Family Guide to Understanding the Rhode Island Next Generation Science Assessment

RI NGSA – 2024

Table of Contents

What is RI NGSA?

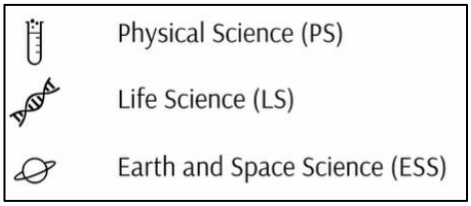
RI Next Generation Science Assessment (RI NGSA or NGSA) is an annual assessment taken by Rhode Island students in grades 5, 8, and 11 that assesses students' understanding of the Next Generation Science Standards (NGSS). The assessment measures students' science knowledge as well as their ability to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

The NGSA was first given in Spring 2019, and there was no testing in Spring 2020. Rhode Island and Vermont partnered to develop this science assessment, which is also built with test items developed by multiple other states.

How students do on the science test gives us an indication of how ready each student is for the next grade level. The test measures the content standards for the student's grade band (grades 3-5, 6-8, and high school).

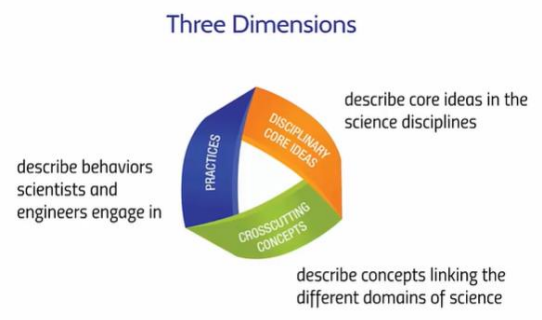
What areas of science are covered on the test?

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 determine 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).

Students learn science by doing science. The science test mimics the "doing" of science through test items that are designed around what students experience using the three dimensions of the NGSS in their science classrooms. Each item incorporates the three dimensions of science. Students apply the 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 different disciplines or situations that students can use to link 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 to.

The assessment is designed to be given on a computer, though a paper version is available for students who have that accommodation documented in their IEP or 504 plan.

Science

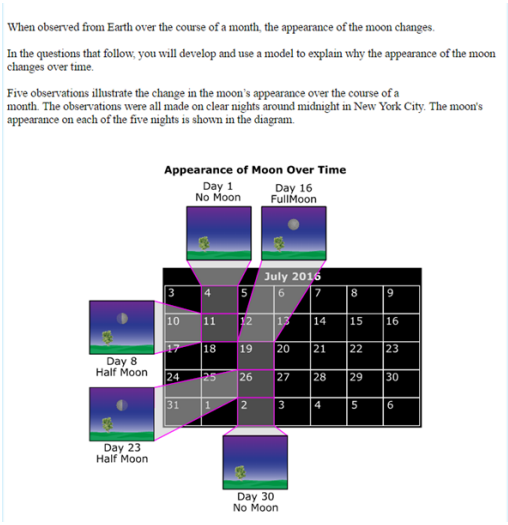
Apply understanding of disciplinary core ideas and crosscutting concepts to solve real-world problems

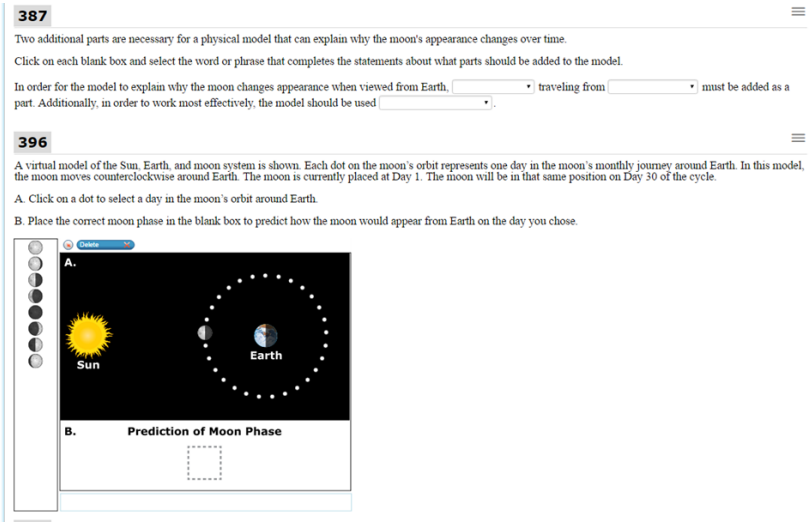
Engage with scientific scenarios by using science and engineering practices

Interact with items, including simulations and animations that require evidence selection to support answer choices

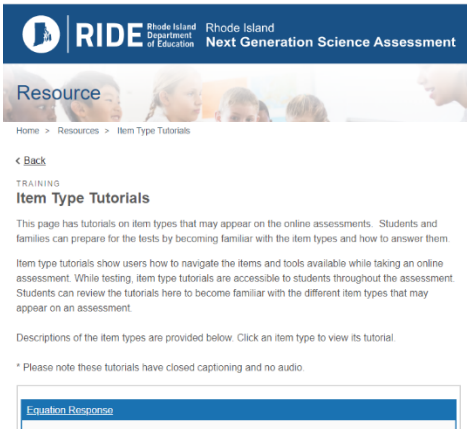
Item and question types

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:

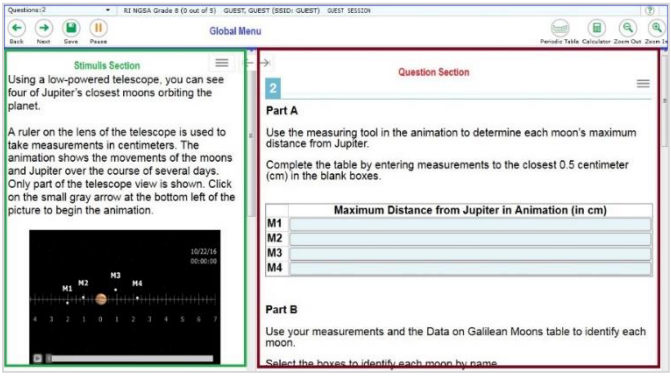




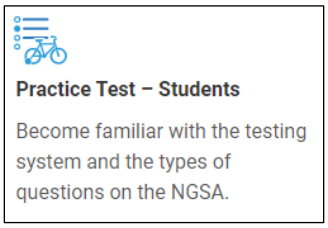
Item types include selected response, drop-down, fill-in-the-blank, graphing, and simulations. An item may have multiple parts that need to be completed for a student to earn full credit. Students can try out each of the item types through the Item Type Tutorials available on the NGSA Portal's Students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



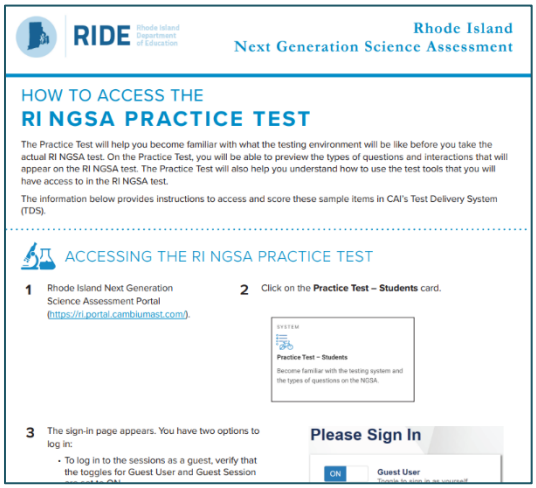
Students can gain experience with the testing platform, various item types, and tools they can use on the test (such as calculators) through the online practice test for their grade level. Practice tests also allow students with accommodations to become familiar with text-to-speech and other supports.



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. 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. State-, district-, and school-level results are made available to the 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 teachers and an individual student's family.

Public Aggregate Results

- Posted on the Rhode Island Assessment Data Portal at https://www3.ride.ri.gov/ADP.
- 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.

Educator Access to Inform Instruction

- 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.

Student Results for Families

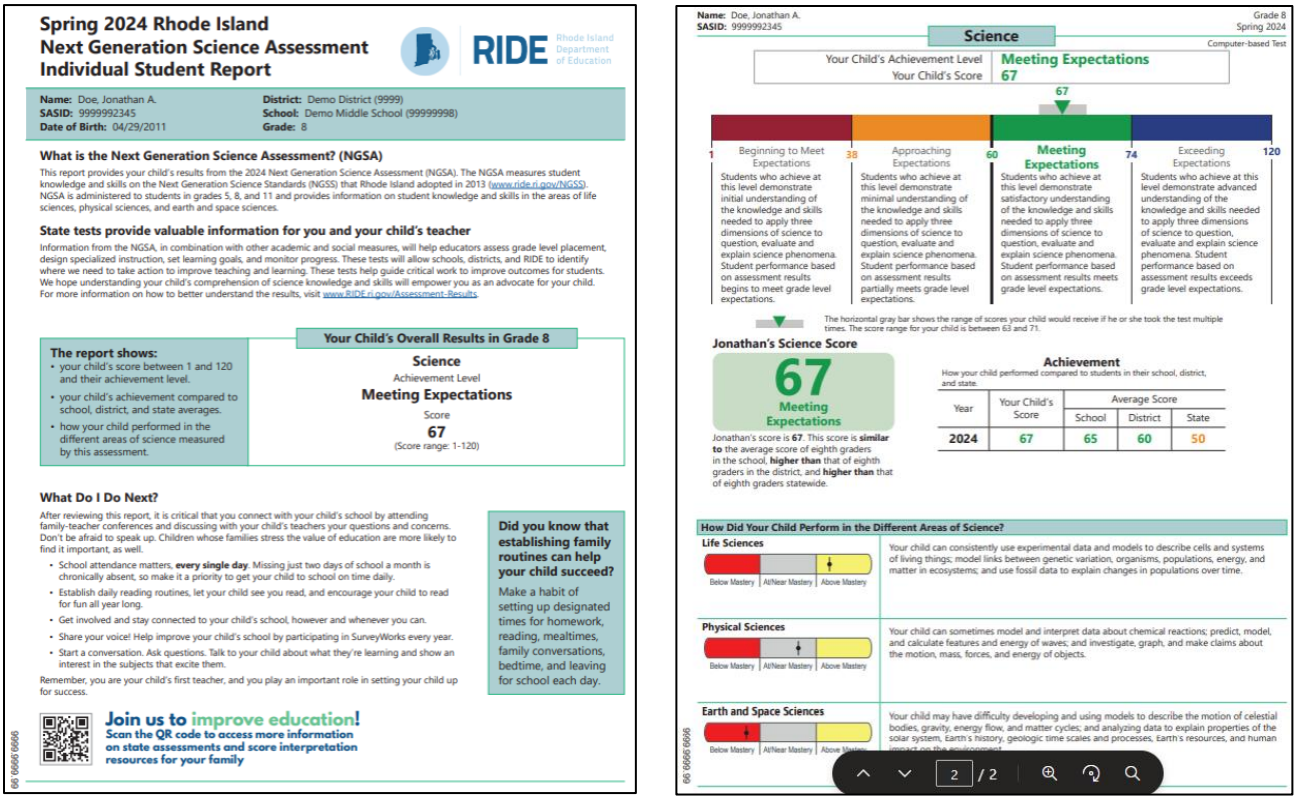
- The family of each student receives their student's NGSA results in the form of the individual student score report (ISR).
- ISRs are provided to families from the student's school district.
- Districts also retain a PDF copy of the student's ISR and can securely transfer that to a student's family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

More Information about Individual Student Reports

RIDE 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 and are available in 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



Spring 2024 Rhode Island Next Generation Science Assessment Individual Student Report

RIDE Rhode Island Department of Education

Name: Doe, Jonathan A. **SASID:** 9999992345 **Date of Birth:** 04/29/2011
District: Demo District (9999) **School:** Demo Middle School (99999998) **Grade:** 8

What is the Next Generation Science Assessment? (NGSA)

This report provides your child's results from the 2024 Next Generation Science Assessment (NGSA). The NGSA measures student knowledge and skills on the Next Generation Science Standards (NGSS) that Rhode Island adopted in 2013 (www.ride.ri.gov/NGSS). NGSA is administered to students in grades 5, 8, and 11 and provides information on student knowledge and skills in the areas of life sciences, physical sciences, and earth and space sciences.

State tests provide valuable information for you and your child's teacher

Information from the NGSA, in combination with other academic and social measures, will help educators assess grade level placement, design specialized instruction, set learning goals, and monitor progress. These tests will allow schools, districts, and RIDE to identify where we need to take action to improve teaching and learning. These tests help guide critical work to improve outcomes for students. We hope understanding your child's comprehension of science knowledge and skills will empower you as an advocate for your child. For more information on how to better understand the results, visit www.RIDE.ri.gov/Assessment-Results.

The report shows:
- your child's score between 1 and 120 and their achievement level.
- your child's achievement compared to school, district, and state averages.
- how your child performed in the different areas of science measured by this assessment.

Your Child's Overall Results in Grade 8

Science
Achievement Level
Meeting Expectations
Score
67
(Score range: 1-120)

What Do I Do Next?

After reviewing this report, it is critical that you connect with your child's school by attending family-teacher conferences and discussing with your child's teachers your questions and concerns. Don't be afraid to speak up. Children whose families stress the value of education are more likely to find it important, as well.

- School attendance matters, **every single day**. Missing just two days of school a month is chronically absent, so make it a priority to get your child to school on time daily.
- Establish daily reading routines, let your child see you read, and encourage your child to read for fun all year long.
- Get involved and stay connected to your child's school, however and whenever you can.
- Share your voice! Help improve your child's school by participating in SurveyWorks every year.
- Start a conversation. Ask questions. Talk to your child about what they're learning and show an interest in the subjects that excite them.

Remember, you are your child's first teacher, and you play an important role in setting your child up for success.

Did you know that establishing family routines can help your child succeed?

Make a habit of setting up designated times for homework, reading, mealtimes, family conversations, bedtime, and leaving for school each day.

Join us to improve education!
Scan the QR code to access more information on state assessments and score interpretation resources for your family

66 6666 6666

Name: Doe, Jonathan A. SASID: 9999992345 — Grade 8, Spring 2024, Computer-based Test

Science

Your Child's Achievement Level: **Meeting Expectations**
Your Child's Score: **67**

67

1	Beginning to Meet Expectations	38	Approaching Expectations	60	**Meeting Expectations**	74	Exceeding Expectations	120
	Students who achieve at this level demonstrate initial understanding of the knowledge and skills needed to apply three dimensions of science to question, evaluate and explain science phenomena. Student performance based on assessment results begins to meet grade level expectations.		Students who achieve at this level demonstrate minimal understanding of the knowledge and skills needed to apply three dimensions of science to question, evaluate and explain science phenomena. Student performance based on assessment results partially meets grade level expectations.		Students who achieve at this level demonstrate satisfactory understanding of the knowledge and skills needed to apply three dimensions of science to question, evaluate and explain science phenomena. Student performance based on assessment results meets grade level expectations.		Students who achieve at this level demonstrate advanced understanding of the knowledge and skills needed to apply three dimensions of science to question, evaluate and explain science phenomena. Student performance based on assessment results exceeds grade level expectations.	

The horizontal gray bar shows the range of scores your child would receive if he or she took the test multiple times. The score range for your child is between 63 and 71.

Jonathan's Science Score

67
Meeting Expectations

Jonathan's score is **67**. This score is **similar to** the average score of eighth graders in the school, **higher than** that of eighth graders in the district, and **higher than** that of eighth graders statewide.

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

Year	Your Child's Score	Average Score		
		School	District	State
2024	67	65	60	50

How Did Your Child Perform in the Different Areas of Science?

Life Sciences
Below Mastery | At/Near Mastery | Above Mastery
Your child can consistently use experimental data and models to describe cells and systems of living things; model links between genetic variation, organisms, populations, energy, and matter in ecosystems; and use fossil data to explain changes in populations over time.

Physical Sciences
Below Mastery | At/Near Mastery | Above Mastery
Your child can sometimes model and interpret data about chemical reactions; predict, model, and calculate features and energy of waves; and investigate, graph, and make claims about the motion, mass, forces, and energy of objects.

Earth and Space Sciences
Below Mastery | At/Near Mastery | Above Mastery
Your child may have difficulty developing and using models to describe the motion of celestial bodies, gravity, energy flow, and matter cycles; and analyzing data to explain properties of the solar system, Earth's history, geologic time scales and processes, Earth's resources, and human impact on the environment.

66 6666 6666

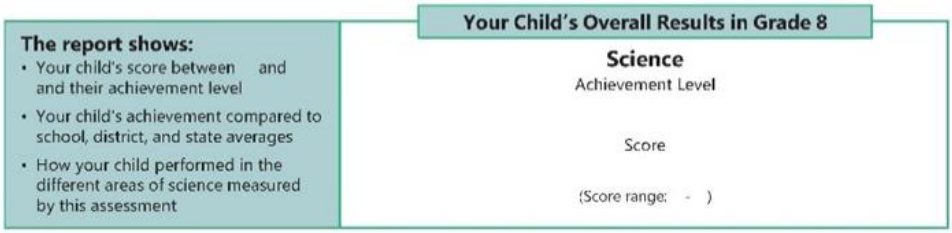
2 / 2

Example of a grade 8 ISR.

What do these assessment terms mean?

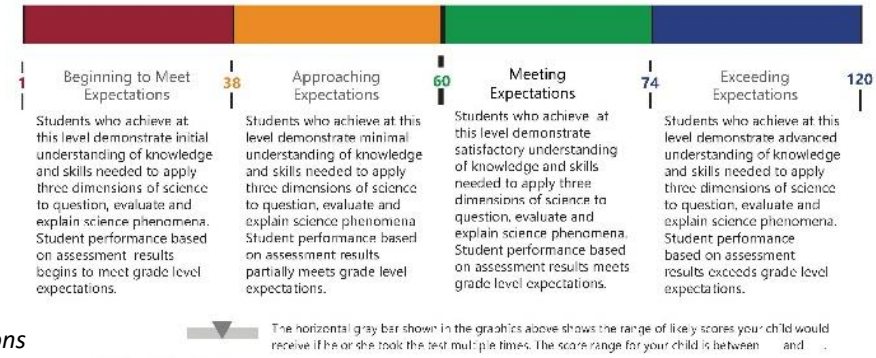
Student Scale Score

- 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.



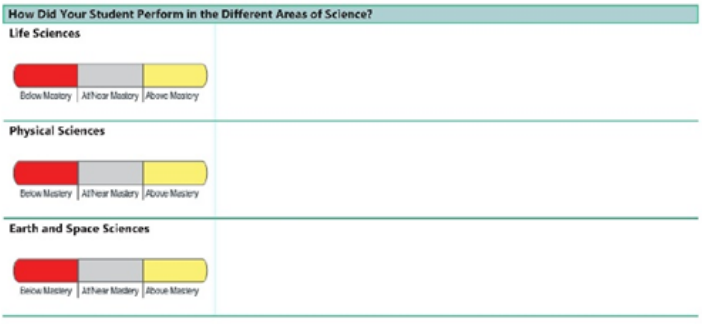
Achievement Level

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



Domain Performance Level

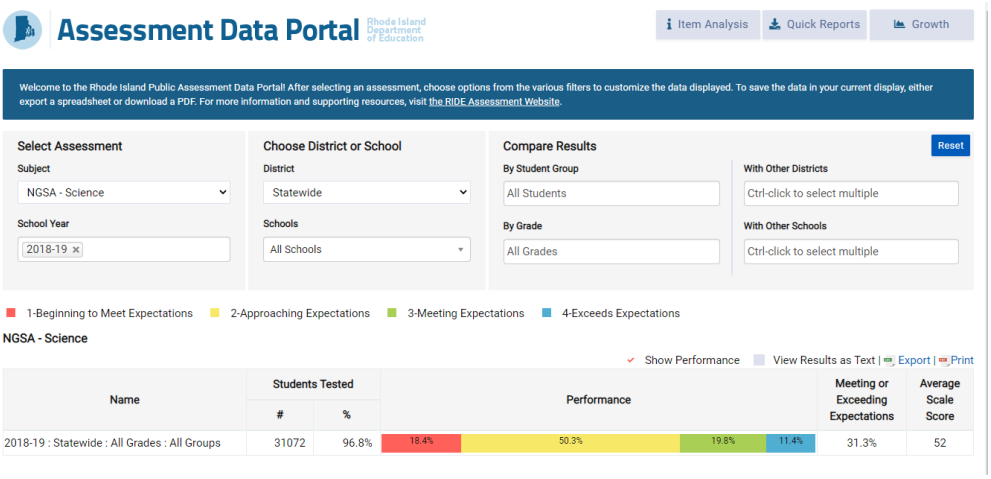
- Students receive a domain performance level that indicates their understanding of the knowledge and skills expected in that discipline for their grade band.
- The domain performance level and its explanation can be used to see where the student is succeeding and where they may need additional support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



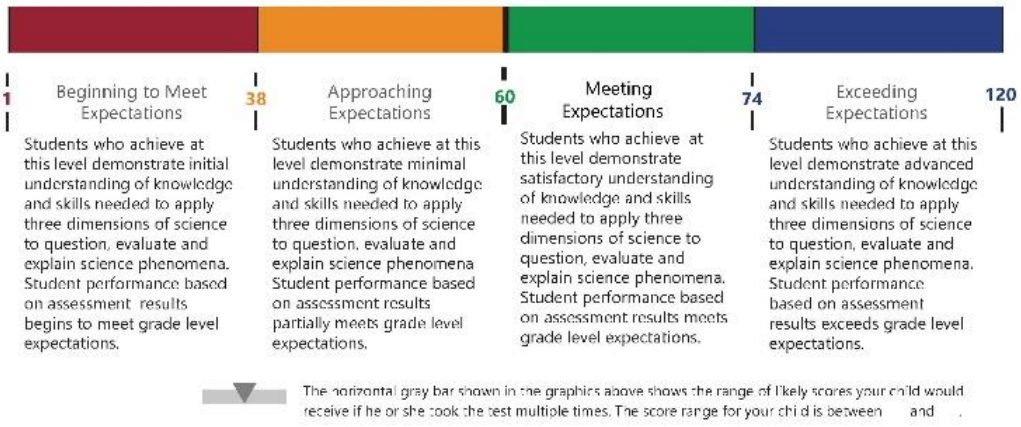
How can NGSA results be used?

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.



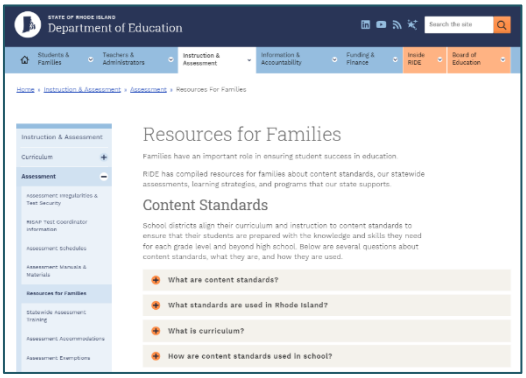
When reviewing your student's ISR, look closely at where your student's score falls within the achievement level. If your student's score is not *Meeting Expectations* or *Exceeding Expectations*, talk with your student's teacher about how you can work together to help your child learn the science knowledge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



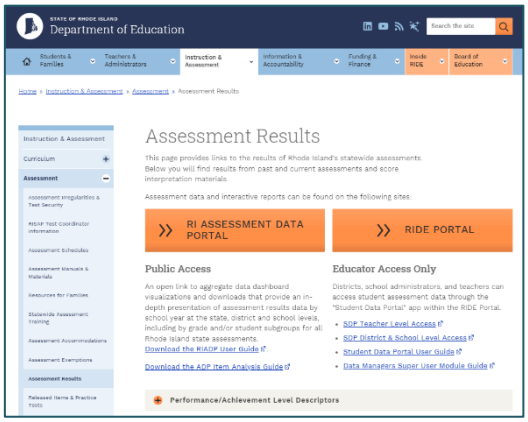
Domain performance levels and descriptions can be used – in conjunction with classroom assignments and assessments – to see where a student is succeeding and where they may need additional support to enhance specific skills needed to master grade-level standards.

Where can I learn more about NGSA results?

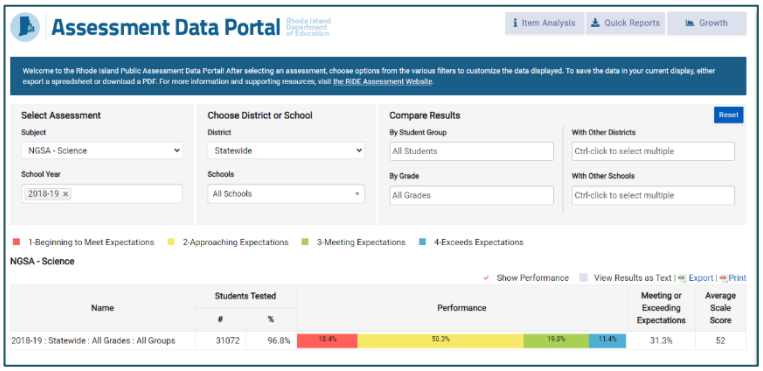
Scanning the QR code on your student's ISR will bring you to RIDE's Resources for Families page at www.ride.ri.gov/Families. This page provides answers to frequently asked questions about content standards, curriculum, and RI's statewide assessments. It also includes resources about student growth percentiles, the NGSA ISRs translated into Spanish and Portuguese, and the NGSA ISR Guide for Families in the ride.ri.gov/instruction-assessment/assessment/resources-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 (https://www3.ride.ri.gov/ADP) displays school and district performance for all state assessments.



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