Attachment A

Provide evidence justifying the enrollment plan shown above. Include the estimated number of students in the geographic area(s) the proposed school plans to serve, including the number of students that currently attend existing schools (both public and private) in the geographic area for the grades the proposed school plans to serve. Cite any research data, censuses, surveys, or other data sources were used, cite these sources or attach the data, as Attachment A.

According to the Department of Education Hawaii Student Count 2021, Kilauea, Hanalei, and Kapaʻa had the following K-6 enrollment numbers:

| | School Name | K | 1 | 2 | 3 | 4 | 5 | 6 | Average |
|---|---|---|---|---|---|---|---|---|---|
| 452 | Hanalei Elem | 40 | 33 | 26 | 31 | 39 | 24 | 32 | 32 |
| 459 | Kilauea Elem | 28 | 35 | 41 | 33 | 40 | 34 | 35 | 35 |
| 447 | Kapaʻa Elem | 130 | 125 | 108 | 116 | 141 | 133 | 0 | 126 |

Students from the Haleleʻa and Koʻolau districts attended three different DOE elementary feeder schools: Hanalei, Kilauea, and Kapaʻa. Utilizing 2010 census population data, we estimate Kapaʻa Elementary School enrollment at 10% from Koʻolau. Therefore, our best estimate is calculated using average class size to find the ratio of students from Haleleʻa and Koʻolau (Hāʻena to Anahola).

We find that (Hanalei + Kilauea + 10% of Kapaʻa = average total students a year)
Utilizing 2020-2021 Hawaii DOE School Enrollment data, we found the following class size averages for each school:
Hanalei = 32 (From Hāʻena to Princeville)
Kilauea = 35 (From Kalihiwai to Waipake)
Kapaa = 126
Where, 10% of Kapaa = 13 (From Waipakē to Anahola)

We also calculated and analyzed data on a range. Therefore looking at K-6th grades to determine the potential range of enrollment:

| School Name | K | 1 | 2 | 3 | 4 | 5 | 6 | Average |
|---|---|---|---|---|---|---|---|---|
| Hanalei Elem | 40 | 33 | 26 | 31 | 39 | 24 | 32 | 32 |
| Kilauea Elem | 28 | 35 | 41 | 33 | 40 | 34 | 35 | 35 |
| 10% Kapaʻa Elem | 13 | 12 | 10 | 11 | 14 | 13 | 0 (use average, 13) | 13 |
| TOTAL | 81 | 80 | 77 | 75 | 93 | 71 | 80 | 80 |

Using the above averages, we calculated the following conservative figure:
Hanalei + Kilauea + 10% of Kapaʻa = average total class size
32 + 35 + 13 = 80 Students Per Class on Average
With the annual enrollment potential ranging from 71 to 93 students each year and a median of 80 students to potentially enroll.

Through polling of our community over the last 8 years and as mentioned previously in the narrative section of this application, 91% of parents and/or caregivers of potential students for Namahana said they would enroll their child/children. Due to the lack of a public secondary education school on the North Shore, we anticipate 75% of the total number of students (60 of the aforementioned 80 students) will enroll each year in our school, accounting for families who may choose other education alternatives such as leaving the island, homeschool, online, private schools, and/or Kapaʻa High School.

Our calculations do not include students who are currently attending non-DOE schools such as Kauaʻi Christian Academy (private located in Kilauea), Island School (private located in Lihue), Kanuikapono (charter located in Anahola), Kawaikini (charter located in Lihue), Kauaʻi Homeschool Now (homeschool located on the North Shore of Kauaʻi), and Hawaii Tech Academy (virtual). The reason these schools were not included in our calculations is because we were unable to obtain credible enrollment figures that disaggregate by place. Therefore, it is important to note that our enrollment projections are a conservative estimate based primarily on the DOE data from feeder schools whose populations live within the geographic area we aim to serve (Hāʻena to Anahola).

Attachment B

Include, as Attachment B (limit 5 pages), a listing of the DOE complex area(s) that these students will most likely come from, and a listing of all public (including charter) and private schools in the targeted community that serve the same grades as the proposed school.

**Namahana School's Anticipated Student Population:**

We anticipate that the majority of our students will come from the two public elementary schools on the North Shore: Hanalei Elementary School and Kilauea Elementary School. To project the demographics of our student population, we took the average percentages between Hanalei Elementary and Kilauea Elementary in the following categories: percentage students eligible to receive free and reduced-price lunches, percentage of students receiving Special Education, and percentage of students that are English Language Learners (ELL). Table 1 below shows the 2020-2021 data for both schools and the average percentages in each category.

Table 1: 2020-21 Feeder School Percentages for F/R eligibility, SPED, and ELL students

| School Name | Percentage of Free & Reduced Students* | Percentage of SPED Students** | Percentage of ELL Students*** |
|---|---|---|---|
| Hanalei Elementary School | 31.7% | 7% | 1% |
| Kilauea Elementary School | 48.8% | 11% | 9% |
| **Average** | **40.25%** | **9%** | **5%** |

\*Free & Reduced Lunch Data taken from the State of Hawaii DOE Hawaii Child Nutrition Programs Report: October Data 2021 (SY20-21) Report of All School Food Authorities
\** Data on % SPED students came from the Hawaii DOE SPED enrollment for 2020-21 (See Table 2)
\*** ELL Data taken from 20-21 Strive HI Reports

Table 2. Hawaii DOE Special Education Enrollment for Local Public Feeder Elementary Schools

| School | Special Education | | | | Total Enrollment | % of SPED Students |
|---|---|---|---|---|---|---|
| | K - 6 | 7 - 8 | 9 - 12 | Total | | |
| Hanalei Elementary School | 16 | 0 | 0 | 16 | 241 | 7% |
| Kilauea Elementary School | 31 | 0 | 0 | 31 | 277 | 11% |

Table 3. List of public, charter and private schools in our complex area that serve middle and high school students

| Complex Areas School Data | | | |
|---|---|---|---|
| Kapa'a Complex Area (K-12) | | | |
| Name | Grades | Private/Public/Charter | Location |
| Hawaii Tech Academy | K-12 | Public charter school | Virtual, blended model |
| Kanuikapono Charter School | K-12 | Public Hawaiian focused charter school | Anahola, Kaua'i |
| Kaua'i Christian Academy | K-12 | Private | Kilauea, Kaua'i |
| Homeschool Now | K-8 | Private | Various North Shore, Kaua'i |
| Kapa'a Middle School | 6-8 | Public DOE | Kapa'a Kaua'i |
| Kapa'a High School | 9-12 | Public DOE | Kapa'a Kaua'i |
| St. Catherine School | K-8 | Private | Kapa'a, Kaua'i |

# STRIVE HI

# Hanalei Elementary

5-5415 Kuhio Highway | Kauai | Kapaa-Kauai-Waimea Complex Area

**THE 2020-21 STRIVE HI SCHOOL PERFORMANCE REPORT** is an annual snapshot of a school's performance on key indicators of student success. This report shows schools' progress on federally-required indicators under the Every Student Succeeds Act. In addition to state-adopted measures focused on student equity, achievement and success. These results help inform action for teachers, principals and other stakeholders.

How do you measure how well a school is doing? In our estimation. It's more than scores on high-stakes tests. Schools should show that they are supporting children along the educational pipeline toward college, career and community readiness. Are our students attending school? Are they graduating? Are they going to college? And how successfully are schools reducing the achievement gap between high-needs and non-high needs students?

## Our Story

Hanalei School conducts regular planning and data conversations through the school's Professional Learning Communities. This is sanctioned time for teacher professional development, pacing curricula, grading calibration, looking at student work, and planning for differentiation.

The Common Core selected curricula for mathematics requires problem-solving and reasoning skills that bring relevance to concepts. The Next Generation Science Standards incorporates mathematics with science & engineering practices to deepen student learning and engagement in evolving concepts. The English Language Arts curriculum uses resources including online tools, leveled readers, and Common Core writing genres.

Hanalei School has developed practices of differentiated instruction and services all students in the general education setting. From 8:00 -8:30, parent volunteers and support staff support small group instruction. The school works closely with the Parent Teacher Association to offer enrichment programs.

The School Community Council brings together all segments of the school community to assess and support the school's vision, mission, and goals. Hanalei School's vision is to be an empowered school community that provides successful, quality education for lifelong learning.

## About Our School

Principal | James (Tony) Sines
Grades | K-6
808-826-4300
www.hanalei.k12.hi.us

### 241
students enrolled

**1%**
of students are English learners

**38%**
of students are eligible for Free or Reduced Lunch

**7%**
of students receive special education services

**— —**
of special education students are in general education classes most of the day

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# STRIVE HI

# Kilauea Elementary

2440 Kolo Road | Kauai | Kapaa-Kauai-Waimea Complex Area

**THE 2020-21 STRIVE HI SCHOOL PERFORMANCE REPORT** is an annual snapshot of a school's performance on key indicators of student success. This report shows schools' progress on federally-required indicators under the Every Student Succeeds Act. In addition to state-adopted measures focused on student equity, achievement and success. These results help inform action for teachers, principals and other stakeholders.

How do you measure how well a school is doing? In our estimation. It's more than scores on high-stakes tests. Schools should show that they are supporting children along the educational pipeline toward college, career and community readiness. Are our students attending school? Are they graduating? Are they going to college? And how successfully are schools reducing the achievement gap between high-needs and non-high needs students?

## Our Story

Kilauea School provides a student-centered learning environment aimed at preparing students to become community and global citizens who embody the General Learner Outcomes. Our mission is: We light the way by SHINE (Supporting, Honoring, Inspiring, Nurturing and Encouraging) students for success. In order to support the social and emotional learning, a common conflict resolution process is utilized school wide to instill and apply valuable life long behaviors.

We understand teachers have the greatest impact on student achievement and school funding is dedicated to hiring highly qualified teachers who embrace research-based best practices in order to meet the needs of all students. Teachers meet on a weekly basis with an academic coach to focus on grade-level expectations and standards, determine student learning needs, plan for classroom instruction and then reflect on student progress using the data team process.

We believe that quality instruction and partnerships with parents and the school community are essential to student success. Parent/family engagement activities help to build connections between what is happening in the classroom and the home. The school offers parental involvement activities through the assistance of the Parent Community Network Coordinator, Title I Coordinator and the Parent Teacher Student Association.

## About Our School

Principal | Sherry Gonsalves
Grades | K-6
808-828-1212
kilaueaschool.com

### 277
students enrolled

**9%**
of students are English learners

**53%**
of students are eligible for Free or Reduced Lunch

**11%**
of students receive special education services

**24%**
of special education students are in general education classes most of the day

**STATE OF HAWAII**
**DEPARTMENT OF EDUCATION**
**HAWAII CHILD NUTRITION PROGRAMS**
**650 IWILEI ROAD, SUITE 270**
**HONOLULU, HI 96817**
**(808) 587-3600**

**OCTOBER DATA 2021 (SY20-21) REPORT**
**ALL SCHOOL FOOD AUTHORITIES**
**(All SFAs)**
**By Alpha Listing**

| Agrmt # | Site ID | School Name | Total Enrolled | Attendance | Free Eligibles | Reduced Price Eligibles | Paid Eligibles | Total | Percentage Free & Reduced Enrolled | Attendance Factor for the Edit Check |
|---|---|---|---|---|---|---|---|---|---|---|
| **PUBLIC** | | | | | | | | | | |
| **1434-6** | | **DOE School Food Services Branch** | **166,904** | **157,486** | **69,922** | **13,914** | **83,068** | **166,904** | **55.2%** | **0.94** |
| | 235 | Gustave H. Webling Elementary | 423 | 407 | 109 | 49 | 265 | 423 | 37.4% | 0.96 |
| | 352 | Haaheo Elementary | 197 | 187 | 84 | 19 | 94 | 197 | 52.3% | 0.95 |
| | 108 | Hahaione Elementary | 565 | 552 | 54 | 20 | 491 | 565 | 13.1% | 0.98 |
| | 401 | Haiku Elementary | 444 | 426 | 169 | 51 | 224 | 444 | 49.6% | 0.96 |
| | 252ALC | Hale o'ulu ALC | 9 | 7 | 5 | 0 | 4 | 9 | 55.6% | 0.78 |
| | 206 | Haleiwa Elementary | 218 | 210 | 109 | 14 | 95 | 218 | 56.4% | 0.96 |
| | 402 | Hana High and Elementary | 396 | 386 | 332 | 0 | 64 | 396 | 83.8% | 0.98 |
| | 452 | Hanalei Elementary | 221 | 204 | 55 | 15 | 151 | 221 | 31.7% | 0.92 |
| | 303 | Hauula Elementary | 384 | 372 | 211 | 37 | 136 | 384 | 64.6% | 0.97 |
| | 470 | Hawaii School for the Deaf and the Blind | 55 | 49 | 55 | 0 | 0 | 55 | 100.0% | 0.89 |
| | 304 | Heeia Elementary | 426 | 413 | 168 | 42 | 216 | 426 | 49.3% | 0.97 |
| | 208 | Helemano Elementary | 522 | 506 | 243 | 62 | 217 | 522 | 58.4% | 0.97 |
| | 154 | Henry J. Kaiser High | 1,159 | 1,107 | 113 | 35 | 1,011 | 1,159 | 12.8% | 0.96 |
| | 400 | Henry Perrine Baldwin High | 1,307 | 1,218 | 338 | 126 | 843 | 1,307 | 35.5% | 0.93 |
| | 230ALC | High Core ALC | 51 | 39 | 23 | 5 | 23 | 51 | 54.9% | 0.77 |
| | 255 | Highlands Intermediate | 913 | 883 | 243 | 85 | 585 | 913 | 35.9% | 0.97 |
| | 370DE | Hilo Hawaiian Language Immersion Program | 99 | 90 | 35 | 6 | 58 | 99 | 41.4% | 0.91 |

**STATE OF HAWAII**
**DEPARTMENT OF EDUCATION**
**HAWAII CHILD NUTRITION PROGRAMS**
**650 IWILEI ROAD, SUITE 270**
**HONOLULU, HI 96817**
**(808) 587-3600**

**OCTOBER DATA 2021 (SY20-21) REPORT**
**ALL SCHOOL FOOD AUTHORITIES**
**(All SFAs)**
**By Alpha Listing**

| Agrmt # | Site ID | School Name | Total Enrolled | Attendance | Free Eligibles | Reduced Price Eligibles | Paid Eligibles | Total | Percentage Free & Reduced Enrolled | Attendance Factor for the Edit Check |
|---|---|---|---|---|---|---|---|---|---|---|
| **PUBLIC** | | | | | | | | | | |
| **1434-6** | | **DOE School Food Services Branch** | **166,904** | **157,486** | **69,922** | **13,914** | **83,068** | **166,904** | **55.2%** | **0.94** |
| | 390 | Kealakehe Intermediate | 707 | 634 | 394 | 67 | 246 | 707 | 65.2% | 0.90 |
| | 372 | Keaukaha Elementary | 423 | 415 | 423 | 0 | 0 | 423 | 100.0% | 0.98 |
| | 458 | Kekaha Elementary | 334 | 304 | 280 | 0 | 54 | 334 | 83.8% | 0.91 |
| | 317 | Keolu Elementary | 116 | 108 | 40 | 29 | 47 | 116 | 59.5% | 0.93 |
| | 391 | Keonepoko Elementary | 555 | 476 | 555 | 0 | 0 | 555 | 100.0% | 0.86 |
| | 294 | Keoneula Elementary | 925 | 883 | 175 | 70 | 680 | 925 | 26.5% | 0.96 |
| | 409 | Kihei Elementary | 709 | 672 | 314 | 122 | 273 | 709 | 61.5% | 0.95 |
| | 459 | Kilauea Elementary | 338 | 319 | 104 | 61 | 173 | 338 | 48.8% | 0.94 |
| | 410 | Kilohana Elementary | 79 | 76 | 79 | 0 | 0 | 79 | 100.0% | 0.96 |
| | 118 | King David Kalakaua Middle | 1,065 | 1,015 | 546 | 151 | 368 | 1,065 | 65.5% | 0.95 |
| | 406 | King Kamehameha III Elementary | 732 | 679 | 228 | 97 | 407 | 732 | 44.4% | 0.93 |
| | 457 | King Kaumualii Elementary | 636 | 605 | 252 | 64 | 320 | 636 | 49.7% | 0.95 |
| | 435 | King Kekaulike High | 1,124 | 1,051 | 370 | 126 | 628 | 1,124 | 44.1% | 0.94 |
| | 130 | King Liholiho Elementary | 455 | 450 | 92 | 47 | 316 | 455 | 30.6% | 0.99 |
| | 135 | King William Lunalilo Elementary | 289 | 282 | 144 | 35 | 110 | 289 | 61.9% | 0.98 |
| | 212 | Kipapa Elementary | 582 | 561 | 218 | 80 | 284 | 582 | 51.2% | 0.96 |
| | 395 | Kohala Elementary | 349 | 327 | 200 | 41 | 108 | 349 | 69.1% | 0.94 |
| | 373 | Kohala High | 253 | 239 | 120 | 27 | 106 | 253 | 58.1% | 0.95 |
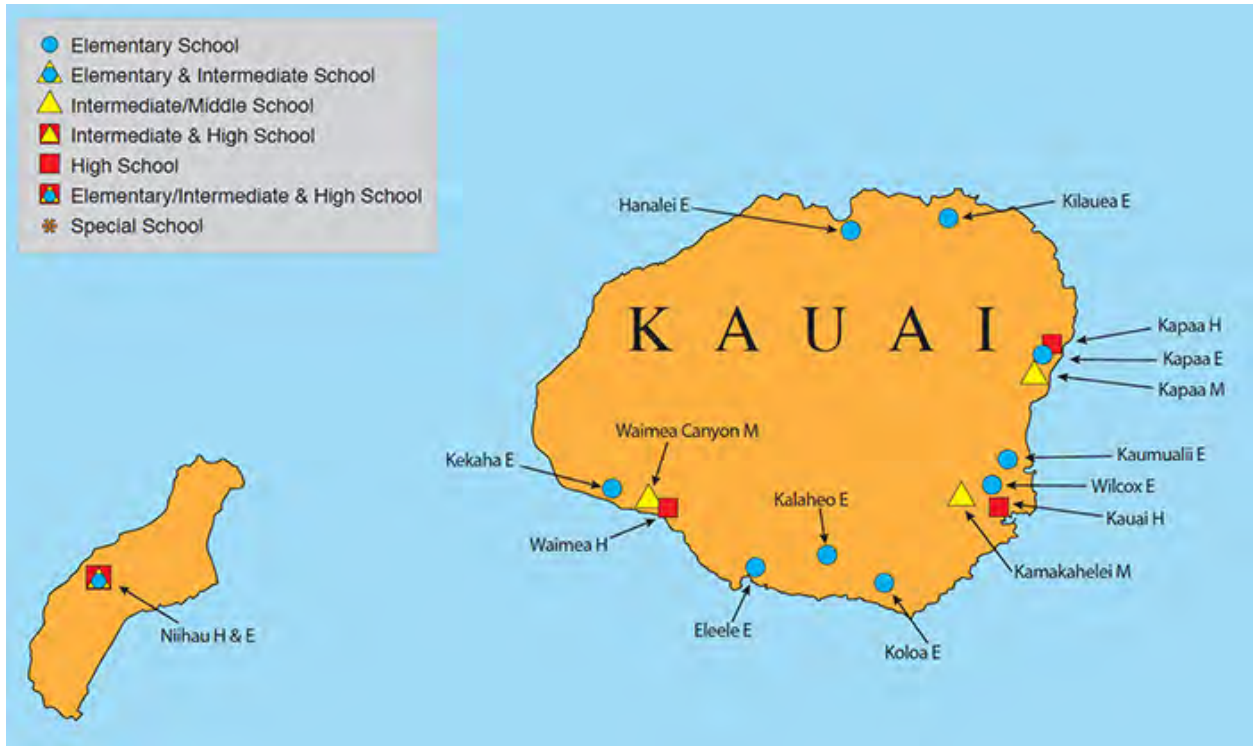
The image above ilustrates the geographic distribution of all Kauaʻi and Niʻihau public DOE schools. Please note the north side Kauaʻi island, you will see there are the two elementary feeder schools, Hanalei E and Kilauea E. It is clear there are no public middle or high schools until you reach the East side of the island where you can see the close cluster of Kapaa H, Kapaa E, and Kapaa M. This image clearly illustrates the geographically disproportionate access to middle and high schools for Kauaʻi's North Shore students.

## Attachment C

Provide an overview of the planned curriculum, including, as Attachment C, a sample course scope and sequence for one subject for each division (elementary, middle, high school) the school would serve. In addition, identify course outcomes and demonstrate alignment with the Hawaii Common Core Standards.

Not applicable. The Scope and Sequence will be developed during the pre-opening years. Please see Attachment D for details.

## Attachment D

If the curriculum is not already developed, provide, as **Attachment D**, a plan for how the curriculum will be developed between approval of the application and the opening of the school, including who will be responsible and when key stages will be completed.

Namahana School teachers, advisors, and internship mentors will draw from a number of curriculum resources. These will include interdisciplinary lessons, projects and assessments from other Big Picture Learning schools, projects adopted or adapted from online databases like PBLWorks and Big Picture Learning, and educational resources created by local, national and international organizations working in fields related to Namahana School's mission and vision. Advisors and teachers will also work closely with individual students to develop customized learning plans based on both need and interest.

Therefore, in order to prepare during the pre-opening years, Namahana School will utilize our Curriculum Advisory Committee (described below) to develop a database of curriculum resources for teachers and advisors. In reviewing curriculum resources, we will consider the following criteria:

- Alignment with standards: Common Core State Standards, C3 (College, Career, & Civic Life) Framework for Social Studies, Next Generation Science Standards
- Alignment with Namahana School graduation requirements
- Basis in scientific research of methods that are successful with our target population, particularly students in Special Education and English Language Learners (differentiated materials)
- Degree of use in other high performing schools
- Rankings in edReports.com
- Organization and extensiveness of teacher materials
- Organization and extensiveness of student materials
- Flexibility for online utility
- Level of vocabulary
- Reinforcement of grade level appropriate literacy skills
- Connections to Namahana School's mission and vision

In the pre-opening years, the Curriculum Advisory Committee will start with developing the Namahana Curriculum Resource Database for grades 7 and 8, our opening grades. The Curriculum Resource Database will include sound curricula to serve as a base for advisors and teachers to utilize. Additionally, the committee will develop sample projects adopted to specific 'āina and in alignment with State Standards and Namahana's 'āina-based learning approach. Immediately following the development of 7th and 8th grade level curriculum, the Curriculum Advisory Committee will add high school curriculum 9-12. In order to build on previous knowledge, the curriculum will be scaffolded ensuring the students are ready to transition from middle to high school and from grade to grade.

Namahana School values the input of teachers and encourage the tailoring of exemplary curriculum to our environment and 'āina. Each successive year after opening, curriculum and instructional materials will be collaboratively reviewed by Namahana teachers, the Curriculum Advisory Committee, and external partners. Additionally, in order for advisors to coach students to seek and build authentic learning experiences inside and outside of the school building, we anticipate teachers developing, adopting, modifying, and implementing curriculum throughout the year to best meet the needs and interests of individual students.

The following table illustrates the timeline and key stages to develop the curriculum for Namahana School:

| Curriculum Development Plan | | |
|---|---|---|
| | **Date** | **Stage Description** |
| **Phase 1** | June – July Pre-opening Year 1 | Executive Director and Governing Board Academic Committee will develop a Namahana Curriculum Scoring Chart to evaluate curriculum based on aforementioned criteria. |
| | | Executive Director, Governing Board Academic Committee, and a Curriculum Development Coordinator consultant will compile an exhaustive list of potential curricula based on the criteria above and confirm trial access to instructional materials. |
| | July Pre-opening Year 1 | Executive Director, facilitate a meeting of the Curriculum Advisory Committee (CAC) to 1) Familiarize the CAC with the school model, 2) explain how to use the Namahana Curriculum Scoring Chart and 3) Divide CAC into smaller teams based on subject areas (i.e. Math, ELA, Social Studies, Science) to investigate curriculum |
| | August Pre-opening Year 1 | Executive Director, facilitate a CAC meeting where 1) each team presents the curriculum they reviewed and present recommended curricula based on data informed findings, 2) identify curriculum for every subject area. Community members that are vested in the school will be invited for specific subject areas to provide real-world perspectives on curriculum (i.e. Agricultural Advisory Committee), and 3) identify existing instructional materials provided with curriculum. |
| | **Key Stage** | **Middle school Curriculum Resource Database complete with recommendations for 7th and 8th grade curriculum and instructional materials.** |
| | August - December Pre-opening Year 1 | Executive Director and CAC develop scope and sequence for 7th grade. Scope and sequence will link assessments to curriculum and standards. |
| | | Executive Director and CAC develop scope and sequence for 8th grade and ensure scaffolding. Scope and sequence include instructional strategies. |
| | **Key Stage** | **Completed full set of scope and sequence for every subject for 7th and 8th grades. Scope and sequence will align standards, curriculum, outcomes, and assessments.** |
| | June-July | Executive Director facilitates a CAC meeting to 1) familiarize the CAC with the high school model, specifically the internship component and 2) divide CAC into smaller teams based on subject/course/credit areas for 9-12 grades. |

| | | |
|---|---|---|
| **Phase 2** | Pre-opening Year 2 | Executive Director, facilitates a CAC meeting where 1) each team presents the curriculum they reviewed and present recommendations for curricula based on data informed findings, 2) identify curriculum for every subject/course/credit area, and 3) identify included instructional materials. |
| | | Executive Director and CAC develop a scaffolded scope and sequence for 9th and 10th grade. Scope and sequence will link assessments to curriculum and standards. |
| | | Executive Director and CAC develop scope and sequence for 11th and 12th grade and ensure scaffolding. Scope and sequence include instructional strategies. |
| | **Key Stage** | **Completed full set of scope and sequence for 9-12 that align standards, curriculum, outcomes, and assessments.** |
| | June Pre-opening Year 2 | Executive Director pilots hands-on components from the 7th grade curriculum in the Kaiāulu Summer Program. |
| | July – December Pre-opening Year 2 | Executive Director and CAC assess curriculum based on the data gathered from the program including student learning, student and parent feedback surveys, and pre and post tests. The data will inform future instruction. |
| | | Executive Director and CAC analyze curriculum map from 7-12 to ensure scaffolding from middle to high school. |
| | | Executive Director and CAC adopt and adapt projects for field study sites near Namahana and with partnering organizations and the Agricultural Advisory Committee in order to support incoming advisors and teachers who need additional support around project- and ʻāina-based learning. Instructional materials will be developed for each project to serve as a base for new teachers to utilize and adapt. |
| | | Executive Director identify any additional costs for curriculum and work with the Manager of Finance and Operations and the Governing Board Finance Committee to assess costs and make any necessary budgetary revisions. |
| | **Key Stage** | **A completed Curriculum Map for Namahana School 7-12.** |
| | January – June Pre-opening Year 2 | Executive director compiles curriculum and instructional materials into the Curriculum Resource Database. |
| | | Conduct second pilot on 8th grade curriculum with the Kaiāulu Koʻolau Summer Program. |

| Phase 3 | Key Stage | A completed robust Curriculum Resource Database which includes curricula, curriculum map, scope and sequence, and sample projects. |
|---|---|---|
| | June – Opening Pre-opening Year 2 | Executive Director and CAC assess curriculum based on the data gathered from the program including student learning, student and parent feedback surveys, and pre and post tests. |
| | | Executive Director and Academic Coach/Director of Academics schedule meeting dates to review the curriculum and subsequent professional development for the upcoming academic year. |
| | | Executive Director schedule and implement training for how to most effectively utilize the Curriculum Resource Database in Namahana's School model. |
| | Key Stage | All advisors and teachers are trained and confident on utilizing the Curriculum Resource Database. |

As shown in the table above, the curriculum development process will be divided and developed over three main phases. During Phase I (pre-opening), the Curriculum Advisory Committee will determine the curriculum in preparation for 7th and 8th grade, drawing on the tested Big Picture Learning design. Next in Phase II, successive professional development and training will occur between the Curriculum Advisory Committee and the entire school staff prior to the beginning of the first school year. Lastly, Phase III, the Executive Director, Academic Coach, and advisors will meet on an ongoing basis throughout each school year to review and continue to adapt the curriculum as they gather more data over time on the needs of each student. This phased approach ensures that the academic rigor is upheld and allows for real time adjustments to cater to the needs of our target population based on common trends of students and community patterns.

In order to implement the curriculum development plan in the pre-opening years, Namahana School's Governing Board and Executive Director have gathered a rounded group of curriculum development leaders to form the Curriculum Advisory Committee. The Curriculum Advisory Committee is comprised of experienced educators and community members with a diverse background in various subject areas (Science, Math, ELA, Social Studies) from varying teaching pedagogy and environments (classroom, ʻāina-based, hands-on, project-based, student-led). Additionally, this committee has extensive experience in curriculum development across various sectors (private, charter, and public) and provides a vast array of pedagogical. Currently, the Curriculum Advisory Committee consists of the Executive Director, the Governing Board Academic Committee, and current educators from Kauaʻi: Paulette Adams, Rachelle Ricardo, Jonathan Kissida, John Cornell, Uʻilani Arbarado, Lei Wann, Mehana Vaughan, ʻAlohilani Rogers, Helen Cox, and Taharaʻa Stein. Additionally, representatives from the Agriculture Advisory Committee will be consulted in the process to offer a real world learning perspective.

The table below shows the current committee members that comprise the Curriculum Advisory Committee:

| Namahana School Curriculum Advisory Committee Members |
|---|

**Paulette Adams**, a resident of Princeville, currently teaches 6th grade science and math at Hanalei Elementary School. She is highly qualified in secondary math education. She has undergraduate degree in Biological Sciences with a focus in Biochemistry, and a Masters in Secondary Science Education from Southeastern Louisiana University. For the past two years, Paulette Adam has been a part of the Hanalei School team that worked collaboratively with math teachers from each elementary school across the island to vigorously vett new potential math curricula by scoring the various potential curriculums with a rubric to compare their strengths and weaknesses.

Prior to teaching 6th grade at Hanalei Elementary School, she served as their Academic Coach and Science Coach. Paulette developed a new STEM and NGSS aligned science curricula for the classroom and garden outdoor laboratory, utilizing the Full Option Science System from the Lawrence Hall of Science as a resource. Over the course of three years, Paulette utilized the I do, We do, You do model to coach staff around the implementation of the NGSS-aligned curricula. Paulette also developed a STEM career connected learning program which brought local STEM professionals from the community into the classrooms. Prior to her time at Hanalei School, Paulette taught 9th grade Physical Science and developed science curriculum and taught 4th – 7th grade. She also taught 7th and 8th grade science at Pu'ukumu School in Kilauea (a private school that has since closed).

**Jonathan Kissida**, a resident of Kilauea, is a passionate outdoor 'aina-based educator and teaches 6th grade science/agriscience, and English Language Arts at Kilauea Elementary School. He has a master's degree in Elementary Education with a specialization in Montessori from Chaminade University in Honolulu, HI. Over his 20 year career, he has had the amazing opportunity to teach in all three school sectors: private, charter, and public. Jonathan worked as the Instructional Coach at Pu'ukumu School, developing and integrating middle school curriculum with the core content and elective teachers using inquiry focused backward design principles to integrate across grade levels and subjects areas, and as the grade 7-11 ELA teacher.

In 2020-21, Jonathan collaborated with Ming Wei Koh, PhD Center for Getting Things Started, Executive Director/Ecoliteracy Educator, and Dr. Lori Andersen, Assistant Specialist, University of Hawai'i at Mānoa, Curriculum Research & Development Group Project Director, and 4 other teachers to develop the first edition of the FEAST (Food Experiences for Agriculture Science Training) Grade 3-5 Workbook, which has been distributed to students and teachers across the Hawaiian Islands and Guam. Currently, he is assisting Ming Wei Koh and Lori Anderson with the HIDOE PDE3 course by examining how the FEAST Grade 3 - 5 resources are being used and adapted by teachers and revising the FEAST Grade 3 - 5 resources for the second edition.

During the summer of 2021, Jonathan had the opportunity to work in the community as an outdoor 'aina based educator at Limahuli's Na Laua'e o Makana Summer Program which provides 'aina-based education to students ages Pre-K-9th. He is also currently helping with

the Hawaiʻi School Garden Curriculum Map Revisions for grade 3-5, reviewing the scope & sequence plus one grade-level band that corresponds with his teaching experience.

**Rachelle Ricardo,** a resident of Kilauea, teaches 6th grade English Language Arts, Social Studies and Art.  She has a Masters of Education in Elementary Education and Teaching from University of Hawaii at Manoa and is also a PhD Candidate in Social Psychology at University of Hawaii at Manoa.  Rachelle has taught at both public and private schools in Hawaii and on the mainland.  During her time at Manoa Elementary School, Rachelle planned and taught standards-based lessons in the areas of Language Arts, Math, Social Studies, Science, and Art with Hawaiian culture integration.  During her time at Sacred Hearts Academy in Honolulu, Rachelle redesigned middle school Language Arts, History and Religion units into a trans-disciplinary curriculum incorporating differentiated instructional strategies and alternative performance-based assessments.  And during her time at Manahattan Academy, Manhattan Beach, Rachelle developed and instructed differentiated Language Arts and Technology curriculum for students in combination classes for grades 1 through 8.

**John Cornell,** a resident of Kilauea and current Fire Fighter/Fire Engineer with the County of Kauaʻi, taught at various schools on the mainland and on the north shore of Kauaʻi.  John has a BS in Physical Geography with a minor in Environmental Studies from University of Oregon, and received his Clear California Teaching Credential for secondary education in General Science and Geoscience from National University, Costa Mesa CA.  While at El Modena High School, in Orange, California, John taught and facilitated curriculum for secondary physical science, earth science, and health science.  He also served as a science educator with the Orange County Marine Institute.  While at Seacliff School in Kilauea (no longer in existence), John developed 7th-9th grade math curriculum and 4th-9th grade science curriculum.  And during his time at Kula High and Intermediate School in Kilauea (also no longer open) John developed curriculum aligned with the HI DOE scope and sequence for middle and high school and taught physical science, earth science, health science, pre-algebra and algebra and physical education classes.  He also participated as a faculty member in two WASC accreditation processes and served as the Kula School's Athletic Director, managing all high school and middle school sports programs.

**Uʻilani Smith Albarado,** a resident of Pakala, is currently the Curriculum Development Administrator/ Coach for Kula Pepe and part-time Special Education Teacher at Kula Niihau o Kekaha.  Uʻilani was born and raised in Kekaha, Kauaʻi, currently lives in Pakala with her `ohana.  She holds an MA in Education with an Emphasis in Early Childhood Education from Concordia University, a BA in Special Education from Chaminade University, certified in the Respecialization in Special Education (RISE) Teacher Certification Program, another BA in Sociology from UH Hilo, and holds a Hawaii Department of Education Teaching Credential in Special Education for K-12. She is a former Preschool Teacher at Kamehameha Schools for 18 years – 10 years in Anahola and 8 years in Kaumakani.  Prior to teaching preschool, she was a Special Education teacher at Waimea Canyon School in 1999-2003.  Uʻilani brings expertise in curriculum development with a background in Special Education.

**Lei Wann**, a resident of Hāʻena and the Director of the Limahuli Garden and Preserve. An experienced educator, Lei spent decades of her career developing and implementing ʻāina-based curriculum for elementary and high school students as well as adults. She is an expert on Hawaiʻi ecosystems, including rare and endangered native species and has more than 20 years' experience as a resource manager utilizing traditional Hawaiian horticultural methods managing farms and gardens. She is also a certified Hawaiian language instructor. She holds a M.A in Education Psychology and a B.A. in Education from UH Mānoa.

**Mehana Vaughan,** a resident of Kilauea and an environmental social scientist whose work focuses on indigenous and community-based natural resource management. Her research, teaching and outreach are all interconnected around themes of ecocultural restoration, ʻāina-based education, and community or collaborative management.  Students in her classes participate in research projects that meet community needs and community members help to serve as teachers. She is an assistant professor at the University of Hawaiʻi at Mānoa in the Department of Natural Resources and Environmental Management in the College of Tropical Agriculture and Human Resources.  She is jointly appointed in the Sea Grant College Program under the School of Ocean and Earth Science and Technology and Hui ʻĀina Momona, an effort to build connections between the University system and rural Hawaiʻi communities to enhance community level capacity for natural resource management. Mehana holds a Ph.D. in Interdisciplinary Environmental Studies from Stanford, an M.Ed. in Curriculum Studies from UH Mānoa, and a B.A. in Sociology and Massachusetts Advanced Provisional Teaching Certification in High School Social Studies from Harvard University.

**Helen Cox,** a resident of Kalaheo, Dr. Cox has served higher education for over 40 years, first as a faculty member and then as an administrator at Salt Lake Community College where she moved from Division Chair to Executive Assistant to the President to Associate Vice President prior to returning to Hawaiʻi  to assume the Chancellor position at Kauaʻi Community College. Dr. Cox also taught high school (grades 9-11) in English, took an Est-West Center Seminar on the Politics of Culture and Identity in the Pacific, and had completed two Fullbright scholarships. Prior to her retirement in December, 2019, Cox's leadership at KCC focused on its role to support the community through education and training, to serve as an intellectual and cultural gathering place, and to provide leadership in moving the island towards cultural, economic, environmental and social sustainability.

**Taharaʻa Stein,** a resident of Wailua, is currently the Vice Principal at Chiefess Kamakahelei Middle School. She began her teaching career as a high school instructor in English language arts at Kauaʻi High School. After her third year of teaching English, she was given an opportunity to take a lead role in the implementation of AVID, a college preparatory program for traditionally underserved kids. Her involvement with AVID gave her access to the best professional development and the ability to follow her students through all four years of high school. After seven years of teaching, she began work as a school administrator, working between Kalaheo Elementary, Chiefess Kamalahelei Middle and Hanalei School. She has worked with teachers and staff to implement grade- and school-wide curricular changes. Taharaʻa has led multiple processes in various subject areas from selection of curriculum to

professional development implementation. She was previously a principal for one of Namahana School's feeder schools, Hanalei School.

Mālia 'Alohilani Kuala Rogers, a resident of Keālia, has been a teacher at Kawaikini Public Charter School in Puhi since the school opened in 2008. Kumu 'Alohilani is the Cultural Education Specialist and is currently teaching the Capstone and Kapa courses to grade 12. She has taught in the field of Hawaiian language education for over 25 years, where she has taught at the elementary, middle school, adult education and community college levels. She has helped develop and translate materials used in the Hawaiian language education program. Kumu 'Alohilani has a BA in Hawaiian Language from the University of Hawai'i and certification in elementary education. She is currently working on a Masters in Hawaiian Language and Literature. She is also on the Board of Directors of 'Aha Punana Leo. Kumu 'Alohilani was also the previous Academic Director for Kawaikini.

Prior to working at Kawaikini, she taught in the Department of Education's Hawaiian Immersion Program at Kapa'a Elementary and Kapa'a Middle Schools for 16 years. 'Alohilani brings a wealth of expertise in curriculum development in both English and Hawaiian language mediums.

Elliot Washor, co-founder of Big Picture Learning, has been serving as Namahana School's educational design consultant, providing coaching and technical assistance around implementing the school's 10 Distinguishers. Elliot has been involved in school reform for more than 30 years as a teacher, principal, administrator, video producer, and writer. He was the co-founder of The Met Center in Providence, RI. He has taught and is interested in all levels of school from kindergarten through college, in urban and rural settings, across all disciplines. His work has spanned across school design, pedagogy, learning environments, and education reform and is supporting others doing similar work throughout the world. Elliot's interests lie in the field of how schools can connect with communities to understand tacit and disciplinary learning both in and outside of school. Elliot is deeply committed to imagining Big Picture Learning as a 'do-think-do' organization, and persistently pushes the boundaries of its design in order to continually innovate practice and influence in the world of education. At Thayer High School in Winchester, N.H., Elliot's professional development programs won an "Innovations in State and Local Government Award" from the Ford Foundation and the Kennedy School of Government at Harvard University. He has been selected as an educator to watch in Rhode Island and has recently been selected as one of the Daring Dozen – the Twelve Most Daring Educators in the World by the George Lucas Educational Foundation. His dissertation on Innovative Pedagogy and New Facilities won the merit award from DesignShare, the international forum for innovative schools.

The table below shows the current committee members that comprise the Agriculture Advisory Committee:

## Namahana School Curriculum Advisory Committee Members

**Yoshito L'Hote**, a resident of Kalihiwai and the Executive Director of 'Āina Ho'okupu o Kīlauea (AHK) for the past nine years. Incorporated in 2015, AHK is a stewardship of a 75-acre parcel in partnership with the County of Kaua'i, formerly owned by the Kīlauea Sugar Plantation Co. AHK's dedicated goal is to be able to facilitate solutions to economic, social, and agricultural food security challenges that the greater Kīlauea community faces. Yosh led AHK in $3 million worth of production in 2020 and $4.3 million in 2021. Yosh has extensive knowledge and expertise in produce cultivation, livestock, food systems, grafting, cooking, imu, fish pond restoration and management, lo'i farming, machinery, and construction. Prior to AHK, Yosh worked with the Waipā Foundation for six years and on Hawaii island worked as a stay at home dad developing a homestead cultivation of two acres of awa in Pana'ewa. Yosh also has experience with commercial crops (i.e. papayas) on a 15 acre farm. Yosh holds a B.S. in Mathematics from UH Hilo and serves as the Kilauea Neighborhood Association president.

**Paul Massey** has been an eager student and teacher of the interrelationship of people and plants since moving to Kaua'i in 1998. Following five years of independent study of Kaua'i's northwest flora and terrestrial ecology, Paul received training in field botany at the National Tropical Botanical Garden, and then earned International Diplomas in Plant Conservation Strategies and Botanical Garden Management from the Royal Botanic Garden, Kew in London, UK. In 2006, he co-founded Regenerations Botanical Garden, a Kaua'i-based 501(c)(3) nonprofit organization that provides training in subtropical agroforestry and related disciplines. Paul serves as project leader of the Kaua'i Food Forest, a nine year old multistory agroforestry system located at Wai Koa Plantation in Kalihiwai. Since 2010, he has hosted a community radio program devoted to sustainable agricultural practices on KKCR, Kaua'i Community Radio. Paul has been fortunate to work with a multitude of Hawai'i farmers, agricultural educators and researchers. He is an ISA Certified Arborist® specializing in the care of tropical fruit trees, and lives on a kalo and dairy water buffalo farm on Kaua'i's southeast shore.

**Melanie Parker**'s passion for food and farming took root when she apprenticed at the University of Santa Cruz Center for Agroecology and Sustainable Food System's Farm & Garden. There she received a Certificate in Ecological Horticulture, gaining skills in organic gardening, small-scale organic farming, and Community Supported Agriculture (CSA) management. Melanie combined her love of growing food with a desire to change local food systems and began working with several Farm to School programs. While at the Center of Ecoliteracy's Food Systems Project, she provided technical assistance to emerging school district Farm-to-School programs, designed survey instruments for local organic farms to develop a regional Farm Purchase Directory Database and started a Farm-to-School Field Study program that brought 2nd – 5th graders from 10 elementary schools to local organic farms. While at Berkeley Unified School District, Melanie managed the district's garden and cooking nutrition education program which provided garden and culinary-based education classes for 14 schools ranging pre-K – High School. Melanie more recently has been providing support to Hanalei Elementary School's garden program and also taught an afterschool

cooking program to 3rd-5th grade students. During the pandemic, she taught a garden-based education class to a small learning pod and currently manages her homestead garden and a small pasture-raised flock of chickens, which provides local egg shares to the community.

Stacy Sproat-Beck grew up in Kalihiwai, Kaua`i, a small coastal community in Kaua`i's Halele`a district, part of a family that practiced subsistence and commercial fishing and farming. A graduate of Kamehameha Schools with a BS from the University of Southern California Marshall School of Business, Stacy moved home to work with her `ohana and community in 1992. Over the next 30 plus years, Stacy led the growth of the Waipā Foundation from a small entirely volunteer organization to a thriving non-profit with over 18 staff, and over 25 weekly volunteers. Waipā manages the resources of the 1,600-acre Waipā watershed, while implementing a full range of eco-cultural programming and activities to various groups and schools year round, serving thousands both from within and outside the local community. In addition to her role as Executive Director of the Waipā Foundation, Stacy has been a gardener for almost her entire adult life, growing kalo and produce, both for Waipā and personally, for subsistence and commercial sale. Stacy has two daughters, Māhie and Melela`i.

Provide, in **Attachment E**, a complete set of the school's proposed learning standards for one grade for each division the school will serve. Address the skills and knowledge each student will be expected to attain by the end of that grade. If the school will serve only one division, the exit standards provided in response to question 5 in this section will suffice. (Approved schools will be required to submit a full set of learning standards for all grades in the school before opening.)

Namahana School will serve two divisions: middle and high school.

### For Middle School Division:
The tables below illustrate all the learning standards for 7th grade. The standards listed below include:
- Hawaii C3 Framework for Social Studies
- Hawaii Common Core Standards, Math
- Hawaii Common Core Standard, English Language Arts/Literacy (ELA)
- Next Generation Science Standards

### For High School Division:
Please see the exit standards in Attachment F.

# Hawaii C3 Framework for Social Studies, Grade 7-8

| Participation and Deliberation |
| --- |
| D2.Civ.1.6-8. Distinguish the powers and responsibilities of citizens, political parties, interest groups, and the media in a variety of governmental and nongovernmental contexts. |
| D2.Civ.2.6-8. Explain specific roles played by citizens (such as voters, jurors, taxpayers, members of the armed forces, petitioners, protesters, and office-holders). |
| D2.Civ.3.6-8. Examine the origins, purposes, and impact of constitutions, laws, treaties, and international agreements. |
| D2.Civ.4.6-8. Explain the powers and limits of the three branches of government, public officials, and bureaucracies at different levels in the United States and in other countries. |
| D2.Civ.5.6-8. Explain the origins, functions, and structure of government with reference to the U.S. Constitution, state constitutions, and selected other systems of government. |
| D2.Civ.6.6-8. Describe the roles of political, civil, and economic organizations in shaping people's lives. |

| Processes, Rules, and Laws |
| --- |
| D2.Civ.11.6-8. Differentiate among procedures for making decisions in the classroom, school, civil society, and local, state, and national government in terms of how civic purposes are intended. |

| D2.Civ.12.6-8. Assess specific rules and laws (both actual and proposed) as means of addressing public problems. |
|---|
| D2.Civ.13.6-8. Analyze the purposes, implementation, and consequences of public policies in multiple settings. |
| D2.Civ.14.6-8. Compare historical and contemporary means of changing societies, and promoting the common good. |
| **Economic Decision Making** |
| D2.Eco.1.6-8. Explain how economic decisions affect the well-being of individuals, businesses, and society |
| D2.Eco.2.6-8. Evaluate alternative approaches or solutions to current economic issues in terms of benefits and costs for different groups and society as a whole. |
| **Exchange and Markets** |
| D2.Eco.3.6-8. Explain the roles of buyers and sellers in product, labor, and financial markets. |
| D2.Eco.4.6-8. Describe the role of competition in the determination of prices and wages in a market economy. |
| D2.Eco.5.6-8. Explain ways in which money facilitates exchange by reducing transactional costs |
| D2.Eco.6.6-8. Explain how changes in supply and demand cause changes in prices and quantities of goods and services, labor, credit, and foreign currencies. |
| D2.Eco.7.6-8. Analyze the role of innovation and entrepreneurship in a market economy. |
| D2.Eco.8.6-8. Explain how external benefits and costs influence market outcomes. |
| D2.Eco.9.6-8. Describe the roles of institutions such as corporations, non-profits, and labor unions in a market economy. |
| **The National Economy** |
| D2.Eco.10.6-8. Explain the influence of changes in interest rates on borrowing and investing |
| D2.Eco.11.6-8. Use appropriate data to evaluate the state of employment, unemployment, inflation, total production, income, and economic growth in the economy |
| D2.Eco.12.6-8. Explain how inflation, deflation, and unemployment affect different groups. |
| D2.Eco.13.6-8. Explain why standards of living increase as productivity improves. |
| **The Global Economy** |
| D2.Eco.14.6-8. Explain barriers to trade and how those barriers influence trade among nations. |
| D2.Eco.15.6-8. Explain the benefits and the costs of trade policies to individuals, businesses, and society. |
| **Geographic Representations** |
| D2.Geo.1.6-8. Construct maps to represent and explain the spatial patterns of cultural and environmental characteristics. |

D2.Geo.2.6-8. Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions, and changes in their environmental characteristics.

D2.Geo.3.6-8. Use paper based and electronic mapping and graphing techniques to represent and analyze spatial patterns of different environmental and cultural characteristics.

### Human-Environment Interaction

D2.Geo.4.6-8. Explain how cultural patterns and economic decisions influence environments and the daily lives of people in both nearby and distant places.

D2.Geo.5.6-8. Analyze the combinations of cultural and environmental characteristics that make places both similar to and different from other places.

D2.Geo.6.6-8. Explain how the physical and human characteristics of places and regions are connected to human identities and cultures.

### Human Population: Spatial Patterns and Movements

D2.Geo.7.6-8. Explain how changes in transportation and communication technology influence the spatial connections among human settlements and affect the diffusion of ideas and cultural practices.

D2.Geo.8.6-8. Analyze how relationships between humans and environments extend or contract spatial patterns of settlement and movement.

D2.Geo.9.6-8. Evaluate the influences of long-term human-induced environmental change on spatial patterns of conflict and cooperation.

### Global Interconnections

D2.Geo.10.6-8. Analyze the ways in which cultural and environmental characteristics vary among various regions of the world.

D2.Geo.11.6-8. Explain how the relationship between the environmental characteristics of places and production of goods influences the spatial patterns of world trade.

D2.Geo.12.6-8. Explain how global changes in population distribution patterns affect changes in land use in particular places.

### Change, Continuity, and Context

D2.His.1.6-8. Analyze connections among events and developments in broader historical contexts.

D2.His.2.6-8. Classify series of historical events and developments as examples of change and/or continuity.

D2.His.3.6-8. Use questions generated about individuals and groups to analyze why they, and the developments they shaped, are seen as historically significant.

### Perspectives

D2.His.4.6-8. Analyze multiple factors that influenced the perspectives of people during different historical eras.

D2.His.5.6-8. Explain how and why perspectives of people have changed over time.

D2.His.6.6-8. Analyze how people's perspectives influenced what information is available in the historical sources they created.

## Historical Sources and Evidence

D2.His.9.6-8. Classify the kinds of historical sources used in a secondary interpretation.

D2.His.10.6-8. Detect possible limitations in the historical record based on evidence collected from different kinds of historical sources.

D2.His.11.6-8. Use other historical sources to infer a plausible maker, date, place of origin, and intended audience for historical sources where this information is not easily identified.

D2.His.12.6-8. Use questions generated about multiple historical sources to identify further areas of inquiry and additional sources.

D2.His.13.6-8. Evaluate the relevancy and utility of a historical source based on information such as maker, date, place of origin, intended audience, and purpose.

## Causation and Argumentation

D2.His.14.6-8. Explain multiple causes and effects of events and developments in the past.

D2.His.15.6-8. Evaluate the relative influence of various causes of events and developments in the past.

D2.His.16.6-8. Organize applicable evidence into a coherent argument about the past.

D2.His.17.6-8. Compare the central arguments in secondary works of history on related topics in multiple media.

## Gathering and Evaluating Sources

D3.1.6-8. Gather relevant information from multiple sources while using the origin, authority, structure, context, and corroborative value of the sources to guide the selection.

D3.2.6-8. Evaluate the credibility of a source by determining its relevance and intended use.

## Developing Claims and Using Evidence

D3.3.6-8. Identify evidence that draws information from multiple sources to support claims, noting evidentiary limitations.

D3.4.6-8. Develop claims and counterclaims while pointing out the strengths and limitations of both.

## Communicating Conclusions

D4.1.6-8. Construct arguments using claims and evidence from multiple sources, while acknowledging the strengths and limitations of the arguments.

D4.2.6-8. Construct explanations using reasoning, correct sequence, examples, and details with relevant information and data, while acknowledging the strengths and weaknesses of the explanations.

D4.3.6-8. Present adaptations of arguments and explanations on topics of interest to others to reach audiences and venues outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, reports, and maps) and digital technologies (e.g., Internet, social media, and digital documentary).

**Critiquing Conclusions**

D4.4.6-8. Critique arguments for credibility.

D4.5.6-8. Critique the structure of explanations.

**Taking Informed Action**

D4.6.6-8. Draw on multiple disciplinary lenses to analyze how a specific problem can manifest itself at local, regional, and global levels over time, identifying its characteristics and causes, and the challenges and opportunities faced by those trying to address the problem.

D4.7.6-8. Assess their individual and collective capacities to take action to address local, regional, and global problems, taking into account a range of possible levers of power, strategies, and potential outcomes.

D4.8.6-8. Apply a range of deliberative and democratic procedures to make decisions and take action in their classrooms and schools, and in out-of-school civic contexts.

## Next Generation Science Standards, Grade 7

**From Molecules to Organisms: Structures and Processes**

MS-LS1-6. Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.
MS-LS1-7. Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.

ELA/Literacy: RST.6-8.1, RST.6-8.2, WHST.6-8.2 a-f, WHST.6-8.9, SL.8.5
Mathematics: 6.EE.9

**Ecosystems: Interactions, Energy, and Dynamics**

MS-LS2-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
MS-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
MS-LS2-3. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.
MS-LS2-4. Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.
MS-LS2-5. Evaluate competing design solutions for maintaining biodiversity and ecosystem services.*

ELA/Literacy: RST.6-8.1, RST.6-8.7, RST.6-8.8, RI. 8.8, WHST. 6-8.1 a-e, WHST. 6-8.2.a-f, WHST. 6-8.9, SL.8.1. a-d, SL.8.4, SL..8.5
Mathematics: MP.4, 6.RP.3. a-d, 6.EE.9, 6.SP.5 a-d

## Earth Systems

MS-ESS2-1. Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.
MS-ESS2-2. Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
MS-ESS2-3. Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate mo- tions.

ELA/Literacy: RST.6-8.1, RST.6-8.7, RST.6-8.9, WHST.6-8.2. a-f, SL.8.5
Mathematics: MP.2, 6.EE.6, 7.EE.4.a-b

## Earth and Human Activity

MS-ESS3-1. Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.
MS-ESS3-2. Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.

ELA/Literacy: RST.6-8.1, RST.6-8.7, WHST.6-8.2. a-f, WHST.6-8.9
Mathematics: MP.2, 6.EE.6, 7.EE.4.a-b

## Matter and Its Interactions

MS-PS1-1. Develop models to describe the atomic composition of simple molecules and extended structures.
MS-PS1-2. Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.
MS-PS1-3. Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.
MS-PS1-4. Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.
MS-PS1-5. Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.
MS-PS1-6. Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.*

ELA/Literacy: RST.6-8.1, RST.6-8.3, RST.6-8.7, WHST.6-8.7, WHST.6-8.8
Mathematics: MP.2, MP.4, 6.RP.3, 6.NS.5, 6.NS.5, 6.SP.4, 6.SP.5. a-d

## Engineering Design

MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
MS-ETS1-2. Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
MS-ETS1-3. Analyze data from tests to determine similarities and differences among several design

solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.
MS-ETS1-4. Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

ELA/Literacy: RST.6–8.1, RST.6–8.7, RST.6–8.9, WHST.6–8.7, WHST.6–8.8, WHST.6–8.9, SL.8.5
Mathematics – MP.2, 7.EE.3, 7.SP.7.a–b

# Mathematics Standards, Grade 7

| Domain | Cluster | Code | Common Core State Standard |
|---|---|---|---|
| Ratios and Proportional Relationships | Analyze proportional relationships and use them to solve real-world and mathematical problems. | 7.RP.1 | Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, If a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction (1/2)/(1/4) miles per hour, equivalently 2 miles per hour. |
| | | 7.RP.2 | Recognize and represent proportional relationships between quantities.<br>a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.<br>b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.<br>c. Represent proportional relationships by equations. For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.<br>d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r) where r is the unit rate. |
| | | 7.RP.3 | Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error. |
| The Number System | Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. | 7.NS.1 | Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.<br>a. Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.<br>b. Understand p + q as the number located a distance |q| from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.<br>c. Understand subtraction of rational numbers as adding the additive inverse, p − q = p + (−q). Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.<br>d. Apply properties of operations as strategies to add and |

| | | | subtract rational numbers. |
|---|---|---|---|
| | | 7.NS.2 | Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.<br>a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as (–1)(–1) = 1 and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.<br>b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then –(p/q) = (–p)/q = p/(–q). Interpret quotients of rational numbers by describing real-world contexts.<br>c. Apply properties of operations as strategies to multiply and divide rational numbers.<br>d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats |
| | | 7.NS.3 | Solve real-world and mathematical problems involving the four operations with rational numbers. (Computations with rational numbers extend the rules for manipulating fractions to complex fractions.) |
| Expressions and Equations | Use properties of operations to generate equivalent expressions. | 7.EE.1 | Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. |
| | | 7.EE.2 | Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. For example, a + 0.05a = 1.05a means that "increase by 5%" is the same as "multiply by 1.05." |
| | Solve real-life and mathematical problems using numerical and algebraic expressions and equations. | 7.EE.3 | Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations as strategies to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making $25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or $2.50, for a new salary of $27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation. |
| | | 7.EE.4 | Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.<br>a. Solve word problems leading to equations of the form px + q = r and p(x + q) = r, where p, q, and r are specific rational numbers. Solve equations of these |

| | | | forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?<br>b. Solve word problems leading to inequalities of the form px + q > r or px + q < r, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions. |
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| Geometry | Draw, construct, and describe geometrical figures and describe the relationships between them. | 7.G.1 | Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale. |
| | | 7.G.2 | Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. |
| | | 7.G.3 | Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids. |
| | Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. | 7.G.4 | Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. |
| | | 7.G.5 | Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. |
| | | 7.G.6 | Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. |
| Statistics and Probability | Use random sampling to draw inferences about a population. | 7.SP.1 | Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences. |
| | | 7.SP.2 | Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be. |
| | Draw informal comparative inferences about two populations. | 7.SP.3 | Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. For example, the |

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| | | | mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable. |
| | | 7.SP.4 | Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book. |
| | Investigate chance processes and develop, use, and evaluate probability models. | 7.SP.5 | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |
| | | 7.SP.6 | Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times. |
| | | 7.SP.7 | Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.<br>a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.<br>b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies? |
| | | 7.SP.8 | Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.<br>a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.<br>b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event.<br>c. Design and use a simulation to generate frequencies for compound events. For example, use random digits as a |

| | simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood? |
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# Common Core: Language Arts Standards, Grade 7

| Strand | Topic | Code | Common Core State Standard |
|---|---|---|---|
| Reading Literature | Key Ideas and Details | 7.RL.1 | Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. |
| | | 7.RL.2 | Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text. |
| | | 7.RL.3 | Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot). |
| | Craft and Structure | 7.RL.4 | Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama. |
| | | 7.RL.5 | Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning. |
| | | 7.RL.6 | Analyze how an author develops and contrasts the points of view of different characters or narrators in a text. |
| | Integration of Knowledge and Ideas | 7.RL.7 | Compare and contrast a story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film). |
| | | 7.RL.9 | Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history. |
| | Range of Reading and Level of Text Complexity | 7.RL.10 | By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range. |
| Reading Informational | Key Ideas and Details | 7.RI.1 | Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. |
| | | 7.RI.2 | Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text. |
| | | 7.RI.3 | Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events). |
| | Craft and Structure | 7.RI.4 | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone. |
| | | 7.RI.5 | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas. |

| | | 7.RI.6 | Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others. |
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| | Integration of Knowledge and Ideas | 7.RI.7 | Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words). |
| | | 7.RI.8 | Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims. |
| | | 7.RI.9 | Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts. |
| | Range of Reading and Level of Text Complexity | 7.RI.10 | By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range. |
| Writing | Text Types and Purposes | 7.W.1 | Write arguments to support claims with clear reasons and relevant evidence.<br>a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant evidence. using accurate. credible sources and demonstrating an understanding of the topic or text.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| | | 7.W.2 | Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.<br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| | | 7.W.3 | Write narratives to develop real or imagined experiences or events using effective technique. relevant descriptive details, and well-structured event sequences. |

| | | | a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. <br> b. Use narrative techniques, such as dialogue. pacing. and description, to develop experiences, events, and/or characters. <br> c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. <br> d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. <br> e. Provide a conclusion that follows from and reflects on the narrated experiences or events. |
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| | Production and Distribution of Writing | 7.W.4 | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) |
| | | 7.W.5 | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 7 on page 53.) |
| | | 7.W.6 | Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources. |
| | Research to Build and Present Knowledge | 7.W.7 | Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation. |
| | | 7.W.8 | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| | | 7.W.9 | Draw evidence from literary or informational texts to support analysis, reflection, and research. <br> a. Apply grade 7 Reading standards to literature (e.g., "Compare and contrast a fictional portrayal of a time. place. or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history"). <br> b. Apply grade 7 Reading standards to literary nonfiction (e.g. "Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims"). |

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| | Range of Writing | 7.W.10 | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| Speaking and Listening | Comprehension and Collaboration | 7.SL.1 | Engage effectively in a range of collaborative discussions (one-on-one. in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br>a. Come to discussions prepared. having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic. text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.<br>d. Acknowledge new information expressed by others and. when warranted. modify their own views. |
| | | 7.SL.2 | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study. |
| | | 7.SL.3 | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence. |
| | Presentation of Knowledge and Ideas | 7.SL.4 | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. |
| | | 7.SL.6 | Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. |
| | | 7.SL.6 | Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 7 Language standards 1 and 3 on page 53 for specific expectations.) |
| Language | Conventions of Standard English | 7.L.1 | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.<br>a. Explain the function of phrases and clauses in general and their function in specific sentences.<br>b. Choose among simple. compound. complex, and compound-complex sentences to signal differing relationships among ideas.<br>c. Place phrases and clauses within a sentence. recognizing and correcting misplaced and dangling modifiers.* |
| | | 7.L.2 | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.<br>a. Use a comma to separate coordinate adjectives (e.g., It |

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| | | | was a fascinating. enjoyable movie but not He wore an old[,] green shirt).<br>b. Spell correctly. |
| | Knowledge of Language | 7.L.3 | Use knowledge of language and its conventions when writing. speaking. reading. or listening.<br>a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.* |
| | Vocabulary Acquisition and Use | 7.L.4 | Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.<br>a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.<br>b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose. rebel).<br>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.<br>d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). |
| | | 7.L.5 | Demonstrate understanding of figurative language. word relationships, and nuances in word meanings.<br>a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.<br>b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words.<br>c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., refined. respectful, polite. diplomatic. condescending). |
| | | 7.L.6 | Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. |
| Reading History | Key Ideas and Details | 6-8.RH.1 | Cite specific textual evidence to support analysis of primary and secondary sources. |
| | | 6-8.RH.2 | Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions. |
| | | 6-8.RH.3 | Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes law, how interest rates are raised or lowered). |
| | Craft and Structure | 6-8.RH.4 | Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies. |
| | | 6-8.RH.5 | Describe how a text presents information (e.g., sequentially, comparatively, causally). |

| | | 6-8.RH.6 | Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts). |
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| | Integration of Knowledge and Ideas | 6-8.RH.7 | Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts. |
| | | 6-8.RH.8 | Distinguish among fact, opinion, and reasoned judgment in a text. |
| | | 6-8.RH.9 | Analyze the relationship between a primary and secondary source on the same topic. |
| | Range of Reading and Level of Text Complexity | 6-8.RH.10 | By the end of grade 8, read and comprehend history/social studies texts in the grades 6–8 text complexity band independently and proficiently. |
| Reading Science and Technical | Key Ideas and Details | 6-8.RST.1 | Cite specific textual evidence to support analysis of science and technical texts. |
| | | 6-8.RST.2 | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| | | 6-8.RST.3 | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| | Craft and Structure | 6-8.RST.4 | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| | | 6-8.RST.5 | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| | | 6-8.RST.6 | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| | Integration of Knowledge and Ideas | 6-8.RST.7 | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| | | 6-8.RST.8 | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| | | 6-8.RST.9 | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| | Range of Reading and Level of Text Complexity | 6-8.RST.10 | By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently. |
| Writing History | Text Types and Purposes | 6-8.WHST.1 | Write arguments focused on discipline-specific content. a. Introduce claim(s) about a topic or issue. acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. c. Use words, phrases, and clauses to create cohesion and |

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| | | | clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| | | 6-8.WHST.2 | Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.<br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| Production and Distribution of Writing | | 6-8.WHST.4 | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| | | 6-8.WHST.5 | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| | | 6-8.WHST.6 | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| Research to Build and Present Knowledge | | 6-8.WHST.7 | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| | | 6-8.WHST.8 | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| | | 6-8.WHST.9 | Draw evidence from informational texts to support analysis reflection, and research. |
| Range of Writing | | 6-8.WHST.10 | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |

## Attachment F

Provide, in **Attachment F,** the school's exit standards for graduating students. These should clearly set forth what students in the last grade served will know and be able to do.

The six Learning Goal areas of Namahana School are: empirical reasoning, quantitative reasoning, communication, social reasoning, personal qualities, and postsecondary learning and career readiness. The goal of empirical reasoning requires that a student learn to think like a scientist: to use empirical evidence and a logical process to make decisions and to evaluate hypotheses. It does not reflect specific science content material, but instead can incorporate ideas from physics to sociology to art theory. The goal of quantitative reasoning requires that a student learn to think like a mathematician: to understand numbers, to analyze uncertainty, to comprehend the properties of shapes, and to study how things change over time. The goal of communication requires that a student learn to be a great communicator: to understand her/his audience, to write, to read, to speak and listen well, to use technology and artistic expression to communicate, and to be exposed to another language. The goal of social reasoning is to learn to think like an historian or anthropologist: to see diverse perspectives, to understand social issues, to explore ethics, to look at issues historically and grounded in place. The goal of personal qualities is to learn to be the best you can be through the community values of aloha 'āina, aloha kanaka, and aloha i ke ao: to demonstrate respect, responsibility, organization, leadership, and to reflect on your abilities and strive for improvement. Finally, the goal of postsecondary learning and career readiness is to prepare students with the necessary academic and professional skills to navigate their college and/or career goals.

Namahana graduates are 'āina conscious caretakers of their community that know who they are, where they are from, and are prepared with the academic skills necessary to achieve their postsecondary goals. Namahana graduates will think logically and creatively, make informed decisions, solve problems, visualize, make reasonable predictions, reflect, and know how to learn. Namahana graduates will be able to read, write, perform and apply mathematical operations, listen, and speak with competence. Namahana Graduates will be responsible, sociable, self-disciplined, and honest. They will display self-confidence and integrity. Namahana graduates will be able to identify, plan, and allocate resources. They will work well with others. They will acquire and use information. They will have the skills to understand complex interrelationships and work with a variety of technologies. Namahana graduates will be inquisitive, ask questions about their world; look for evidence and reason through issues and ideas before accepting them; use disciplinary thinking to understand, describe, and solve real problems; question others as well as themselves; distinguish fact from opinion; detect bias; and understand the limit of their own experience. Namahana graduates will be able to "put themselves in another's shoes;" strive to understand and respect points of view other than their own; develop a sense of perspective on an issue; understand their own and other's cultures, styles, values, and biases; and value and welcome diversity of opinions and ideas. Namahana graduates will have a strong sense of themselves, a commitment to community service, and will be responsible and active citizens grounded in the values of their community: aloha 'āina, aloha kanaka, and aloha i ke ao.

Students must complete all their academic course work for a high school diploma. Following the Hawaii Board of Education, the table below identifies each of the minimum graduation course requirements (24 credits) and affiliated standards necessary for students to exit high school.

| Subject | Courses | Standards |
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| ELA (4 Credits) | English Language Arts 1 (1.0 credit) English Language Arts 2 (1.0 credit) Expository Writing (0.5 credit) English Language Arts electives (1.5 credits) | Hawaii Common Core Standards, EL A(HCCS) |
| Social Studies (4 Credits) | U.S. History and Government (1.0 credit) World History and Culture (1.0 credit) Modern History of Hawaii (0.5 credit) Participation in a Democracy (0.5 credit) Social Studies basic elective (1.0 credit) | Hawaii C3 Framework in Social Studies (Hawaii C3) |
| Math (3 Credits) | Algebra 1.0 (1.0 credit); Geometry (1.0 credit); Mathematics elective (1.0 credit) | Hawaii Common Core Standards, Math (HCCS) |
| Science (3 Credits) | Biology 1 (1.0 credit); Science elective (2.0 credits) | Next Generation Science Standards (NGSS) |
| Foreign Language, Fine Arts, or CTE (2 Credits) | 2.0 credits in one of the specified programs of study or proficiency based equivalents | Hawaii Content and Performance Standards III |
| | Physical Education (1 credit) | Hawaii Content and Performance Standards III |
| | Health (0.5 credits) | National Health Education Standards: Achieving Excellence |
| | Personal Transition Plan (0.5 credits) | Personalized Learning Plans |
| Electives from ACCN Guide (6 Credits) | English Language Arts 3, English Language Arts 4 | HCCS ELA |
| | Algebra 2, Trigonometry, Precalculus, Calculus, Probability, Statistics | HCCS Math |
| | Chemistry, Physics | NGSS |
| | Hawaiian Studies, Humanities in Social Studies, Philosophy | Hawaii C3 |
| | Intro to Computer Science | CSTA K-12 Computer Science Standards |
| | Beginning Creative Dance, Beginning Hawaiian Dance, Intro to General Music, Beginning Music Appreciation, Chorus 1, General Art 1, Arts/Crafts of Hawaii, Hawaiiana 1 | Hawaii Content and Performance Standards III |

The table below lists all the standards for each student in order to graduate from Namahana School:

## SCIENCE: Next Generation Science Standards, 9-12

### Matter and Its Interactions

HS-PS1-1. Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms.

HS-PS1-2. Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.

HS-PS1-3. Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles.

HS-PS1-4. Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends on the changes in total bond energy.
HS-PS1-5. Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.
HS-PS1-6. Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium.*
HS-PS1-7. Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.
HS-PS1-8. Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay.

ELA/Literacy HS-PS1-1: RST.9-10.7, HS-PS1-2: WHST.9-12.2, WHST.9-12.5, HS-PS1-3: RST.11-12.1, WHST.9-12.7, WHST.11-12.8, WHST.9-12.9, HS-PS1-4: SL.11-12.5, HS-PS1-5: RST.11-12.1, WHST.9-12.2 HS-PS1-6: WHST.9-12.7

Mathematics HS-PS1-2: HSN-Q.A.1, HSN-Q.A.3, HS-PS1-3: HSN-Q.A.1, HSN-Q.A.3, HS-PS1-4: MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3, HS-PS1-5: MP.2, HSN-Q.A.1, HSN-Q.A.3, HS-PS1-7: MP.2, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-PS1-8: MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q-3

### Motion and Stability: Forces and Interactions

HS-PS2-1. Analyze data to support the claim that Newton's Second Law of Motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.
HS-PS2-2. Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system.
HS-PS2-3. Apply science and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision.
HS-PS2-4. Use mathematical representations of Newton's Law of Gravitation and Coulomb's Law to describe and predict the gravitational and electrostatic forces between objects.
HS-PS2-5. Plan and conduct an investigation to provide evidence that an electrical current can produce a magnetic field and that a changing magnetic field can produce an electrical current.

HS-PS2-6. Communicate scientific and technical information about why the molecular-level structure is important in the functioning of designed materials.

ELA/Literacy HS-PS2-1: RST.11-12.1, RST.11-12.7, WHST.9-12.9 HS-PS2-3: WHST.9-12.7 HS-PS2-5: WHST.9-12.7, WHST.11-12.8, WHST.9-12.9 HS-PS2-6: RST.11-12.1, WHST.9-12.2
Mathematics HS-PS2-1: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3, HSA-SSE.A.1, HSA-SSE.B.3, HSA-CED.A.1, HSA-CED.A.2, HSA-CED.A.4, HSF-IF.C.7, HSS-ID.A.1 HS-PS2-2: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3, HSA-CED.A.1, HSA-CED.A.2, HSA-CED.A.4 HS-PS2-4: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3, HSA-SSE.A.1, HSA-SSE.B.3 HS-PS2-5: HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-PS2-6: HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A-3

## Energy

HS-PS3-1. Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.
HS-PS3-2. Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motion of particles (objects) and energy associated with the relative positions of particles (objects).
HS-PS3-3. Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.
HS-PS3-4. Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics).
HS-PS3-5. Develop and use a model of two objects interacting through electrical or magnetic fields to illustrate the forces between objects and the changes in energy of the objects due to the interaction.

ELA/Literacy HS-PS3-1: SL.11-12.5 HS-PS3-2: SL.11-12.5 HS-PS3-3: WHST.9-12.7 HS-PS3-4: RST.11-12.1, WHST.9-12.7, WHST.11-12.8, WHST.9-12.9 HS-PS3-5: WHST.9-12.7, WHST.11-12.8, WHST.9-12.9, SL.11-12.5
Mathematics HS-PS3-1: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-PS3-2: MP.2, MP.4 HS-PS3-3: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-PS3-4: MP.2, MP.4 HS-PS3-5: MP.2, MP.4

## Waves and Their Applications in Technologies for Information Transfer

HS-PS4-1. Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.
HS-PS4-2. Evaluate questions about the advantages of using digital transmission and storage of information.
HS-PS4-3. Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other.

HS-PS4-4. Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter.
HS-PS4-5. Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.

ELA/Literacy HS-PS4-1: RST.11-12.7 HS-PS4-2: RST.9-10.8, RST.11-12.1, RST.11-12.8 HS-PS4-3: RST.9-10.8, RST.11-12.1, RST.11-12.8 HS-PS4-4: RST.9-10.8, RST.11-12.1, RST.11-12.7, RST.11-12.8, WHST.11-12.8 HS-PS4-5: WHST.9-12.2
Mathematics HS-PS4-1: MP.2, MP.4, HSA-SSE.A.1, HSA-SSE.B.3, HSA.CED.A.4 HS-PS4-3: MP.2, HSA-SSE.A.1, HSA-SSE.B.3, HSA.

## From Molecules to Organisms: Structure and Process

HS-LS1-1. Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins, which carry out the essential functions of life through systems of specialized cells.
HS-LS1-2. Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
HS-LS1-3. Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.
HS-LS1-4. Use a model to illustrate the role of cellular division (mitosis) and differentiation in producing and maintaining complex organisms.
HS-LS1-5. Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy.
HS-LS1-6. Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules.
HS-LS1-7. Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed, resulting in a net transfer of energy.

ELA/Literacy HS-LS1-1: RST.11-12.1, WHST.9-12.2, WHST.9-12.9 HS-LS1-2: SL.11-12.5 HS-LS1-3: WHST.9-12.7, WHST.11-12.8 HS-LS1-4: SL.11-12.5 HS-LS1-5: SL.11-12.5 HS-LS1-6: RST.11-12.1, WHST.9-12.2, WHST.9-12.5, WHST.9-12.9 HS-LS1-7: SL.11-12.5
Mathematics HS-LS1-4: MP.4, HSF-IF.C.7, HSF

## Ecosystems: Interactions, Energy, and Dynamics

HS-LS2-1. Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
HS-LS2-2. Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.
HS-LS2-3. Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions.
HS-LS2-4. Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem.

HS-LS2-5. Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere.
HS-LS2-6. Evaluate claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.
HS-LS2-7. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
HS-LS2-8. Evaluate evidence for the role of group behavior on individual and species' chances to survive and reproduce.

ELA/Literacy HS-LS2-1: RST.11-12.1, WHST.9-12.2 HS-LS2-2: RST.11-12.1, WHST.9-12.2 HS-LS2-3: RST.11-12.1, WHST.9-12.2, WHST.9-12.5 HS-LS2-6: RST.9-10.8, RST.11-12.1, RST.11-12.7, RST.11-12.8 HS-LS2-7: RST.9-10.8, RST.11-12.7, RST.11-12.8, WHST.9-12.7 HS-LS2-8: RST.9-10.8, RST.11-12.1, RST.11-12.7, RST.11-12
Mathematics HS-LS2-1: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-LS2-2: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-LS2-4: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-LS2-6: MP.2, HSS-ID.A.1, HSS-IC.A.1, HSS-IC.B.6 HS-LS2-7: MP.2, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3

## Heredity: Inheritance and Variation of Traits

HS-LS3-1. Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.
HS-LS3-2. Make and defend a claim based on evidence that inheritable genetic variations may result from (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.
HS-LS3-3. Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.

ELA/Literacy HS-LS3-1: RST.11-12.1, RST.11-12.9 HS-LS3-2: RST.11-12.1, WHST.9-12.1
Mathematics HS-LS2-2: MP.2 HS-LS3-3: MP.2

## Biological Evolution: Unity and Diversity

HS-LS4-1. Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.
HS-LS4-2. Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment.
HS-LS4-3. Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait.
HS-LS4-4. Construct an explanation based on evidence for how natural selection leads to adaptation of populations.

HS-LS4-5. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

ELA/Literacy HS-LS4-1: RST.11-12.1, WHST.9-12.2, WHST.9-12.9, SL.11-12.4 HS-LS4-2: RST.11-12.1, WHST.9-12.2, WHST.9-12.9, SL.11-12.4 HS-LS4-3: RST.11-12.1, WHST.9-12.2, WHST.9-12.9 HS-LS4-4: RST.11-12.1, WHST.9-12.2, WHST.9-12.9 HS-LS4-5: RST.11-12.8, WHST.9-12.9 HS-LS4-6: WHST.9-12.5, WHST.9-12.7

Mathematics HS-LS4-1: MP.2 HS-LS4-2: MP.2, MP.4 HS-LS4-3: MP.2 HS-LS4-4: MP.2 HS-LS4-4: MP.2, HS-LS4-5: MP.2

## Earth's Place in the Universe

HS-ESS1-1. Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation.

HS-ESS1-2. Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe.

HS-ESS1-3. Communicate scientific ideas about the way stars, over their life cycle, produce elements.

HS-ESS1-4. Use mathematical or computational representations to predict the motion of orbiting objects in the solar system.

HS-ESS1-5. Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks.

HS-ESS1-6. Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history.

ELA/Literacy HS-ESS1-1: RST.11-12.1 HS-ESS1-2: RST.11-12.1, WHST.9-12.2 HS-ESS1-3: WHST.9-12.2, SL.11-12.4 HS-ESS1-5: RST.11-12.1, RST.11-12.8, WHST.9-12.2 HS-ESS1-6: RST.11-12.1, RST.11-12.8, WHST.9-12.1

Mathematics HS-ESS1-1: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3, HSA-SSE.A.1, HSA-CED.A.2, HSA-CED.A.4 HS-ESS1-2: MP.2, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3, HSA-SSE.A.1, HSA-CED.A.2, HSA-CED.A.4 HS-ESS1-3: MP.2 HS-ESS1-4: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3, HSA-SSE.A.1, HSA-CED.A.2, HSA-CED.A.4 HS-ESS1-5: MP.2, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-ESS1-6: MP.2, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3, HSF-IF.B.5, HSS-ID.B.6

## Earth's Systems

S-ESS2-1. Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features.

HS-ESS2-2. Analyze geoscience data to make the claim that one change to Earth's surface can create feedback that causes changes to other Earth systems.

HS-ESS2-3. Develop a model based on evidence of Earth's interior to describe the cycling of matter by thermal convection.

HS-ESS2-4. Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.

HS-ESS2-5. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.

HS-ESS2-6. Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.

HS-ESS2-7. Construct an argument based on evidence about the simultaneous co-evolution of Earth's systems and life on Earth.

ELA/Literacy HS-ESS2-1: SL.11-12.5 HS-ESS2-2: RST.11-12.1, RST.11-12.2 HS-ESS2-3: RST.11-12.1, SL.11-12.5 HS-ESS2-4: SL.11-12.5 HS-ESS2-5: WHST.9-12.7 HS-ESS2-7: WHST.9-12.1

Mathematics HS-ESS2-1: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-ESS2-2: MP.2, HSN-Q.A.1, HSN-Q.A.3, HS-ESS2-3: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-ESS2-4: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-ESS2-5: HSN-Q.A.3 HS-ESS2-6: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3

## Earth and Human Activity

HS-ESS3-1. Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.

HS-ESS3-2. Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.

HS-ESS3-3. Create a computational simulation to illustrate the relationships among the management of natural resources, the sustainability of human populations, and biodiversity.

HS-ESS3-4. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

HS-ESS3-5. Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth's systems.

HS-ESS3-6. Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

ELA/Literacy HS-ESS3-1: RST.11-12.1, WHST.9-12.2 HS-ESS3-2: RST.11-12.1, RST.11-12.8 HS-ESS3-4: RST.11-12.1, RST.11-12.8 HS-ESS3-5: RST.11-12.1, RST.11-12.2, RST11-12.7

Mathematics HS-ESS3-1: MP.2, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-ESS3-2: MP.2 HS-ESS3-3: MP.2, MP.4 HS-ESS3-4: MP.2, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-ESS3-5: MP.2, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3 HS-ESS3-6: MP.2, MP.4, HSN-Q.A.1, HSN-Q.A.2, HSN-Q.A.3

## Engineering Design

HS-ETS1-1. Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.

HS-ETS1-2. Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.

HS-ETS1-3. Evaluate a solution to a complex real-world problem based on prioritized criteria and tradeoffs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.
HS-ETS1-4. Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.

ELA/Literacy HS-ETS1-1: RST.11-12.7, RST.11-12.8, RST.11-12.9 HS-ETS1-3: RST.11-12.7, RST.11-12.8, RST.11-12.9
Mathematics HS-ETS1-1: MP.2, MP.4 HS-ETS1-2: MP.4 HS-ETS1-3: MP.2, MP.4 HS-ETS1-4: MP.4

## SOCIAL STUDIES: Hawaii C3 Framework for Social Studies

### Constructing Compelling Questions

D1.1.9-12. Explain how a question reflects an enduring issue in the field.
D1.2.9-12. Explain points of agreement and disagreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a compelling question.

### Constructing Supporting Questions

D1.3.9-12. Explain points of agreement and disagreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a supporting question.
D1.4.9-12. Explain how supporting questions contribute to an inquiry and how, through engaging source work, new compelling and supporting questions emerge.

### Determining Helpful Sources

D1.5.9-12. Determine the kinds of sources that will be helpful in answering compelling and supporting questions, taking into consideration multiple points of view represented in the sources, the types of sources available, and the potential uses of the sources.

### Civic and Political Institutions

D2.Civ.1.9-12. Distinguish the powers and responsibilities of local, state, tribal, national, and international civic and political institutions.
D2.Civ.2.9-12. Analyze the role of citizens in the U.S. political system, with attention to various theories of democracy, changes in Americans' participation over time, and alternative models from other countries, past and present.
D2.Civ.3.9-12. Analyze the impact of constitutions, laws, treaties, and international agreements on the maintenance of national and international order.
D2.Civ.4.9-12. Explain how the U.S. Constitution establishes a system of government that has powers, responsibilities, and limits that have changed over time and that are still contested.
D2.Civ.5.9-12. Evaluate citizens' and institutions' effectiveness in addressing social and political problems at the local, state, tribal, national, and/or international level.
D2.Civ.6.9-12. Critique relationships among governments, civil societies, and economic markets.

## Participation and Deliberation

D2.Civ.7.9-12. Apply civic virtues and democratic principles when working with others.
D2.Civ.8.9-12. Evaluate social and political systems in different contexts, times, and places, that promote civic virtues and enact democratic principles.
D2.Civ.9.9-12. Use appropriate deliberative processes in multiple settings.
D2.Civ.10.9-12. Analyze the impact and the appropriate roles of personal interests and perspectives on the application of civic virtues, democratic principles, constitutional rights, and human rights.

## Processes, Rules, and Laws

D2.Civ.11.9-12. Evaluate multiple procedures for making governmental decisions at the local, state, national, and international levels in terms of the civic purposes achieved.
D2.Civ.12.9-12. Analyze how people use and challenge local, state, national, and international laws to address a variety of public issues.
D2.Civ.13.9-12. Evaluate public policies in terms of intended and unintended outcomes, and related consequences.
D2.Civ.14.9-12. Analyze historical, contemporary, and emerging means of changing societies, promoting the common good, and protecting rights.

## Economic Decision Making

D2.Eco.1.9-12. Analyze how incentives influence choices that may result in policies with a range of costs and benefits for different groups.
D2.Eco.2.9-12. Use marginal benefits and marginal costs to construct an argument for or against an approach or solution to an economic issue.

## Exchange and Markets

D2.Eco.3.9-12. Analyze the ways in which incentives influence what is produced and distributed in a market system.
D2.Eco.4.9-12. Evaluate the extent to which competition among sellers and among buyers exists in specific markets.
D2.Eco.5.9-12. Describe the consequences of competition in specific markets.
D2.Eco.6.9-12. Generate possible explanations for a government role in markets when market inefficiencies exist.
D2.Eco.7.9-12. Use benefits and costs to evaluate the effectiveness of government policies to improve market outcomes.
D2.Eco.8.9-12. Describe the possible consequences, both intended and unintended, of government policies to improve market outcomes.
D2.Eco.9.9-12. Describe the roles of institutions such as clearly defined property rights and the rule of law in a market economy.

## The National Economy

D2.Eco.10.9-12. Use current data to explain the influence of changes in spending, production, and the money supply on various economic conditions.
D2.Eco.11.9-12. Use economic indicators to analyze the current and future state of the economy.

D2.Eco.12.9-12. Evaluate the selection of monetary and fiscal policies in a variety of economic conditions.

D2.Eco.13.9-12. Explain why advancements in technology and investments in capital goods and human capital increase economic growth and standards of living

## The Global Economy

D2.Eco.14.9-12. Analyze the role of comparative advantage in international trade of goods and services.

D2.Eco.15.9-12. Explain how current globalization trends and policies affect economic growth, labor markets, rights of citizens, the environment, and resource and income distribution in different nations.

## Geographic Representations

D2.Geo.1.9-12. Use geospatial and related technologies to create maps to display and explain the spatial patterns of cultural and environmental characteristics.

D2.Geo.2.9-12. Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their political, cultural, and economic dynamics.

D2.Geo.3.9-12. Use geographic data to analyze variations in the spatial patterns of cultural and environmental characteristics at multiple scales.

## Human-Environment Interaction

D2.Geo.4.9-12. Analyze relationships and interactions within and between human and physical systems to explain reciprocal influences that occur among them.

D2.Geo.5.9-12. Evaluate how political and economic decisions throughout time have influenced cultural and environmental characteristics of various places and regions.

D2.Geo.6.9-12. Evaluate the impact of human settlement activities on the environmental and cultural characteristics of specific places and regions.

## Human Population: Spatial Patterns and Movements

D2.Geo.7.9-12. Analyze the reciprocal nature of how historical events and the spatial diffusion of ideas, technologies, and cultural practices have influenced migration patterns and the distribution of human population.

D2.Geo.8.9-12. Evaluate the impact of economic activities and political decisions on spatial patterns within and among urban, suburban, and rural regions.

D2.Geo.9.9-12. Evaluate the influence of long-term climate variability on human migration and settlement patterns, resource use, and land uses at local-to-global scales.

## Global Interactions

D2.Geo.10.9-12. Evaluate how changes in the environmental and cultural characteristics of a place or region influence spatial patterns of trade and land use.

D2.Geo.11.9-12. Evaluate how economic globalization and the expanding use of scarce resources contribute to conflict and cooperation within and among countries.

D2.Geo.12.9-12. Evaluate the consequences of human-made and natural catastrophes on global trade, politics, and human migration.

## Change, Continuity, and Context

D2.His.1.9-12. Evaluate how historical events and developments were shaped by unique circumstances of time and place as well as broader historical contexts.

D2.His.2.9-12. Analyze change and continuity in historical eras.

D2.His.3.9-12. Use questions generated about individuals and groups to assess how the significance of their actions changes over time and is shaped by the historical context.

## Perspectives

D2.His.4.9-12. Analyze complex and interacting factors that influenced the perspectives of people during different historical eras.

D2.His.5.9-12. Analyze how historical contexts shaped and continue to shape people's perspectives.

D2.His.6.9-12. Analyze the ways in which the perspectives of those writing history shaped the history that they produced.

D2.His.7.9-12. Explain how the perspectives of people in the present shape interpretations of the past.

D2.His.8.9-12. Analyze how current interpretations of the past are limited by the extent to which available historical sources represent perspectives of people at the time.

## Historical Sources and Evidence

D2.His.9.9-12. Analyze the relationship between historical sources and the secondary interpretations made from them.

D2.His.10.9-12. Detect possible limitations in various kinds of historical evidence and differing secondary interpretations.

D2.His.11.9-12. Critique the usefulness of historical sources for a specific historical inquiry based on their maker, date, place of origin, intended audience, and purpose.

D2.His.12.9-12. Use questions generated about multiple historical sources to pursue further inquiry and investigate additional sources.

D2.His.13.9-12. Critique the appropriateness of the historical sources used in a secondary interpretation.

## Causation and Argumentation

D2.His.14.9-12. Analyze multiple and complex causes and effects of events in the past.

D2.His.15.9-12. Distinguish between long-term causes and triggering events in developing a historical argument.

D2.His.16.9-12. Integrate evidence from multiple relevant historical sources and interpretations into a reasoned argument about the past.

D2.His.17.9-12. Critique the central arguments in secondary works of history on related topics in multiple media in terms of their historical accuracy.

## Gathering and Evaluating Sources

D3.1.9-12. Gather relevant information from multiple sources representing a wide range of views while using the origin, authority, structure, context, and corroborative value of the sources to guide the selection.

D3.2.9-12. Evaluate the credibility of a source by examining how experts value the source.

### Developing Claims and Using Evidence

D3.3.9-12. Identify evidence that draws information directly and substantively from multiple sources to detect inconsistencies in evidence in order to revise or strengthen claims.

D3.4.9-12. Refine claims and counterclaims attending to precision, significance, and knowledge conveyed through the claim while pointing out the strengths and limitations of both.

### Communicating Conclusions

D4.1.9-12. Construct arguments using precise and knowledgeable claims, with evidence from multiple sources, while acknowledging counterclaims and evidentiary weaknesses.

D4.2.9-12. Construct explanations using sound reasoning, correct sequence (linear or non-linear), examples, and details with significant and pertinent information and data, while acknowledging the strengths and weaknesses of the explanation given its purpose (e.g., cause and effect, chronological, procedural, technical).

D4.3.9-12. Present adaptations of arguments and explanations that feature evocative ideas and perspectives on issues and topics to reach a range of audiences and venues outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, reports, and maps) and digital technologies (e.g., Internet, social media, and digital documentary).

### Critiquing Conclusions

D4.4.9-12. Critique the use of claims and evidence in arguments for credibility.

D4.5.9-12. Critique the use of the reasoning, sequencing, and supporting details of explanations.

### Taking Informed Action

D4.6.9-12. Use disciplinary and interdisciplinary lenses to understand the characteristics and causes of local, regional, and global problems; instances of such problems in multiple contexts; and challenges and opportunities faced by those trying to address these problems over time and place.

D4.7.9-12. Assess options for individual and collective action to address local, regional, and global problems by engaging in self-reflection, strategy identification, and complex causal reasoning.

D4.8.9-12. Apply a range of deliberative and democratic strategies and procedures to make decisions and take action in their classrooms, schools, and out-of-school civic contexts.

# Mathematics Standards, Grade 9-12

| Domain | Cluster | Code | Common Core State Standard |
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| The Real Number System | Extend the properties of exponents to rational exponents. | N.RN.1 | Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. For example, we define 5^(1/3) to be the cube root of 5 because we want [5^(1/3)]^3 = 5^[(1/3) x 3] to hold, so [5^(1/3)]^3 must equal 5. |
| | | N.RN.2 | Rewrite expressions involving radicals and rational exponents using the properties of exponents. |
| | Use properties of rational and irrational numbers. | N.RN.3 | Explain why the sum or product of rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. |
| Quantities | Reason quantitatively and use units to solve problems. | N.Q.1 | Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. |
| | | N.Q.2 | Define appropriate quantities for the purpose of descriptive modeling. |
| | | N.Q.3 | Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. |
| The Complex Number System | Perform arithmetic operations with complex numbers. | N.CN.1 | Know there is a complex number i such that $i^2 = ?1$, and every complex number has the form a + bi with a and b real. |
| | | N.CN.2 | Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers. |
| | | N.CN.3 | Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers. |
| | Represent complex numbers and their operations on the complex plane. | N.CN.4 | Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers), and explain why the rectangular and polar forms of a given complex number represent the same number. |
| | | N.CN.5 | Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation. For example, $(-1 \pm ?3i)^3 = 8$ because $(-1 \pm ?3i)$ has modulus 2 and argument 120°. |
| | | N.CN.6 | Calculate the distance between numbers in the complex plane as the modulus of the difference, and the midpoint of a segment as the average of the numbers at its endpoints. |
| | Use complex numbers in polynomial | N.CN.7 | Solve quadratic equations with real coefficients that have complex solutions. |

| | | N.CN.8 | Extend polynomial identities to the complex numbers. For example, rewrite x^2 + 4 as (x + 2i)(x - 2i). |
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| | identities and equations. | N.CN.9 | Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials. |
| Vector and Matrix Quantities | Represent and model with vector quantities. | N.VM.1 | Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes (e.g., v, \|v\|, \|\|v\|\|, v). |
| | | N.VM.2 | Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point. |
| | | N.VM.3 | Solve problems involving velocity and other quantities that can be represented by vectors. |
| | Perform operations on vectors. | N.VM.4 | Add and subtract vectors. a. Add vectors end-to-end, component-wise, and by the parallelogram rule. Understand that the magnitude of a sum of two vectors is typically not the sum of the magnitudes. b. Given two vectors in magnitude and direction form, determine the magnitude and direction of their sum. c. Understand vector subtraction v - w as v + (-w), where (-w) is the additive inverse of w, with the same magnitude as w and pointing in the opposite direction. Represent vector subtraction graphically by connecting the tips in the appropriate order, and perform vector subtraction component-wise. |
| | | N.VM.5 | Multiply a vector by a scalar. a. Represent scalar multiplication graphically by scaling vectors and possibly reversing their direction; perform scalar multiplication component-wise, e.g., as c(vx, vy) = (cvx, cvy). b. Compute the magnitude of a scalar multiple cv using \|\|cv\|\| = \|c\|v. Compute the direction of cv knowing that when \|c\|v =? 0, the direction of cv is either along v (for c > 0) or against v (for c < 0). |
| | Perform operations on matrices & use matrices in applications. | N.VM.6 | Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network. |
| | | N.VM.7 | Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled. |
| | | N.VM.8 | Add, subtract, and multiply matrices of appropriate dimensions. |
| | | N.VM.9 | Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties. |
| | | N.VM.10 | Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse. |

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| | | N.VM.11 | Multiply a vector (regarded as a matrix with one column) by a matrix of suitable dimensions to produce another vector. Work with matrices as transformations of vectors. |
| | | N.VM.12 | Work with 2 X 2 matrices as transformations of the plane, and interpret the absolute value of the determinant in terms of area. |
| Seeing Structure in Expressions | Interpret the structure of expressions | A.SSE.1 | Interpret expressions that represent a quantity in terms of its context.*<br>a. Interpret parts of an expression, such as terms, factors, and coefficients.<br>b. Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret $P(1+r)^n$ as the product of P and a factor not depending on P. |
| | | A.SSE.2 | Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$. |
| | Write expressions in equivalent forms to solve problems | A.SSE.3 | Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.<br>a. Factor a quadratic expression to reveal the zeros of the function it defines.<br>b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.<br>c. Use the properties of exponents to transform expressions for exponential functions. For example the expression $1.15^t$ can be rewritten as $[1.15^{(1/12)}]^{(12t)}$ ? $1.012^{(12t)}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%. |
| | | A.SSE.4 | Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. For example, calculate mortgage payments. |
| Arithmetic with Polynomials and Rational Expressions | Perform arithmetic operations on polynomials | A.APR.1 | Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. |
| | Understand the relationship between zeros and factors of polynomials | A.APR.2 | Know and apply the Remainder Theorem: For a polynomial p(x) and a number a, the remainder on division by x - a is p(a), so p(a) = 0 if and only if (x - a) is a factor of p(x). |
| | | A.APR.3 | Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. |
| | Use polynomial identities to solve problems | A.APR.4 | Prove polynomial identities and use them to describe numerical relationships. For example, the polynomial identity $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ can be used to generate Pythagorean triples. |

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| | | A.APR.5 | Know and apply that the Binomial Theorem gives the expansion of $(x + y)^n$ in powers of x and y for a positive integer n, where x and y are any numbers, with coefficients determined for example by Pascal's Triangle. (The Binomial Theorem can be proved by mathematical induction or by a combinatorial argument.) |
| | Rewrite rational expressions | A.APR.6 | Rewrite simple rational expressions in different forms; write a(x)/b(x) in the form q(x) + r(x)/b(x), where a(x), b(x), q(x), and r(x) are polynomials with the degree of r(x) less than the degree of b(x), using inspection, long division, or, for the more complicated examples, a computer algebra system. |
| | | A.APR.7 | Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions. |
| Creating Equations | Create equations that describe numbers or relationships | A.CED.1 | Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.* |
| | | A.CED.2 | Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.* |
| | | A.CED.3 | Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.* |
| | | A.CED.4 | Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law V = IR to highlight resistance R.* |
| Reasoning with Equations and Inequalities | Understand solving equations as a process of reasoning and explain the reasoning | A.REI.1 | Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. |
| | | A.REI.2 | Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise. |
| | Solve equations and inequalities in one variable | A.REI.3 | Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. |
| | | A.REI.4 | Solve quadratic equations in one variable.<br>a. Use the method of completing the square to transforms any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.<br>b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the |

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| | | | initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as a ± bi for real numbers a and b. |
| | Solve systems of equations | A.REI.5 | Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. |
| | | A.REI.6 | Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. |
| | | A.REI.7 | Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line y = -3x and the circle x^2 + y^2 = 3. |
| | | A.REI.8 | Represent a system of linear equations as a single matrix equation in a vector variable. |
| | | A.REI.9 | Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension 3 × 3 or greater). |
| | Represent and solve equations and inequalities graphically | A.REI.10 | Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). |
| | | A.REI.11 | Explain why the x-coordinates of the points where the graphs of the equations y = f(x) and y = g(x) intersect are the solutions of the equation f(x) = g(x); find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where f(x) and/or g(x) are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.* |
| | | A.REI.12 | Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. |
| Interpreting Functions | Understand the concept of a function and use function notation | F.IF.1 | Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then f(x) denotes the output of f corresponding to the input x. The graph of f is the graph of the equation y = f(x). |
| | | F.IF.2 | Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. |
| | | F.IF.3 | Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. For example, the Fibonacci sequence is defined recursively by f(0) = f(1) = 1, f(n+1) = f(n) + f(n-1) for n ? 1 (n is greater than or equal to 1). |
| | Interpret functions that arise in | F.IF.4 | For a function that models a relationship between two quantities, interpret key features of graphs and tables in |

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| | | | terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.* |
| | applications in terms of the context | F.IF.5 | Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.* |
| | | F.IF.6 | Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.* |
| | Analyze functions using different representations | F.IF.7 | Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.* <br> a. Graph linear and quadratic functions and show intercepts, maxima, and minima. <br> b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. <br> c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. <br> d. Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior. (+) <br> e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. |
| | | F.IF.8 | Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. <br> a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. <br> b. Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)^{(12t)}$, $y = (1.2)^{(t/10)}$, and classify them as representing exponential growth or decay. |
| | | F.IF.9 | Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. |

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| Building Functions | Build a function that models a relationship between two quantities | F.BF.1 | Write a function that describes a relationship between two quantities.*<br>a. Determine an explicit expression, a recursive process, or steps for calculation from a context.<br>b. Combine standard function types using arithmetic operations. For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.<br>c. Compose functions. For example, if T(y) is the temperature in the atmosphere as a function of height, and h(t) is the height of a weather balloon as a function of time, then T(h(t)) is the temperature at the location of the weather balloon as a function of time. (+) |
| | | F.BF.2 | Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.* |
| | Build new functions from existing functions | F.BF.3 | Identify the effect on the graph of replacing f(x) by f(x) + k, k f(x), f(kx), and f(x + k) for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. |
| | | F.BF.4 | Find inverse functions.<br>a. Solve an equation of the form f(x) = c for a simple function f that has an inverse and write an expression for the inverse. For example, f(x) =2(x^3) for x > 0 or f(x) = (x+1)/(x-1) for x =? 1 (x not equal to 1).<br>b. Verify by composition that one function is the inverse of another. (+)<br>c. Read values of an inverse function from a graph or a table, given that the function has an inverse. (+)<br>d. Produce an invertible function from a non-invertible function by restricting the domain. (+) |
| | | F.BF.5 | Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents. |
| Linear, Quadratic, and Exponential Models | Construct and compare linear and exponential models and solve problems | F.LE.1 | Distinguish between situations that can be modeled with linear functions and with exponential functions.*<br>a. Prove that linear functions grow by equal differences over equal intervals and that exponential functions grow by equal factors over equal intervals.*<br>b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.*<br>c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.* |
| | | F.LE.2 | Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).* |

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| | | F.LE.3 | Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.* |
| | | F.LE.4 | For exponential models, express as a logarithm the solution to ab^(ct) = d where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology.* |
| | Interpret expressions for functions in terms of the situation they model | F.LE.5 | Interpret the parameters in a linear, quadratic, or exponential function in terms of a context.* |
| Trigonometric Functions | Extend the domain of trigonometric functions using the unit circle | F.TF.1 | Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle. |
| | | F.TF.2 | Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle. |
| | | F.TF.3 | Use special triangles to determine geometrically the values of sine, cosine, tangent for (pi)/3, (pi)/4 and (pi)/6, and use the unit circle to express the values of sine, cosine, and tangent for x, [(pi) + x], and [2(pi) - x] in terms of their values for x, where x is any real number. |
| | | F.TF.4 | Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions. |
| | Model periodic phenomena with trigonometric functions | F.TF.5 | Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.* |
| | | F.TF.6 | Understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed. |
| | | F.TF.7 | Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context.* |
| | Prove and apply trigonometric identities | F.TF.8 | Prove the Pythagorean identity $(\sin A)^2 + (\cos A)^2 = 1$ and use it to calculate trigonometric ratios. |
| | | F.TF.9 | Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems. |
| Congruence | Experiment with transformations in the plane | G.CO.1 | Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. |
| | | G.CO.2 | Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). |

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| | | G.CO.3 | Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself. |
| | | G.CO.4 | Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments. |
| | | G.CO.5 | Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another. |
| | Understand congruence in terms of rigid motions | G.CO.6 | Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. |
| | | G.CO.7 | Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. |
| | | G.CO.8 | Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. |
| | Prove geometric theorems | G.CO.9 | Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints. |
| | | G.CO.10 | Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180 degrees; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point. |
| | | G.CO.11 | Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals. |
| | Make geometric constructions | G.CO.12 | Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line. |
| | | G.CO.13 | Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle. |
| Similarity, Right Triangles, and Trigonometry | Understand similarity in terms of similarity transformations | G.SRT.1 | Verify experimentally the properties of dilations given by a center and a scale factor: <br> -- a. A dilation takes a line not passing through the |

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| | | | center of the dilation to a parallel line, and leaves a line passing through the center unchanged.<br>-- b. The dilation of a line segment is longer or shorter in the ratio given by the scale factor. |
| | | G.SRT.2 | Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides. |
| | | G.SRT.3 | Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar. |
| | Prove theorems involving similarity | G.SRT.4 | Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity. |
| | | G.SRT.5 | Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures. |
| | Define trigonometric ratios and solve problems involving right triangles | G.SRT.6 | Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles. |
| | | G.SRT.7 | Explain and use the relationship between the sine and cosine of complementary angles. |
| | | G.SRT.8 | Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. |
| | Apply trigonometry to general triangles | G.SRT.9 | Derive the formula $A = (1/2)ab \sin(C)$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side. |
| | | G.SRT.10 | Prove the Laws of Sines and Cosines and use them to solve problems. |
| | | G.SRT.11 | Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces). |
| Circles | Understand and apply theorems about circles | G.C.1 | Prove that all circles are similar. |
| | | G.C.2 | Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle. |
| | | G.C.3 | Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle. |
| | | G.C.4 | Construct a tangent line from a point outside a given circle to the circle. |
| | Find arc lengths and areas of sectors of circles | G.C.5 | Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of |

| | | | proportionality; derive the formula for the area of a sector. |
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| Expressing Geometric Properties with Equations | Translate between the geometric description and the equation for a conic section | G.GPE.1 | Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation. |
| | | G.GPE.2 | Derive the equation of a parabola given a focus and directrix. |
| | | G.GPE.3 | Derive the equations of ellipses and hyperbolas given the foci. |
| | Use coordinates to prove simple geometric theorems algebraically | G.GPE.4 | Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point (1, sqrt3) lies on the circle centered at the origin and containing the point (0, 2). |
| | | G.GPE.5 | Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point). |
| | | G.GPE.6 | Find the point on a directed line segment between two given points that partitions the segment in a given ratio. |
| | | G.GPE.7 | Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.* |
| Geometric Measurement and Dimension | Explain volume formulas and use them to solve problems | G.GMD.1 | Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments. |
| | | G.GMD.2 | Give an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures. |
| | | G.GMD.3 | Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.* |
| | Visualize relationships between two-dimensional and three-dimensional objects | G.GMD.4 | Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects. |
| | Apply geometric concepts in modeling situations | G.MG.1 | Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).* |
| Modeling with Geometry | Apply geometric concepts in modeling situations | G.MG.2 | Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).* |
| | | G.MG.3 | Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios). * |
| Interpreting Categorical and | Summarize, represent, and interpret data on | S.ID.1 | Represent data with plots on the real number line (dot plots, histograms, and box plots). |

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| Quantitative Data | a single count or measurement variable | S.ID.2 | Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. |
| | | S.ID.3 | Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). |
| | | S.ID.4 | Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve. |
| | Summarize, represent, and interpret data on two categorical and quantitative variables | S.ID.5 | Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data. |
| | | S.ID.6 | Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. b. Informally assess the fit of a function by plotting and analyzing residuals. c. Fit a linear function for a scatter plot that suggest a linear association. |
| | Interpret linear models | S.ID.7 | Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. |
| | | S.ID.8 | Compute (using technology) and interpret the correlation coefficient of a linear fit |
| | | S.ID.9 | Distinguish between correlation and causation |
| Making Inferences and Justifying Conclusions | Understand and evaluate random processes underlying statistical experiments | S.IC.1 | Understand statistics as a process for making inferences about population parameters based on a random sample from that population. |
| | | S.IC.2 | Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. For example, a model says a spinning coin falls heads up with probability 0. 5. Would a result of 5 tails in a row cause you to question the model? |
| | Make inferences and justify conclusions from sample surveys, experiments, and observational studies | S.IC.3 | Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each. |
| | | S.IC.4 | Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling. |
| | | S.IC.5 | Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. |
| | | S.IC.6 | Evaluate reports based on data. |

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| Conditional Probability and the Rules of Probability | Understand independence and conditional probability and use them to interpret data | S.CP.1 | Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not"). |
| | | S.CP.2 | Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. |
| | | S.CP.3 | Understand the conditional probability of A given B as P(A and B)/P(B), and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B. |
| | | S.CP.4 | Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results. |
| | | S.CP.5 | Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer. |
| | Use the rules of probability to compute probabilities of compound events in a uniform probability model | S.CP.6 | Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model. |
| | | S.CP.7 | Apply the Addition Rule, P(A or B) = P(A) + P(B) - P(A and B), and interpret the answer in terms of the model. |
| | | S.CP.8 | Apply the general Multiplication Rule in a uniform probability model, P(A and B) = [P(A)]*[P(B|A)] =[P(B)]*[P(A|B)], and interpret the answer in terms of the model. |
| | | S.CP.9 | Use permutations and combinations to compute probabilities of compound events and solve problems. |
| Using Probability to Make Decisions | Calculate expected values and use them to solve problems | S.MD.1 | Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions. |
| | | S.MD.2 | Calculate the expected value of a random variable; interpret it as the mean of the probability distribution. |
| | | S.MD.3 | Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. For example, find the theoretical probability distribution for the number of correct answers obtained by guessing |

| | | | on all five questions of a multiple-choice test where each question has four choices, and find the expected grade under various grading schemes. |
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| | | S.MD.4 | Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. For example, find a current data distribution on the number of TV sets per household in the United States, and calculate the expected number of sets per household. How many T V sets would you expect to find in 100 randomly selected households? |
| | Use probability to evaluate outcomes of decisions | S.MD.5 | Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values. <br> a. Find the expected payoff for a game of chance. For example, find the expected winnings from a state lottery ticket or a game at a fast-food restaurant. <br> b. Evaluate and compare strategies on the basis of expected values. For example, compare a high-deductible versus a low- deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident. |
| | | S.MD.6 | Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). |
| | | S.MD.7 | Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game). |

# Common Core: Language Arts Standards, Grade 11-12

| Strand | Topic | Code | Common Core State Standard |
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| Reading Literature | Key Ideas and Details | 11-12.RL.1 | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. |
| | | 11-12.RL.2 | Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. |
| | | 11-12.RL.3 | Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). |
| | Craft and Structure | 11-12.RL.4 | Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) |
| | | 11-12.RL.5 | Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. |
| | | 11-12.RL.6 | Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement). |
| | Integration of Knowledge and Ideas | 11-12.RL.7 | Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.) |
| | | 11-12.RL.9 | Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics. |
| | Range of Reading and Level of Text Complexity | 11-12.RL.10 | By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11–CCR text complexity band independently and proficiently. |

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| Reading Informational | Key Ideas and Details | [11-12.RI.1](#) | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. |
| | | [11-12.RI.2](#) | Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text. |
| | | [11-12.RI.3](#) | Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. |
| | Craft and Structure | [11-12.RI.4](#) | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines faction in Federalist No. 10). |
| | | [11-12.RI.5](#) | Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging. |
| | | [11-12.RI.6](#) | Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text. |
| | Integration of Knowledge and Ideas | [11-12.RI.7](#) | Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem. |
| | | [11-12.RI.8](#) | Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses). |
| | | [11-12.RI.9](#) | Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features. |
| | Range of Reading and Level of Text Complexity | [11-12.RI.10](#) | By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literary nonfiction at the high end of the grades 11–CCR text complexity band independently and proficiently. 1, Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. |

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| | | | | 2, Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.<br>3, Analyze how and why individuals, events, and ideas develop and interact over the course of a text.<br>4, Interpret words and phrases as they are used in a text, including determining technical, connotative. and figurative meanings, and analyze how specific word choices shape meaning or tone.<br>5, Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene. or stanza) relate to each other and the whole.<br>6, Assess how point of view or purpose shapes the content and style of a text.<br>7, Integrate and evaluate content presented in diverse formats and media. including visually and quantitatively, as well as in words.<br>8, Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.<br>9, Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.<br>10, Read and comprehend complex literary and informational texts independently and proficiently. |
| Writing | Text Types and Purposes | 11-12.W.1 | | Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.<br>a. Introduce precise. knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.<br>b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.<br>c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence. and between claim(s) and counterclaims.<br>d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| | | 11-12.W.2 | | Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.<br>a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that |

| | | | which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. |
| | | | b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. |
| | | | c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. |
| | | | d. Use precise language. domain-specific vocabulary, and techniques such as metaphor, simile. and analogy to manage the complexity of the topic. |
| | | | e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. |
| | | 11-12.W.3 | Write narratives to develop real or imagined experiences or events using effective technique. well-chosen details, and well-structured event sequences.<br>a. Engage and orient the reader by setting out a problem, situation, or observation and its significance. establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.<br>b. Use narrative techniques, such as dialogue. pacing. description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.<br>c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense. growth. or resolution).<br>d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting. and/or characters.<br>e. Provide a conclusion that follows from and reflects on what is experienced. observed. or resolved over the course of the narrative. |
| | Production and Distribution of Writing | 11-12.W.4 | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) |
| | | 11-12.W.5 | Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grades 11-12 on page 55.) |

| | | 11-12.W.6 | Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. |
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| | Research to Build and Present Knowledge | 11-12.W.7 | Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. |
| | | 11-12.W.8 | Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. |
| | | 11-12.W.9 | Draw evidence form literary or informational texts to support analysis, reflection, and research. <br> a. Apply grades 11–12 Reading standards to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature. including how two or more texts from the same period treat similar themes or topics"). <br> b. Apply grades 11–12 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning [e.g., in U.S. Supreme Court Case majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses]"). |
| | Range of Writing | 11-12.W.10 | Write routinely over extended time frames (time for research. reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences. <br> 1, Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. <br> 2, Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content. <br> 3, Write narratives to develop real or imagined experiences or events using effective technique. well-chosen details, and well-structured event sequences. <br> 4, Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose. and audience. <br> 5, Develop and strengthen writing as needed by planning. revising. editing. rewriting. or trying a new approach. |

| | | | 6, Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others. |
| | | | 7, Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation. |
| | | | 8, Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source. and integrate the information while avoiding plagiarism. |
| | | | 9, Draw evidence from literary or informational texts to support analysis, reflection, and research. |
| | | | 10, Write routinely over extended time frames (time for research. reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences. |
| Speaking and Listening | Comprehension and Collaboration | 11-12.SL.1 | Initiate and participate effectively in a range of collaborative discussions (one-on-one. in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.<br>a. Come to discussions prepared. having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.<br>b. Work with peers to promote civil, democratic discussions and decision-making. set clear goals and deadlines, and establish individual roles as needed.<br>c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.<br>d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task. |
| | | 11-12.SL.2 | Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. |
| | | 11-12.SL.3 | Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used. |
| | Presentation of Knowledge and Ideas | 11-12.SL.4 | Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are |

| | | | appropriate to purpose, audience, and a range or formal and informal tasks. |
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| | | 11-12.SL.5 | Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. |
| | | 11-12.SL.6 | Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. (See grades 11-12 Language standards 1 and 3 on page 54 for specific expectations.)<br>1, Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.<br>2, Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.<br>3, Evaluate a speaker's point of view, reasoning. and use of evidence and rhetoric.<br>4, Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose. and audience.<br>5, Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.<br>6, Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate. |
| Language | Conventions of Standard English | 11-12.L.1 | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.<br>a. Apply the understanding that usage is a matter of convention, can change over time. and is sometimes contested.<br>b. Resolve issues of complex or contested usage. consulting references (e.g., Merriam-Webster's Dictionary of English Usage. Garner's Modern American English) as needed. |
| | | 11-12.L.2 | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.<br>a. Observe hyphenation conventions.<br>b. Spell correctly. |
| | Knowledge of Language | 11-12.L.3 | Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style. and to comprehend more fully when reading or listening.<br>a. Vary syntax for effect, consulting references (e.g., Tufte's Artful Sentences) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading. |
| | Vocabulary Acquisition and Use | 11-12.L.4 | Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a |

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| | | | range of strategies.<br>a. Use context (e.g., the overall meaning of a sentence. paragraph. or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.<br>b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive. conception, conceivable).<br>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning. its part of speech. its etymology, or its standard usage.<br>d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). |
| | | 11-12.L.5 | Demonstrate understanding of figurative language. word relationships, and nuances in word meanings.<br>a. Interpret figures of speech (e.g., hyperbole. paradox) in context and analyze their role in the text.<br>b. Analyze nuances in the meaning of words with similar denotations. |
| | | 11-12.L.6 | Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading. writing. speaking. and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.<br>1, Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.<br>2, Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.<br>3, Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style. and to comprehend more fully when reading or listening.<br>4, Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.<br>5, Demonstrate understanding of word relationships and nuances in word meanings.<br>6, Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading. writing. speaking. and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. |
| Reading History | Key Ideas and Details | 11-12.RH.1 | Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the |

| | | | text as a whole. |
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| | | 11-12.RH.2 | Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas. |
| | | 11-12.RH.3 | Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain. |
| | Craft and Structure | 11-12.RH.4 | Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines faction in Federalist No. 10). |
| | | 11-12.RH.5 | Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole. |
| | | 11-12.RH.6 | Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence. |
| | Integration of Knowledge and Ideas | 11-12.RH.7 | Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem. |
| | | 11-12.RH.8 | Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information. |
| | | 11-12.RH.9 | Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources. |
| | Range of Reading and Level of Text Complexity | 11-12.RH.10 | By the end of grade 12, read and comprehend history/social studies texts in the grades 11–12 text complexity band independently and proficiently. |
| Reading Science and Technical | Key Ideas and Details | 11-12.RST.1 | Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. |
| | | 11-12.RST.2 | Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. |
| | | 11-12.RST.3 | Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. |
| | Craft and Structure | 11-12.RST.4 | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics. |

| | | | |
|---|---|---|---|
| | | 11-12.RST.5 | Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas. |
| | | 11-12.RST.6 | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved. |
| | Integration of Knowledge and Ideas | 11-12.RST.7 | Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem. |
| | | 11-12.RST.8 | Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information. |
| | | 11-12.RST.9 | Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible. |
| | Range of Reading and Level of Text Complexity | 11-12.RST.10 | By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently. |
| Writing History | Text Types and Purposes | 11-12.WHST.1 | Write arguments focused on discipline-specific content. a. Introduce precise. knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence. and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from or supports the argument presented. |
| | | 11-12.WHST.2 | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. a. Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. |

| | | | |
|---|---|---|---|
| | | | b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.<br>c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.<br>d. Use precise language. domain-specific vocabulary and techniques such as metaphor, simile. and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.<br>e. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic). |
| | Production and Distribution of Writing | 11-12.WHST.4 | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| | | 11-12.WHST.5 | Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. |
| | | 11-12.WHST.6 | Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. |
| | Research to Build and Present Knowledge | 11-12.WHST.7 | Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. |
| | | 11-12.WHST.8 | Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. |
| | | 11-12.WHST.9 | Draw evidence from informational texts to support analysis, reflection, and research. |
| | Range of Writing | 11-12.WHST.10 | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |

# FINE ARTS, CAREER TECHNICAL EDUCATION, WORLD LANGUAGE, PHYSICAL EDUCATION, ELECTIVES:
## Hawaii Content & Performance Standards III

### Fine Arts

VISUAL ARTS: Understand and apply art materials, techniques, and processes in the creation of works of art and understand how the visual arts communicate a variety of ideas, feelings, and experiences

MUSIC: Understand and apply elements of music and understand how music communicates ideas, feelings, and experiences across cultures

DRAMA AND THEATER: Understand and apply the skills of acting, design, and technical theatre and understand the role of drama in various cultures throughout history

DANCE: Understand and apply elements of dance, appreciate how dance communicates meaning, and recognize its role across cultures and throughout history

### Career and Technical Education

TECHNOLOGICAL DESIGN: Design, modify, and apply technology to effectively and efficiently solve problems

CAREER PLANNING: Explore and understand educational and career options in order to develop and implement personal, educational, and career goals

### World Language

INTERPERSONAL: Use target language to engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions

INTERPRETIVE: Understand and interpret written and spoken language on diverse topics from diverse media

PRESENTATIONAL: Present information, concepts, and ideas to an audience of listeners or readers on a variety of topics

CULTURES: Understand relationships among perspectives, products, and practices of target culture

COMPARISONS: Understand that different languages use different patterns to communicate and apply this knowledge to the target and native languages

### Physical Education

MOVEMENT FORMS: Use motor skills and movement patterns to perform a variety of physical activities

COGNITIVE CONCEPTS: Understand movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities

ACTIVE LIFESTYLE: Participate regularly in physical activity

PHYSICAL FITNESS: Know ways to achieve and maintain a health: enhancing level of physical fitness

# HEALTH: National Health Education Standards: Achieving Excellence

## Comprehending Concepts

NHES.1.12.1 Predict how healthy behaviors can affect health status.

NHES.1.12.2 Describe the interrelationships of emotional, intellectual, physical, and social health.

NHES.1.12.3 Analyze how environment and personal health are interrelated.

NHES.1.12.4 Analyze how genetics and family history can affect personal health.

NHES.1.12.5 Propose ways to reduce or prevent injuries and health problems.

NHES.1.12.6 Analyze the relationship between access to health care and health status.

NHES.1.12.7 Compare and contrast the benefits of and barriers to practicing a variety of healthy behaviors.

NHES.1.12.8 Analyze personal susceptibility to injury, illness, or death if engaging in unhealthy behaviors.

NHES.1.12.9 Analyze the potential severity of injury or illness if engaging in unhealthy behaviors.

## Analyzing Influences

NHES.2.12.1 Analyze how the family influences the health of individuals.

NHES.2.12.2 Analyze how the culture supports and challenges health beliefs, practices, and behaviors.

NHES.2.12.3 Analyze how peers influence healthy and unhealthy behaviors.

NHES.2.12.4 Evaluate how the school and community can affect personal health practice and behaviors.

NHES.2.12.5 Evaluate the effect of media on personal and family health.

NHES.2.12.6 Evaluate the impact of technology on personal, family, and community health.

NHES.2.12.7 Analyze how the perceptions of norms influence healthy and unhealthy behaviors.

NHES.2.12.8 Analyze the influence of personal values and beliefs on individual health practices and behaviors.

NHES.2.12.9 Analyze how some health risk behaviors can influence the likelihood of engaging in unhealthy behaviors.

NHES.2.12.10 Analyze how public health policies and government regulations can influence health promotion and disease prevention.

## Accessing Resources

NHES.3.12.1 Evaluate the validity of health information, products, and services.

NHES.3.12.2 Use resources from home, school, and community that provide valid health information.

NHES.3.12.3 Determine the accessibility of products and services that enhance health.

NHES.3.12.4 Determine when professional health services may be required.

NHES.3.12.5 Access valid and reliable health products and services.

## Interpersonal Communication

NHES.4.12.1 Use skills for communicating effectively with family, peers, and others to enhance health.

NHES.4.12.2 Demonstrate refusal, negotiation, and collaboration skills to enhance health and avoid or reduce health risks.

NHES.4.12.3 Demonstrate strategies to prevent, manage, or resolve interpersonal conflicts without harming self or others.

NHES.4.12.4 Demonstrate how to ask for and offer assistance to enhance the health of self and others.

## Decision-Making

NHES.5.12.1 Examine barriers that can hinder healthy decision-making.

NHES.5.12.2 Determine the value of applying a thoughtful decision-making process in health-related situations.

NHES.5.12.3 Justify when individual or collaborative decision making is appropriate.

NHES.5.12.4 Generate alternatives to health-related issues or problems.

NHES.5.12.5 Predict the potential short-term and long-term impact of each alternative on self and others.

NHES.5.12.6 Defend the healthy choice when making decisions.

NHES.5.12.7 Evaluate the effectiveness of health-related decisions.

## Goal-Setting

NHES.6.12.1 Assess personal health practices and overall health status.

NHES.6.12.2 Develop a plan to attain a personal health goal that addresses strengths, needs, and risks.

NHES.6.12.3 Implement strategies and monitor progress in achieving a personal health goal.

NHES.6.12.4 Formulate an effective long-term personal health plan.

## Self-Management

NHES.7.12.1 Analyze the role of individual responsibility in enhancing health.

NHES.7.12.2 Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others.

NHES.7.12.3 Demonstrate a variety of behaviors that avoid or reduce health risks to self and others.

## Advocacy

NHES.8.12.1 Utilize accurate peer and societal norms to formulate a health-enhancing message.

NHES.8.12.2 Demonstrate how to influence and support others to make positive health choices.

NHES.8.12.3 Work cooperatively as an advocate for improving personal, family, and community health.

NHES.8.12.4 Adapt health messages and communication techniques to a specific target audience.

## COMPUTER SCIENCE: CSTA K-12 Computer Science Standards

### Computing Systems

3B-CS-01 Categorize the roles of operating system software.

3B-CS-02 Illustrate the ways computing systems implement logic, input, and output through hardware components

### Networks and the Internet

3B-NI-03 Describe the issues that impact network functionality (e.g., bandwidth, load, delay, topology).

3B-NI-04 Compare ways software developers protect devices and information from unauthorized access.

3B-DA-05 Use data analysis tools and techniques to identify patterns in data representing complex systems.

3B-DA-06 Select data collection tools and techniques to generate data sets that support a claim or communicate information.

3B-DA-07 Evaluate the ability of models and simulations to test and support the refinement of hypotheses.

### Algorithms and Programming

3B-AP-08 Describe how artificial intelligence drives many software and physical systems.

3B-AP-09 Implement an artificial intelligence algorithm to play a game against a human opponent or solve a problem.

3B-AP-10 Use and adapt classic algorithms to solve computational problems.

3B-AP-11 Evaluate algorithms in terms of their efficiency, correctness, and clarity.

3B-AP-12 Compare and contrast fundamental data structures and their uses.

3B-AP-13 Illustrate the flow of execution of a recursive algorithm.

3B-AP-14 Construct solutions to problems using student-created components, such as procedures, modules and/or objects.

3B-AP-15 Analyze a large-scale computational problem and identify generalizable patterns that can be applied to a solution.

3B-AP-16 Demonstrate code reuse by creating programming solutions using libraries and APIs.

3B-AP-17 Plan and develop programs for broad audiences using a software life cycle process.

3B-AP-18 Explain security issues that might lead to compromised computer programs.

3B-AP-19 Develop programs for multiple computing platforms.

3B-AP-20 Use version control systems, integrated development environments (IDEs), and collaborative tools and practices (code documentation) in a group software project.

3B-AP-21 Develop and use a series of test cases to verify that a program performs according to its design specifications.

3B-AP-22 Modify an existing program to add additional functionality and discuss intended and unintended implications (e.g., breaking other functionality).

3B-AP-23 Evaluate key qualities of a program through a process such as a code review.

3B-AP-24 Compare multiple programming languages and discuss how their features make them suitable for solving different types of problems.

### Impacts of Computing

3B-IC-25 Evaluate computational artifacts to maximize their beneficial effects and minimize harmful effects on society.

3B-IC-26 Evaluate the impact of equity, access, and influence on the distribution of computing resources in a global society.

3B-IC-27 Predict how computational innovations that have revolutionized aspects of our culture might evolve.

3B-IC-28 Debate laws and regulations that impact the development and use of software.

In **Attachment G**, provide the school's proposed calendar for the first year of operation, including total number of days/hours of instruction.

The academic calendar provided above aligns similarly to the DOE public school schedule. We anticipate that we will have parents that have children attending a current feeder elementary schools (Kilauea and Hanalei) and Namahana School. Therefore, with the community in mind, we have closely aligned the Namahana School academic calendar to that of our feeder schools.

| Week | Student Days | Teacher Days | | Su | M | T | W | Th | F | Sa | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | July | 21 | 22 | 23 | 24 | 25 | 26 | 27 | | |
| 1 | 0 | 4 | | | 28 | 29 | 30 | 31 | 1 | 2 | 3 | | July 30 – August 2: Teacher Work Days (no students) |
| 2 | 5 | 9 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | August 5: Students' First Day |
| 3 | 9 | 13 | August | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Quarter 1 | August 16: State Holiday (no school) |
| 4 | 14 | 18 | | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Starts: Aug. 6 | |
| 5 | 19 | 23 | | 25 | 26 | 27 | 28 | 29 | 30 | 31 | | |
| 6 | 23 | 27 | September | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 43 Days | September 5: Labor Day |
| 7 | 28 | 32 | | 8 | 9 | 10 | 11 | 12 | 13 | 14 | Ends: Oct. 4th | |
| 8 | 33 | 37 | | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | |
| 9 | 38 | 42 | | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| 10 | 43 | 47 | October | 29 | 30 | 1 | 2 | 3 | 4 | 5 | | October 4: End 1st Quarter |
| 11 | | | | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | October 7 - 11: Fall Break |
| 12 | 47 | 52 | | 13 | 14 | 15 | 16 | 17 | 18 | 19 | | October 14: Professional Collaboration Day |
| 13 | 52 | 57 | | 20 | 21 | 22 | 23 | 24 | 25 | 26 | | October 14: Starter Quarter 2 |
| 14 | 57 | 62 | | 27 | 28 | 29 | 30 | 31 | 1 | 2 | Quarter 2 | |
| 15 | 61 | 66 | November | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Starts: Oct. 15 | November 5: Election Day |
| 16 | 65 | 70 | | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | November 11: Veterans Day (no school) |
| 17 | 70 | 75 | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 46 Days | |
| 18 | 73 | 78 | | 24 | 25 | 26 | 27 | 28 | 29 | 30 | Ends: Dec 16th | Novermber 28: Lā Kū'oko'a, Thanksgiving (no school) |
| 19 | 78 | 83 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | November 29: School Holiday |
| 20 | 83 | 88 | December | 8 | 9 | 10 | 11 | 12 | 13 | 14 | | |
| 21 | 88 | 93 | | 15 | 16 | 17 | 18 | 19 | 20 | 21 | | October 20: End Quarter 2 |

| | | | Month | | | | | | | | Quarter | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 | | | | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | December 23 – January 6: Winter Break |
| 23 | | | | 29 | 30 | 31 | 1 | 2 | 3 | 4 | | |
| 24 | 92 | 98 | January | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | January 6: Teacher Work Day (no students) |
| 25 | 97 | 103 | | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | January 6: Start Quarter 3 |
| 26 | 101 | 107 | | 19 | 20 | 21 | 22 | 23 | 24 | 25 | Quarter 3 | January 20: Martin Luther King, Jr. Day (no school) |
| 27 | 106 | 112 | | 26 | 27 | 28 | 29 | 30 | 31 | 1 | Starts: | |
| 28 | 111 | 117 | February | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Jan. 7 | |
| 29 | 116 | 122 | | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 47 Days | |
| 30 | 120 | 126 | | 16 | 17 | 18 | 19 | 20 | 21 | 22 | Ends: | February 17: Presidents Day (no school) |
| 31 | 125 | 131 | | 23 | 24 | 25 | 26 | 27 | 28 | 1 | Mar. 14 | |
| 32 | 130 | 136 | March | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| 33 | 135 | 141 | | 9 | 10 | 11 | 12 | 13 | 14 | 15 | | March 10: End Quarter 3 |
| 34 | | | | 16 | 17 | 18 | 19 | 20 | 21 | 22 | | March 17 - 21: Spring Break |
| 35 | 138 | 145 | | 23 | 24 | 25 | 26 | 27 | 28 | 29 | | March 24: Professional Collaboration Day |
| 36 | 143 | 150 | April | 30 | 31 | 1 | 2 | 3 | 4 | 5 | | March 25: Start Quarter 4 |
| 37 | 148 | 155 | | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | March 26: Prince Kuhio Day (no school) |
| 38 | 152 | 159 | | 13 | 14 | 15 | 16 | 17 | 18 | 19 | Quarter 4 | April 18: Good Friday (no school) |
| 39 | 157 | 164 | | 20 | 21 | 22 | 23 | 24 | 25 | 26 | Starts: | |
| 40 | 162 | 169 | | 27 | 28 | 29 | 30 | 1 | 2 | 3 | March 25 | |
| 41 | 167 | 174 | May | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 47 Days | |
| 42 | 172 | 179 | | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Ends: | |
| 43 | 177 | 184 | | 18 | 19 | 20 | 21 | 22 | 23 | 24 | May 30 | May 26: Memorial Day |
| 44 | 181 | 188 | | 25 | 26 | 27 | 28 | 29 | 30 | 31 | | May 30: End Quarter 4, Last Day for Students |
| 45 | 182 | 188 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | June 2: Last Day for Teachers |
| | | | June | 8 | 9 | 10 | 11 | 12 | 13 | 14 | | |

Attachment H

Your response should include, in **Attachment H**, a sample daily and weekly schedule for each division of the school.

There are two tables below: 1) is a sample schedule for the middle school division, Grade 7, and 2) is a sample schedule for the high school division, Grade 9. Please note that the school starts at 8:30AM and ends at 3:00PM. Each course in main subject areas (Math, Science, ELA, Social Studies) is 90 minutes. Other Courses are such as Physical Education, Health, and Hawaiian Language are also 90 minutes a day. Lunch is a 30 minute break. For grades 7-8, Fridays are field study (ulu'āina) days whereby students are immersed in site/place through 'āina-based learning. For grades 10-12, students will have internships at least one day a week.

### 7th Grade Sample Schedule

| Mins | Time | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|---|
| 30 | 8:00 - 8:15AM | All Staff Meeting | Staff Meetings | | | Field Study/ Ulu'āina |
| | 8:15 - 8:30AM | | Advisor Preparation | | | |
| 35 | 8:30 - 9:05AM | Piko/Advisory | | | | |
| 90 | 9:10 - 10:40AM | Math | English | Math | English | |
| 15 | 10:40 - 10:55AM | Recess | | | | |
| 90 | 10:55 - 12:25AM | Science | Social Studies | Science | Social Studies | |
| 30 | 12:30 - 1:00PM | Lunch | | | | |
| 90 | 1:05 - 2:25PM | PE/Health | Hawaiian Language | PE/Health | Hawaiian Language | Early Dismissal 1:30PM Staff PD |
| 30 | 2:30 - 3:00PM | Advisory | | | | |

### 9th Grade Sample Schedule

| Mins | Time | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|---|
| 30 | 8:00-8:15AM | All Staff Meeting | Advisor Articulation Time | | | |
| | 8:00-8:30AM | | Advisor Preparation | | | |
| 10 30 | 8:30 - 9:05AM | Piko/Advisory | | | | |
| 90 | 9:10-10:40AM | Humanities | STEM | Humanities | STEM | Humanities |
| 15 | 10:40 – 10:55AM | Recess | | | | |
| 90 | 10:55 - 12:25PM | Humanities | STEM | Humanities | STEM | STEM |
| 30 | 12:30 – 1:00PM | Lunch | | | | |
| 90 | 1:05 - 2:25PM | Health / PE | Language/ Electives | Health / PE | Language/ Electives | Early Dismissal 1:30PM Staff PD |
| 30 | 2:30 - 3:00PM | Advisory | | | | |

## Attachment I

Describe, in **Attachment I,** a typical school day from the perspective of a student in a grade that will be served in your first year of operation.

A typical school day for a Namahana 7th grade student, Ana, will start in advisory. Ana is feeling excited this morning about the "Who am I" project that she knows she'll get to work on in advisory.  She heads over to "da Hammahz" the advisory name that she and her cohorts came up with at the beginning of the year.  Ana enjoys the chance to see her advisory daily, and smiles to herself thinking about the fun bonding activities that her advisory, Kumu Lei, had the students engage in at the beginning of the year. Just last night, Ana told her mom that she is feeling a level of comfort and camaraderie with her Kumu and classmates that helps her to start off the day.

She arrives in class and settles into a piko with her classmates. Her advisor, Kumu Lei, goes around and asks for everyone's Weekend Update. During Ana's turn, she shares her weekend activities with her mom and siblings heading up to Nīhoku to mālama ʻāina and saw ʻuaʻu kani (shearwater bird) burrows.  Kumu Lei asks the students if they had heard about the latest news around a proposed development project at Nīhoku and she leads a brief discussion. After that, Kumu Lei reviews the day's advisory agenda, which includes individual work time on projects outlined in their personal learning plan.  As Kumu Lei checks in with students about their work, Ana confirms that she has a few more items to finalize for her "Who Am I" project. Kumu Lei suggests that she and Lucas, who is also working on his "Who am I" project, spend some time at the end of advisory to do some peer sharing.

After advisory, Ana looks forward to her first class, English, where she has chosen to work on a graphic novel for her "Who Am I project". The course starts with the English kumu reviewing the last lesson which focused on how the structure of a soliloquy contributes to its meaning and offers another example from the text they just finished reading. Ana enjoys the format of this course where she is driving her learning based on her love for books while getting one-on-one support from her English teacher when she needs help. Next Ana is excited to walk over to her social studies class, History of the Hawaiian Kingdom, where she is preparing to debate whether the annexation of Hawaiʻi as illegal or not. Ana is a confident speaker that is looking forward to making her case. She is working to improve her communication with others and teamwork skills during this project. She loves how her Kumu continually challenges the class to take on roles and forcefully argue a case.  When Ana arrives to class, she is paired up with one of her debate teammates to review and practice the key questions and sources of evidence they will present followed by role play.

After social studies, Ana heads outside to eat lunch with friends. She grabs some fruit from the harvest baskets brought over by students who harvested the fruit from the neighboring food forest during a field study project.  It is a sunny day, so Ana knows to find her friends eating lunch by the avocado tree they planted two years ago. After lunch, Ana walks with her classmates to the neighboring Food Forest for her Health and Physical Education course. Ana and a group of her classmates have been learning about the nutritional benefits of eating fruits and vegetables.  In the food forest, the community Kumu offers comparisons between healthy bodies and healthy plants.  The students help plant nitrogen fixing pigeon pea plants and harvest greens and other edible perennials to make a healthy snack that they enjoy at the end of class.  After class, Ana washes up and heads back to advisory to end the day. Ana checks in with her advisor Kumu Lei to review her learning plan and sees that she needs to start planning for her exhibition (hōʻike) at the end of the quarter. She spends the rest of advisory working on a schedule for this quarter's exhibition where she will be sharing her graphic novel. She also plans to invite her Grandma to this exhibition because she is a writer.

## Attachment J

Describe, in **Attachment J,** a typical day for a teacher in a grade that will be served in your first year of operation.

At Namahana School, a typical day for a 7th grade advisor, Kumu Lei, will start with a quick on-your-feet staff meeting. Kumu Lei circles up with the rest of the middle school advisors and one by one each teacher shares briefly. Kumu Lei mentions one of her students is struggling in math and Kumu John, the math advisory, invites Kumu Lei to send over her student during advisory to work one-on-one. She also shares that her advisory is really enjoying the current field study site at Puʻukumu Stream. She ends with confirming her Professional Learning Community (PLC) meeting with the social studies kumu this afternoon.

After the staff meeting, Kumu Lei heads to her advisory where she finds students circled up ready for piko. She leads the conversation by asking students to share any news from the weekend or their home lives. When one student, Ana, mentions her weekend outing to Nīhoku, Kumu Lei asks if any students know about recent events surrounding the development at Nīhoku. Kumu Lei makes a mental note to talk with Kumu Mokihana, the Social Studies teacher, about ways they could integrate this local news into their projects exploring civics and principles of democracy. After the discussion, Kumu Lei announces that students will be doing independent project work today and checks in with her students individually as they talk through which projects to focus on. Kumu Lei asks one of her students who is having difficulty in a math lesson, to head over to Kumu John's math advisory for support. Kumu Lei had set out time to work with one of her students who needed support on a science project.

After advisory, Kumu Lei shifts to her subject area, science, while 7th grade students enter and get situated in her class. Currently, she has started the hydroponics project with students. Kumu Lei reviews last week's lesson and then moves into showing students examples around the world of how hydroponics feeds various communities. Kumu Lei has also arranged for a guest speaker from the community to come in and share about hydroponic gardens being installed in homes in Anahola. After her first course, Kumu Lei shifts to the makerspace for her next class of 8th graders who are building a hydroponic garden. Kumu Lei has divided the class into smaller groups to work on various components. The guest speaker from the previous class accompanies Kumu Lei and is tasked to work with students to provide feedback on their projects based on experience installing hydroponics in the Koʻolau community. As students arrive, they immediately gather with their small groups and continue to work on their components. Kumu Lei spends this class circulating the smaller groups answering questions, providing resources, sharing materials, and supporting students guiding their own learning. Then Kumu Lei has a lunch break.

After lunch, Kumu Lei heads to meet with the Social Studies advisor, Kumu Mokihana, for their Professional Learning Community (PLC). The current field study is at Puʻukumu Stream which is walking distance from the school. During the PLC, the kumu are focused on cross-curricular teaching and spend their time working on instructional materials specific to place/site. They initiate development of a rubric outlining the project culmination and outcomes. Kumu Lei and Kumu Mokihana are working together to identify ways to test water quality and connect the importance of the stream through moʻolelo and historical documents. They also brainstorm kupuna from the community to invite them to share information about the sugar plantation times and the significance of the Puʻukumu stream. After the PLC, Kumu Lei returns to advisory to end the day. She spends her time meeting one-on-one with each advisee to review their personalized learning plan and ensure students are on track for their exhibitions. After school, Kumu Lei uses her 45 minute prep time to plan for tomorrow's lessons.

## Attachment K

Provide, as **Attachment K**, the school's Enrollment Policy, which should include the following:

a) Tentative dates for application period, and enrollment deadlines and procedures, including explanation of how the school will receive and process Intent to Enroll forms;
b) A timeline and plan for student recruitment/engagement and enrollment;
c) Policies and procedures for student waiting lists, withdrawals, re-enrollment, and transfers; and
d) Description of any pre-admission activities for students or parents/guardians, and the purpose of such activities.

## Namahana School Admissions Policy

### Eligibility

Namahana School is a public school of choice. All students who are residents of the County of Kaua'i are eligible to apply for admission for the grade levels we serve (7-12). Out-of-state or visiting students are ineligible and will not be considered for admission. In accordance with HRS §302D-34, Namahana does not discriminate against any student or limit admission based on race, color, ethnicity, national origin, religion, gender, sexual orientation, income level, disability, level of proficiency in the English language, need for special education services, academic, or athletic ability.

### Recruitment and Engagement

Namahana School's student recruitment plan and timeline has been developed to ensure equal access to interested students and families. During the second pre-opening year, we will take the following steps to engage and recruit new students:

- Namahana will develop and distribute marketing materials in English and Tagalog, and any other identified language as appropriate.
- Namahana will host (similar to listening sessions in communities) community sharing sessions throughout various ahupua'a to share information about our proposed school, additionally, we will participate in public festivals, fairs, the middle school fairs held at the local elementary schools, and community events.
- The Namahana team is deeply connected to the served communities and will reach out to various multicultural communities. Additionally, Namahana leadership will continue to attend meetings of community groups to share about our enrollment process.
- Interested families who provided their contact information during community engagement sessions will be notified throughout the development process of Namahana and provided with information about the school enrollment process. Namahana will continue to announce school updates/events through public service listings such as the Garden Island newspaper.
- The Halele'a and Ko'olau communities are small enough that, if there are geographic areas we identify as not being reached, we will go door-to-door to pass out materials on our program.
- Namahana will share information with community centers, Princeville Library, local non-profit organizations, churches, stores and other local businesses.
- The Namahana team will post flyers/posters advertising Namahana School around the geographic area of our school site.

## Enrollment

Namahana School will hold an open enrollment period every year to accept eligible applicants for admission for the subsequent school year. Namahana School will make every attempt to assist those families whose second language is English or may have difficulty completing the application process in submitting completed applications. During the pre-opening years, the Namahana leadership team will develop an Intent to Enroll form as well as processes for receiving, processing, and storing enrollment information.

## Namahana School ʻOhana Orientation

Prior to the start of each enrollment period, Namahana School will host an ʻOhana Orientation for new and/or prospective applicants. Due to the advisory model which facilitates building close relationships and support for each student, it is imperative that parents and/or guardians are familiar with the expectations of Namahana School. Therefore, attendance at the ʻOhana Orientation will be expected for those who are applying for admission.

## Tentative Application Timeline

The application enrollment period for Namahana School shall begin on January 15th and end eight weeks later. After guaranteeing space for currently enrolled students, if the number of applicants exceeds the number of student openings for any given grade, Namahana will hold an enrollment lottery within 10 days after the closing of the application enrollment period.

## Priorities

In Year 2 and beyond, in order to support a consistent educational environment for all of the children of each family that joins Namahana school's community, in alignment with HRS §302D-34, enrollment priority will be as follows:

1. Current students (i.e., Students currently enrolled at Namahana)
2. Children of Namahana staff*
3. Children of Founding Governing Board members**
4. Siblings*** of currently enrolled students
5. Siblings*** of newly admitted students
6. All other Hawaiʻi students.

*If the staff member is employed less than half time, enrollment priority is not given until the second year of employment.
**Founding Governing Board members are those who were listed on the charter application approved by the Hawaii Public Charter School commission on June 24, 2022.
***Siblings are defined as having one or more parents or legal guardians in common.

## Lottery

In the instance that the total number of eligible applicants exceeds the numbers of vacant seats in a grade, then Namahana will employ a random public lottery within 10 business days after the application enrollment period closes.

In accordance with the federal law, the following category shall be given a weighted preference upon verification, as approved by the Executive Director:

Geographic Preference: In order to align with our mission, applicants who have resided in the moku of Haleleʻa and Koʻolau for at least one year from the end date of the enrollment period will receive preference in a weighted lottery (equivalent to ten (10) additional lottery tickets).

The lottery will be run within each grade starting with the highest grade. Students not admitted as a result of the lottery process will be placed on a waiting list, ranked by their position in the lottery, and will be notified if a seat becomes available.

## Admission
When a student is offered admission, applicants will be notified to accept the offer and complete the enrollment process.

## Waitlists
All non-placed students shall be waitlisted for each grade in the order in which they are drawn in the lottery. The waiting list shall be maintained for use throughout the ensuing year only. If an applicant has not been selected for admission in a given year, the applicant must reapply. If a space becomes available, students on the waitlist who are offered a space will be given three calendar weeks to notify the office of their intent to accept or decline the seat.

## Withdrawals and Re-enrollment
Any student that withdraws after October 15th who wishes to re-enroll in Namahana will need to re-apply for admission during the open enrollment period for the following year. If a student withdraws after submitting re-enrollment documents, their re-enrollment is no longer valid. If a student re-applies who has previously been dismissed from Namahana for a Class A offense under Chapter 19, the student will be offered admission only after it is determined that Namahana can provide the services required to ensure the student's safety and success in the Namahana community as well as the safety of all students.

Namahana School has begun to draft the Code of Conduct (and Restorative Justice) Policy. The attachment below is the most recent version which responds to each of the eight prompts for this attachment. The " * " areas indicate various components that we will refine/define during the pre-opening years with the Executive Director.

# DRAFT* Code of Conduct
# (and Restorative Justice) Policy

## OUR PHILOSOPHY

Namahana School will foster a culture and climate that is conducive to creating learning opportunities and environments that engage students in deep and productive learning. By providing a tailored student experience, Namahana will create not only a safe and orderly environment, but a thriving community of learners. Namahana's Discipline Policy will reflect our philosophy that minimal external discipline is required when an appropriate culture and climate are cultivated, and when students are nurtured and guided as individuals. Self-awareness, self-control, responsibility, accountability, and collaboration are competencies best developed in a community that fundamentally embraces such practices.

Namahana's Discipline Policy is predicated upon a simple principle: **to show respect for oneself, for others, for the 'āina, and for the community.** This guiding philosophy shapes behavioral expectations for middle and high school students (e.g. fighting is disrespectful of others; use of illegal substances violates respect for oneself, vandalism disrespects our 'āina) and also establishes a positive school culture. Namahana's approach—substituting caring for control and placing special emphasis on the student responsibility and accountability – will foster a safe, respectful learning environment.

## OUR PRACTICES

The structures of Namahana such as Advisory, 'Āina-based Learning, and Internships sustain a positive and respectful culture. Violation of this culture will be addressed quickly through **Restorative Justice practices**. Such practices emphasize the restoration of students to the community through mediation, reflection, and reparation of the misdeed. Working with the Advisor, the Executive Director, parents, peers, and others, depending upon the circumstances, the student will identify the root problem reflected by the misbehavior and bear the onus of addressing it. Given Namahana School's personal approach to disciplinary actions and proceedings, disabilities of any student involved in disciplinary offenses will be acknowledged and considered thoroughly. Aligned to the Individuals with Disabilities Education Act (IDEA) and the Free and Appropriate Public Education (FAPE) act, Namahana will support and honor the individual needs and circumstances of each child, maintaining our vision for a safe, productive learning environment, and engaging community, complex, and state partners as necessary.

When required, Namahana School will employ a restorative discipline system that will be:
- Explicit, reasonable, and timely
- Have logical, fair consistent, and age-appropriate consequences
- Include a variety of prevention and intervention measures
- Provide the opportunity for significant parent/guardian participation
- Respond to individual differences among students with insight and sensitivity
- Ensure the opportunity for all students to obtain a quality education

## DISCIPLINARY OFFENSES

Student disciplinary offenses are those actions or inactions that violate the school's Disciplinary Policy. A disciplinary offense may occur while the student is: at school and/or on school grounds; participating in a school-sponsored activity; walking to or from school or a school- sponsored event; walking to or from, waiting for, or riding on school-provided transportation; or walking to or from, waiting for, or riding on public transportation to and from school or a school-sponsored activity.

School-related disciplinary offenses may also include serious misconduct outside the school where evidence exists that the student's continued presence would have a substantial detrimental effect on the school. The list of actionable offenses (page X)* is not exhaustive but provides examples of violations of the **Code of Conduct**. The list may be modified periodically by the Executive Director.

Disciplinary action shall be taken for all offenses in grades seven through twelve in accordance with procedures established under *HRS §8-19-6* and within the following options as determined in this Policy.

## STAFF TRAINING

School staff will participate in training for administration and implementation of the Policy prior to the start of each academic year, and as deemed necessary by the Executive Director. If a new staff member is introduced after the mandatory training has occurred, then the Executive Director, or his/her representative, will oversee this training not more than 14-days following staff member's enrollment.

## POLICY REVIEW & CHANGES

The Policy is to undergo an annual review, overseen by the Executive Director. Any development or modification to the Policy can be proposed by any staff or board member at any time. All formal, proposed changes are reviewed by the Executive Director and confirmed by the Board. Any confirmed changes to the Policy must be reported, in writing, to the Board, staff, parents and students as soon as possible. All changes take immediate effect.

## ACCESSIBILITY

Namahana School will provide a comprehensive Code of Conduct to all students and parents in a Student Handbook which will be distributed at the beginning of every academic year. Code of Conduct & Discipline Policy, as well as other school policies, shall be published online or made available for inspection at the school office. These policies serve to inform students, staff, and parents of the prohibited conduct, per the Policy. Newly admitted students will receive a copy of the Code of Conduct & Disciplinary Policy in their enrollment packet. An overview of the Policy will be presented to parents at an orientation at the beginning of each school year.

# LIST OF ACTIONABLE OFFENSES

Namahana School will implement the list and definitions of offenses for which students in the school must or may be suspended or expelled that is outlined in Hawaii's Administrative Rules on Student Misconduct, Discipline, School Searches and Seizures, Reporting Offences, Police Interviews and Arrests, and Restitution for Vandalism[1]

| Disciplinary Issue | Definition | Course of Action |
|---|---|---|
| **SECTION 1.**<br>**Class D**<br>**DISRUPTING THE SCHOOL ENVIRONMENT** | • Arriving Late to School or Class<br>• Cutting School, Class, Detention, or Mandatory School Events<br>• Gum, Food, and Beverages<br>• Disrupting Class and Preventing Teaching<br>• Cheating, Plagiarism, and Copying Other's Work<br>• Forgery of signatures<br>• Lying to a Staff Member<br>• Being Disrespectful toward a Staff Member<br>• Being Disrespectful toward a Student<br>• Possession of Inappropriate Property, including but not limited to Electronics<br>• Gambling<br>• Misbehaving inside or outside of Class<br>• Other behavior detrimental to the school<br>• Failure to Comply with School-Imposed Consequences | *Pursuant to Namahana School's Code of Conduct and Discipline Policy, Section 1 offenses will result in restorative justice in-school disciplinary measures. Serious or repeat cases may result in long-term suspension and/or expulsion* |
| **SECTION 2.**<br>**Class A**<br>**ASSAULT, BATTERY, BODILY HARM, INAPPROPRIATE TOUCHING, AND/OR THREATS** | • Causing Bodily Harm<br>• Committing Assault or Assault and Battery<br>• Fighting or Unwanted Physical Contact<br>• Play fighting and Threatening<br>• Setting off a False Alarm or Making a Threat<br>• Engaging in Sexual Activity or Inappropriate Touching | *Pursuant to HRS §8-19-6 (Prohibited Student Conduct; Class Offenses), Section 2 offenses may result in long-term suspension and/or expulsion at first occurrence.* |
| **SECTION 3.**<br>**Class A**<br>**POSSESSION OR USE OF FIREARMS, WEAPONS, AND/OR DANGEROUS OBJECTS** | • Possession or Use of a Firearm<br>• Possession or Use of a Mock Firearm<br>• Using or Possessing a Weapon or Dangerous Object<br>• Arson | *Pursuant to HRS §8-19-6 (Prohibited Student Conduct; Class Offenses), Section 3 offenses may result in long-term suspension and/or expulsion at first occurrence.* |

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[1] http://boe hawaii.gov/policies/AdminRules/Pages/AdminRule19.aspx

| SECTION 4.<br>Class A<br>POSSESSION, USE, OR DISTRIBUTION OF CONTROLLED SUBSTANCES, ALCOHOL, AND TOBACCO | • Using or Possessing Drugs or Alcohol<br>• Selling or Transferring Drugs or Alcohol<br>• Using or Possessing Tobacco Products<br>• Selling or Transferring Tobacco Products | *Pursuant to HRS §8-19-6 (Prohibited Student Conduct; Class Offenses),* Section 4 *offenses may result in long-term suspension and/or expulsion at first occurrence.* |
|---|---|---|
| SECTION 5.<br>Class B<br>HARASSMENT AND VIOLATIONS OF CIVIL RIGHTS | • Violating the Civil Rights of Others<br>• Harassment<br>• Bullying<br>• Abusive or Profane Language or Treatment | *Pursuant to HRS §8-19-6 (Prohibited Student Conduct; Class Offenses),* Section 5 *offenses may result in long-term suspension and/or expulsion at first occurrence.* |
| SECTION 6.<br>Class A<br>THEFT OR VANDALISM | • Theft, Loss, or Destruction of Personal or School Property<br>• Mistreatment or Inappropriate Use of Technology or School Property | *Pursuant to HRS §8-19-6 (Prohibited Student Conduct; Class Offenses),* Section 6 *offenses may result in long-term suspension and/or expulsion at first occurrence.* |

## REPEATED VIOLATIONS OF THE CODE OF CONDUCT

Serious disciplinary consequences shall be imposed upon any student who repeatedly commits one or more disciplinary offenses. Repeated violations of the code of conduct, even for offenses not generally punishable by suspension or expulsion if committed on their own, may be punishable by suspension or expulsion when taken together with other offenses previously committed.

## FIREARM VIOLATION

Federal law requires the expulsion from school for a period of not less than one year of a student who is determined to have brought a firearm to the school, or to have possessed a firearm at school, except that the Executive Director may modify such expulsion requirement for a student on a case-by-case basis, if such modification is in writing, in accordance with the Federal Gun-Free Schools Act of 1994 (as amended). "Firearm," as used in this law means a "firearm," as defined by 18 USC §921, and includes firearms and explosives. The Executive Director shall refer a student under the age of sixteen who has been determined to have brought a weapon or firearm to school to a presentment agency for a juvenile delinquency proceeding consistent with Article 3 of the Family Court Act except a student fourteen or fifteen years of age who qualifies for juvenile offender status under Criminal Procedure Law § 1.20(42). The Executive Director shall refer any pupil sixteen years of age or older or a student fourteen or fifteen years of age who qualifies for juvenile offender status under Criminal Procedure Law § 1.20(42), who has been determined to have brought a weapon or firearm to school to the appropriate law enforcement officials.

## CONTRABAND*

Contraband includes all property and articles considered unlawful to possess or to produce, as well as those articles defined by school rules as being prohibited because of potential for bodily injury or disruption of school operations. All contraband will be confiscated and returned to the parent/guardian.

Contraband items include, but are not limited to, the following:

- **Money –** In most instances, there is no need for students to bring money to school. If there is a fundraiser or event that requires money, students will be notified in advance. All field trip money should be turned into the school office upon arrival. If it is absolutely necessary to bring money, please keep it at a reasonable amount. The school and its staff are not responsible for any lost or stolen money.
- **Skateboards, roller blades, roller skates, pocket bikes** must be left in classroom or office with teacher approval, and teacher designated space
- **Portable electronics (radios, speakers, computers, iPads)—**These items may be permitted for various classroom use, but must be done so with teacher's permission
- **Distasteful or offensive media material (CDs, videos) depicting sex, drugs, alcohol and/or violence (to include searching and/or viewing online videos and websites on any device).**
- **Cell phones—**These items may be used before and after school hours, or unless permitted by teacher/staff for classroom use; use of cell phones during recess, lunch or other unpermitted times may result in the phone being confiscated. Messages for students may be left with the office if a student needs to be contacted during school hours
- **Gang-related paraphernalia**
- **Pornographic materials**
- **Matches, lighters, and other incendiary devices**
- **Pets**

# STUDENT DISCIPLINARY ACTIONS

Student discipline at Namahana will be administered by school personnel, using measures outlined in this Policy (page X)*. However, in addition to the disciplinary actions provided in this Policy, any breaches of state or federal law may be handled in cooperation with the Kaua'i Police Department or other authorities. Where appropriate, Namahana staff also will contact necessary law enforcement agencies.

Pursuant to HRS §8-19-12, in determining disciplinary actions, the Executive Director shall consider the intention of the offender, the nature and severity of the offense, the impact of the offense on others including whether the action was committed by an individual or a group of individuals such as a gang, the age of the offender, and if the offender was a repeat offender. *[Eff 9/1/82; ren §8-19-4, 5/23/86; am and comp 7/19/93; comp 5/19/97; comp 2/22/01; am and comp 9/10/09] (Auth: HRS §§302A-1112, 302A-1002) (Imp: HRS §§302A-1112, 302A-1002)*

| Disciplinary Measures | Definition |
|---|---|
| In-School Discipline | Refers to defined disciplinary actions that will be administered/overseen by the Executive Director. Actions might include; student's removal from class, parent conferences, assignment of other disciplinary measures |
| Short-term Suspension | Refers to the removal of a student from school for disciplinary reasons for a period of ten days or less |
| Long-term Suspension | Refers to the removal of a student from school for disciplinary reasons for a period of more than ten days |
| Expulsion | Refers to the permanent removal of a student from school for disciplinary reasons |
| Crisis Removal | Refers to the immediate and permanent removal of a student in an emergency, due to the apparent physical, or otherwise, threat that that student poses to him/herself or others, or due to extreme disruption that has deemed the student's removal as immediately necessary by the Executive Director |

# DISCIPLINARY MEASURES & PROCESS

Pursuant to HRS §8-19-5, the following disciplinary measures and processes are instated. Disciplinary actions may be carried over to the following school year if the offense is committed within twenty school days from the last instructional day for students in that school year.

## In-School Discipline

No disciplinary action amounting to serious discipline shall be imposed for violation of any individual school rule as a Section 1 offense. Namahana School shall follow due process procedures consistent with Goss v. Lopez, 419 U.S.565 (1975)

For each in-school disciplinary matter, the Executive Director will follow the steps below:
1. The staff member/advisor addresses the conduct (including describing the infraction(s) and hearing the student's version of events) and writes up the infraction to the Assistant Executive Director overseeing school culture and discipline.
2. If appropriate, the Executive Direct will initiate the Restorative Justice process* and, if necessary, the student is removed from class.
3. The Executive Director notifies the parents of the offense and describes the consequence to be administered.
4. If appropriate, the school will schedule a meeting with a parent or guardian in order to discuss the infractions and may reduce the penalty based upon mutual understanding reached at the meeting.
5. The Executive Director may assign one or more of the following In-School Disciplinary measures as a consequence for violating the Code of Conduct: a) Behavioral Contract; b) Detention (After school); c) Detention (Lunch); and d) Loss of school privilege.

## Short-Term Suspension

The Executive Director or Board of Directors may impose a short-term suspension. If a student commits an offense that calls for short-term suspension (less than 10 days), the following steps are taken:
1. If necessary, the student is immediately removed from class and/or school.
2. The student is informed of the charges against him or her.
3. Upon determining that a student's action warrants a possible short-term suspension, the Executive Director shall verbally inform the student that he or she is being suspended and is being considered for a short-term suspension and state the reasons for such actions.
4. The parent/guardian is notified in writing by Namahana. Written notice shall be provided by personal delivery or express mail delivery to the student's last known address. Where possible, notification also shall be provided by telephone if the school has been provided with a contact telephone number for the parent(s) or guardian(s).
5. The school will set a parent/guardian-conference date to discuss the incident and actions.
6. The Executive Director will issue a written decision to be sent to the student, the parent/guardian and the student's permanent record.
7. If a parent or student wishes to appeal a decision, they may do so by notifying the Executive Director in writing within 3 school days of the issuance of the written decision. The decision to impose a short-term suspension upon a student may be challenged by the parent(s) or guardian in accordance with the charter school's complaint process, pursuant to Education Law § 2855(4).

## Long-Term Suspension, Expulsion

The Executive Director or Board of Directors may impose a long-term suspension. If a student commits an offense that calls for long-term suspension (more than 10 days) or expulsion, the following steps are taken:
1. If necessary, the student is immediately removed from class and/or school.
2. The student is informed of the charges against him or her.
3. Upon determining that a student's action warrants a possible long-term suspension, the Executive Director shall verbally inform the student that he or she is being suspended and is being considered for a long-term suspension (or expulsion) and state the reasons for such actions.
4. The parent/guardian is notified in writing by Namahana. Written notice shall be provided by personal delivery or express mail delivery to the student's last known address. Where possible, notification also shall be provided by telephone if the school has been provided with a contact telephone number for the parent(s) or guardian(s).

5.  The school will set a hearing date. The student and/or his/her parent/guardian will be notified in writing of the a) charges and a statement of the evidence; b) date, time and place of a hearing; c) notice of the right at the hearing to be represented by legal counsel (at the student's/parent's own expense); and d) present evidence and question witnesses.
6.  After the Executive Director, the Board, or a hearing officer designated by either of them hears the case, the Executive Director or the Board issues a written decision to be sent to the student, the parent/guardian, the school's Governing Board, and the student's permanent record.
7.  If a parent or student wishes to appeal a decision, they may do so by notifying the Chair of the Governing Board in writing within 5 school days of the issuance of the written decision. The decision to impose a long-term suspension/expulsion upon a student may be challenged by the parent(s) or guardian in accordance with the charter school's complaint process, pursuant to Education Law § 2855(4).

## Crisis Removal

The Executive Director will remove the student and take the necessary steps of informing the student's family, and when necessary the authorities, of the conditions that warranted the immediate removal of a student. Namahana School will make a good faith effort to inform the student's parent/guardian immediately by phone. A follow-up written notice of the crisis removal shall be personally delivered or mailed to the parent/guardian. The notice of the crisis removal shall contain the following written statements:

1.  Allegations of the specific acts committed by the student that form the basis of the crisis removal;
2.  The allegations of the specific acts that were substantiated;
3.  A statement of the disciplinary action(s); and
4.  A statement of a conference date, time, and place offered by Namahana School to the parent/guardian.

A copy of the crisis removal notice shall be mailed to the complex area superintendent. In addition to the crisis removal notice required, the Executive Director will attempt to confirm the notice by telephoning the parent/guardian.

A student who is involved in a crisis removal shall be permitted to resume attendance at school as soon as the crisis no longer exists. A crisis removal shall not continue for more than ten school days, except when approved by the complex area superintendent during an appeal.

## Provision of Services During Removal

Namahana will ensure that alternative educational services are provided to a child who has been suspended. For a student who has been suspended or expelled, alternative instruction will be provided to the extent required by law. The school will provide alternative instruction to students as soon as practicable: in general, no later than the day after the suspension is effective. Such instruction will be at a reasonable location and time of the school's choosing.

Alternative instruction for suspended students will be of sufficient duration to enable a student to cover all course material, take all tests and quizzes, stay focused on the goals they set at their learning plan meeting, keep pace with other students, and progress to the next grade level. Except for the brief time it would take for a student to re-enter another public school, Namahana does not have to, but may, provide alternative instruction for expelled students.

## Attachment M

Include, as **Attachment M**, existing evidence of support from intended community partners such as letters of intent/commitment, memoranda of understanding, and/or contracts.

Namahana School's educational model fosters relationships with community organizations through field studies, internships, and course offerings. Included in this attachment are 22 letters of partnership and support from various community organizations (nonprofit and for-profit), community leaders, the island's community college, and feeder schools. These partnerships demonstrate Namahana's commitment to working with the community to provide students with real-world learning and simultaneously shows the community's partnership excitement. Prior to the start of each school year, Namahana School will enter into formal MOU's with community parters outlining the roles, responsibilities and scope of servies to be provided during the school year.

The following is a list of all the community partners (location) with Namahana School currently established:

1. Hui Maka'ainana o Makana (Hā'ena, Halele'a)
2. Limahuli Garden and Preserve (Limahuli, Halele'a)
3. Waipā Foundation (Waipā, Halele'a)
4. Hanalei Initiative (Hanalei, Halele'a)
5. Hanalei Hawaiian Civic Club & Hanalei Canoe Club (Hanalei, Halele'a)
6. Rotary Club of Hanalei Bay (Hanalei, Halele'a)
7. North Shore Library Princeville (Kalihikai, Halele'a)
8. Makana Urgent Care (Kalihikai, Halele'a)
9. Regenerations Botanical Garden (Kalihiwai, Halele'a)
10. Common Ground (Kīlauea, Ko'olau)
11. Anaina Hou (Kīlauea, Ko'olau)
12. 'Āina Ho'okupu o Kīlauea (Kīlauea, Kaua'i)
13. Kīlauea Neighborhood Association (Kīlauea, Kaua'i)
14. Retro-farms (Moloa'a, Ko'olau)
15. Kaua'i North Shore Lions Club (Halele'a and Ko'olau)
16. Hanalei Elementary School (Halele'a)
17. Kīlauea Elementary School (Ko'olau)
18. Kaua'i Planning & Action (Island-wide)
19. Kaua'i Community College (Island-wide)
20. Office of the Mayor, Derek Kawakami (Island-wide)
21. County Council Member, Felicia Cowden (Island-wide)
22. County Council Member, Luke Evslin (Island-wide)

Please note that some of these letters were collected in 2020 when the charter application was first released and are addressed to Shannon Cleary, the previous Applications Chair. See the following letters of intent/commitment/partnership.

*The Hui Makaʻānana o Makana is a non-profit organization dedicated to perpetuating and teaching the skills, knowledge, and practices of our kūpuna (ancestors) through the interpretation, restoration, care, and protection of natural and cultural resources in within the Hāʻena State Park.*

May 7, 2020

Yvonne Lau, Interim Executive Director
Shannon Cleary, Applications Committee Chairperson
Hawaiʻi State Public Charter School Commission (ʻAha Kula Hoʻāmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96713

Aloha Ms. Lau and Ms. Cleary,

As the President and Executive Director of the Hui Makaʻāinana o Makana (HUI), we are honored to provide this letter of support for Namahana School. We look forward to a meaningful, exciting partnership and welcoming Namahana School students into our programs.

"The HUI is a community based organization founded by families with ancestral ties to the ahupuaʻa of Haʻena. The HUI aspires to reawaken the widsom left to us by our kupuna, and to meld this wisdom with the best that contemporary knowledge, technology and practice can afford. Our ancestors said "I ka hana ka ʻike!" (Knowledge is the doing!). Knowledge is useless, unless it is exercised and perpetuated through practice."[1]

The HUI has a curatorship agreement with the State of Hawaiʻi for the preservation, restoration and management of the Haʻena State Park, itʻs loʻi kalo, wahi pana, historical structures, archaelogical sites, and near shore fishery. The organization is dedicated, through its programs, to perpetuating and teaching the skills, knowledge, and practices of our kūpuna through the interpretation, restoration, care, and protection of natural and cultural resources.

We are dedicated to partnering with Namahana school to provide placed based hands on learning, and to engaging with school leadership to develop programs to support the curriculum and values of Namahana School.

Presley Wann
President, Hui Makaʻāianana o Makana

Kirsten Hermstad
Executive Director, Hui Makaʻāinana o Makana

[1] Hui Makaʻāinana o Makana Long Range Vision Objectives and Land Use Master Plan December 1999

May 1, 2020

Yvonne Lau, Interim Executive Director
Shannon Cleary, Applications Committee Chairperson
Hawaiʻi State Public Charter School Commission
(ʻAha Kula Hoʻāmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Dear Ms. Lau and Ms. Cleary:

It is my pleasure to both serve on the Governing Board of Namahana Public Charter School on Kauaʻi and to outline for you the ways in which the Limahuli Garden and Preserve, one of five National Tropical Botanical Garden's in the world plans to partner with Namahana School.

But first, I'd like to give you a little personal background: I have served as an ʻāina-based educator for more than two decades, working with children in Kauai's public schools, most recently at Kawaikini NCPCS and at Kamehameha School affiliates. In developing and implementing ʻāina-based curriculum, I know firsthand how empowering it is for students to have an immersive, first-person experience that provides real-world knowledge.

As director of Limahuli Gardens and Preserve, I am thrilled to be able to offer a partnership to Namahana PCS whose school model focuses on agriculture and sustainability through student-centered learning, individual mentoring and high-school internships. Limahuli Gardens are uniquely qualified to serve as a "living laboratory" for Namahana students to learn about eco-sustainability and engage in place-based education by learning about the special history and scientific value of the Limahuli Valley; which has been cultivated for more than a millennium and is home to dozens of endangered plants and birds found nowhere else on earth.

As we strive to impart the value of sustainability and resilience to students during a time of unprecedented global change, the lessons learned on-the-ground at places like Limahuli will allow them to become leaders in our changing world. I believe that Namahana is focused on providing that kind of education and I am deeply committed to working with them to ensure the best possible educational outcomes for their students.

With warm aloha,

Lindsay Leipuaahilehuaokalani Scott Wann
Director, Limahuli Gardens and Preserve

May 12, 2020


Shannon Cleary, Applications Committee Chairperson
Yvonne Lau, Interim Executive Director
Hawaiʻi State Public Charter School Commission
(ʻAha Kula Hoʻāmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813


Aloha Ms. Cleary &  Ms. Lau,

I am pleased to submit this letter of support for Namahana Public Charter School On behalf of the Waipā Foundation.

The 1,600 acre ahupuaʻa of Waipā, one of nine within the moku of Halele`a, along the north shore of Kauaʻi, is owned by the Kamehameha Schools and is managed by the Waipā Foundation.  A 501c3 nonprofit created in 1994, the Foundation and it's work evolved from the community's first efforts in the early 1980's to save the valley from resort and golf course development.  The Foundation currently holds a 40 year lease from the landowner, Kamehameha Schools, one of the strongest supporters of the Waipā and it's work.  For over 20 years, Waipā has been a living learning center, its' work multi-faceted with efforts balanced between stewardship, cultural resiliency and economic development rooted in agriculture that has historically sustained local Hawaiian communities.  Waipā is a place to connect with the ʻāina (that which feeds us—the land and resources), and learn about Hawaiian values and lifestyle through shared work. Our mission is to restore Waipā's vibrant natural systems and resources and inspire healthy, thriving communities connected to their resources.


As a resource to schools, special interest groups, and community, Waipā welomes over 3,000 lifelong learners annually on field trips, retreats, visits and tours.  Waipā's summer and year round internships provide for and support youth from our local community and beyond from high school through college. Last year alone Waipā hosted student interns from Duke and Stanford Universities as well as the University of Hawaii, Kapa`a High and Island School.

As an ideal landscape for project-based learning, we are excited about a collaboration with Namahana School.  Waipā's ecosystems and learning sites range from streams and wetlands to gardens and farms,

to loʻi kalo, fishponds, a plant nursery, reforestation sites, the shoreline at Hanalei Bay and a certified kitchen and poi mill. The options for project based learning are limitless and we are open to hosting classes on site for recurring visits and/or for one time field trips and learning retreats. Our team of staff and management tailor learning experiences to the needs and interests of the teacher and class that we are working with. As an example, during this school year, until the COVID-19 Pandemic hit, Kawaikini NCPCS was visiting Waipā monthly with itʻs 5th and 6th graders learning math in the loʻi. Kanuikapono NCPCS and KANAKA NCPCS come to Waipā for cultural retreats annually or more. Kilauea school 6th graders visit once or twice annually to do science through water quality monitoring and itʻs 4th graders on Hawaiian culture and ʻāina stewardship field trips. Hanalei 4th grade has done an overnight field trip annually for years focused on Hawaiian culture and learning geology on the beach.

Perhaps Namahana students will work on our Stream Restoration project and be involved in ongoing management of the stream, gaining hands-on experience working with our Stream Project manager, Watershed Technician and staff. In addition to monitoring stream flow and contamination levels, Namahana students would also be given the opportunity to work on restoration of Waipā's native and food forests, learning the science and sigificance of forest ecosystems, including modern best practices and traditional methods of management.

With great anticipation, the Waipā Foundation looks forward to working with Namahana School to ensuring that the next generation of leaders in our community will be deeply connected to their place, community, and ʻāina.

Please do not hesitate to contact me with any further questions about our future collaboration.


Most sincerely,

Stacy Sproat-Beck
Executive Director

April 20, 2020

Yvonne Lau, Interim Executive Director
Shannon Cleary, Applications Committee Chairperson
Hawai'i State Public Charter School Commission
('Aha Kula Ho'āmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Dear Ms. Lau and Ms. Cleary:

On behalf of the Board of Directors of the Hanalei Initiative, I am pleased to write this letter of support for Namahana School. On a personal note, as someone born and raised on Kauai's North Shore and as a father of three children who will be attending Kauai public schools, I am thrilled about Namahana School and the educational horizons it will open for our children. I vividly remember the hours-long commute to the Kapaa school campus and hope that things will be different for my keiki.

The Hanalei Initiative was formed after the devastating floods of April 2018, when we demonstrated that local community-led solutions and key partnerships to both manmade and environmental challenges would be more effective than waiting for an outside solution. If anything, the floods underscored the resilience of our North Shore communities. Because the Hanalei Initiative is a "hyper-local," organization that is focused on pressing North Shore issues, Namahana School will be a good partner to complement our mission to build and strengthen our North Shore communities as a good place to live, work and raise our families.

In response to implementing the Ha'ena State Park Master Plan, which stated the community's desire to dramatically curtail the number of visitors and vehicular traffic allowed to visit Ke'e beach area, the Hanalei Initiative's Kauai North Shore Shuttle came online in 2019 with a community-based solution to provide shuttle services for visitors. We then leveraged our partnership with a licensed and insured local bus charter company to provide free transportation for residents to maximize our utilization during backhauls and may be able to work similar types of arrangements for Namahana students to its school site in Kalihiwai/Kīlauea especially when planning the 2nd phase expansion of our shuttle service to the Kilauea area in the near future.

In addition to transportation services, the Hanalei Initiative will have opportunities for project based learning as we look at place-based solutions for some of our rural community's most pressing problems, which include safe pathways on streets that exceed intended carrying capacity and water quality in the iconic Hanalei Bay, into which a 33.1-square-mile watershed area drains to name a few projects being investigated. Namahana students will gain perspective on local policy in action and how an engaged citizenry can make a difference in the place they call home.

With warm personal regards,

Joel Guy
Executive Director

**P. O. Box 814 Hanalei, HI 96714**

January 18, 2022

Yvonne Lau, Interim Executive Director
Mitch D'Olier, Applications Committee Chairperson
Hawaiʻi State Public Charter School Commission ('Aha Kula Hoʻāmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Dear Ms. Lau and Mr. D'Olier:

The Hanalei Canoe Club is pleased to write this letter of endorsement for Namahana School. We are excited at the prospect of North Shore students having a school closer to home so that they may participate more fully in the cultural, social and athletic activities of our communities.

The distance North Shore students must currently travel to school presents a logistical challenge for many of them to be involved in activities closer to home.

We hope to partner with Namahana to support the physical and ʻāina-based educational components of the school through outrigger canoe paddling. Our approach to paddling mirrors Namahana's school values by encouraging teamwork, mutual respect, positive coaching, good sportsmanship and unity. We feature open registration and encourage participation from all interested individuals, regardless of skill level.

Many of the individuals involved in the Namahana School initiative are well known to us and we have witnessed firsthand their dedication and commitment to inclusivity and community support over the years.

With warm aloha,

Wilbert K. Tai Hook
Vice-President

April 20, 2020

Yvonne Lau, Interim Executive Director
Shannon Cleary, Applications Committee Chairperson
Hawai'i State Public Charter School Commission
('Aha Kula Ho'āmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Dear Ms. Cleary & Ms. Lau:

As president of the Rotary Club of Hanalei Bay and on behalf of its board of directors and members, I am pleased to offer this letter of support for the Namahana Public Charter School. Rotary International has for many years operated a youth program, Interact, for young people ages 12-18 in middle school and high schools around the globe. Interact clubs bring together young people to develop leadership skills while discovering the power of "service above self."

Here on Kaua'i, Interact clubs operate in local public schools, however, because of commuting distances, many North Shore students are challenged to participate in this worthwhile program. Therefore, we are excited about the possibility of a local middle school and high school for North Shore youth. We are doubly excited about working with Namahana School because its focus on Aloha Kanaka—respecting and caring for our community—which dovetails perfectly with Rotary's service orientation.

Interact clubs are lead by school teachers and typically organize at least two projects a year, one to mālama their school or community (i.e, Aloha Kanaka) and one that promotes international understanding, which again aligns with Namahana's core value of Aloha i Ke Ao, to perpetuate pono practices in navigating world cultures. Rotary club sponsors the school mentor and guide Interactors as they carry out projects and develop leadership skills.
Namahana will help Rotary develop the next generation of community leaders and we couldn't be more pleased to support this very worthwhile project.

With aloha

Monica Ozust, President
Rotary Club of Hanalei Bay
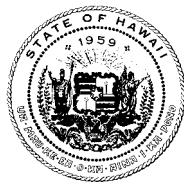
**STATE OF HAWAIʻI**
HAWAIʻI STATE PUBLIC LIBRARY SYSTEM
PRINCEVILLE PUBLIC LIBRARY
4343 EMMALANI DRIVE
PRINCEVILLE, HAWAIʻI 96722

April 29, 2020

Yvonne Lau, Interim Executive Director
Shannon Cleary, Applications Committee Chairperson
Hawaiʻi State Public Charter School Commission
(ʻAha Kula Hoʻāmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Dear Ms. Lau and Ms. Cleary:

I am writing to endorse the Kauaʻi North Shore Community Foundation's (KNSCF) signature project: the Namahana Public Charter School. The purpose of this project is to build a much needed tuition-free public charter school in Kalihiwai, Kīlauea for 350 students in grades 7th through 12th.

At present, North Shore middle-school and high-school students take the bus to their respective schools in Kapaʻa. The trip is a distance of 25 miles. The journey can take an indefinite period of time because of frequent stops and the rural character of our roads. Our community has long wished for a middle and high school closer to home. Although a number of private schools have attempted to "fill the gap" over the years, none has succeeded for more than a brief time because private tuition is out of the economic reach of most of our community's families.

As the Branch Manager of the Princeville Public Library of the Hawaiʻi State Public Library System (HSPLS), I regularly collaborate with North Shore public, private and home schools. Our staff hosts multiple class visits a week. These visits focus on developing students' digital literacy skills, love of reading, encouraging critical thinking and establishing the library as a safe and reliable resource. The library also hosts KNSCF's pilot tutoring program: iLearn Study Club.

The Namahana Charter School would anchor our students to their home community, and be an anchor for community educational partners. As a librarian, I would continue to be committed to supporting this new school by hosting classes on a rotating basis and serve as a supplementary resource for the school's curriculum and research needs. Our library would also provide an accessible, knowledgeable and reliable space for after-school study or independent research and learning. As a branch of HSPLS, students and educators would have access to a plethora of digital resources and programs to support their learning needs.

Over the last two years I have had the opportunity to work with the Kauaʻi North Shore Community Foundation. I have been deeply impressed by the Foundation's professionalism, forethought, reliability and initiative. I cannot think of a better team to support and develop a learning space for our middle and high school students. The Namahana Public Charter School would be an asset to our students, their families and our North Shore community.

Mahalo for your consideration,

Katherine Bengston
Branch Manager
Princeville Public Library

**MAKANA**
**NORTH SHORE**
**URGENT CARE**

June 1, 2020

To Whom It May Concern,

It is my distinct pleasure to write this letter of support on behalf of the Namahana School proposed for the North Shore community of Kauai. We at Makana Urgent Care understand community needs and have been sincerely grateful to many individuals from the Namahana School effort who worked tirelessly with us to establish a much needed non-profit emergency medical facility for the North Shore.

Similar passion and dedication have now been directed at meeting the critical need for quality education on Kauai's North Shore. Our children deserve our best efforts in accomplishing this goal and we believe that the organization, planning and generosity that has come together in creating the Namahana School represents what is needed to create a best in class educational center for our community.

At Makana we look forward to vigorously supporting the Namahana School both in spirit and in deed by offering our support as part of this wonderful community and by creating healthcare curriculum opportunities for the school going forward.

In summary, the Namahana School will be a profound addition to Kauai's North Shore that will provide quality learning and needed opportunities for our children for generations to come.

Sincerely,

Edward J. Kimball MD
President and Founder
Makana North Shore Urgent Care

4488 Hanalei Plantation Rd, Princeville, Kauai, HI 96722
www.makanacare.org

## ☀ regenerations botanical garden
P.O. Box 1137   Kilauea, HI 96754 USA
(808) 652-4118   info@ribg.org

February 1, 2022

Yvonne Lau - Interim Executive Director
Mitch D'Olier, Applications Committee Chairperson
Hawai'i State Public Charter School Commission
'Aha Kula Ho'āmana
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Dear Commissioners,

I am writing to express strong support for the authorization of Namahana School to establish and operate as a State of Hawai'i Public Charter School. Our nonprofit organization has provided physical management and associated educational training programs on land directly adjacent to the proposed Namahana School campus for the past twelve years. We are excited at the prospect of collaborating with the School by contributing our agroecological knowledge base and facilities in a variety of flexible formats that serve the School's innovative approach to learning.

Regenerations Botanical Garden has developed a one-of-a-kind agroforestry demonstration, education, and research site called the Kaua'i Food Forest– a 2.5 acre agroecosystem consisting of over 200 species and varieties of multipurpose plant species and varieties, weaving together trees, shrubs, ground covers, vines, and root crops that form a resilient and productive whole. This ideal outdoor classroom for the study of Pacific Island and world food plants, soil-plant interactions, forest ecology, and community-powered food systems is located mere steps away from Namahana School. The opportunity for us to provide mentorship and hands-on training in subtropical agroforestry to the Students of Namahana is in perfect alignment with our mission, *cultivating regenerative relationships with people, plants and the land to restore connection, meaning, and purpose to our lives.*

In addition to agroforestry, we have expertise in plant propagation, seed saving, and soil fertility management, all critical skills in the practice of regenerative farming. As Namahana School continues to expand the agricultural component of its curriculum, Regenerations aspires to offer these methods and techniques as well to students who wish to take advantage of these resources.

We recognize that the vision of food sovereignty for Kaua'i can only be realized by inspiring and training our youth to value and practice agroecological stewardship. Namahana School will undoubtedly make an important contribution toward that goal.

Sincerely,

Paul Massey
President, Regenerations Botanical Garden

# COMMON GROUND

February 1, 2022

Yvonne Lau, Interim Executive Director
Shannon Cleary, Applications Committee Chairperson
Hawai`i State Public Charter School Commission
1164 Bishop Street, Suite 1100
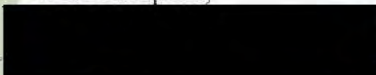Honolulu, HI 96813

Dear Ms. Lau and Ms. Cleary,

Common Ground is a commercial venue in Kilauea, Kauai. We are focused on building the farm of the future where doers, thinkers and changemakers, come together to redesign key elements of our food systems and ignite a global shift towards a regenerative system.

We do this by investing in a circular economy of food and beverage businesses, developing a media and policy platform, demonstrating regenerative farming practices, hosting events and providing distribution channels for local products. The Common Ground Kauai campus serves as a lab environment, demonstrating in real time how the farm of the future can look, feel and taste.

Namahana Charter School's `aina-based and student led education model will help prepare the next generation of business owners, creators and community leaders for the challenges they will inevitably face. We are excited to partner with them as a future project site and look forward to working with the Namahana students throughout their academic careers. We enthusiastically support Namahana's charter application and look forward to working alongside them in building a more regenerative and equitable future for Hawaii.

With aloha,

Jennifer Luck
Chief Operating Officer
Common Ground

4900 Kuawa Road, Kilauea, HI 96754

# ANAINA HOU
## —COMMUNITY PARK—

808-828-2118
anainahou.org
5-2723 Kuhio Hwy
Kilauea, HI 96754

April 21, 2020

**FOUNDERS**
BILL & JOAN PORTER

**PRESIDENT**
FRANK ROTHSCHILD

**VICE PRESIDENT**
JIM BRAMAN

**TREASURER**
CHICK LANPHIER

**CO-SECRETARIES**
PAM WARREN
NICKI PIGNOLI

**DIRECTORS**
JOAN PORTER
MIKE JAMES
STEPHENIE BROWN
BRANDON SASSONE
JOY BRAHMST
BEN GILLIKIN
KEN ROSENTHAL
KILIPAKI VAUGHAN

**EXECUTIVE
DIRECTOR**
JILL W. LOWRY

Yvonne Lau, Interim Executive Director
Shannon Cleary, Applications Committee Chairperson
Hawaiʻi State Public Charter School Commission
(ʻAha Kula Hoʻāmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Aloha Ms. Lau & Ms. Cleary,

We are writing in support of Namahana Public Charter School (NPCS) on behalf of Anaina Hou Community Park (AHCP). We are happy to recommend Namahana Public Charter School in its application for a Hawaiʻi charter as they have demonstrated a sincere dedication to bringing this long needed resource to the north shore of Kauai.

The stakeholders of NPCS have worked tirelessly and very successfully in engaging the community to ascertain needs and concerns, identifying the best delivery methods of education based on those needs, and have aligned the members of our community with capacity to stand with them in the development of NPCS. This is no small undertaking, and in our opinion shows that NPCS has the necessary skillset and mindset to ensure continued success.

AHCP is a 38-acre nonprofit, multi-use campus that is located adjacent to the Wai Koa Plantation property where NPCS will be located. Our mission supports education, health and public safety, environmental stewardship, and quality entertainment. As we look to the future of Kauai we understand its growth and health lies with the young people of our island. As such, we believe that NPCS is the perfect catalyst to steward these young minds through their educational journey and give them the best opportunity to develop their best selves.

We strongly recommend Namahana Public Charter School for your consideration.

With Respect,

Jill W. Lowry
Executive Director

Frank Rothschild
President
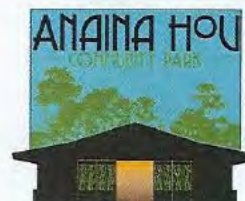
PO Box 1023, Kilauea, HI 96754

info@ainahookupuokilauea.org

January 17, 2021

Shannon Cleary, Applications Committee Chairperson
Yvonne Lau, Interim Executive Director
Hawai'i State Public Charter School Commission
('Aha Kula Ho'āmana)
1164 Bishop Street, Suite 1100, Honolulu, HI 96813

Aloha Ms. Cleary & Ms. Lau,

I am pleased to submit this letter of support for Namahana Public Charter School on behalf of
'Āina Ho'okupu O Kīlauea.

'Āina Ho'okupu o Kīlauea (AHK) is a community-based nonprofit headquartered in the town of
Kilauea on the north shore of the Hawaiian island of Kaua'i; AHK received 501c3 status on
September 8, 2015. AHK's first and flagship project has been to assist the County of Kaua'i in
developing 75 acres immediately north of the town of Kilauea into what is now known as the
Kilauea Community Agricultural Center (KCAC). KCAC is the farming site where production,
training and educational programs occur. It is perhaps best described as an agricultural incubator
and small farm support system that removes barriers and reduces risk to small and new farming
startups by providing low-cost shared land, infrastructure, capital equipment, and farming
training while also engaging in demand aggregation and fresh produce retailing.

AHK acts a resource for local schools by hosting field trips and educational programming,
serving as a regular volunteering site, and helping transition high school students into
agricultural careers through its comprehensive internship program.

AHK looks forward to hosting Namahana School students to learn about local agriculture,
Hawaiian culture, the Kilauea area agricultural history, the latest technological
advancements in small farming operations, and ways we can blend the old and the new to
create a better future for us all.

Mahalo,

Yoshito L'Hote
CEO of 'Āina Ho'okupu O Kīlauea

**President**
Yoshito L'Hote

**Co-Vice Presidents**
Mike Latif
Ron Paul

**Secretary**
Jeremy Burns

**Treasurer**
Gary Pacheco

**Sergeant-at-Arms**
Bill Chase

**PTSA Rep**
Sonrisa Stepath

**Directors**

Stephenie Brown

Thomas Daubert

Mike Latif

Mike Lyons

Charlie Martin

Kalena Pacheco

Ron Paul

Steven Squire

Sonrisa Stepath

Sarah Wright

## KĪLAUEA NEIGHBORHOOD ASSOCIATION

January 25, 2022

Yvonne Lau, Interim Executive Director
Mitch D'Olier, Applications Committee Chairperson
Hawai'i State Public Charter
School Commission ('Aha Kula Ho'āmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Aloha Ms. Lau and Mr. D'Olier:

On behalf of the Kīlauea Neighborhood Association (KNA), I wish to offer our support of the proposed Namahana School which will be built here in our community. We are very excited about the potential for a middle- and high-school for the north shore communities of Kīlauea, Hanalei, Wainiha and Hā'ena. In particular, the school's focus on agriculture and sustainability is consistent with our mission and our north shore community history and values.

For many years, Kīlauea was a center of agriculture on Kaua'i. That legacy is still evident in the number of small family farms across the north shore and with the largest taro production in Hawai'i still operating in Hanalei. We are still an agricultural community and a school that helps advance sound, sustainable agricultural practice here will be a benefit for all. The group behind Namahana School has been working for years on this project and along the way has assembled an excellent team to shape curriculum along with an exceptional governing Board to lead the implementation and management of the school.

Namahana School has wide support in the community among families of school-age children who are excited by the prospect of a school closer to home - so their middle-school and high-school age children aren't forced to spend long hours each day commuting to Kapa'a. While only 14 miles from Kīlauea Town, the bus ride can take an hour due to our one-lane highway with increasing traffic congestion, roadway work and additional stops along the way. Students from Hā'ena must travel 26 miles across multiple single-lane one-way bridges complicated by frequent extensive road closures; their commute can currently take close to two hours. Namahana School's Kīlauea location would greatly reduce these burdens.

Mahalo nui loa,

Yoshito L'Hote,
President - Kīlauea Neighborhood Association

PO Box 283, Kīlauea, Kaua'i, Hawai'i 96754
www.kna-kauai.org | joekilauea@gmail.com
Like us on Facebook: Facebook.com/kna.kauai

# Retro Farms

*Our mission on Kauai is to inspire children to love and protect our natural resources.*
*To create understanding through in-class instruction and hands-on field trip experiences*
*that lead to responsible stewardship and compassion for all living things.*

Yvonne Lau, interim Executive Director
Shannon Cleary, Applications Chair
Hawai'i State Public Charter School Commission
1164 Bishop Street, suite 1100
Honolulu, HO 96813

Dear Ms. Lau and Ms. Cleary,

This letter is in support of Namahana School on Kauai.

Retro Farms is a Kauai NPO focused on environmental education. We work with many north shore schools to conduct in-school programs and provide field trip opportunities. We have conducted our programs for ten years. Most recently, we have added an Agricultural Intern program geared toward providing farm experiences and job opportunities to Kauai's high school students. As a small organization, we are constantly seeking new partnerships with schools that share our objectives, providing well rounded, place-based educational opportunities for the youth of Kauai. While we work toward a sustainable future for Kauai, we are grateful for the establishment of new schools that are invested in instilling a need for sustainability in our students and develop curriculums toward this overreaching goal.

We are excited about our new partnership with Namahana  school as we look toward future opportunities for collaboration with our 'aina based programs. We have every confidence in the direction this school is heading as well as the community support and leadership of this organization. Kapua Chandler has a long-standing reputation as a person of integrity with strong organizational and leadership capabilities. We are excited to include them in our school roster and look forward to getting started as we work toward our common desired outcomes of connecting our island youth to the 'aina.

Please feel free to contact me if you have any questions.

Warmest regards,
Mary Ellen Pearlman
Director Retro Farms

**Lion Members**

David Bancroft
Russ Boyer
Art Bradbury
Terri Bradbury
Bob Broshears
Stephanie Brown
Stuart Cain
Joe Chaulklin
Ron Chittenden
Trudy Comba
Celica Covel
Susan Dierker
Odie Dill
Parke Elmore
Alan Faye
John Gordon
Dick Gott
Mark Greenberg
Kirsten Hermstead
KoKo Kaneali'l
Tom LaCour
Louis LaFratta
Mike Loo
Conrad Makarewicz
Don McConnell
Jonathan McRoberts
Gerald Moore
Patrick O'Connell
Sal Ochoa
Gary Pacheco
Psolar
Bob Robertson
Conrad Schmidt
Cas Schwabe
Wayne Tanji
Richard Teixeira
Tom Trombley
Bill Troutman
Kalani Walther

Shannon Cleary, Applications Committee Chairperson
Yvonne Lau, Interim Executive Director
Hawai'i State Public Charter School Commission
('Aha Kula Ho'āmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Dear Mses. Cleary & Lau:

The Kauai North Shore Lions Club is a community-based organization focused on helping make our North Shore a better, happier place. With the help of our tireless members, we organize fundraisers, execute community-building events, and offer in-depth training sessions for our volunteers.

We wholeheartedly endorse the creation of the Namahana Public Charter School and believe it will be a welcome addition to our community. The Lions would enthusiastically explore the possibility of establishing a youth Lions chapter within the school. The Leo (Leadership, Experience and Opportunity) clubs began in 1957 when the first club was formed in Pennsylvania. Today, Leos have grown into a dynamic force for good—actively providing their communities and the world with kindness and service.

Namahana will allow us to extend our unique brand of voluntarism to a school that will actively cultivate a sense of community service among its student body. Each year the Lions hold several community events that raise funds for scholarships and other worthwhile efforts—like maintaining sun shelters at bus stops and at the local dog park and collecting, cleaning and mailing used eyeglasses to the developing world.

Namahana's plan to involve students in hands-on efforts to support their school and community will be a welcome addition to our work.

Sincerely,

Patrick J. O'Connell Jr
President Kauai North Shore Lions Club

**Hanalei School**
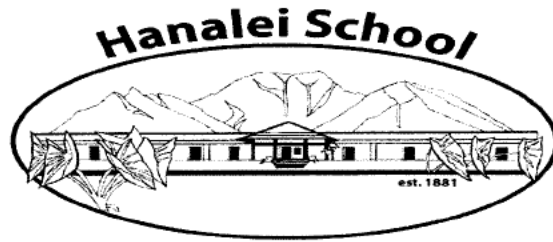
STATE OF HAWAII
DEPARTMENT OF EDUCATION
HANALEI ELEMENTARY SCHOOL
P.O. BOX 46
HANALEI, HAWAII 96714

January 18, 2022

Yvonne Lau, Interim Executive Director
Mitch D'Olier, Applications Committee Chairperson Hawai'i State Public Charter
School Commission ('Aha Kula Ho'āmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Aloha Mr. D'Olier and Ms. Lau,

By way of introduction, I am Tony Sines, the principal of Hanalei Elementary School. My position as principal at Hanalei gives me unique insight into the need for a public school for our middle and high school students on the North Shore and I am therefore writing to voice my strong support for Namahana Charter School.

The North Shore of Kauai is a unique and special place comprised of multiple communities, and the need for a tuition-free secondary school in our area has been a long-standing concern. In my position as principal of Hanalei, I am keenly aware of the transportation and societal challenges for our students after they graduate from elementary school. We are an area often beset by natural disasters, such as landslides and floods, that compound the need for schools closer to home for our students. Additionally, after graduation, so often our students' friendships and social support networks become splintered with families sending their children off in different directions, with some families even moving away. The difficulties our middle and high schoolers face because of the distance from their community results in physical and social impediments to their education and emotional growth. Opportunities for extra-curricular activities are also significantly impacted and parents face challenges trying to participate in their children's school.

Having a middle/high school in our community would provide a significant opportunity to align elementary schooling on the North Shore with the curriculum of the secondary school. I have had the opportunity to get to know the people who are spearheading the Namahana effort and have seen the educational model they are proposing. I believe the team that has been assembled is well-equipped to take on the challenge of building a high performing secondary school in our community that is uniquely suited for us on all levels.

I am pleased to extend my whole-hearted support for Namahana Charter School and look forward to partnering with them. This is a long-awaited opportunity for our families, our community, and the future of education in our area. Please do not hesitate to contact me if I can provide any further information.

Together we can,

Tony Sines, Principal
Hanalei Elementary School

January 12, 2022

To Whom it may Concern:
Yvonne Lau, Interim Executive Director
Mitch D'Olier, Applications Committee Chairperson Hawai'i State Public Charter
School Commission ('Aha Kula Ho'āmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Aloha Mr. D'Olier and Ms. Lau,

I'm writing this letter of support for Namahana Charter School. As acting principal of Kilauea Elementary School, I am precisely aware of the need for the North Shore community to offer additional options for middle and high school.

The need for a North Shore middle School is multifaceted. To start, the North Shore is a special community with its own individual set of needs, strengths and challenges. A middle/high school on the North Shore would most appropriately address the particular academic, social emotional and physical needs of the community.

In addition, there are also geographic concerns to be considered. Students from Haena and Hanalei communities can spend more than two hours commuting on a bus each day. Not only is this inconvenient for students and their parents, but it also affects their time for homework and ability to participate in extracurricular activities.

Furthermore, both Kilauea And Hanalei Elementary Schools range from kindergarten to sixth grade. When our students transfer from elementary school to middle school at Kapaa Middle School they are the only ones who arrive in seventh grade, in a period after students have already solidified their friendships and social groups. As a result, they search for familiar faces and the result is that they find each other. This is an unfair disadvantage resulting in our North Shore students experiences of isolation and disconnect.

Finally, as a north shore complex it would be much easier to connect and partner with our feeder school in order to vertically align the curriculum. A partnership between Kilauea Elementary School and Namahana Middle/High School could serve both for backwards mapping; to properly prepare our students for future expectations, as well as for the support that middle/high school students could provide to facilitate the learning at the elementary school.

With all this in mind, I implicitly urge you to accept the Namahana Charter School Application. Not only for all of the reasons mentioned but also because I have had the opportunity to meet and work with the team in other contexts. I have also reviewed the specifics of their proposed program of study, and I feel confident in stating that this team is equipped with the expertise to effectively and efficiently utilize public funds to responsibly educate our north shore students.

Please feel free to connect with me if you have any additional questions. I am happy to support Namahana Charter School in any way possible and look forward to partnering with their team in the future.

Sincerely,

Deena Moraes
Kilauea School- TA Principal

January 19, 2022

Yvonne Lau, Interim Executive Director
Mitch D'Olier, Applications Committee Chairperson
Hawai'i State Public Charter
School Commission ('Aha Kula Ho'āmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Dear Ms. Lau and Mr. D'Olier:

I am happy to write this letter of support for Namahana School. Kaua'i Planning and Action is a data-driven organization with a vision of an island community where Kaua'i's keiki through young adults are healthy, competent, confident and caring. Because Namahana's School's values of aloha kanaka, aloha i ke ao and aloha 'aina closely reflect KPA's own, we look forward to partnering with them to advance our respective missions.

Every two years, Keiki to Career (K2C), KPA's signature program, releases the Kauai Youth Report to serve as a snapshot of Kauai's young people from birth to workforce entry. Our most recent report outlines several new indicators, many focused on the physical, mental, and emotional health of our island youth to ensure we are assessing their overall well-being. We have found a quiet crisis among our island youth, with 9% of Kaua'i high school students surveyed reporting that they attempted suicide in the previous year. More than a quarter of our young people report feeling sad or worthless. We want to change that.

We believe that the foundation of a child's success begins in the home, with a loving and supportive family. That support must extend into the schools and community. It is upon this foundation that our young people can be most successful. The Keiki to Career Leadership Council embraces the view that the community must rally together to create supportive environments for our young people to thrive—at home, in the community and in our schools. Namahana School will be structured to do just that, with a school design that emphasizes community.

We look forward to a partnership where we can work with Namahana to develop and provide socioemotional learning opportunities to Namahana students.

With warm aloha,

Alice Luck, KPAA President and K2C Coordinator:

UNIVERSITY of HAWAI'I

# KAUA'I
COMMUNITY COLLEGE

May 4, 2020

Yvonne Lau, Interim Executive Director
Shannon Cleary, Applications Committee Chairperson
Hawai'i State Public Charter School Commission ('Aha Kula Ho'āmana)
1164 Bishop Street, Suite 1100
Honolulu, HI 96813

Dear Ms. Cleary & Ms. Lau:

As the Chancellor of Kaua'i Community College, it is my pleasure to offer this letter of support for the charter application of Namahana School. As a lifelong professional educator with more than 42 years of experience, half of which was in secondary education, both as a high school teacher and principal, I understand the benefits of a public community school and its importance to young working families. The North Shore of Kaua'i currently lacks any public middle or high school and consequently students in grades 7-12 are presently bused to the district schools in Kapa'a. The logistical issues inherent in this situation results in students' lack of access to extracurricular school activities, hours of commute time which could be more beneficially spent, and lack of parental involvement due to the distance of their children's school from their homes.

A new charter school on Kaua'i's North Shore that offers an 'aina based, student centered learning model in a robust academic environment will benefit not only the students of the North Shore, but the overall educational system on Kaua'i. Kaua'i CC, which was proud to be ranked 21st out of 710 community colleges in the nation in 2019, provides an Early College program for academically qualified high school students in which students can earn both high school and college credits. This initiative between UH and the DOE benefits from engaged learners that strive for post-secondary education. Academic institutions that offer student-driven education engage students on a higher learning level and open opportunities that may have seemed beyond their reach in more traditional school environments. Our partnerships with schools and communities on the island give us the opportunity to collaborate in the education and careers of our future leaders and citizens.

Small advisory groups, experience-based learning, partnerships with community, and knowledge sharing opportunities offer students the chance to forge holistic, community driven solutions to 21st century social, economic, and environmental challenges. At Kaua'i CC, we welcome new approaches to education and school design because engaged students become life-long learners. Namahana School's philosophy is in keeping with Kaua'i CC's mission to inspire, engage, and empower learners and educators to enrich our community and our world.

We look forward to partnering with Namahana School to educate the citizens of tomorrow and give them the skills they need to navigate their ever-changing world. At Kaua'i CC, we encourage innovation, entrepreneurship, promote sustainability and environmental responsibility, and work to develop leadership skills. Namahana School will help the next generation of students find their paths to successful college or career and we are pleased to support their application to become a Hawai'i Public Charter School.

With aloha,

Joseph M. Daisy, EdD
Chancellor Kaua'i Community College

# OFFICE OF THE MAYOR

**DEREK S.K. KAWAKAMI,** MAYOR
**MICHAEL A. DAHILIG,** MANAGING DIRECTOR

January 18, 2022

Hawaiʻi State Public Charter School Commission
1164 Bishop Street, Suite 1100
Honolulu, HI  96813

Dear Applications Chair D'Olier and Commissioners:

RE: LETTER OF SUPPORT FOR NAMAHANA SCHOOL

I am writing in strong support of the proposed Namahana Public Charter School on the north shore of Kauaʻi.  The proposal for this school first came to my attention in 2015 when I served as the Representative for the 14th District, Kauaʻi's East and North Shores. At that time, I met with representatives of the Kauaʻi North Shore Community Foundation's (KNSCF) Education Committee regarding the need for an alternate choice for students on the north shore of Kauaʻi.

Over the last five years, KNSCF has worked diligently to seek input from community members on their educational needs and goals, and then investigated several learning platforms before selecting Big Picture Learning (BPL). Student centered learning that incorporates the values and culture of our community is imperative for the success of our youth and the future of our island.

Having always had educators in my life, from my late mother to my wife, I know the importance of education that is dynamic and adaptable, and where leadership seeks guidance from experts in many fields. I am impressed with the strong governing board the KNSCF Education Committee has formed to guide this charter school.

One of the many challenges a public charter school faces is a location. The generous donation of the eight-acre site in Kalihiwai through a 99 year lease adds to the financial stability of Namahana Public Charter School.

I am confident that with the wide community support including the KNSCF, innovative curriculum, strong governing board, and secure location, the Namahana Public Charter School will succeed in educating and preparing our youth for an ever-changing world.

With warm aloha,

Derek S.K. Kawakami
Mayor, County of Kauaʻi

**COUNTY COUNCIL**
Arryl Kaneshiro, Chair
Mason K. Chock, Vice Chair
Bernard P. Carvalho, Jr.
Felicia Cowden
Bill DeCosta
Luke A. Evslin
KipuKai Kualiʻi

**OFFICE OF THE COUNTY CLERK**

Jade K. Fountain-Tanigawa, County Clerk
Scott K. Sato, Deputy County Clerk


Telephone:     (808) 241-4188
Facsimile:      (808) 241-6349
E-mail:  cokcouncil@kauai.gov

**Council Services Division**
4396 Rice Street, Suite 209
Līhuʻe, Kauaʻi, Hawaiʻi  96766

January 20, 2022


Yvonne Lau, Interim Executive Director
Mitch D'Olier, Applications Committee Chairperson
Hawaiʻi State Public Charter School Commission
1164 Bishop Street, Suite 1100
Honolulu, Hawaiʻi  96813

Dear Ms. Lau and Mr. D'Olier:

### RE:  LETTER OF RECOMMENDATION FOR NAMAHANA SCHOOL

As an individual Councilmember on the Kauaʻi County Council, I strongly support the  charter school application for Namahana School in Kīlauea, Kauaʻi.  The need for a middle and high school on Kauaʻi's North Shore has been strong for four decades.  The agricultural location in Kīlauea, the school management team, and the governing board are a formula for success.  A progression of efforts over the decades has been a demonstration of community desire and acceptance for this regionally appropriate program that is a cultural reflection of our North Shore community as well as in close enough proximity for parental involvement.  The public support for this education program is deeply needed to offer all economic layers of our community the opportunity for empowering education.

School Director Dr. Kapua Chandler was born and raised in this community and brings with her a wealth of knowledge and well-matched professional training. The collaboration with Big Picture Learning will assist this start-up school's student-directed life-based education.

As a member of the Kīlauea and North Shore communities, former provider of an alternative education middle school program, and a founding member of the adjacent Kauaʻi Food Forest that will offer immediate application of agricultural learning, I am committed to supporting the success of Namahana School. I respectfully ask for your favorable consideration of their application.  Should you have any questions, please feel free to contact me or Council Services Staff at (808) 241-4188.

Sincerely,

*Felicia Cowden*

FELICIA COWDEN
Councilmember, Kauaʻi County Council

**COUNTY COUNCIL**
Arryl Kaneshiro, Chair
Mason K. Chock, Vice Chair
Bernard P. Carvalho, Jr.
Felicia Cowden
Bill DeCosta
Luke A. Evslin
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**OFFICE OF THE COUNTY CLERK**

Jade K. Fountain-Tanigawa, County Clerk
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Telephone:    (808) 241-4188
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E-mail:  cokcouncil@kauai.gov

**Council Services Division**
4396 Rice Street, Suite 209
Līhuʻe, Kauaʻi, Hawaiʻi  96766

January 25, 2022

Yvonne Lau, Interim Executive Director
Mitch D'Olier, Applications Committee Chairperson
Hawaiʻi State Public Charter School Commission (ʻAha Kula Hoʻāmana)
1164 Bishop Street, Suite 1100
Honolulu, Hawaiʻi  96813

Dear Ms. Lau and Mr. D'Olier:

### RE:  LETTER OF RECOMMENDATION FOR NAMAHANA SCHOOL

As an individual Councilmember on the Kauaʻi County Council, I strongly support the  charter school application for Namahana School in Kīlauea, Kauaʻi.  I support the proposed Namahana School, because it would be a huge help to the communities of Hāʻena, Waipa, and Hanalei by drastically shortening the commute times for middle school and high school students.

Both in my role as a Councilmember and as a part-time teacher, I interact with a lot of North Shore students and families and have heard firsthand the need for an additional high quality school closer than Kapaʻa and Līhuʻe. The children who are commuting to Līhuʻe and Kapaʻa from the North Shore are spending a significant portion of their lives in traffic.  Their daily commute is compounded by tourism, road work, and frequent road closures due to storm events of increasing intensity.

This lengthy commute takes away from time with their families and time that could be used for studying or extra-curricular activities. It also contributes to congestion on our overburdened infrastructure.  According to a study prepared for the Trust for The Rural School and Community Trust, the longest bus rides for high school students should not exceed sixty (60) minutes. For students in Hanalei, Wainiha, and Hāʻena, this upper limit is exceeded daily.

Schools are also important centers for communities far beyond the principal mission of teaching. They serve as gathering and assembly places.  When schools are far away from their communities, parents cannot participate in after school or other civic activities at the school, and this has a ripple effect on their student's engagement.

AN EQUAL OPPORTUNITY EMPLOYER

Yvonne Lau, Interim Executive Director
Mitch D'Olier, Applications Committee Chairperson
RE: Letter of Recommendation for Namahana School
January 25, 2022
Page 2

      I hope that you give Namahana School your full consideration.  I know it has a lot of support from the North Shore.  Thank you for your time and consideration. Should you have any questions, please feel free to contact me or Council Services Staff at (808) 241-4188.

                    Sincerely,

                    LUKE A. EVSLIN
                    Councilmember, Kaua'i County Council

## Attachment N

Also provide, as **Attachment N**, the qualifications, resume, and professional biography for this individual (proposed School Director).

## Kapua Lililehua Chandler, Namahana School Leader

Ph.D. Candidate (ABD), Higher Education and Organizational Change
*University of California Los Angeles* (Anticipated 2020)
Master of Arts, Higher Education and Organizational Change
*University of California Los Angeles*
Master of Education in Educational Administration
*University of Hawaii at Mānoa*
Bachelor of Science, Computer Science & Mathematics
*University of Portland*

Born and raised in Kīlauea, Kapua Lililehua Chandler is a kupaʻāina and lineal descendant of Koʻolau and Haleleʻa. In 2018, Chandler joined the Kauaʻi North Shore Community Foundation to plan and implement the community engagement process for creating a north shore charter school. This process led to the development of Namahana's school values, mission, vision, and school model. Kapua finished her doctoral studies from UCLA in 2020, reaching her goal to return home and serve her community. Her research focuses on fostering success for Native Hawaiian and rural students, more specifically, how leadership impacts rural communities. She is particularly interested in how the concepts of "place" play a role in the higher education experiences of First Nations' Peoples of the Pacific and how Indigenous communities can increase educational opportunities through ʻāina-based education.

On Kauaʻi, she collaborated with the Kauaʻi Community College to understand the issue of access to higher education, reviewing data and holding focus groups to understand local patterns of access for the rural north shore community. Her doctoral work investigates and evaluates best practices and processes to develop Indigenous models of higher education, with a goal of creating an Indigenous institute of higher education on Kauaʻi. Her work is informed by a network of Native Hawaiian scholars, tribal colleges in the United States and Māori institutions – many of which she has visited to interview faculty, administrators, students, and community members on their efforts to develop educational opportunities through an Indigenous worldview.

For seven years, she served as a kumu at the Waipā Foundation, using ʻāina-based learning principles with month-long student cohorts to study the Kauaʻi ahupuaʻa system, focusing on different elements of the ahupuaʻa: mauka, kula, makai. Students then reflected their learning in a hōʻike to parents and community members. One cohort of students developed a "rap" describing what resonated with them and recorded it on a CD that is still used as part of the Waipā Foundation's instructional materials.

Most recently in 2021, Dr. Chandler worked with Governing Board member, Dr. Vaughan, to develop and implement Kaiāulu Koʻolau, a summer program to pilot components of Namahana School's educational model including ʻāina-based learning and BPL's Big Picture Living initiative. This pilot program provided valuable insights relating to the implementation of Namahana School's educational model while serving as an important community engagement opportunity to share aspects of our Namahana School model firsthand with families. In addition, the program built partnerships with local organizations and community members who provided field study opportunities for the students.

# Kapua L. Chandler

███████████████████████████████████████

## EDUCATION

Doctorate in Higher Education and Organizational Change
*University of California Los Angeles, Los Angeles, CA*                 ████████
Master of Arts in Higher Education and Organizational Change
*University of California Los Angeles, Los Angeles, CA*                      ██████
Master of Education in Educational Administration
*University of Hawaii at Mānoa, Honolulu, HI*                               ██████
Bachelor of Science Computer Science, Mathematics
*University of Portland, Portland, OR*                                       ██████
University of Portland Studies Abroad
*Salzburg, Austria*                                                    ████████
High School Diploma
*Kamehameha Schools Kapālama, Honolulu, HI*                        ██████

## RESEARCH INTERESTS

Fostering success for Indigenous Native Hawaiian students; Impact of community leadership in rural Native Hawaiian communities; Role of place in the higher education experiences of First Nations' Peoples of the Pacific; Role of Indigenous culture and community in increasing educational access;

## ACADEMIC PROFESSIONAL EXPERIENCE

Kauaʻi North Shore Community Foundation, Kīlauea, HI                 October 2018 – Present
**Research Consultant**
- Developed and implemented community engagement plan to facilitate the collaborative effort to develop a community-based charter school
- Discussed and collaborated with 150+ Kīlauea community members regarding community engagement strategies

UCLA Higher Education and Oranizational Change Division, Los Angeles, CA     September - December 2018
**Teaching Assistant**
- Facilitated discussions and graded for a class of 30 students in a History of Higher Education course
- Designed, developed, and implemented course curriculum and syllabus

American Indian College Fund, Denver, CO                       August 2017 – April 2018
**Research Consultant**
- Developed a summary report of nine Indigenous environmental and sustainability programs across the United States to assist tribal colleges and universities in curriculum and degree development
- Analyzed ten tribal college websites for Indigenous environmental and sustainability programs and created a portfolio outlining the various layouts, options, and trends

UCLA Graduate Student Education and Information Sciences, Los Angeles, CA     August 2016 – June 2018
**Graduate Student Researcher**
- Team lead of four graduate students for a National Science Foundation Improving Undergraduate STEM Education grant on flipped Life Science courses
- Collected and analyzed in class observations utilizing SPSS

American Indian College Fund, Denver, CO                                    June 2016 - October 2016
**Research Consultant**
- Conducted a document analysis of the impact of Achieving the Dream initiative with two Tribal College/Universities
- Developed a report to be utilized internally to improve the assessment and evaluation process for future Achieving the Dream initiatives with Tribal Colleges/Universities

UCLA College of Letters & Sciences, Los Angeles, CA                        September 2015- June 2016
**College Academic Mentor**
- Advised 75 low-income minority students in academic planning for Life and Physical Sciences majors
- Developed and presented college success and resume writing workshops for undergraduate students

UCLA College of Letters & Sciences, Los Angeles, CA                        September 2015- January 2016
**Teaching Assistant**
- Taught and graded 18 students in an Introduction to Higher Education course
- Designed, developed, and implemented course curriculum

UCLA Graduate Student Education and Information Sciences, Los Angeles, CA          January-June 2015
**Graduate Student Researcher**
- Analyzed issues to transmigration for Native Hawaiians to the continental U.S. using census data
- Developed literature review which resulted in publication

University of California Los Angeles Graduate Housing, Los Angeles, CA       September 2014-June 2015
**Community Assistant**
- Organized, planned, and executed bi-weekly social programs for graduate student residents
- Collaborated with two other community assistants on programs geared to community building

Waipā Foundation, Waipā, HI                                        June-July 2011, 2012, 2013, 2014
**Kumu**
- Organized, developed, and executed Hawaiian value programs with 3rd and 4th grade Halele'a students
- Demonstrated and taught 20+ keiki traditional Hawaiian practices including fishing, farming, and lei making

University of Hawaii at Mānoa Student Housing Services, Honolulu, HI            July 2012-June 2014
**Assistant Resident Director**
- Co-supervise 13 Resident Assistants and independently supervise two Resident Assistants
- Manage and supervise the functionality of a 42 person residence hall
- Conduct regular conduct hearings and facilitate student career development activities
- Supervise and collaborate with Resident Assistants to execute at minimum six programs a month

### PUBLICATIONS

**Chandler, K.L.** (in-progress). Indigenous perspectives on Leadership: Moving from Individualistic to Collective Action in Leadership Research and Discourse. *New directions for student leadership, number 177*. John Wiley & Sons.

**Chandler, K.L.** (2018). I Ulu No Ka lālā I Ke Kumu, The Branches Grow Because of the Trunk: Ancestral Knowledge as Refusal. *International Journal of Qualitative Studies in Education, 31(3),* 177-187.

Chang, M. J., Nguyen, M. H., & **Chandler, K. L.** (2015). Can Data Disaggregation Resolve Blind Spots in Policy Making? Examining a Case for Native Hawaiians. *AAPI Nexus: Policy, Practice and Community*, *13*(1), 295-320.

## CONFERENCE PRESENTATIONS

Native American and Indigenous Studies Association, Vancouver, Canada                    June 2017
**Chandler, K.L.** *I ulu no ka lālā i ke kumu.* Panel session entitled, Indigenous Women Constructing Indigenous Space in Higher Education: Interdisciplinary Perspectives.

Association for the Study of Higher Education, Columbus, Ohio                    November 2016
**Chandler, K.L.** *Higher Education for Social Change: A Look at Native Hawaiian and Pacific Islander Leadership Development*. Paper submission and presentation.

Native American and Indigenous Studies Association, Honolulu, HI                    May 2016
**Chandler, K.L.** *The Value of Hawaiian Culture and Knowledge in Higher Education: A Silenced Story of the Rural Hawaiian Practices of Fishing, Hunting, and Farming*. Panel session entitled, Indigenous Women Constructing Indigenous Space in Higher Education: Interdisciplinary Perspectives.

American Educational Research Association, Washington DC                    April 2016
**Chandler, K.L.** *'O Wai Kou Inoa? What is your name? Who is your water? Where are you from?*. Poster session presented at the 10th Annual Indigenous Peoples of the Americas Indigenous Peoples of the Pacific.

University of California Los Angeles Research & Inquiry Conference, Los Angeles, CA                    May 2015
Nguyen M.H., & **Chandler, K.L.** *Can Data Disaggregation Resolve Blind Spots in Policy Making? Examining a Case for Native Hawaiians*. Poster session.

Association for Asian American Studies, Evanston, Illinois                    April 2015
Chang, M.J., Nguyen, M.H., & **Chandler, K.L.** *An Examination of Native Hawaiian Migration to the Continental United States: Investigating and Promoting the Conditions and Lives of Native Hawaiians*. Session presentation.

National Association of Student Personnel Administrators, Salt Lake City, Utah.                    November 2013
**Chandler, K.L.**, & Jupp, M.A. *How to Create Values-Based Training Program*. Session presentation.

## ACADEMIC ACCOMPLISHMENTS

UCLA Dissertation Year Fellowship                    August 2019 – July 2020
- Received a ($20,000) stipend to research Indigenous higher education models across the United States and New Zealand.

UCLA Graduate Research Mentorship Program                    August 2018 – July 2019
- Received a ($20,000) stipend to research Indigenous higher education models.

First Nations' Futures Program Fellowship, Hawai'i, Alaska, New Zealand                    August 2016 – July 2017
- Fellowship program focused on building First Nations' capacity through developing values-based leadership and more integrated solutions for managing First Nations' assets and resources
- Develop well balanced First Nations' leadership skills to serve our Indigenous communities through important work in community, public and professional roles.
- Attendance of an academic consortium involving Stanford University and University of Hawai'i Mānoa in collaboration with Kamehameha Schools, Te Rūnanga o Ngāi Tahu, and the First Alaskans Institute and South East Alaska

UCLA Research Practicum                    2015-2016
- Designed, collected, and analyzed institutional data from Kaua'i Community College regarding

predictors of transfer from community college to four-year University of Hawai'i universities

- Interviewed two community college academic counselors and conducted 9 in-depth interviews with Native Hawaiian transfer students for data collection
- Collaborated with the Kaua'i Community College Chancellor and Research Analysts to design and implement study

UCLA Graduate Summer Research Mentorship Recipient, Los Angeles, CA                                    2015
- Received a ($6000) stipend to conduct interviews with 10 rural Native Hawaiian kupuna
- Transcribed and analyzed data to develop a paper on the value of Hawaiian culture in higher education

University of Hawai'i at Mānoa Thesis, Honolulu, HI                                                  2013-2014
- Developed and implemented a research study (*Barriers to Accessing Higher Education for Native Hawaiian Students: A Kaua'i North Shore Perspective*) in collaboration with Kaua'i Community College Chancellor to improve rural Native Hawaiian transition from high school to college
- Interviewed 6 Native Hawaiians from the north shore of Kaua'i regarding their academic choices to not pursue a post-high degree
- Developed a report to support the start-up of a north shore satellite campus

University of Hawai'i at Mānoa ResLife Programming Model Author                                        2012
- Successfully created and implemented the first Hawaiian values-based departmental programming model for 9 residence halls
- Modified the Hawaiian values-based programming model for first-year students

Senior Design Project                                                                                 2012
- Design and implement a web-based application for students and professors to organize and evaluate student four-year plans with a team of three
- Spring semester team lead, responsible for communication between team members, client, and faculty advisor

Resident Assistant Pilot Award                                                                        2011
- Awarded for to the most exceptional performance within the RA position.

Computer Science Game project                                                                         2009
- Designed and implemented a game with four team members
- Implemented the game "Flinch," developed human and computer players and presented to class of thirty students

## ACADEMIC AWARDS

| | |
|---|---|
| Dissertation Year Fellowship ($20,000) | Fall 2019 – Spring 2020 |
| Graduate Research Mentorship ($20,000) | Fall 2018 – Spring 2019 |
| Graduate Summer Research Mentorship ($6,000) | Summer 2016 |
| Kamehameha Schools 'Imi Na'auao Scholarship ($12,000) | Fall 2014 – Spring 2016 |
| Kamehameha Schools Na Ho'okama a Pauahi Scholarship ($10,000) | Fall 2008 - Spring 2014 |
| Mānoa Opportunity Grant ($2,000) | Fall 2012 - Spring 2013 |
| University of Portland Grant ($8,940) | Fall 2011 - Spring 2012 |
| Howard Vollum Scholarship ($13,000) | Fall 2008 - Spring 2012 |
| Native Hawaiian Leadership ($2,000) | Fall 2010 - Spring 2011 |

## SERVICE TO THE COMMUNITY

| | |
|---|---|
| Hui Maka'ainana o Makana, 'Ohana Council Chair | 2020-Present |
| Hanalei Canoe Club, Steering Committee Member | 2019-Present |
| Hanalei Hawaiian Civic Club, Director | 2018-Present |
| Waipā Foundation, Volunteer | 2008-Present |
| Makapō (Blind) Canoe Club Lei Making Fundraiser: Instructor | 2016 |
| Higher Education & Organizational Change: Student Representative | 2015-2016 |

| | |
|---|---|
| Loko Iʻa Invasive Species: Volunteer | 2015 |
| National Association of Student Personnel Administrators Region IV: Editor | 2014 |
| Higher Education Student Association: Advisory Council Member | 2014 |
| Higher Education Student Association: Vice President of Student Activities & Communications | 2013-2014 |
| Kākoʻo ʻŌiwi: Volunteer | 2013 |
| Kaleiopuʻu Elementary School Makahikiki: Volunteer | 2013 |
| Hale Kipa: Tutor | 2010 |
| Native Alaskan Social Justice: Volunteer | 2009 |

## PROFESSIONAL AFFILIATIONS

| | |
|---|---|
| Native American and Indigenous Studies Association (NAISA) | 2015 - Present |
| Association for Asian American Studies (AAAS) | 2015 - Present |
| Association for the Study of Higher Education (ASHE) | 2013 - Present |
| National Association of Student Personnel Administrators (NASPA) | 2013 - Present |
| World Indigenous Peoples Conference on Education (WIPCE) | 2013 - Present |
| American Educational Research Association (AERA) | 2012 - Present |

## PROFESSIONAL DEVELOPMENT

| | |
|---|---|
| BPL Leadership Conference, Seattle, WA | December 2019 |
| Kauaʻi Social Emotional Learning Summit | October 2019 |
| Ulana Lauhala, Kona, HI | June 2018 |
| Anne Wilson Schaeff Writers Workshop, Boudler, MT | August 2018 |
| ASHE, Houston, TX | November 2017 |
| NAISA, Vancouver, BC, Canada | June 2017 |
| NAISA, Honolulu, HI | May 2016 |
| AERA, Washington DC | April 2016 |
| ASHE Denver, CO | November 2015 |
| AAAS, Chicago, IL | April 2015 |
| ASHE Annual Conference, Washington, DC | November 2014 |
| NASPA Region IV Conference, Anaheim, CA | November 2014 |
| WIPCE Honolulu, HI | May 2014 |
| ASHE Annual Conference, St. Louis, MI | November 2013 |
| NASPA Region IV Conference, Salt Lake City, UT | November 2013 |
| AERA Annual Conference, San Francisco, CA | April 2013 |

## COMPUTER SKILLS

Macintosh and PC, Java, C, Excel, Word, Pages, iMovie, Powerpoint.

# Kapua  L. Chandler

## Attachment O

If no candidate has been identified, provide as **Attachment O** the job description or qualifications, and describe the timeline, criteria, and recruiting and selection process for hiring the school leader.

Attachment does not apply. We have identified our candidate, see Attachment N for proposed Executive Director.

## Attachment P

If known, identify the individuals (leadership/management team beyond the School Director) who will fill these positions and provide, as **Attachment P**, the qualifications, resumes, and professional biographies for these individuals. If these positions are not yet filled, explain the timeline, criteria, and process for recruitment and hiring.

We have not identified candidates to fill these positions, therefore, there are no qualifications, resumes, and professional biographies for these individuals at this time. Here is the timeline, criteria, and process for recruitment and hiring of our leadership team.

Beyond the Executive Director, we plan to hire a Manager of Finance and Operations (MFO) and an Academic Coach during year 0, both of whom will serve in leadership/management capacities. It is important to note that after the first two years of operation, the Academic Coach position will be re-classified into a Director of Academics position starting in year 3 and will include additional responsibilities related to the supervision of instructional staff.

Our timeline for hiring the MFO and Academic Coach is as follows:
- By September 2022: Draft MFO and Academic Coach Job Descriptions
- By Fall of 2023: Start hiring process for MFO & Academic Coach positions
- Seven months prior to school opening: Hire MFO and Academic Coach part-time on contract under associated nonprofit
- Two months prior to school opening: MFO and Academic Coach increase contracted hours to full time.
- School Opening: MFO and Academic Coach move into full time salaried position, covered by State per pupil funds.

### Manager of Finance and Operations (MFO)

**Responsibilities:** The MFO's is responsible for managing the fiscal functions and daily operations of Namahana School. Specifically, the MFO will be responsible for:
- Setting up and managing a robust accounting system capable of meeting reporting requirements, and the tracking of restricted funding streams
- Taking a lead role in budgeting and financial planning in conjunction with the Executive Director
- Work with the Finance Committee and provide monthly financial statements and other requested fiscal reports as needed.
- Develop and oversee implementation of Namahana School's financial policies, procedures, and systems to ensure compliance with all local, state and federal regulations.
- Oversee Human Resources and serve as one of the primary contacts with SimplicityHR by Altres, the contracted HR back-offices service provider.
- Prepare budgets and financial reports for grants
- Oversee and prepare documentation for annual audit
- Supervise the Custodian and Office Manager
- Oversee several contractors including the school's accountant, grounds and agricultural maintenance, transportation services for field studies, school lunch vendors, and IT services.

Criteria/qualifications for the MFO position will include:
- Commitment to upholding Namahana School's mission, vision and values
- Bachelor's degree or equivalent certifications in a related field (a Master's Degree in Business or Finance is preferred)
- Prior work experience in finance, accounting and human resources.
- Experience with school operations preferred
- Experience with Quickbooks Pro or similar software

## The Academic Coach/Academic Director

In the first two years of operation (Year 1 & 2), the Academic Coach position will be responsible for:
- Taking a lead role in supporting advisors/teachers with curriculum development, lesson planning, instructional coaching, and staff development.
- Overseeing student assessments
- Working with the Executive Director and staff to analyze student data and determine curricular, instructional or assessment adjustments necessary to meet the needs of students and improve academic outcomes.
- Participating on the Student Support Services Team to ensure students are receiving appropriate support and interventions.

Criteria and qualifications for the Academic Coach include:
- Belief in and alignment with Namahana School's mission, vision and educational model
- Bachelor's degree
- At least four years of instructional experience in middle school or high school
- Strong classroom management skills
- Knowledge of the 'āina-based or place-based instructional and curricular strategies
- Strong knowledge of the Hawaii Common Core Standards
- Experience managing a team, coaching teachers and/or designing curriculum.

In year 3, this position will turn into a Director of Academics position and include the following responsibilities:

- In collaboration with the school's leadership team, provide strategic academic planning by identifying academic priorities, measurable goals, and key instructional and curricular strategies along with assessment tools to monitor progress.
- Managing curriculum development and professional development for instructional staff
- Overseeing student assessments
- Working with the Executive Director and staff to analyze student data and determine curricular, instructional or assessment adjustments necessary to meet the needs of students and improve academic outcomes.
- Participating on the Student Support Services Team to ensure students are receiving appropriate support and interventions.
- Supervising the following staff: advisors and teachers, the Student Support Services Coordinator, and the Internship Coordinator.
- Overseeing the accreditation process.

Criteria and qualification for the Director of Academics position include:

- Belief in and alignment with Namahana School's mission, vision and educational model
- Bachelor's Degree (Master's Degree preferred)
- At least four years of secondary classroom teaching experience
- Strong classroom management skills
- Knowledge of the 'āina-based or place-based instructional and curricular strategies
- Knowledge of the Hawaii Common Core Standards
- Experience managing a team, coaching teachers and/or designing curriculum.
- Administrative experience