RHODE ISLAND ALTERNATE ASSESSMENT

EMMA

SAMPLE GRADE 4 STUDENT DATAFOLIO: SCIENCE

RIAA 2009-2010

Data Summary Sheet for Science Inquiry Construct

Student: Dates, Emma **Grade:** 4

Science	**Structured Performance Task: 04-5** **Description:** Student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.						**Inquiry Construct Description:** Follow procedures, using equipment or measurement devices accurately as appropriate, for collecting and/or recording qualitative or quantitative data.					
	Domain: ESS AAGSE# ESS 1.1.2 Description: **Describe rocks and minerals using their physical properties.**				Domain: PS AAGSE# PS 3.2.1a Description: Identify objects that are and are not attracted to magnets.				Domain: LS AAGSE# LS 1.2.1 Description: **Describe the things that plants need in order to grow and survive.**			
	Collection Period 1 **Oct. 5 - Nov. 13, 2009**				**Collection Period 2** **Jan. 11 - Feb. 5, 2010**				**Collection Period 3** **March 15 - April 9, 2010**			
Date	10/9/2009	10/13/2009	10/15/2009		1/12/2010	1/14/2010	1/19/2010		3/17/2010	3/24/2010	4/7/2010	
Data Type	DP	DP	SDF		DP	DP	SDF		DP	DP	SDF	
Accuracy %	100	100	100		100	100	100		100	100	100	
Independence %	65	50	83		35	50	83		75	80	83	
Levels of Assistance				**Average**				**Average**				**Average**
Auditory **Prompt %**	10	10	17	12	35	25	17	26	10	10	17	12
Visual **Prompt %**	25	40	0	22	30	25	0	18	15	10	0	8
Physical **Prompt %**	0	0	0	0	0	0	0	0	0	0	0	0
Average % for Collection Period	Accuracy: 100				Accuracy: 100				Accuracy: 100			
	Independence: 66				Independence: 56				Independence: 79			

Student Documentation Form for Science Inquiry Construct

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

Student: Dates, Emma	**Grade:** 4	**Date:** 10/15/2009	**Data Collection Period: 1**
Science Domain: ESS **Structured Performance Task (SPT)#:** 04-5 **Description:** Student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.		**Inquiry Construct Description** Follow procedures, using equipment or measurement devices accurately as appropriate, for collecting and/or recording qualitative or quantitative data. **WITHIN AAGSE#** ESS 1.1.2 **Description: Describe rocks and minerals using their physical properties.**	

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:

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 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 that most rocks are hard was correct.

Describe the student's application of the assessed Inquiry Construct within the science investigation:

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 picked up, scratched, and recorded what resulted for each rock and mineral. 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).

Evaluation of Student's Performance

Evaluate the student's accuracy performance on the Inquiry Construct. Explain how percentages were determined.

Emma accurately followed procedures and recorded her data for all 6 rocks and minerals giving her an accuracy score of 100%.

Evaluate the student's independence performance on the Inquiry Construct. Explain how percentages were determined.

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%.

Level of Accuracy: 100 %

Level of Independence: 83 %

Teacher Initials _____

Student Documentation Form for Science Inquiry Construct

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

Student: Dates, Emma	**Grade:** 4	**Date:** 1/19/2010	**Data Collection Period: 2**

Science Domain: PS **Structured Performance Task (SPT)#:** 04-5 **Description:** Student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.	**Inquiry Construct Description** Follow procedures, using equipment or measurement devices accurately as appropriate, for collecting and/or recording qualitative or quantitative data. **WITHIN AAGSE#** PS 3.2.1a **Description:** Identify objects that are and are not attracted to magnets.

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:

The 4th grade is working on a unit on the exploration of magnets. The students used magnet wands to test the magnetism of different objects. The students participated in the science investigation as follows: OBSERVE/QUESTION: Students developed the research question "What objects attract or stick to magnets?" PLAN: To answer this research question the students identified objects of different materials to test and gathered the objects. CONDUCT: Students followed procedures to test the objects and record their data on a recording sheet ANALYZE: Students discussed their common findings ("what objects attracted and what were they made of?").

Describe the student's application of the assessed Inquiry Construct within the science investigation:

During the conducting part of the investigation, Emma was evaluated on how well she followed procedures to test each of her six objects and record her data. Emma used the wand to touch each object to see if was attracted to the magnet.

Evaluation of Student's Performance

Evaluate the student's accuracy performance on the Inquiry Construct. Explain how percentages were determined.

Emma was assessed on her ability to follow procedures. She accurately used the wand to test six out of six objects correctly for an accuracy score of 100%.

Evaluate the student's independence performance on the Inquiry Construct. Explain how percentages were determined.

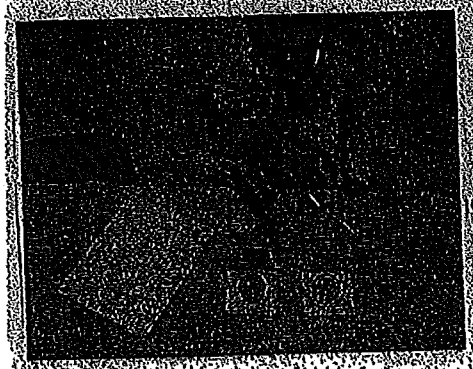
Emma independently followed procedures for five of the six objects. Emma needed auditory prompting to test one of six objects. Her independence was 83%.

Level of Accuracy: 100 %

Level of Independence: 83 %

Teacher Initials LL

RIAA Photo Evidence Documentation



Accuracy= 100%

Independence= 5/6 83%

Prompt Levels

Auditory= 1/6 17%

Visual= _____

Physical= _____

Explain the student's participation in applying the AAGSE:

Emma is shown following the procedure to test her objects. In this picture Emma is using magnet wand to test the magnetism of her objects. She recorded her findings on her data table.

Student Name Emma Date 1/19

SPT 04-5 AAGSE PS 3.2.1a

Teacher: ll

Student Documentation Form for Science Inquiry Construct

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

Student: Dates, Emma	**Grade:** 4	**Date:** 4/7/2010	**Data Collection Period: 3**
Science Domain: LS **Structured Performance Task (SPT)#:** 04-5 **Description:** Student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.		**Inquiry Construct Description** Follow procedures, using equipment or measurement devices accurately as appropriate, for collecting and/or recording qualitative or quantitative data. **WITHIN AAGSE#** LS 1.2.1 **Description: Describe the things that plants need in order to grow and survive.**	

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:

The 4th grade is working on a unit about plants – including the things plants need to grow and survive. The students participated in the science investigation as follows: OBSERVE/QUESTION: Students read a book about seeds and plants, and developed the research question "What do plants need to grow?" PLAN: Students looked at different types of seeds and chose the seeds they wanted to grow; The students identified locations for their plants that matched the light/no light conditions. CONDUCT: Students planted 6 seeds and labeled the plants with light/no light and water/no water. They recorded their observations of each plant twice a week. ANALYZE: Students talked about their observations and described the things that plants needed to grow.

Describe the student's application of the assessed Inquiry Construct within the science investigation:

This assessment focused on the conducting part of the unit - following planting procedures, including using pots, trowels, soil and seeds, and recording the results. Each student planted six seeds in different pots that were filled with soil. Three plants were given water and light. The other three were not. Emma recorded her procedures by checking each of the six steps as she completed them.

Evaluation of Student's Performance

Evaluate the student's accuracy performance on the Inquiry Construct. Explain how percentages were determined.

Emma accurately followed procedures to plant each seed in six of six steps. Her accuracy was 100%.

Evaluate the student's independence performance on the Inquiry Construct. Explain how percentages were determined.

Emma independently followed procedures for planting each seed for five of six steps. She needed an auditory prompt for one of the six steps.

Level of Accuracy: 100 %

Level of Independence: 83 %

Teacher Initials LL

Data Summary Sheet for Science Knowledge Entry

Student: Dates, Emma

Grade: 4

Science	**Structured Performance Task#: 04-5** **Description:** Student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.						**Inquiry Construct:** Follow procedures, using equipment or measurement devices accurately as appropriate, for collecting and/or recording qualitative or quantitative data.		
	Domain: ESS AAGSE# ESS 1.1.2 Description: **Describe rocks and minerals using their physical properties.**			Domain: PS AAGSE# PS 3.2.1a Description: Identify objects that are and are not attracted to magnets.			Domain: LS AAGSE# LS 1.2.1 Description: **Describe the things that plants need in order to grow and survive.**		
	Collection Period 1 Oct. 5 - Nov. 13, 2009			**Collection Period 2 Jan. 11 - Feb. 5, 2010**			**Collection Period 3 March 15 - April 9, 2010**		
Date	10/9/2009	10/13/2009	10/16/2009	1/12/2010	1/14/2010	1/19/2010	3/17/2010	3/24/2010	4/6/2010
Data Type	DP	DP	SDF	DP	DP	SDF	DP	DP	SDF
Accuracy %	60	75	90	50	30	50	75	80	100
Independence %	100	100	100	100	100	100	100	100	100
Average % for Collection Period	Accuracy: 75			Accuracy: 43			Accuracy: 85		
	Independence: 100			Independence: 100			Independence: 100		

Average % across all three collection periods:	Accuracy: 68
	Independence: 100

Student Documentation Form for Science Knowledge Entry

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

Student: Dates, Emma	**Grade:** 4	**Date:** 10/16/2009	**Data Collection Period: 1**
Science Domain: ESS **Structured Performance Task (SPT)#:** 04-5 **Description:** Student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.		**WITHIN AAGSE#** ESS 1.1.2 **Description: Describe rocks and minerals using their physical properties.**	

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:

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 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 that most rocks are hard was correct.

Describe the student's application of the assessed AAGSE within the SPT/science investigation:

The AAGSE being assessed is whether or not the Emma is able to describe rocks and minerals using their physical properties. Emma utilized her data that she gathered from several science investigations to described rocks and minerals by using a list of descriptors (hard/soft, heavy/light, color). Emma was given 10 opportunities to describe physical properties of rocks and minerals (seven rocks and three minerals).

Evaluation of Student's Performance

Evaluate the student's accuracy performance on the Inquiry Construct. Explain how percentages were determined.

Emma had 10 opportunities to describe each of the seven rocks and three minerals. Emma correctly described two of the three minerals and seven of the rocks for an accuracy score of 90%.

Evaluate the student's independence performance on the Inquiry Construct. Explain how percentages were determined.

Emma independently described all ten rocks and minerals for an independence score of 100%.

Level of Accuracy: 90 %

Level of Independence: 100 %

Teacher Initials LL

Student Documentation Form for Science Knowledge Entry

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

Student: Dates, Emma	**Grade:** 4	**Date:** 1/19/2010	**Data Collection Period: 2**
Science Domain: PS **Structured Performance Task (SPT)#:** 04-5 **Description:** Student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.		**WITHIN AAGSE#** PS 3.2.1a **Description:** Identify objects that are and are not attracted to magnets.	

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:

The 4th grade is working on a unit on the exploration of magnets. The students used magnet wands to test the magnetism of different objects. The students participated in the science investigation as follows: OBSERVE/QUESTION: Students developed the research question "What objects attract or stick to magnets?" PLAN: To answer this research question the students identified objects of different materials to test and gathered the objects. CONDUCT: Students followed procedures to test the objects and record their data on a recording sheet ANALYZE: Students discussed their common findings ("what objects attracted and what material were they made of?").

Describe the student's application of the assessed AAGSE within the SPT/science investigation:

The AAGSE being assessed is whether or not Emma is able to identify objects that are and are not attracted to magnets. Emma was assessed by the number of correct responses about an object's magnetism she completed on her investigation recording sheet.

Evaluation of Student's Performance

Evaluate the student's accuracy performance on the Inquiry Construct. Explain how percentages were determined.

Emma answered three of six questions on the magnetism of objects correctly for an accuracy level of 50%.

Evaluate the student's independence performance on the Inquiry Construct. Explain how percentages were determined.

Emma independently answered six out of six questions on magnetism of objects. Her independence was 100%.

Level of Accuracy: 50 %

Level of Independence: 100 %

Teacher Initials CC

EMMA

Name: Emma Date: 1/19

Science: Magnetism

Are they attracted?	Yes	No
paper clip		
eraser		
nail		
styrofoam balls		
spoon		
crayons		

Accuracy = 3/6 = 50%

Indep = 6/6 = 100%

AAGSE PS 3.2.1a

Student Documentation Form for Science Knowledge Entry

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

Student: Dates, Emma	**Grade:** 4	**Date:** 4/6/2010	**Data Collection Period: 3**
Science Domain: LS **Structured Performance Task (SPT)#:** 04-5 **Description:** Student will demonstrate the concept within a science investigation, which includes observing/questioning, planning, conducting and analyzing.		**WITHIN AAGSE#** LS 1.2.1 **Description: Describe the things that plants need in order to grow and survive.**	

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:

The 4th grade is working on a unit about plants – including the things plants need to grow and survive. The students participated in the science investigation as follows: OBSERVE/QUESTION: Students read a book about seeds and plants, and developed the research question "What do plants need to grow?" PLAN: Students looked at different types of seeds and chose the seeds they wanted to grow; The students identified locations for their plants that matched the light/no light conditions. CONDUCT: Students planted 6 seeds and labeled the plants with light/no light and water/no water. They recorded their findings twice a week. ANALYZE: Students talked about their observations and determined what plants needed to grow.

Describe the student's application of the assessed AAGSE within the SPT/science investigation:

Emma is being assessed on her ability to describe the things that plants need to grow and survive. Emma planted six seeds in soil, giving three of them water, light and air; the other three plants were not given water and light. Emma filled in her recording sheet twice a week. After 10 days, she was assessed on her "reporting out" on her findings on each plant, indicating what all six plants needed to grow. Emma found that plants need water to grow. Emma said her light/water plants grew best over the 10 days.

Evaluation of Student's Performance

Evaluate the student's accuracy performance on the Inquiry Construct. Explain how percentages were determined.

Emma had six opportunities to describe the things that plants need in order to grow. Of the six opportunities, Emma correctly identified the things that plants need to grow and survive for all six opportunities resulting in an accuracy score of 100%.

Evaluate the student's independence performance on the Inquiry Construct. Explain how percentages were determined.

Emma independently completed six out of six answers on her recording sheet. Her independence was 100%.

Level of Accuracy: 100 %

Level of Independence: 100 %

Teacher Initials LL