

Hawai‘i State Science Assessment Family Report Interpretive Guide



Understanding Your Child’s 2020–2021 Assessment Scores

What Is the Purpose of the HSA Assessments?

The Hawai‘i State Science Assessments (HSA Science) are designed to measure student performance in the Next Generation Science Standards (NGSS) that help guide your child’s daily instruction throughout the school year.

In the spring of school year 2020–2021, a NGSS Science assessment was administered in Grades 5 and 8. Students who took the Science assessment are receiving this report.

What Is the Purpose of the HSA Science Assessments?

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Disclaimer: The data in the sample Family Report are for display purposes only and do not represent actual results. The student’s name on the sample report is fictitious, and any similarity to an actual student name is purely coincidental.

Cover Letter
 The first page of your child's family report includes an important letter summarizing the contents of the report and encouraging you to be an active participant in your child's education.

Hawai'i State Science Assessment

This report presents your child's performance on the Hawai'i State Science Assessment in the Spring of 2021. These assessments measure students' understanding of the Next Generation Science Standards (NGSS) which have been adopted by the Board of Education as Hawai'i's science content standards. Students in grades 5 and 8 took the Science (NGSS) Assessments, which provide you, your child, and your child's teachers with valuable information about their strengths and areas needing attention.

The NGSS were developed by states and guided by the National Research Council, the National Science Teachers Association, the American Association for the Advancement of Science, and Achieve. The standards reflect current research and best practices in science teaching and learning to prepare students to think critically, analyze information and solve complex problems — the skills needed to be scientifically literate and to pursue future opportunities.

The NGSS emphasizes three distinct, yet equally important dimensions that help students learn science — the fundamental scientific knowledge, the practices scientists and engineers use to explain the world or solve problems, and scientific thinking across disciplines.

You are encouraged to use this report to start a conversation you're your child's teacher about their progress in school.

Your Child's Score
 On the second page of the report, you will see your child's overall score and performance level.

Performance Levels
 If your child's score is in the Standard Exceeded or Standard Met range, then your child has met the standards for that course. If your child's score is in the Standard Nearly Met or Standard Not Met range, then your child has not met the standards for that course.

Doe, Jennifer
 Student ID: 99999999 | Student DOB: 11/11/2005 | Enrolled Grade: 5
 Date Taken: 4/16/2021

Performance: Level 2 - Standard Nearly Met **Scale Score:** 493±9

How Did Your Child Do on the Test?

600	Meets State Standard	Level 4 - Standard Exceeded The student has exceeded elementary school expectations by effectively using the science and engineering practices, including crosscutting concepts, and their understanding of the core ideas of sciences to explain real-world situations and design solutions to problems in the natural and the man-made world.
525		Level 3 - Standard Met The student has met the elementary school expectations by using the science and engineering practices, including crosscutting concepts, and their understanding of the core ideas of sciences to explain real-world situations and design solutions to problems in the natural and the man-made world.
500		Level 2 - Standard Nearly Met The student is approaching the elementary school expectations and is developing the ability to use the science and engineering practices, including crosscutting concepts, and their understanding of the core ideas of sciences to explain real-world situations and design solutions to problems in the natural and the man-made world.
474		Level 1 - Standard Not Met The student has not met the elementary school expectations and has difficulty using the science and engineering practices, including crosscutting concepts, and has a partial understanding of the core ideas of science needed to explain real-world situations and design solutions to problems in the natural and the man-made world.
400	Does Not Meet State Standard	

Score
493 ±9

How Does Your Child's Score Compare?

Name	Average Score
Hawaii Department of Education	490
Training Complex Area -A	489±9
Demo School Group 2	489±9
Kula a'o Hawai'i	495±9

Information on Standard Error of Measurement

A student's score is best interpreted when it is compared to the score range of other students that the student's knowledge and skills fall within. A score range is a range of scores and not just a precise number. For example, 2300 (±10) indicates a score range of 2290 and 2310.

Cut Scores

Cut scores were determined for each subject assessed. The displayed values indicate the minimum score a student must achieve to place in the Standard Not Met, Standard Nearly Met, Standard Met, or Standard Exceeded categories.

Standard Error of Measurement

A student's score is best interpreted when recognizing that the student's knowledge and skills fall within a score range and not just a precise number. For example, 493 (±9) indicates a score range between 484 and 502.

Reporting

Individual Student Report

Grade 5 HSA Science (NGSS) 2020-2021

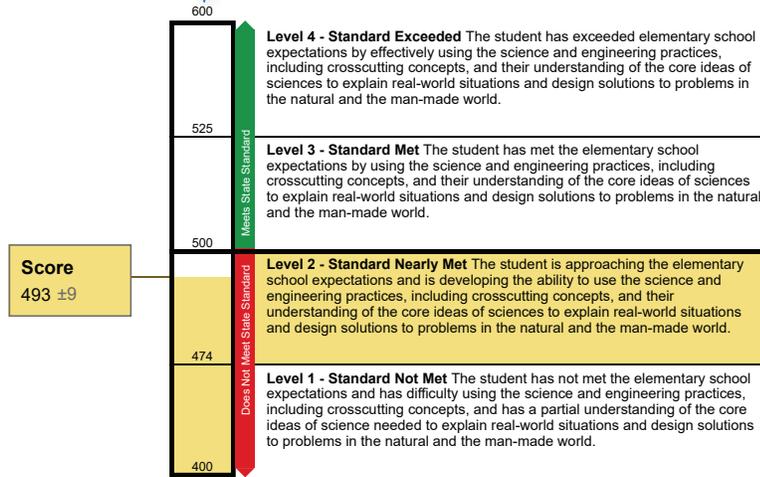
Student ID: 9999999 | Student DOB: 12/12/2005 | Enrolled Grade: Grade 05
Date Taken: 4/16/2021

Training Complex Area - A
Demo School Group 2
Kula a'o Hawai'i

Performance: Level 2 - Standard Nearly Met

Scale Score: 493±9

How Did Your Child Do on the Test?



How Does Your Child's Score Compare?

Name	Average Scale Score
Hawaii Department of Education	490
Training Complex Area -A	489±1
Demo School Group 2	489±1
Kula a'o Hawai'i	495±2

Information on Standard Error of Measurement

Comparison Scores

Your child's score is compared to the average score of students who took the Hawai'i State Science Assessment.

Reporting Category Assessed

This section describes how your child performed on each reporting category of the Science exam.

Black dot indicates the likely scores your student

Below Standard At/Near Standard Above Standard

Reporting Category	Performance	Performance Level	Performance level Description
Earth and Space Science		At/Near Standard	This domain includes: <ul style="list-style-type: none"> Using data from patterns in shadows, daylight, and stars to explain Earth's movement in space; Investigating and modelling interactions among Earth's systems that cause weather, climate, landforms, and geologic events; Using evidence to describe interactions between human activities and Earth processes; and, Designing solutions to reduce the impact of Earth processes on humans.
Life Science		At/Near Standard	This domain includes: <ul style="list-style-type: none"> Using evidence to show that structures, systems and processes help organisms survive and reproduce; Using models to show the effects of matter flowing on an ecosystem; Using patterns to explain that traits are inherited and can be influenced by the environment; Using fossil data to explain how survival depends on traits and environment; and, Evaluating solutions to problems caused by environmental changes.
Physical Science		At/Near Standard	This domain includes: <ul style="list-style-type: none"> Using models to show that matter is made of particles and is conserved during changes; Using patterns to investigate changes in motion caused by forces; Investigating moving objects that transfer energy; Using models to show that waves cause objects to move and, in the case of light, to be seen; and,

Performance Information

Your child's score in each area of the test is displayed in the bar chart. The black dot indicates your child's score on each category. The whisker plot that runs through the score dot shows the range at which your child will perform if he or she took the test multiple times. There is an explanation of what your child is able to do in each area.

Glossary of Terms/Definitions

Cut Scores: Selected points on the score scale of the HSA Science assessments, which are used to classify student performance into one of four performance levels.

Performance Level: Performance levels represent levels of mastery with respect to the NGSS Content Standards.

Reporting Categories: Reporting categories are a subset of content knowledge and skills within a content area. Science Grade 5 reporting categories are Scientific Process; Life Science; and Physical, Earth, and Space Sciences. Reporting categories for Grade 8 Science are Scientific Process, Biological and Physical Sciences, and the Solar System and The Universe.

Reporting Category Descriptors: These descriptors are a summary of what students within each reporting category are expected to know and be able to do.

Scale Scores: Scale scores are statistically converted scores using the number of items students answer correctly and the difficulty of the items presented. Scale scores can be compared over multiple test administrations.

Standards: Grade-level specific (science) content that is assessed for accountability purposes.

Additional Resources

Each of the links provided below can also be accessed at alohahsap.org on the HSA Science homepage via the Resources page link.

[More Information on Next Generation Science Standards](#)

[NGSS Parent Guide](#)

[Student Practice Test](#)

[HSA Science Information and Parent Resources](#)