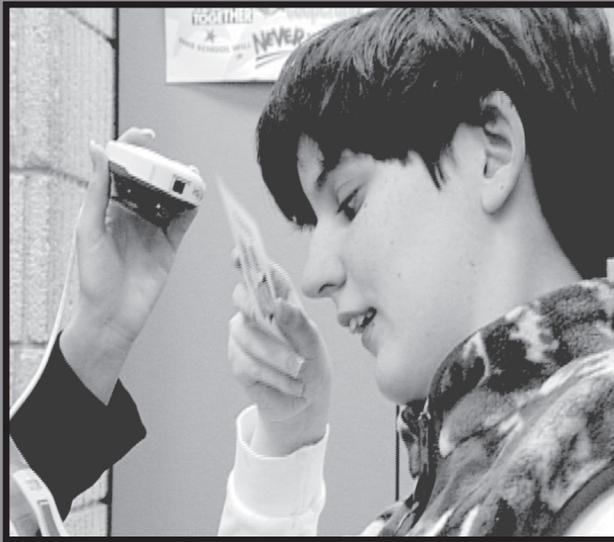


# RHODE ISLAND

## STATE ASSESSMENT PROGRAM



Alternate Assessment  
Science

**Guide to Interpretation**

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## **Purpose of the Rhode Island Alternate Assessment**

The federal Elementary and Secondary Education Act was reauthorized as the No Child Left Behind Act, NCLB. This law requires that states establish a single assessment and accountability system. It requires the assessment of all students, including those with significant cognitive disabilities. NCLB has three critical elements: academic content standards, academic achievement standards, and assessments. These provide the foundation for an accountability system that ensures that all students, including those with disabilities, reach high standards.

Reauthorization of the Individuals with Disabilities Education Act–2004 confirmed these elements.

The inclusion of students with disabilities in the assessment and accountability system is critical to ensure appropriate allocation of resources and learning opportunities for students. The Alternate Assessment was designed for the one percent of the student population for whom traditional assessments, even with accommodations, would be an inappropriate measure of progress. Completion of the Alternate Assessment

- provides multiple ways for the Individual Education Program (IEP) team, including general and special education teachers, support services, families, and students, to measure progress toward relevant student outcomes;
- merges instructional and assessment activities; and
- builds support for meaningful participation in the appropriate general education curriculum.

Rhode Island educators, in consultation with the Rhode Island Department of Education and Measured Progress, the state contractor for the alternate assessment, designed an assessment that is a multidisciplinary approach to student learning and progress. Datafolios showcase student work so that learning can be assessed in a comprehensive way. The philosophy behind these performance based assessments supports a method of student evaluation that allows students to demonstrate strengths, knowledge, skills, and independence and merges the processes of instruction and assessment. This assessment process encourages the student to engage in learning that is meaningful and appropriate, and provides multiple opportunities for measuring significant progress.

In effective learning environments, assessment and instruction are fundamentally linked. High quality assessment practices provide information, which can be a basis for ongoing development of a curriculum that is responsive to student needs. The performance-based assessment promotes a vision of enhancing capacities and integrated life opportunities for students who experience severe disabilities.

## STUDENT PARTICIPATION AND ELIGIBILITY CRITERIA

The majority of students with disabilities is able to participate in the general education curriculum, and will take the PARCC and NECAP Science assessments with accommodations and other supports. However, a small number of students with significant cognitive disabilities cannot participate in the PARCC and NECAP Science assessments even with accommodations. These students require a different kind of test in order for them to show what they know and can do.

The term “significant cognitive disability” is not a separate category of disability. It is a designation given to a small number of students with disabilities that applies only to their participation status in the statewide student assessment program. For a student to be considered as having a significant cognitive disability, ALL of the criteria found below must be true as shown by the evidence collected and discussed by all members of the student’s IEP team. For the complete guidance document, 2015-16 Guidance on Eligibility for IEP Teams, please visit: <http://www.ride.ri.gov/InstructionAssessment/Assessment/AlternateAssessments.aspx>

The three eligibility criteria that students must meet in order to be eligible for the alternate assessments are:

1. Student has a disability, or disabilities, that significantly impacts cognitive function and adaptive behavior. Review of student records and other evidence indicate a disability or multiple disabilities that prevent the student from meaningful participation in the standard academic core curriculum or achievement at their enrolled grade level. Additionally, the student’s disability causes dependence on others for many, and sometimes all, daily living needs, and the student is expected to require extensive ongoing support in adulthood.
2. The student’s instruction aligned to the Core Content Connectors and uses adapted grade-level content that focuses on essential academic knowledge and skills. Instruction in science is aligned to the science AAGSEs. Goals and instruction for this student is linked to the enrolled grade-level CCCs and address knowledge and skills that are appropriate and challenging for this student. Life and job skills are also embedded and included as part of the student’s instruction and provide the context for access to the Core Content Connectors and the AAGSEs in Science.
  - a) RIAA Science: For students in grades 4, 8, or 11 instruction and curriculum should be aligned to the Alternate Assessment Grade Span Expectations (AAGSEs) for Science.
3. The student is unable to apply academic, life, and job skills in home, school, and community without intensive, frequent, and individualized instruction and supports in multiple setting. The student’s demonstrated cognitive functioning and adaptive behavior across these settings is significantly below age expectations, even with program modifications, adaptations, and accommodations. This covers the three aspects of learning:
  - a) What the student needs in order to learn. The student requires extensive, repeated, individualized instruction and supports from teachers and other professionals.
  - b) The types of materials required in order for the student to learn. Materials are significantly modified, customized, and adapted in order to facilitate understanding.
  - c) How the student demonstrates their learning. His or her need for substantial supports to learn effectively in the grade-and-age-appropriate curriculum requires substantially adapted materials and customized methods of accessing information in order to acquire, maintain, generalize, demonstrate, and transfer skills across multiple settings.

The scope of standards assessed on the RIAA Science is much narrower than on the NECAP science assessment in order to accommodate the unique needs of the students who participate in the RIAA. Within each content area, two strands are assessed; one is required and the other is the teacher's choice after careful consideration of the student's needs and goals. After teachers select the AAGSEs, an assessment activity is designed. This task provides the context for assessing the standard. This design allows for content, instruction, and assessment to be successfully linked and provides a framework for evaluating what students know and can do in reading, mathematics, writing, and science.

Science follows the same structure except that the science investigation is the focus. From the science investigation, teachers assess students' science content knowledge (Knowledge Entry) as well as their ability to conduct aspects of the investigation (Inquiry Entry).

For more information on how teachers administer the RIAA in their classrooms, please read the *RIAA Administration Manual* ([www.ride.ri.gov](http://www.ride.ri.gov)) or discuss plans directly with teachers implementing the RIAA.

### The Testing Cycle

The RIAA for Science is a year-long assessment beginning in October and ending in May. This long testing window is divided into three smaller sections, called Collection Periods. It is useful to think of each Collection Period as a small testing window during which all testing is taking place. Each Collection Period contributes to the score of the student. Missing collection periods lowers the student's score.

The assessment information that the teachers gather during each collection period is entered into the secure online website, ProFile. At the end of each collection period, ProFile locks, preventing further entries or edits by teachers. Administrators are able to read any information entered by teachers for each student in their building, district, and/or outplacement school in a read only format.

### Scoring

The data and student evidence teachers collected throughout the year are scored on four dimensions using the rubrics on the following pages. The dimensions that are measured are Connection to Strand, Student Progress, Level of Accuracy, and Level of Independence. Together, these determine each child's Achievement Level. Below are the questions each dimension is designed to answer:

- 1. Connection to the Content Strand:** Does the student work show that they have learned the inquiry skill and the science content being tested?
- 2. Student Progress:** Over the course of the school year, did the student improve in either accuracy or independence? Improvement in either area is considered as showing progress.
- 3. Level of Accuracy:** How much of the task did the student get correct?
- 4. Level of Independence:** How much of the task did the student do on his or her own?

# TEST DESIGN AND SCORING

## Scoring Rubric for Science

Dimension	0 Points	2 Points	4 Points	6 Points	8 Points
<b>Connection to Content Strand for Science</b>	There is insufficient evidence of a connection to the AAGSE and/or the Inquiry Construct.	There is evidence of connection to the AAGSE/ Inquiry Construct but no application of the AAGSE/ Inquiry Construct in a distinct standards-based science investigation connected to the SPT.	There is evidence of connection to the AAGSE/ Inquiry Construct and applying the AAGSE/ Inquiry Construct in 1 distinct standards-based science investigation connected to the SPT, in 1 out of 3 collection periods.	There is evidence of connection to the AAGSE/ Inquiry Construct and applying the AAGSE/ Inquiry Construct in 2 distinct standards-based science investigations connected to the SPT, in 2 out of 3 collection periods.	There is evidence of connection to the AAGSE/ Inquiry Construct and applying the AAGSE/ Inquiry Construct in 3 distinct standards-based science investigations connected to the SPT, in 3 out of 3 collection periods.

Dimension	0 Points	4 Points	8 Points
<b>Student Progress</b>	No progress between any data collection periods.	Progress shown between 2 data collection periods.	Progress shown between 3 data collection periods.

Dimension	0 Points	1 Point	2 Points	3 Points	4 Points
<b>Level of Accuracy</b>	Entry contains insufficient information to determine a score  <b>OR</b>  <b>0% accuracy</b>	Student performance of skills based on AAGSE demonstrates a minimal understanding of concepts.  <b>1-25% accuracy</b>	Student performance of skills based on AAGSE demonstrates a limited understanding of concepts.  <b>26-50% accuracy</b>	Student performance of skills based on AAGSE demonstrates some understanding of concepts.  <b>51-75% accuracy</b>	Student performance of skills based on AAGSE demonstrates a high level understanding of concepts.  <b>76-100% accuracy</b>
<b>Level of Independence</b>	Entry contains insufficient information to determine a score  <b>OR</b>  <b>0% independence</b>	Student utilizes extensive verbal, visual, and/or physical assistance to demonstrate skills and concepts.  <b>1-25% independence</b>	Student utilizes frequent verbal, visual, and/or physical assistance to demonstrate skills and concepts.  <b>26-50% independence</b>	Student utilizes some verbal, visual, and/or physical assistance to demonstrate skills and concepts.  <b>51-75% independence</b>	Student utilizes minimal verbal, visual, and/or physical assistance to demonstrate skills and concepts.  <b>76-100% independence</b>

The Alternate Assessment results are reported in several formats:

Paper copies:

- Student Score Reports (parent/guardian copy and school copy)

Online to schools and districts via a secure website:

- School Summary Reports
- School Roster Reports
- District Summary Reports
- District Roster Reports

### Score Reports

The parent or guardian of each student receives a Student Score Report and the *Parent Guide to the Rhode Island Alternate Assessment 2014–15 Score Report* from their school or district. A sample of a Student Score Report is shown on the next page.

Each student received an Achievement Level that was determined from the total dimension scores on the score report. To understand how a student’s Achievement Level was determined, follow the steps below.

**Step 1:** Locate the Total Dimension Scores in the shaded bar on the Student Score Report on the following page or use your child’s score report.

**Step 2:** Locate the Total Dimension Score for Student Progress on the student report and find that number on the Science Dimension Score Chart. Circle that number.

**Step 3:** Add the Dimension Scores for Accuracy and Independence together. Locate the total on the Dimension Score Chart.

**Step 4:** Find the Achievement Level by locating the area where the Student Progress Score and the Accuracy and Independence scores meet. That is the Achievement Level that should be listed on the Student Score Report. If the student has a different achievement level, see step 5 below.

**Step 5:** Determining the Impact of the Connection to Strand Total Dimension Score. Locate the Connection to the Strand Total Dimension Score on the Score Report. If the total score is minimal and the student is just above the cut point between Achievement Levels, the score is lowered one Achievement Level. The Achievement Level is increased if there is a strong Connection to Strand score. If the total connection score is satisfactory, the Achievement Level remained the same.

**NOTE:** If a student was supposed to participate in the Alternate Assessment but their datafolio was incomplete, they received a Connection to the Strand Total Dimension Score of 1 and the achievement level of Substantially Below Proficient.

**NOTE:** If a student was supposed to participate in the Alternate Assessment and no entries or datafolio was submitted for them, they received a Not Tested, Other designation on the Score Report.

**Student Score Report Sample**



**Rhode Island Alternate Assessment  
Student Score Report 2014-2015**

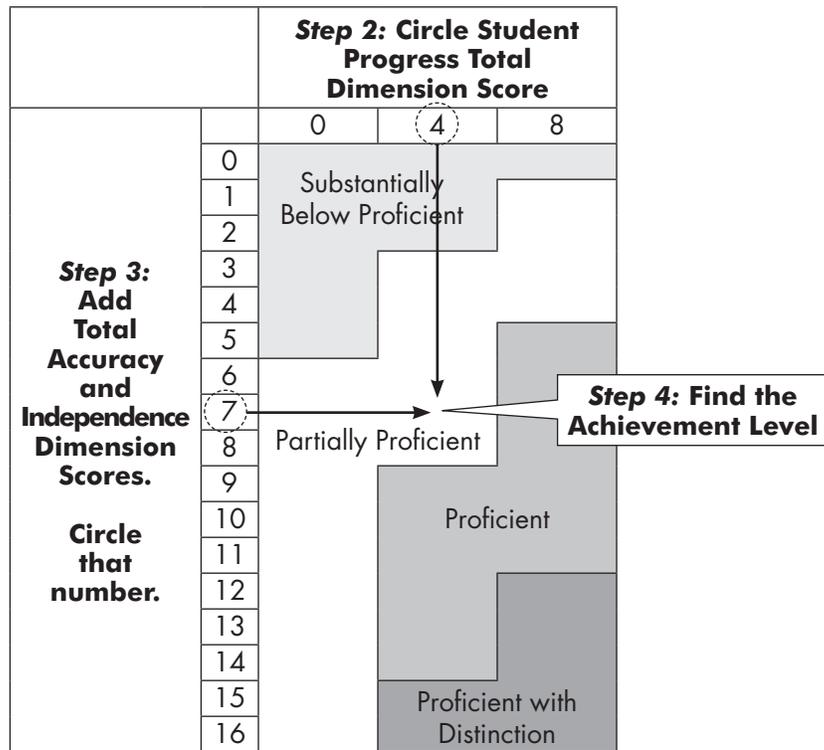
Alternate Assessment datafolios assessed students in grades 4, 8, and 11 in Science. Evidence of student work was collected in three distinct data collection periods: September 29 – November 14, 2014, January 5 – February 13, 2015, & March 2 – April 3, 2015

**Student:** Student Name  
**Grade:** 04  
**School:** School Name  
**District:** District Name

	Dimensions			
	Connection to the Content Strand	Student Progress	Level of Accuracy	Level of Independence
<b>Science</b>				
<b>Inquiry Construct</b>				
Inquiry-Conducting: Follow procedures using appropriate equipment to collect and record data	8	4	4	4
<b>Knowledge Construct</b>				
The student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.				
PS3.2.1a - Identify objects that are or are not attracted to magnets.				
ESS1.1.2 - Describe rocks and minerals using their physical properties.	8		4	4
LS1.1.1 - Distinguish between living and non-living things.				
<b>Total Science Dimension Scores</b>	<b>16</b>		<b>8</b>	<b>8</b>
<b>Achievement Level</b>	<b>Proficient with Distinction</b>			

AAGSE = Alternate Assessment Grade Span Expectation S = State approved special consideration § = Datafolio was submitted but every entry was unscorable Not Tested; Other = No entries submitted

**RIAA Science Dimension Score Chart**



~~**Step 5: Locate the Achievement Level**~~

<b>Step 5: Determining the Impact of the Connection to Strand Total Dimension Score</b>			
	<b>Minimal Connection</b>	<b>Satisfactory Connection</b>	<b>Strong Connection</b>
<b>Connection to the Strand Total Dimension Score</b>	0-3	4-13	14-16
<b>Possible Impact on Achievement Level</b>	Lowered to previous achievement level	Remain	Increased to next achievement level

## ALTERNATE ASSESSMENT SAMPLE

The piece of student work that follows reflects a portion of one AAGSE that received the Proficient level of achievement. The explanation of how the student demonstrates the AAGSE is clear. *“Emma completed this activity by counting the following like coins: 4 quarters, 13 dimes, 18 nickels, and 15 pennies.”* The description of the standards-based activity provides further explanation of the purpose for this activity to assess this AAGSE within the context of the SPT, *“...the students count like coins orally by their value and match them to a chart that has several amounts listed as dollar notations. The students complete the activity by filling out a ‘cashier’s slip.’ The slip requires the number of each coin contained within the Snack Shack’s cash register and the total value amount in decimal notation.”*

A review of the Data Summary Sheet (see page 11) shows that this student made progress between Collection Periods 1 and 2 and between Collection Periods 2 and 3 by an increase in her Level of Independence.

In the final collection period, this student had a Level of Accuracy of 100%, which scores 4 points on the Rubric, and a Level of Independence of 57%, which scores 3 additional points.

Students performing at this level submitted datafolios that demonstrated:

- an adequate level of accuracy on instructional activities aligned with the grade span Numbers and Operations and Geometry and Measurement Alternate Assessment Grade Span Expectations (AAGSEs)
- an adequate level of independence on instructional activities aligned with the grade span AAGSEs
- consistent progress in applying knowledge and skills on the grade span AAGSEs during the year
- an adequate ability to apply knowledge and skills of the grade span AAGSEs across multiple instructional activities

**Student Documentation Form for Science  
Inquiry Construct**

Check box if Student Product or Photograph Evidence Documentation Form is attached.

<b>Student:</b> Emma Scoring	<b>Grade:</b> 04	<b>Date:</b> 10/17/14	<b>Data Collection Period:</b> 1
<b>Science Domain:</b> ESS <b>Structured Performance Task#:</b> 04-5 <b>Description:</b> Student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.		<b>Inquiry Construct Description</b> CONDUCTING: Follow procedures or use appropriate equipment or measurement devices accurately to record qualitative or quantitative data. <b>WITHIN AAGSE#</b> ESS 1.1.2 <b>Description:</b> Describe rocks and minerals using their physical properties.	
<b>Describe the four components of the SPT/science investigation (observe/question, plan, conduct, and analyze) as they are embedded in the instruction of the AAGSE:</b> The 4th grade is working on a unit on the exploration of rocks and minerals. The students used magnifying glasses to explore various rocks, minerals and other objects. The students participated in the science investigation as follows: OBSERVE/QUESTION: Looked at different rocks, talked about what they saw and developed a hypothesis: "Most rocks are hard"; PLAN: Selected one physical property (hardness/softness) to test, and prepared the recording sheets needed in this experiment; CONDUCT: tested rocks and minerals for hardness/softness using a scratch test and recorded the data; ANALYZE: Reviewed the data to see if the hypothesis was correct.			
<b>Describe the student's application of the assessed Inquiry Construct within the science investigation:</b> During the conducting part of the investigation, Emma was evaluated on how well she followed procedures (a scratch test) to test the hardness/softness of each rock and mineral and record her data. Emma was given five rocks and one mineral to test and describe. Data was taken on her ability to follow the procedures (test the rock for hardness/softness and record her data).			
<b>Evaluation of Student's Performance</b>			
<b>Evaluate the student's accuracy performance on the Inquiry Construct. Explain how percentages were determined.</b> Emma accurately followed procedures and recorded her data for all 6 rocks and minerals giving her an accuracy score of 100%.		<b>Evaluate the student's independence performance on the Inquiry Construct. Explain how percentages were determined.</b> Emma needed auditory prompts to follow procedures in testing/recording one rock and was independent in four rocks and one mineral giving her an independence score of 83%	

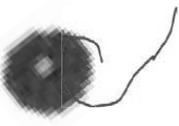
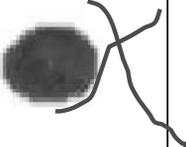
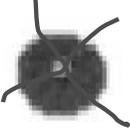
Teacher's Initials: \_\_\_\_\_

RIAA Web Profile 2014-2015

# ALTERNATE ASSESSMENT SAMPLE

Name Emma

Date: 1/16

Are they attracted?	Yes 	No 
		
Paper clip 		
Eraser 		
Nail 		
Styrofoam Ball 		
Spoon 		
Crayons 		

Accuracy: 3/6 = 50%

Independence: 6/6 = 100%

*SD*

# ALTERNATE ASSESSMENT SAMPLE

## Data Summary Sheet for Science Knowledge Entry

**Student:** Emma Scoring

**Grade:** 04

<b>Science</b>	<b>Structured Performance Task:</b> 04-5 <b>Description:</b> Student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.	<b>Inquiry Construct:</b> CONDUCTING: Follow procedures or use appropriate equipment or measurement devices accurately to record qualitative or quantitative data.
	<b>Domain:</b> ESS <b>AAGSE#</b> ESS 1.1.2 <b>Description:</b> Describe rocks and minerals using their physical properties.	<b>Domain:</b> PS <b>AAGSE#</b> PS 3.2.1a <b>Description:</b> Identify objects that are or are not attracted to magnets.
		<b>Domain:</b> LS <b>AAGSE#</b> LS 1.2.1 <b>Description:</b> Describe the things that plants need in order to grow and survive.

	Collection Period 1 Sep. 29 - Nov. 14, 2014			Collection Period 2 Jan. 5 - Feb. 13, 2015			Collection Period 3 March 2 - April 3, 2015		
<b>Date</b>	10/7/14	10/14/14	10/15/14	1/13/15	1/16/15	1/20/15	3/13/15	3/20/15	4/3/15
<b>Data Type</b>	DP	DP	SDF	DP	SDF	DP	DP	DP	SDF
<b>Accuracy %</b>	60	75	90	50	50	50	78	80	50
<b>Independence %</b>	100	100	100	100	100	100	100	100	100
<b>Average % for Collection Period</b>	Accuracy: 75			Accuracy: 50			Accuracy: 69		
	Independence: 100			Independence: 100			Independence: 100		

<b>Average % across all three Collection Periods:</b>	Accuracy: 65
	Independence: 100

RIAA Web Profile 2014-2015



## CREATING ENHANCED PROGRAMS

The purpose and uses of the Alternate Assessment mirror those of other state assessments. Assessment results offer information useful for planning and instruction at the district, school, and student levels. The results also provide valid and reliable data to document program effects. Some ways teachers and parents can create enhanced programs are to

- merge the processes of instruction, assessment, teaching, and learning;
- examine the assessment guidelines, requirements, scoring rubrics, and examples;
- model and practice making extensions and connections throughout the year;
- offer extensive opportunities for students to establish interactions and social relationships with nondisabled peers; and
- ensure that programs will be based on best-practice research in offering integrated settings, age-appropriate materials, functionality, assistive technology, and opportunities for choices.



