



NGSS-Aligned Interim Assessments for Elementary Schools, Middle Schools and Biology 1

Fact Sheet

The grades 5 and 8 science assessments and the Biology 1 End of Course Exam in school year 2023-2024 will be aligned to the Next Generation Science Standards (NGSS) (<https://www.nextgenscience.org/>).



The NGSS-aligned Interim Assessments are designed to support teaching and learning throughout the year. In addition, these assessments can be used to prepare students for this year's summative assessments. Various Interim Assessments are available, organized by Disciplinary Core Idea (DCI) and by Practice (SEP); in addition, a nine-item Interim CAT Assessment (ICA) is also available. The Interim Assessments organized by DCI may contain a single cluster item (see the example in Appendix A), or a cluster item and a standalone item (see example in Appendix B), associated with a specific NGSS performance expectation. The Interim Assessments by SEP and the NGSS ICAs will contain both clusters and standalone items. Keep in mind that summative tests will also include both cluster items and standalone items.

This document contains an overview of the NGSS-Aligned Interim Assessments that are available for administration to students throughout the 2023-2024 school year.

Ways in which Interim Assessments are similar to the items students will encounter on the Summative Assessment:

- All items were developed using the same process/criteria as Summative items
- Assess the NGSS performance expectations
- Provide the designated supports and accommodations identified for a student in TIDE if administered through the TA Live Site with students logging in through the secure browser
- Provide evidence of student progress towards meeting the NGSS performance expectations

Ways in which Interim Assessments are different:

- Separate, open, non-secure item pool
- Interim Assessments by DCI and SEP are fixed form (all students see the same questions and will see them again if the assessment for each subject is taken multiple times)

Assessments from any grade may be used, depending on the purpose. Students in grades 3 – 5 are preset as eligible for all Elementary Interim Assessments and those in grades 6 – 8 as eligible for both Elementary and Middle School Interim Assessments. Teachers have the option

of making students eligible for additional Interim Assessments by adjusting the student’s settings in TIDE

Interim Assessments may be administered up to five times during the school year however they are fixed form tests so students will see the same item(s) each time. School level personnel must decide which Interim Assessments to administer and how often.

Interim Assessment Security

The Interim Assessments are considered student- and teacher-facing only. This designation provides educators the flexibility to access the test questions in the Assessment Viewing Application, answer keys in TIDE, and their students’ responses to the test questions in Centralized Reporting System. However, Interim Assessments must not be publicly displayed or distributed outside the classroom to ensure all educators can use the Interim Assessments as intended.

Interim Assessments Available

The following are lists of the NGSS-Aligned Interim Assessments by DCI and SEP that are currently available for the 2023-2024 school year. **Interims by DCI with an asterisk following the Item Description are available in Braille.** (Please note the Interims by SEP, and the ICAs, are not available in Braille.)

Elementary School Interims by Disciplinary Core Idea (DCI)

| TDS Test Label | # of Items | Item Description | | Performance Expectation |
|----------------------------|------------|------------------------------------|------------|-------------------------|
| Interim ES DCI - ES-ESS1.B | 2 | Sagittarius Visibility is Seasonal | Cluster | 5-ESS1-2 |
| | | Moon movement | Standalone | 5-ESS1-2 |
| Interim ES DCI - ES-ESS1.C | 1 | Rock Strata | Standalone | 4-ESS1-1 |
| Interim ES DCI - ES-ESS2.A | 1 | Soil Erosion | Cluster | 4-ESS2-1 |
| Interim ES DCI - ES-ESS2.C | 1 | Chesapeake Bay* | Cluster | 5-ESS2-2 |
| Interim ES DCI - ES-ESS2.D | 2 | Arizona Monsoon* | Cluster | 3-ESS2-1 |
| | | Seasonal Rain in Seattle | Standalone | 3-ESS2-1 |
| Interim ES DCI - ES-ESS3.A | 1 | UK Wind Farms | Standalone | 4-ESS3-1 |
| Interim ES DCI - ES-ESS3.B | 1 | Oklahoma Tornadoes | Standalone | 4-ESS3-2 |
| Interim ES DCI - ES-LS1.A | 1 | Great Frigate Birds | Standalone | 4-LS1-1 |
| Interim ES DCI - ES-LS1.D | 1 | Dog Head Tilt | Standalone | 4-LS1-2 |
| Interim ES DCI - ES-LS2.A | 1 | Terrarium Matter Cycle* | Cluster | 5-LS2-1 |
| Interim ES DCI - ES-LS3.A | 1 | Checkered Chickens | Cluster | 3-LS3-1 |
| Interim ES DCI - ES-LS4.A | 1 | Redwall Limestone* | Cluster | 3-LS4-1 |
| Interim ES DCI - ES-LS4.C | 1 | Battle of the Toads | Standalone | 3-LS4-3 |
| Interim ES DCI - ES-PS1.A | 2 | Sugar in Tea | Cluster | 5-PS1-2 |
| | | Steel Wool | Standalone | 5-PS1-2 |
| Interim ES DCI - ES-PS1.B | 1 | Expanding Balloon | Cluster | 5-PS1-4 |

| TDS Test Label | # of Items | Item Description | | Performance Expectation |
|---------------------------|------------|----------------------|------------|-------------------------|
| Interim ES DCI - ES-PS2.A | 2 | Rubber Band Launch | Cluster | 3-PS2-2 |
| | | Cart Forces* | Standalone | 3-PS2-1 |
| Interim ES DCI - ES-PS2.B | 1 | Gravity and Feather* | Cluster | 5-PS2-1 |
| Interim ES DCI - ES-PS3.B | 2 | Door Alarm* | Cluster | 4-PS3-4 |
| | | Soccer Penalty Kick* | Standalone | 4-PS3-3 |
| Interim ES DCI - ES-PS4.A | 1 | Boat at Dock | Cluster | 4-PS4-1 |
| Interim ES DCI - ES-PS4.B | 1 | Reflected Cat | Cluster | 4-PS4-2 |
| Interim ES DCI - ES-PS4.C | 1 | Light Messages | Cluster | 4-PS4-3 |

Elementary School Interims by Practice (SEP)

| TDS Test Label | # of Items |
|---------------------------------|------------|
| Interim ES SEP - Argument | 3 |
| Interim ES SEP - Data | 6 |
| Interim ES SEP - Explanations | 4 |
| Interim ES SEP - Information | 1 |
| Interim ES SEP - Investigations | 5 |
| Interim ES SEP - Models | 4 |
| Interim ES SEP - Questions | 1 |
| Interim ES SEP - Using Math | 3 |

Middle School Interims by Disciplinary Core Idea (DCI)

| TDS Test Label | # of Items | Item Description | | Performance Expectation |
|----------------------------|------------|-------------------------------|------------|-------------------------|
| Interim MS DCI - MS-ESS1.A | 2 | Lunar Eclipse* | Cluster | MS-ESS1-1 |
| | | A Change in Orbit | Cluster | MS-ESS1-2 |
| Interim MS DCI - MS-ESS1.B | 1 | Mountains on Earth and Mars | Standalone | MS-ESS1-3 |
| Interim MS DCI - MS-ESS1.C | 1 | K/Pg Boundary | Cluster | MS-ESS1-4 |
| Interim MS DCI - MS-ESS2.A | 1 | Metamorphic Rock Ice Wedging* | Cluster | MS-ESS2-1 |
| Interim MS DCI - MS-ESS2.B | 1 | Lystrosaurus, World Traveler? | Standalone | MS-ESS2-3 |
| Interim MS DCI - MS-ESS2.C | 1 | TN Weather | Cluster | MS-ESS2-5 |
| Interim MS DCI - MS-ESS3.C | 2 | Bear Glacier | Cluster | MS-ESS3-3 |
| | | CA Housing | Standalone | MS-ESS3-4 |
| Interim MS DCI - MS-LS1.A | 2 | Body's Response to Running* | Cluster | MS-LS1-3 |
| | | LTPs | Standalone | MS-LS1-2 |
| Interim MS DCI - MS-LS1.C | 1 | Muscle Repair | Cluster | MS-LS1-7 |
| Interim MS DCI - MS-LS1.D | 1 | Startle Response | Cluster | MS-LS1-8 |
| Interim MS DCI - MS-LS2.A | 1 | Hippos | Cluster | MS-LS2-2 |
| Interim MS DCI - MS-LS2.C | 2 | Osprey and Cutthroat Trout | Standalone | MS-LS2-4 |
| | | Japanese Beetle Control | Standalone | MS-LS2-5 |

| TDS Test Label | # of Items | Item Description | | Performance Expectation |
|---------------------------|------------|-------------------------------|------------|-------------------------|
| Interim MS DCI - MS-LS3.A | 2 | Jellyfish | Cluster | MS-LS3-2 |
| | | Monkeyflower Pollination* | Cluster | MS-LS3-1 |
| Interim MS DCI - MS-LS4.A | 1 | Ostracod Origins | Standalone | MS-LS4-1 |
| Interim MS DCI - MS-LS4.B | 1 | Pocket Mice | Cluster | MS-LS4-4 |
| Interim MS DCI - MS-LS4.C | 1 | Bacterial Resistance | Cluster | MS-LS4-6 |
| Interim MS DCI - MS-PS1.A | 1 | Whistling Tea Kettle | Cluster | MS-PS1-4 |
| Interim MS DCI - MS-PS1.B | 2 | Lead Iodide | Cluster | MS-PS1-5 |
| | | Chemical Hand Warmer | Standalone | MS-PS1-6 |
| Interim MS DCI - MS-PS2.A | 1 | Sliding Box* | Cluster | MS-PS2-2 |
| Interim MS DCI - MS-PS3.A | 3 | Energy-efficient Window | Cluster | MS-PS3-3 |
| | | Heated Pool Cover | Cluster | MS-PS3-3 |
| | | Flagpole Heights | Cluster | MS-PS3-4 |
| Interim MS DCI - MS-PS3.B | 1 | Model Plane Energy | Standalone | MS-PS3-5 |
| Interim MS DCI - MS-PS4.A | 1 | Guitar Cluster* | Cluster | MS-PS4-1 |
| Interim MS DCI - MS-PS4.B | 1 | Packing Tape on Frosted Glass | Standalone | MS-PS4-2 |

Middle School Interims by Practice (SEP)

| TDS Test Label | # of Items |
|---------------------------------|------------|
| Interim MS SEP - Argument | 6 |
| Interim MS SEP - Data | 3 |
| Interim MS SEP - Explanations | 7 |
| Interim MS SEP - Information | 1 |
| Interim MS SEP - Investigations | 3 |
| Interim MS SEP - Models | 10 |
| Interim MS SEP - Using Math | 2 |

Biology 1 (NGSS) EOC Exam Interims by Disciplinary Core Idea (DCI)

| TDS Test Label | # of Items | Item Description | | Performance Expectation |
|----------------------------|------------|------------------------|------------|-------------------------|
| Interim HS DCI - HS-ESS2.D | 1 | PETM C Cycle* | Cluster | HS-ESS2-6 |
| Interim HS DCI - HS-ESS2.E | 1 | Swamp Millipedes | Cluster | HS-ESS2-7 |
| Interim HS DCI - HS-ESS3.C | 2 | Over Fished | Cluster | HS-ESS3-3 |
| | | WTE | Cluster | HS-ESS3-4 |
| Interim HS DCI - HS-LS1.A | 3 | Goldfish Gills | Cluster | HS-LS1-3 |
| | | Brain Freeze | Cluster | HS-LS1-2 |
| | | ADG | Standalone | HS-LS1-1 |
| Interim HS DCI - HS-LS1.C | 1 | Clostridium Media | Standalone | HS-LS1-6 |
| Interim HS DCI - HS-LS2.A | 2 | Oysters/Chesapeake Bay | Cluster | HS-LS2-2 |
| | | Pond Fish | Standalone | HS-LS2-1 |

| TDS Test Label | # of Items | Item Description | | Performance Expectation |
|---------------------------|------------|---------------------------------------|------------|-------------------------|
| Interim HS DCI - HS-LS2.C | 1 | Green Roofs | Standalone | HS-LS2-7 |
| Interim HS DCI - HS-LS3.B | 2 | High Bone Density Pedigrees* | Cluster | HS-LS3-2 |
| | | Japanese Horn Beetles | Standalone | HS-LS3-3 |
| Interim HS DCI - HS-LS4.A | 2 | Red Pandas* | Cluster | HS-LS4-1 |
| | | Succulent Evolution | Standalone | HS-LS4-1 |
| Interim HS DCI - HS-LS4.B | 2 | Pink Salmon Migration | Cluster | HS-LS4-2 |
| | | Natural Selection of Mice in Nebraska | Standalone | HS-LS4-2 |

Note: there are no Interims by Practice for Biology 1 (NGSS)

NGSS Interim CAT Assessments

- Grade 5 Science - Interim CAT Assessment (ICA)
- Grade 8 Science - Interim CAT Assessment (ICA)
- Biology EOC - Interim CAT Assessment (ICA)

Administration of Interim Assessments

Standardized Administration

Standardized administration means that a student completes the Interim Assessment individually, following the procedure for administration used for the Summative Assessments. Results from a standardized administration will appear in Centralized Reporting System and can be interpreted in a consistent manner and used as a gauge of student learning that is comparable across students. In this approach, the Interim Assessment is used as an assessment of learning before or after a period of instruction and results reflect an individual student's mastery of the concepts assessed.

Information about the reliability and meaning of scores for these fixed form assessments applies only to the first time a test is administered under standardized conditions. Subsequent administrations, or results from collaborating with a class or teacher, alter the interpretation of results. The conditions of administration should be considered when interpreting results.

Standard administration of the Interim Assessments:

- is administered online through the Test Delivery System (TDS).
- includes individual Universal Tools, Designated Supports, and/or Accommodations, which have been set in [TIDE](#) based on the needs of individual students.
- uses the same [Secure Browser](#) as Summative Assessments and other statewide assessments.
- uses the same directions for administration as the Summative Assessments. These directions may be found in the [NGSS Interim Assessments Test Administration Guide](#) posted on the resources page of the Hawai'i Statewide Assessment Program (HSAP) portal at [alohahsap.org](#).

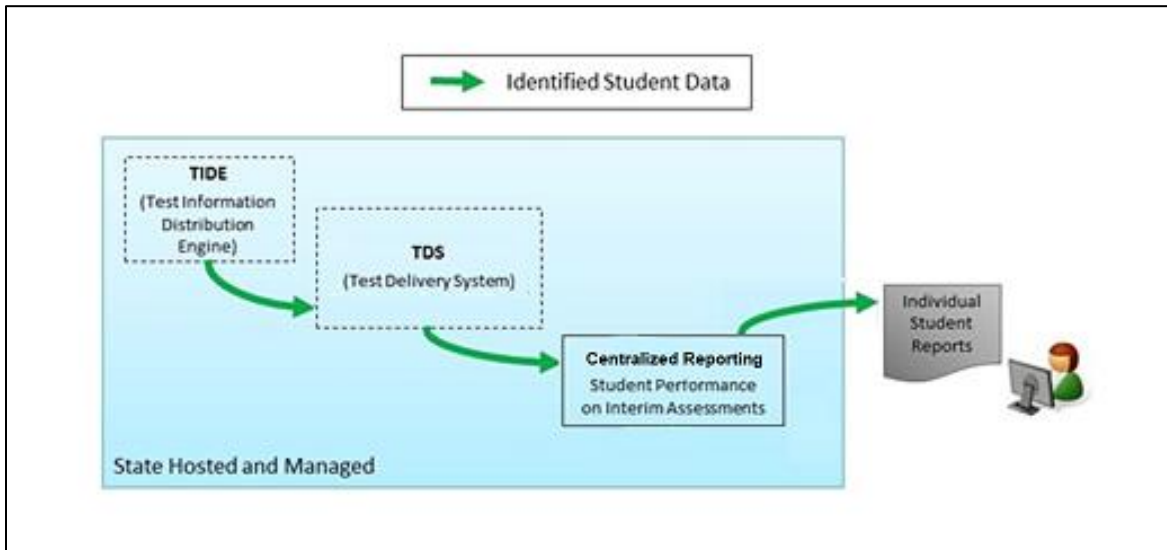
Remote Administration

The HSA Science (NGSS) Interim Assessments are available for in-person or Remote Administration. Remote Administration of the Interim Assessments will follow the same procedures as Remote Summative Test Administration. Cambium Assessment (CAI) and the Hawai'i Department of Education (HIDOE) Assessment Section have developed a set of documents to provide specific guidance on administering assessments remotely. These documents are available on the resources page under [Remote Summative Test Administration](#) in the HSAP portal at [alohahsap.org](#).

The HIDOE believes data from Remote Interim Administration should only be used for teachers' instructional decision-making. Data should not be used for any other purpose, including but not limited to the placement of students in classes, the identification of student performance trends, or as a replacement for summative test results. Interim Assessments are not designed nor should they be used for accountability purposes, e.g., grading.

Flow of Scored Test Data During Standard Administration

The [Centralized Reporting System](#) will be used to post individual student reports for Interim Assessments.



Non-standardized Administration

Non-standardized administration refers to any administration that is not consistent with the administration requirements of the summative assessment. Some examples of non-standardized administration might include (but are not limited to):

- Administering tests while students answer cooperatively in pairs, in small groups, or as a whole class. Teachers may elect to include some discussion time between test items.
- Providing access to classroom resources that may support the students' understanding of the assessed content.

Results from a non-standardized administration of the Interim Assessments are more appropriately used as assessment for learning (formative assessment process) rather than the assessment of learning. Because non-standardized administrations do not necessarily describe the performance of individual students in a comparable manner, caution must be used when making instructional decisions based on data from a non-standardized administration.

Additional Information:

Test administration manuals and user guides for other systems are available on the Hawai'i Statewide Assessment Program portal at alohahsap.org.

Appendix A: Example Item Cluster

This cluster, called Yellowstone Ecosystem, is designed for middle school addressing the Performance Expectation MS-LS2-4: Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations. This page presents the phenomenon. The following has the associated parts of the cluster.

Willow populations in Yellowstone National Park have increased since wolves were reintroduced to the park in 1995.

Willows are small trees that grow best in marshlike environments. After studying the Yellowstone food web shown in Diagram 1 and the population data for the park shown in Table 1, students arrive at two different hypotheses.

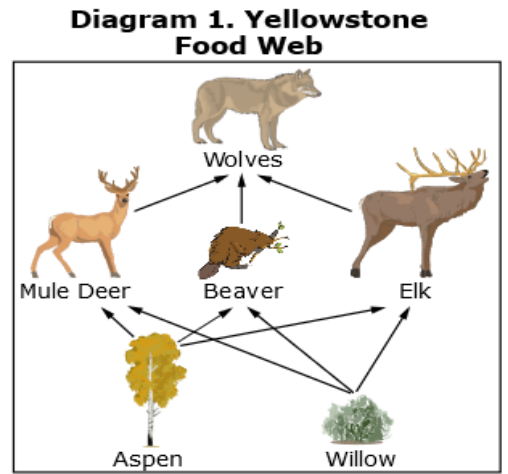


Table 1. Yellowstone Population Data

| | Wolves | Elk | Beaver | Mule Deer |
|-------------|--------|--------|--------|-----------|
| 1995 | 31 | 16,791 | 10 | 2,014 |
| 2004 | 171 | 8,335 | 120 | 2,014 |

Note: These data are approximate.

Hypothesis 1:
When wolves were reintroduced to Yellowstone, the wolves preyed upon the elk, which allowed the beavers to eat more willow. This led to more beavers and beaver dams. Beaver dams create marsh environments that willows do well in, allowing the willow's population to increase.

Hypothesis 2:
When wolves were reintroduced to Yellowstone, they preyed upon all animal species that ate plants. With fewer plant-eating animals eating willows, fewer willow plants were eaten and the population of willow plants increased.

Your Task
In the questions that follow, you will analyze and evaluate these two competing hypotheses.

Part A

Click on each box and select a word/phrase that completes the table with the Yellowstone population data from 1995 and 2004 and the hypothesis those data support.

increased

decreased

had no change

→

| Data | Hypothesis Supported |
|---|----------------------|
| Elk population <input type="text"/> | <input type="text"/> |
| Beaver population <input type="text"/> | <input type="text"/> |
| Mule deer population <input type="text"/> | <input type="text"/> |

Part B

Which hypothesis is best supported by the evidence?

Ⓐ All of the evidence is consistent with Hypothesis 1.
 Ⓑ All of the evidence is consistent with Hypothesis 2.
 Ⓒ Most of the evidence is consistent with Hypothesis 1.
 Ⓓ Most of the evidence is consistent with Hypothesis 2.
 Ⓔ The evidence does not favor either hypothesis.

Supports Hypothesis 1

Supports Hypothesis 2

Supports both hypotheses

Supports neither hypothesis

→

preyed on by wolves

it has the same prey as wolves

its consumers are preyed on by wolves

it is not preyed on by wolves

Part C

Aspen trees are shown in Diagram 1. Moose and bison are two plant-eating animal species that are not shown in Diagram 1 but are also part of the Yellowstone food web.

Based on Hypothesis 2, click on each box to select a word/phrase to make a prediction about what would happen to the moose, bison, and aspen tree populations after the reintroduction of wolves.

increase

decrease

stayed the same

→

| Species | Population after Wolf Reintroduction | Reason for Impact on Population |
|------------|--------------------------------------|---------------------------------|
| Moose | <input type="text"/> | <input type="text"/> |
| Bison | <input type="text"/> | <input type="text"/> |
| Aspen tree | <input type="text"/> | <input type="text"/> |

Part D

Based on Hypothesis 1, and the information in Diagram 1, Table 1, and Table 3 from part C, click on each box to select **two** different predictions.

Willows would grow in more places throughout the park.

Willows would have more leaves on each plant.

The aspen population would increase.

Aspen would have more leaves on each tree.

→

| Prediction Number | Prediction Statement |
|-------------------|----------------------|
| 1 | <input type="text"/> |
| 2 | <input type="text"/> |

Appendix B: Example Stand-Alone Item

The stand-alone aligns to the Performance Expectation HS-LS2-6: Evaluate the 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.

Ranchers have raised livestock on the island of Crete since 10,000 BCE. Goats and sheep raised on a mountain on Crete eat shrubs, grass, and leaves from the lower branches of trees.

Figure 1 shows the number of livestock grazed on the mountaintop from 1961 to 1991.

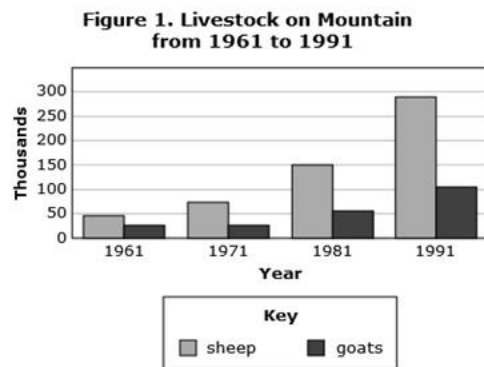
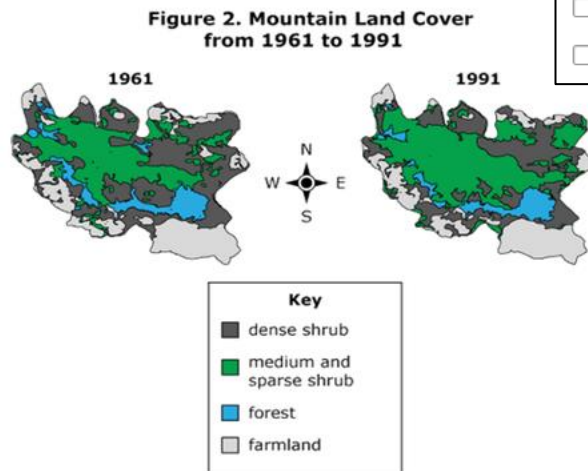


Figure 2 shows the land cover of the mountaintop from 1961 to 1991.



Select the **three** characteristics that provide evidence that the mountain ecosystem has changed.

- density of shrubs
- amount of farmland
- livestock habitat size
- total number of livestock
- ratio of forest to farmland