



## 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 2022-2023 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

- Braille versions of many of the Interim Assessment are now available.
- New and enhanced NGSS Interim Assessments are also now available.

This document contains an overview of the NGSS-Aligned Interim Assessments that are available for administration to students throughout the 2022-2023 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 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 currently available for the 2022-2023 school year. Interims with an asterisk following the Item Description are available in Braille.

### Elementary School Interims

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	2	Terrarium Matter Cycle	Cluster	5-LS2-1
		Gobi Desert	Standalone	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

NGSS-Aligned Interim Assessments for Elementary and Middle Schools and the Biology 1 EOC Exam

<b>TDS Test Label</b>	<b># of Items</b>	<b>Item Description</b>		<b>Performance Expectation</b>
Interim ES DCI - ES-PS1.B	1	Expanding Balloon	Cluster	5-PS1-4
Interim ES DCI - ES-PS2.A	3	Rubber Band Slingshot Car	Cluster	3-PS2-1
		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
Interim ES Earth and Space Science - PE 3-ESS2-1_Braille	1	Arizona Monsoon	Cluster	3-ESS2-1
Interim ES Earth and Space Science - PE 5-ESS2-2_Braille	1	Chesapeake Bay	Cluster	5-ESS2-2
Interim ES Life Science - PE 3-LS4-1_Braille	1	Redwall Limestone	Cluster	3-LS4-1
Interim ES Life Science - PE 5-LS2-1_Braille	1	Terrarium Matter Cycle	Cluster	5-LS2-1
Interim ES Physical Science - PE 3-PS2-1_Braille	1	Cart Forces	Standalone	3-PS2-1
Interim ES Physical Science - PE 4-PS3-3_Braille	1	Soccer Penalty Kick	Standalone	4-PS3-3
Interim ES Physical Science - PE 4-PS3-4_Braille	1	Door Alarm	Cluster	4-PS3-4
Interim ES Physical Science - PE 5-PS2-1_Braille	1	Gravity and Feather	Cluster	5-PS2-1

**Middle School Interims**

<b>TDS Test Label</b>	<b># of Items</b>	<b>Item Description</b>		<b>Performance Expectation</b>
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	2	Metamorphic Rock Ice Wedging	Cluster	MS-ESS2-1
		Iceland Crust Recycling	Standalone	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
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-PS2.B	1	Falling Astronaut	Cluster	MS-PS2-4
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
Interim MS Earth and Space Science - PE MS-ESS1-1_Braille	1	Lunar Eclipse	Cluster	MS-ESS1-1
Interim MS Earth and Space Science - PE MS-ESS2-1_Braille	1	Metamorphic Rock Ice Wedging	Cluster	MS-ESS2-1
Interim MS Life Science - PE MS-LS1-3_Braille	1	Body's Response to Running	Cluster	MS-LS1-3

NGSS-Aligned Interim Assessments for Elementary and Middle Schools and the Biology 1 EOC Exam

<b>TDS Test Label</b>	<b># of Items</b>	<b>Item Description</b>		<b>Performance Expectation</b>
Interim MS Life Science - PE MS-LS3-1_Braille	1	Monkeyflower Pollination	Cluster	MS-LS3-1
Interim MS Physical Science - PE MS-PS2-2_Braille	1	Sliding Box	Cluster	MS-PS2-2
Interim MS Physical Science - PE MS-PS4-1_Braille	1	Guitar Cluster	Cluster	MS-PS4-1

### Biology 1 (NGSS) EOC Exam Interims

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
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
Interim HS Earth and Space Science - PE HS-ESS2-6_Braille	1	PETM C Cycle	Standalone	HS-ESS2-6
Interim HS Life Science - PE HS-LS3-2_Braille	1	High Bone Density Pedigrees	Cluster	HS-LS3-2
Interim HS Life Science - PE HS-LS4-1_Braille	1	Red Pandas	Cluster	HS-LS4-1

## Administration of Interim Assessments

### Standardized Administration

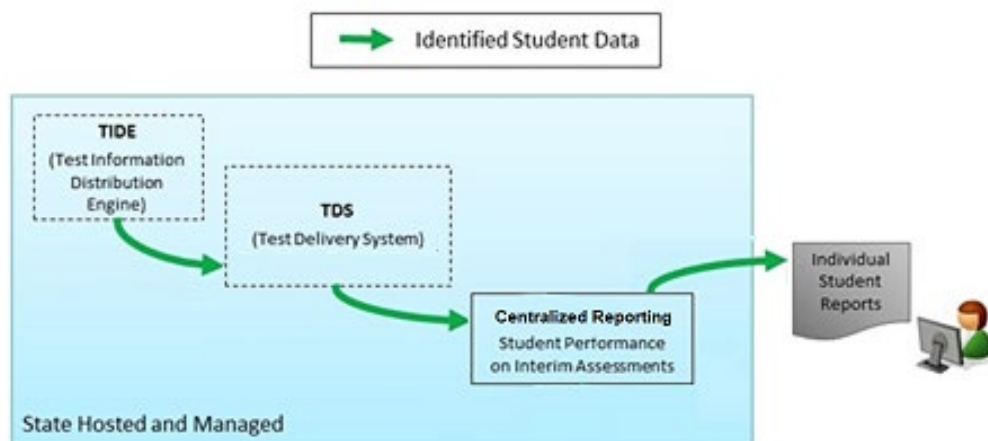
Standardized administration means that a student completes the Interim Assessment individually, following the procedure for administration used for the Summative Assessments. Results from a standardized administration will appear in Centralized Reporting System and can be interpreted in a consistent 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:

- 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.

### 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.



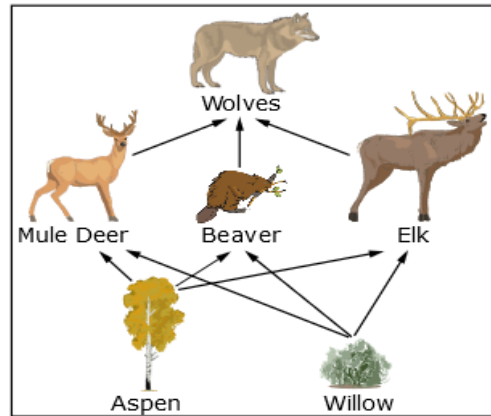
## Appendix A: Example Item Cluster

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
<b>1995</b>	31	16,791	10	2,014
<b>2004</b>	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

**Table 2. Summary of Yellowstone Population Data and Supported Hypotheses**

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?

- A All of the evidence is consistent with Hypothesis 1.
- B All of the evidence is consistent with Hypothesis 2.
- C Most of the evidence is consistent with Hypothesis 1.
- D Most of the evidence is consistent with Hypothesis 2.
- E 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

**Table 3. Population Predictions**

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.

**Table 4. Population Predictions**

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.

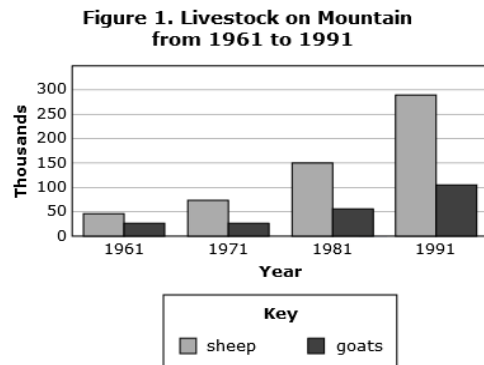
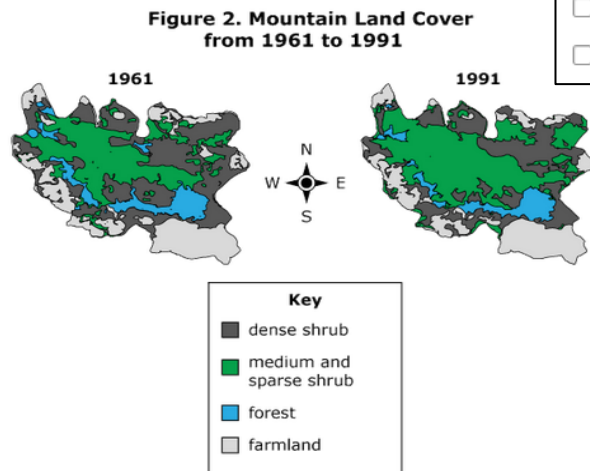


Figure 2 shows the land cover of the mountaintop from 1961 to 1991.



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