CHALLENGE #1: Which description best matches Grade 4 Inquiry Construct: Conducting?

A. Jenny was assessed on her ability to identify the tools needed for her life science investigation. She carefully reviewed the science tools, and accurately identified the three tools (thermometer, ruler, rain gauge) for her investigation of plant growth (100% accurate). Jenny required a tap prompt to select the rain gauge. Her independence was 66%. She then listed these tools on her lab report which she will use in her experiment.

B. Jenny followed a three step procedure in her life science investigation. The steps were: 1- gather the tools; 2- use the tools to measure air temperature; plant growth; amount of rain; 3- record data on the recording sheet. Jenny was accurate in 2/3 steps (66%). She needed verbal prompting to record her data. She was independent in the other two steps (66%).

CHALLENGE #2: Which description best matches Grade 8 Inquiry Construct: Planning?

A. The class developed the hypothesis "Heavy cars move faster" for their physical science investigation. Jenny needed to decide what data needed to be recorded when she conducted the experiment. Jenny accurately and independently named "weight of car" and "time to complete the test track" and developed a recording sheet with this information included. She was 100% independent and 100% accurate in identifying the data.

B. Jenny recorded the weight of each car and time for each test track run. There were six cars of different weight used for her experiment. When the experiment was complete, Jenny needed to divide the cars into two categories (heavy and light) and compute the average weight and time for each category. Jenny was accurate in computing the average weight but not the average time resulting in 50% accuracy. She needed verbal prompting to average both the weight and time (0% independent).

CHALLENGE #3: Which description best matches Grade 11 Inquiry Construct: Conducting?

A. Jenny followed a three step procedure in her life science investigation. The steps were: 1- gather the tools; 2- use the tools to measure air temperature; plant growth; amount of rain; 3- record data on the recording sheet. Jenny was accurate in completing 2/3 steps (66%). She needed verbal prompting to record her data. She was independent in completing the other two steps (66%).

B. Jenny recorded the weight of each car and time for each test track run. There were six cars of different weights used for her experiment. Jenny was evaluated on how accurately and independently she recorded the data (placing the correct numbers in the correct place on her Experiment Data Chart). Jenny was accurate in representing data 8/12 times, resulting in 75% accuracy. She needed a point prompt to record data 6/12 times (50% independent).

CHALLENGE #4: Identify the Inquiry Construct and Grade Described Below:

Abdel completed three defined observations of the water. At each observation he was assessed on his ability to (1) describe what he observed (choosing the state of matter) and (2) record the data on his chart, providing six total points of assessment. Abdel was accurate in describing what he observed for two observations and accurate in placing his data for all three observations (5/6=83% Accuracy). Abdel needed verbal prompts for both describing observations and recording data (0% independence).

Inquiry Construct: _____ Grade: _____

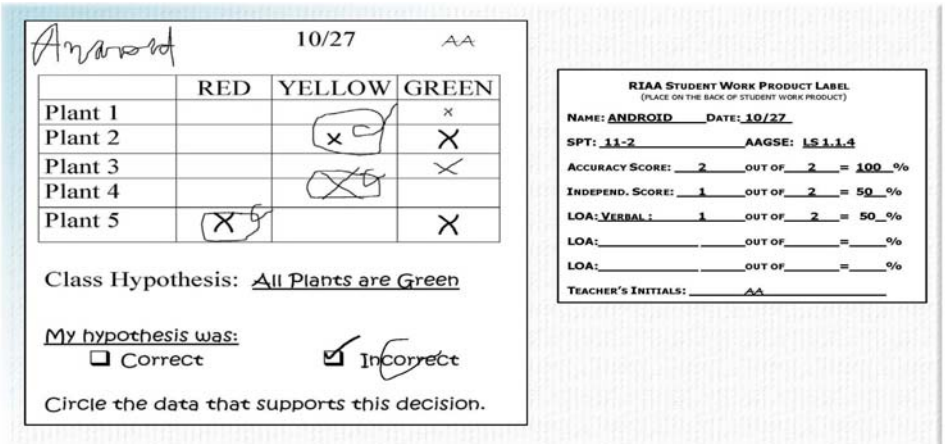
CHALLENGE #5: Identify the Inquiry Construct and Grade Described Below

John investigated nine objects. He had to use the data on his chart to determine if his hypothesis on whether the object was living/non-living was correct. He used his recording sheets and his chart to assist him with this. John accurately used his evidence to determine whether his hypothesis was correct resulting in100% accuracy. John needed verbal prompts to cite the evidence to determine correctness of his hypothesis for 4 objects (45%), and was independent in 5 objects (55%).

Inquiry Construct: _____ Grade: _____

CHALLENGE #6: Does the description match the student work?

Android was assessed on two aspects of analyzing: (1) identifying whether his hypothesis was correct or incorrect and (2) locating the data from his chart that supported his conclusion. Android was accurate in indicating his hypothesis was incorrect and accurately identified the data that supported his conclusion by circling it on his chart. His accuracy was 100%. He independently indicated his hypothesis was incorrect, but needed verbal prompts to circle the observational data that supported his conclusion (50% independence).



Android 10/27 AA

	RED	YELLOW	GREEN
Plant 1			x
Plant 2		x	X
Plant 3			X
Plant 4			
Plant 5	X		X

Class Hypothesis: All Plants are Green

My hypothesis was:
☐ Correct ☑ Incorrect

Circle the data that supports this decision.

RIAA STUDENT WORK PRODUCT LABEL
(PLACE ON THE BACK OF STUDENT WORK PRODUCT)

NAME: ANDROID DATE: 10/27
SPT: 11-2 AAGSE: LS 1.1.4
ACCURACY SCORE: 2 OUT OF 2 = 100 %
INDEPEND. SCORE: 1 OUT OF 2 = 50 %
LOA: VERBAL : 1 OUT OF 2 = 50 %
LOA: _____ OUT OF _____ = _____ %
LOA: _____ OUT OF _____ = _____ %
TEACHER'S INITIALS: AA

Does the description match the student work? _____ If no, why not? _____

CHALLENGE #7: Does the description match the student work?

Description of Grade 8 Planning:

Zachary was assessed on identifying the tools needed to conduct the experiment related to weather. Zachary identified a thermometer and a rain gauge as the two tools needed for this experiment. He was 100% accurate and needed 50% physical prompt to complete this task.

Name: Zachary
Date: 2/2/09
Check off each step as you go along.
1. Look outside
2. The weather today is (circle): sunny, cloudy, rainy, windy, snowy,
3. Look at the thermometer.
4. The temperature is 45 °F Fahrenheit.

Student Work Product

RIAA STUDENT WORK PRODUCT LABEL
(PLACE ON THE BACK OF STUDENT WORK PRODUCT)

NAME: ZACHARY CHARLES DATE: 2/2/09
SPT: 04-04 AAGSE: 1.2.13A
ACCURACY SCORE: 3 OUT OF 4 = 75 %
INDEPEND. SCORE: 3 OUT OF 4 = 75 %
LOA: AUDITORY : 1 OUT OF 4 = 25 %
LOA: _____ OUT OF _____ = _____ %
LOA: _____ OUT OF _____ = _____ %
TEACHER'S INITIALS: AA

Does the description match the student work? _____ If no, why not? _____

CHALLENGE # 8: Does the description below match the Science AAGSE?

AAGSE: PS 1.1.2b Describe physical changes.
Fredrik identified the procedures needed for this experiment. He identified five of the six procedures correctly, yielding an accuracy of 83%. He was independent in listing all procedures (100% independent).

Does the description match the Science AAGSE? _____

CHALLENGE #9: Connection to the SPT: Locate the inquiry constructs within the description below.

Android conducted a scientific investigation on the external features of plants. After viewing a number of plant photographs, the class developed a hypothesis: *All plants are green*. Android used a magnifying glass and color chart to document color(s) of five plants. Android recorded his observations on a science data chart. He analyzed his results and determined that his hypothesis was incorrect because some plants were red or yellow.

Observe/Question: _____

Planning: _____

Conducting: _____

Analyzing: _____

CHALLENGE #10: Connection to the SPT: Locate the inquiry constructs within the description below.

The class conducted an investigation that focused on concepts of living and non-living things. Students used manipulative cards and then converted these into a Lab Report Data sheet. After the experiment, the students analyzed their findings and discussed their reasoning for charting the object as "living" or "non-living". After completing the experiment, the students reviewed their hypothesis chart and concluded if their hypothesis was correct or incorrect based on their evidence.

Observe/Question: _____

Planning: _____

Conducting: _____

Analyzing: _____

Grade	Observing/ Questioning	Planning	Conducting	Analyzing
4	Make and describe observations in order to ask questions, and/or make predictions related to the science investigation.		Follow procedures, using equipment or measurement devices accurately as appropriate, for collecting and/or recording qualitative or quantitative data.	
8		Identify information/ evidence that needs to be collected and/or tools to be used in order to answer a question and/or check a prediction.	Use data to summarize results.	
11			Use accepted methods of organizing, representing and/or manipulating data.	Use evidence to support and/or justify interpretations and/or conclusions or explain how the evidence refutes the hypothesis.