Family Guide to Understanding RI NGSA

RI Next Generation Science Assessment – Spring 2021

Office of Instruction, Assessment, & Curriculum

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What is RI NGSA?

RI Next Generation Science Assessment (RI NGSA or NGSA) is an annual assessment taken by Rhode Island students in grades 5, 8, and 11 that assesses students’ understanding of the Next Generation Science Standards (NGSS). The assessment measures students’ science knowledge as well as their ability to think critically, analyze information, and apply science practices.

First administration took place in Spring 2019, and there was no assessment in Spring 2020. Rhode Island and Vermont partnered to develop this assessment, which is built with items developed by ten states.

Student performance on the assessment gives a signal of student readiness for the next grade level based on the content standards for their corresponding grade band (grades 3–5, 6–8, and high school).

What areas of science are covered on the test?

Rhode Island’s science assessment measures three disciplines from the Next Generation Science Standards (NGSS): Life Sciences, Physical Sciences, and Earth and Space Sciences.

The NGSS were designed to set what students should be able to do in order to demonstrate that they are on track to succeed in jobs and opportunities in science, technology, engineering, and mathematics (STEM).

Since students learn science by doing science, the science assessment mimics that application in how the items are designed and what students experience. Students utilize scientific practices through the lens of the cross-cutting concepts to investigate phenomena that relate to the content of the disciplinary core ideas for that particular area of science.

Disciplinary core ideas are the important ideas that are necessary for understanding a particular science discipline.

Crosscutting concepts are the concepts that connect across different disciplines or situations that students can use to connect new learning to prior experience.
What is the test like?

Students take two sixty-minute sessions, but students may use additional time if they need it to continue working productively.

The assessment is designed to be given on a computer, though a paper version is available for students who have that accommodation documented.

**Science**

- Apply understanding of disciplinary core ideas and crosscutting concepts to solve real-world problems
- Engage with scientific scenarios by using science and engineering practices
- Interact with items, including simulations and animations that require evidence selection to support answer choices

**Item and question types**

Items are like performance tasks. The “stimulus” provides the information that the student will use to answer the items. This stimulus may include one or more passages, videos, data sets, or diagrams. Sometimes there is only one item for a stimulus; other times, a stimulus may have multiple items associated with it, as in the following example:

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Item types include selected response, drop-down, fill-in-the-blank, graphing, and simulations. An item may have multiple parts that need to be completed in order for a student to earn full credit. Students can try out each of the item types through the Item Type Tutorials available on the NGSA Portal’s Students and Families page.

Students can gain experience with the testing platform, various item types, and tools they can use on the test (such as calculators) through the online practice test for their grade level. Practice tests also allow students with accommodations to become familiar with text-to-speech and other supports.

You and your child can access the Practice Test through the NGSA Portal.

The Practice Test brochure provides directions for how to use the practice test system.
Why are NGSA results important?

NGSA gives teachers, students, and families information about student understanding, school performance, and how to improve teaching and learning. The performance standards for NGSA signal students’ readiness for the next grade band.

When and how are NGSA results reported?

NGSA results are reported in the fall of the same calendar year the assessment took place. Spring 2021 assessment results will be released in November 2021. State-, district-, and school-level results are made available to the general public: data that are released in aggregate form (groups) make it possible to see how schools, districts, and the state are doing while keeping individual student results confidential. Student-level information is only available to certain educators and an individual student’s family.

- Posted on the Rhode Island Assessment Data Portal ([www.ride.ri.gov/RIADP](http://www.ride.ri.gov/RIADP)).
- School, district, and state levels in aggregate form: reporting averages for groups of students protects student confidentiality.
- Families, community members, and educators can review this data.
- Review how schools are doing, including comparing between schools within and across districts.

- Educators receive access to the results of the students they teach.
- Only accessible through a confidential, secure login system.
- Educators analyze student results to help them better support the students – whether that means refining their instructional practices or adjusting curricular decisions.

- The family of each student receives their student’s NGSA results in the form of the individual student score report (ISR).
- ISRs are provided to families from the student’s school district.
- Districts also retain a PDF copy of the student’s ISR and can securely transfer that to a student’s family or use it to re-print the ISR if a duplicate is needed.
More Information about Individual Student Reports

RIDE has created a guide to help families understand the individual student score report (ISR) they receive, which is posted at www.ride.ri.gov/Assessment-Families. The NGSA ISRs for grades 5, 8, and 11 have been translated into Spanish and Portuguese.

ISRs include the following information, explained in more detail in the guide:

- general information about this year’s administration
- student scale score and overall achievement level
- achievement comparison with the school/district/state
- domain performance level for each of the three science disciplines

Example of a blank ISR, grade 8
What do these assessment terms mean?

**Student Scale Score**

- A student earns a scale score between 0 and 120 based on their performance on the test.
- The score indicates how well the student meets the expectations for their grade band, and corresponds to a particular performance level.

**Achievement Level**

- NGSA uses four performance levels to describe how well students meet the expectations for their grade level:
  - Beginning to Meet Expectations,
  - Approaching Expectations,
  - Meeting Expectations, and
  - Exceeding Expectations.
- Meeting Expectations means that students are able to demonstrate grade band expectations;
- while Exceeding Expectations means that students are showing mastery of the standards for their grade.

**Domain Performance Level**

- Students receive a domain performance level that indicates their understanding of the knowledge and skills expected in that discipline for their grade band.
- The domain performance level and its explanation can be used to see where the student is succeeding and where they may need additional support to enhance specific content area knowledge and skills needed to master the science standards for their grade.
How can NGSA results be used?

NGSA is a valid and reliable measure of student performance and can help us understand how our schools are doing in preparing our students with the skills and knowledge they will need to be successful in postsecondary education and careers.

The aggregate results displayed on the Assessment Data Portal provide an indicator of each school’s or district’s performance. This can support discussions about where the school or district is doing well and where there is a need for improvement.

When reviewing your student’s ISR, look closely at where your student’s score falls within the achievement level. If your student’s score is not Meeting Expectations or Exceeding Expectations, talk with your student’s teacher about how you can work together to help your child learn the science knowledge and skills for their grade level.

Domain performance levels and descriptions can be used – in conjunction with classroom assignments and assessments – to see where a student is succeeding and where they may need additional support to enhance specific skills needed to master grade-level standards.
Where can I learn more about NGSA results?

Scanning the QR code on your student’s ISR will bring you to RIDE’s Resources for Families page at www.ride.ri.gov/Families. This page provides answers to frequently asked questions about content standards, curriculum, and RI’s statewide assessments. It also includes resources about student growth percentiles, the NGSA ISRs translated into Spanish and Portuguese, and the NGSA ISR Guide for Families in the www.ride.ri.gov/Assessment-Families section.

RIDE’s Assessment Results page includes links to the Assessment Data Portal, as well as supporting materials for current and past assessment results (www.ride.ri.gov/Assessment-Results).

The Assessment Data Portal (www.ride.ri.gov/RIADP) displays school and district performance for all state assessments.

The NGSA Portal provides access to practice tests and student resources on their families page at https://ri.portal.cambiumast.com/families.html.