Understanding the NGSA Assessment

November 2019



What is the NGSA?

- NGSA is the Next Generation Science Assessment for grades 5, 8, and 11 that assesses students' understanding of the Next Generation Science Standards (NGSS)
 - Measures students' science knowledge as well as their ability to think critically, analyze information, and solve complex problems
 - First administration took place in Spring 2019
 - Rhode Island and Vermont partnered to develop this assessment, built with items developed by ten states
- The NGSS have three disciplines: life sciences, physical sciences, and earth and space sciences
 - The standards were designed to set forth the knowledge and skills required for students to succeed in jobs and opportunities in science, technology, engineering, and mathematics (STEM)
 - **Disciplinary core ideas (DCI)** are the fundamental ideas that are necessary for understanding a particular science discipline
 - Crosscutting concepts (CCC) are the concepts connect across different disciplines or situations that students can use to connect new learning to prior experience



What is the assessment like?

- Designed to be given on a computer, paper available for students with accommodations
- All items ask students to use science and engineering practices and apply their understanding of disciplinary core ideas and crosscutting concepts to solve real-world problems
- Items are like performance tasks: grouped in clusters around a stimulus (e.g., passage, video, data, diagrams), with item types that include selected response, drop-down fill-in-the-blank, graphing, and simulations
- There are two sixty-minute sessions, but students are provided additional time if needed
- Check out the <u>NGSA Practice Test</u> to try it yourself!
 - Try the <u>full practice test</u>
 - Review the <u>Student Resources</u> to learn more

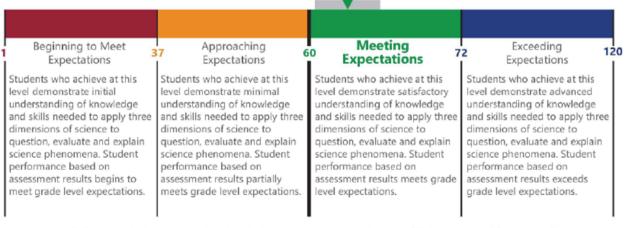


Individual Student Report (ISR)

- NGSA scores were released in November 2019 to districts, schools, and families
- Students receive overall scores, as well as information about how well they are performing in each of the three disciplines of life sciences, physical sciences, and earth and space sciences
- Families will receive a **paper student report** from their school within two months of the release
- Student reports include:
 - Overall scale score
 - Proficiency Level
 - Achievement level comparison
 - Science domain/discipline performance



What do the scores look like?



The horizontal gray bar shown in the graphics above shows the range of likely scores your child would receive if he or she took the test multiple times. The score range for your child is between 58 and 69.

- A student receives a scale score between 0 and 120
- Four performance levels describe how well student(s) meet the expectations for their grade level
- Meeting Expectations means that students are able to demonstrate grade level expectations while Exceeding Expectations means that students are showing mastery of the grade level expectations

Note: Each grade level's performance level scale score ranges are slightly different; the example chart above is for grade 5

Grade	Level 1	Level 2	Level 3	Level 4
5	1-37	38-59	60-71	72-120
8	1-37	38-59	60-74	75-120
11	1-35	36-59	60-70	71-120



How does my student's score compare?

's Science Score



's Science score is **63.** This score is **higher than** the average score of fifth graders in the school, **higher than** that of fifth graders in the district, and **higher than** that of fifth graders statewide.

Achievement

How your child performed compared to students in their school, district, and state.

Year	Your Child's	Average Score			
	Score	School	District	State	
2019	63	44	44	52	

- A chart on your student's report shows how well your student did in comparison to the average scores of students in their school, district, and statewide at the same grade level
- Scores are color coded to match the achievement level for quick reference

Note: Each grade level's performance level scale score ranges are slightly different; the example chart above is for grade 5



How did my student perform in the different science disciplines?

Life Sciences	Your student can sometimes model life cycles and movement of matter in ecosystems; use evidence to explain that organisms need structures to live; and interpret data to show that individuals inherit traits, populations have many different traits, and some organisms thrive in specific environments.		
Below Mastery At/Near Mastery Above Mastery			
Physical Sciences Below Mastery At/Near Mastery Above Mastery	Your student can sometimes conduct experiments to explain the structure of matter, signs of chemical change, and how forces affect the motion of objects; use evidence to explain speed and energy transfer; and model particles of matter and light waves.		
Earth and Space Sciences Below Mastery At/Near Mastery Above Mastery	Your student can sometimes display data to show the results of Earth's movements around the sun; graph where fresh and salt water exist on Earth; model interactions of the geosphere, biosphere, hydrosphere, and atmosphere; and use evidence to analyze solutions to hazards caused by weather.		

Note: Each grade level's discipline explanations are different; the example chart above is for grade 5

- Science has three disciplines for which students receive information about their performance: Life Sciences, Physical Sciences, and Earth and Space Sciences.
- This chart shows how close to mastery your student is in each area, according to how he or she performed on this assessment: below mastery, at or near mastery, or above mastery.
- The description provides information about the various grade-specific topics or skills where your child is succeeding and where he or she may need additional support to enhance specific skills needed to master grade-level standards.



Why are these scores important?

- NGSA gives teachers, students, and families information about how all our students are performing in science overall, as well as a general idea of how well they are doing in the disciplines
- Through this assessment, we can monitor student progress, school performance, and how to improve teaching and learning in science
- The performance levels for NGSA signal students' mastery of the skills and knowledge needed to prepare them for STEM opportunities throughout their academic and postsecondary careers
- Look closely at where your child's score falls within the Approaching Expectations category. If it isn't close to Meeting Expectations, talk with your child's teacher about how you can work together to help your child catch up.



Where can I find more information?

- <u>www.ride.ri.gov/Families</u> for FAQs about:
 - content standards & curriculum
 - Rhode Island's Statewide Assessments
- <u>www.ride.ri.gov/Assessment-Families</u> for resources:
 - sample NGSA Individual Student Reports for grades 5, 8, & 11
 - the NGSA 2019 Individual Student Reports Guide for Families
- <a>www.ride.ri.gov/NGSS for resources about the NGSS
- <a>www.ride.ri.gov/NGSA for information about the NGSA

