Hawai'i Statewide Assessment Program

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 2020-2021 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. The interim assessments each contain a single cluster item (see the example in Appendix A) associated with a specific NGSS performance expectation. Keep in mind that summative tests will include both cluster items and stand-alone items (see the example in Appendix B).

School Year 2020-2021 Updates

- NGSS-Aligned interim assessments can now be administered remotely. The *Guide to Remotely Administering Interim Assessments* document outlines considerations, guidance, and processes regarding the remote administration of the NGSS-aligned Interim Assessments.
- Braille versions of many of the interim assessment are now available.

This document contains an overview of the NGSS-Aligned Interim Assessments that are available for administration to students throughout the 2020-2021 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
- Assessments are fixed form (all students see the same questions and will see them again if the assessment for each subject is taken multiple times).

Grade flexibility testing on the Interim Assessments provides teachers with the option of testing students outside their current enrolled grade level, when appropriate and set in TIDE. 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.

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 cluster 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 (formerly known as AIRWays Reporting). 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 currently available for the 2020-2021 school year. Interims with an asterisk following the Item Description are available in Braille.

Elementary School Interims

TDS Test Label	Item Description	Performance Expectation
Interim ES Earth and Space Science – Weather and Climate: 3-ESS2-1	Arizona Monsoon*	3-ESS2-1
Interim ES Life Science – Inheritance of Traits: 3-LS3-1	Checkered Chickens	3-LS3-1
Interim ES Life Science – Common Ancestry and Diversity: 3-LS4-1	Redwall Limestone*	3-LS4-1
Interim ES Physical Science – Forces and Motion: 3-PS2-2	Rubber Band Launch	3-PS2-2
Interim ES Earth and Space Science – Earth's Systems 1: 4-ESS2-1	Soil Erosion	4-ESS2-1
Interim ES Physical Science – Energy Transfer: 4-PS3-4	Door Alarm*	4-PS3-4

TDS Test Label	Item Description	Performance Expectation
Interim ES Physical Science – Waves Properties 1: 4-PS4-1	Boat at Dock	4-PS4-1
Interim ES Physical Science – Waves Properties 2: 4-PS4-2	Reflected Cat	4-PS4-2
Interim ES Physical Science – Waves Properties 3: 4-PS4-3	Light Messages	4-PS4-3
Interim ES Earth and Space Science – Earth's Systems 2: 5-ESS2-2	Chesapeake Bay*	5-ESS2-2
Interim ES Life Science –Ecosystems: 5-LS2-1	Terrarium Matter Cycle*	5-LS2-1
Interim ES Physical Science –Properties of Matter: 5-PS1-2	Sugar in Tea	5-PS1-2
Interim ES Physical Science – Chemical Reactions: 5-PS1-4	Expanding Balloon	5-PS1-4
Interim ES Physical Science – Forces and Interaction: 5-PS2-1	Gravity and Feather*	5-PS2-1

Middle School Interims

TDS Test Label	Item Description	Performance Expectation
Interim MS Earth and Space Science – Space Systems 1: ESS1-1	Lunar Eclipse*	MS-ESS1-1
Interim MS Earth and Space Science – Space Systems 2: ESS1-2	A Change in Orbit	MS-ESS1-2
Interim MS Earth and Space Science – Earth's History: ESS1-4	K/Pg Boundary	MS-ESS1-4
Interim MS Earth and Space Science – Earth's Systems 1: ESS2-1	Metamorphic Rock Ice Wedging*	MS-ESS2-1
Interim MS Earth and Space Science – Earth's Systems: ESS2-5	TN Weather	MS-ESS2-5
Interim MS Earth and Space Science – Human Impacts on Earth Systems: ESS3-3	Bear Glacier	MS-ESS3-3
Interim MS Life Science – Structure and Function: LS1-3	Body's Response to Running*	MS-LS1-3
Interim MS Life Science – Matter and Energy in Organisms: LS1-7	Muscle Repair	MS-LS1-7

TDS Test Label	Item Description	Performance Expectation
Interim MS Life Science –Information Processing: LS1-8	Startle Response	MS-LS1-8
Interim MS Life Science –Ecosystems: LS2-2	Hippos	MS-LS2-2
Interim MS Life Science – Inheritance of Traits 2: LS3-1	Monkeyflower Pollination*	MS-LS3-1
Interim MS Life Science – Inheritance of Traits 1: LS3-2	Jellyfish	MS-LS3-2
Interim MS Life Science – Natural Selection: LS4-4	Pocket Mice	MS-LS4-4
Interim MS Life Science –Adaptation: LS4-6	Bacterial Resistance	MS-LS4-6
Interim MS Physical Science –Properties of Matter: PS1-4	Whistling Tea Kettle	MS-PS1-4
Interim MS Physical Science – Chemical Reactions: PS1-5	Lead Iodide	MS-PS1-5
Interim MS Physical Science – Forces and Motion: PS2-2	Sliding Box*	MS-PS2-2
Interim MS Physical Science – Energy: PS3-3	Energy-efficient Window	MS-PS3-3
Interim MS Physical Science – Wave Properties 2: PS4-1	Guitar*	MS-PS4-1
Interim MS Physical Science – Wave Properties 1: PS4-2	Tuning Fork	MS-PS4-2

Biology 1 (NGSS) EOC Exam Interims

TDS Test Label	Item Description	Performance Expectation
Interim HS Earth and Space Science – Human Impacts on Earth Systems 2: ESS3-3	Over Fished	HS-ESS3-3
Interim HS Life Science – Molecules to Organisms: LS1-2	Brain Freeze	HS-LS1-2
Interim HS Life Science – Structure and Function: LS1-3	Goldfish Gills	HS-LS1-3
Interim HS Life Science – Matter and Energy in Organisms: LS1-5	Geranium Photosynthesis	HS-LS1-5
Interim HS Life Science –Ecosystems: LS2-2	Oysters/Chesapeake Bay	HS-LS2-2

TDS Test Label	Item Description	Performance Expectation
Interim HS Life Science – Inheritance of Traits: LS3-2	High Bone Density Pedigrees*	HS-LS3-2
Interim HS Life Science – Common Ancestry and Diversity: LS4-1	Red Pandas*	HS-LS4-1

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 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:

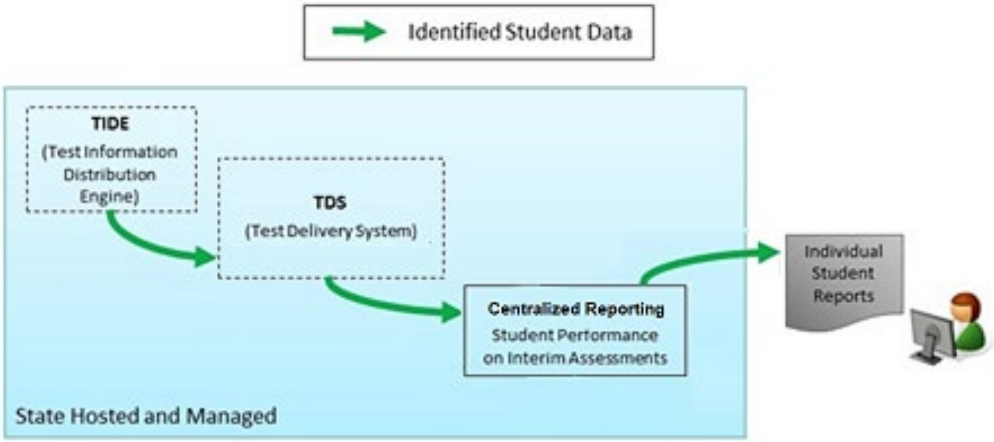
- are administered online through the Test Delivery System (TDS).
- include individual Universal Tools, Designated Supports, and/or Accommodations, which have been set in TIDE based on the needs of individual students.
- use the same Secure Browser as Summative Assessments and other statewide assessments.
- use the same directions for administration as the Summative Assessments.

Remote Administration

The Smarter Balanced and HSA Science (NGSS) Interim Assessments are available for in-person or remote administration. Remote administration of the interim assessments is available without students needing to use the secure browser. Cambium Assessment (CAI) and the Hawai'i Department of Education (HIDOE) Assessment Section have developed a *Guide to Remotely Administering Interim Assessments* to provide specific guidance on administering interim assessments remotely.

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



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.

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.

Diagram 1. Yellowstone Food Web

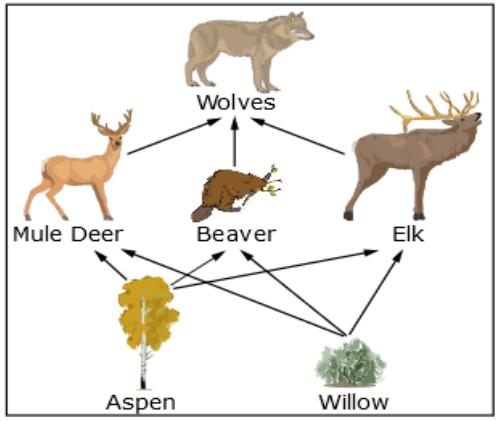


Table 1. Yellowstone Population Data

	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.

Table 2. Summary of Yellowstone Population Data and Supported Hypotheses

Data	Hypothesis Supported
Elk population	
Beaver population	
Mule deer population	

increased
decreased
had no change

Supports Hypothesis 1
Supports Hypothesis 2
Supports both hypotheses
Supports neither hypothesis

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.

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.

Table 3. Population Predictions

Species	Population after Wolf Reintroduction	Reason for Impact on Population
Moose		
Bison		
Aspen tree		

increase
decrease
stayed the same

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 thoughout the park.
Willows would have more leaves on each plant.
The aspen population would increase.
Aspen would have more leaves on each tree.

Table 4. Population Predictions

Prediction Number	Prediction Statement
1	
2	

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 1. Livestock on Mountain from 1961 to 1991

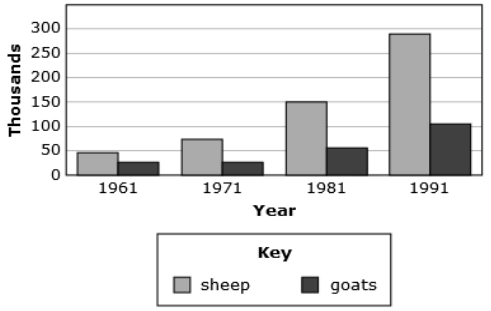
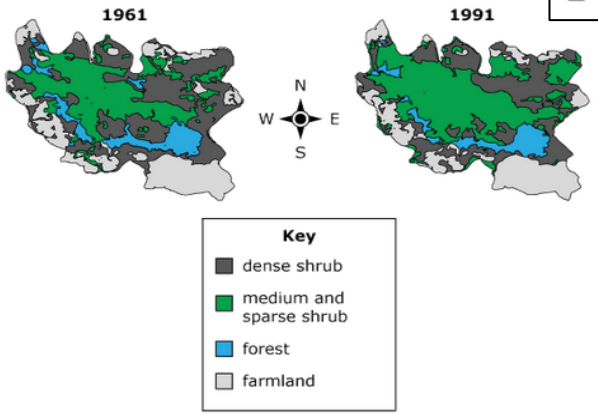


Figure 2 shows the land cover of the mountaintop from 1961 to 1991.

Figure 2. Mountain Land Cover 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