

2011-2012 VTAAP Form 5: Science Inquiry Worksheet

Date(s) of Investigation:
Student Name:
Communication Level:
Grade:
Unit/Topic Area:

General Directions: *This worksheet is used to document the student's participation in the inquiry process for science. It replaces the standard VTAAP Form 5 used for reading, math, and the science content knowledge domains. **This form is required, and all sections must be completed in their entirety for the inquiry submission to be eligible for scoring. Please print and attach directly to the student product evidence for inquiry. Three distinct products are required (1 product for each inquiry stage). Student products submitted without the worksheet or with an incomplete worksheet will not be scored.***

Description of General Education Curriculum Activity

Content Focus: Identify the content knowledge domain and GE (9-50) connected to this inquiry

Domain:

GE:

GLGEC: How does this inquiry task reflect a theme, topic, or unit of study from the Grade-Level General Education Curriculum?

Stage I: Develop Question and Plan Investigation

*Directions: Students receive instruction and participate in all elements of the multi-step inquiry process, but they are **formally assessed on only one skill element in each stage**. These skills targeted for formal assessment are determined by the Student Evaluation Team (SET) and should represent **independent student behaviors**. Inquiry steps in each stage that are not assessed may be completed cooperatively or even be directly provided by the teacher. Regardless, **all of the inquiry steps must be completed**, and the level of student participation documented as either Directed or Cooperative or Independent (see Science Administration Guidelines for more information). **The information in the skill area specified for assessment must be accompanied by a student product** representing independent performance on the skills detailed in the Inquiry Target Behaviors document. A full explanation of the assessment task must be included in the Stage I Product Description.*

Inquiry Skill (Target Behavior) <i>(Complete all text fields in this column)</i>	Skill Description (Criteria) <i>(Do not write in these sections)</i>
<p>Identify a Question: What question will be investigated?</p> <p><input type="checkbox"/> Directed <input type="checkbox"/> Cooperative <input type="checkbox"/> Independent</p>	<p>The inquiry is based on <u>either</u> an:</p> <p style="text-align: center;">Experimental Question (cause/effect relationship) OR Observational Question (answered primarily through observations).</p>
<p>Make a Prediction: What might happen and why?</p> <p><input type="checkbox"/> Directed <input type="checkbox"/> Cooperative <input type="checkbox"/> Independent</p>	<p>The Prediction states what will happen AND uses the student's past experience or knowledge to justify the prediction.</p> <p style="text-align: center;"><i>I predict . . . because</i></p>

<p>Develop a Procedure: What steps will the student follow?</p> <input type="checkbox"/> Directed <input type="checkbox"/> Cooperative <input type="checkbox"/> Independent	<p>Procedure for an Observational Question: The individual steps that must be followed in order to gather data to answer the question are identified in sequence.</p>
	<p>Procedure for an Experimental Question: The individual steps that must be followed in order to gather data to answer the question are identified in sequence.</p> <p style="text-align: center;">AND</p> <p>An experimental procedure must also specify which variables will remain the same and which variable will change.</p>

Stage I Product Description

Assessment Product Options (Select one):

Identify a Question
 Make a Prediction
 Develop a Procedure

Product Format (Select one):

Original student work + Printed copy of Form 5- Science Inquiry Worksheet
 Graphic representation (photos, videos) + Printed copy of Form 5- Science Inquiry Worksheet

Include all of the following:

- Task content
- Materials
- Results of the student's performance

Assessment Administration: (VTAAP products must represent independent student performance. Briefly describe the roles of the teacher and student and the use of teacher-free supports for development the Stage I Product).

Teacher role:

Student role:

Supports used:

Stage II: Conduct Investigations

*Directions: Students receive instruction and participate in all elements of the multi-step inquiry process, but they are **formally assessed on only one skill element in each stage**. These skills targeted for formal assessment are determined by the Student Evaluation Team (SET) and should represent **independent student behaviors**. Inquiry steps in each stage that are not assessed may be completed cooperatively or even be directly provided by the teacher. Regardless, **all of the inquiry steps must be completed**, and the level of student participation documented as either Directed or Cooperative or Independent (see Science Administration Guidelines for more information). **The information in the skill area specified for assessment must be accompanied by a student product** representing independent performance on the skills detailed in the Inquiry Target Behaviors document. A full explanation of the assessment task must be included in the Stage II Product Description.*

Inquiry Skill (Target Behavior) (Complete all text fields in this column)	Skill Description (Criteria) (Do not write in these sections)
<p>Perform the Procedure: What steps did the student do?</p> <input type="checkbox"/> Directed <input type="checkbox"/> Cooperative <input type="checkbox"/> Independent	<p>The steps in the procedure identified in the Investigation Design that were actually completed are identified.</p>

<p>Collect and Organize the Data: What data was collected and how was it organized?</p> <p><input type="checkbox"/> Directed <input type="checkbox"/> Cooperative <input type="checkbox"/> Independent</p>	<p>The data are collected and organized in a table, a graph, and/or represented in a labeled scientific drawing.</p>
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Stage II Product Description

Assessment Product Options (*Select one*):

Perform the Procedure
 Collect and Organize the Data

Product Format (*Select one*):

Original student work + Printed copy of Form 5- Science Inquiry Worksheet
 Graphic representation (photos, videos) + Printed copy of Form 5- Science Inquiry Worksheet

Include all of the following:

- Task content
- Materials
- Results of the student's performance

Assessment Administration: (*VTAAP products must represent independent student performance. Briefly describe the roles of the teacher and student and the use of teacher-free supports for development the Stage II Product.*)

Teacher role:

Student role:

Supports used:

Stage III: Develop and Communicate Conclusions

*Directions: Students receive instruction and participate in all elements of the multi-step inquiry process, but they are **formally assessed on only one skill element in each stage**. These skills targeted for formal assessment are determined by the Student Evaluation Team (SET) and should represent **independent student behaviors**. Inquiry steps in each stage that are not assessed may be completed cooperatively or even be directly provided by the teacher. Regardless, **all of the inquiry steps must be completed**, and the level of student participation documented as either Directed or Cooperative or Independent (see Science Administration Guidelines for more information). **The information in the skill area specified for assessment must be accompanied by a student product** representing independent performance on the skills detailed in the Inquiry Target Behaviors document. A full explanation of the assessment task must be included in the Stage III Product Description.*

<p style="text-align: center;">Inquiry Skill (Target Behavior) (<i>Complete all text fields in this column</i>)</p>	<p style="text-align: center;">Skill Description (Criteria) (<i>Do not write in these sections</i>)</p>
<p>Analyze the Data and Construct a Conclusion: What did the student discover?</p> <p><input type="checkbox"/> Directed <input type="checkbox"/> Cooperative <input type="checkbox"/> Independent</p>	<p>A reasonable explanation that accurately reflects the collected data is provided.</p>
<p>Evaluate the Prediction: Did the collected data support the prediction?</p> <p><input type="checkbox"/> Directed <input type="checkbox"/> Cooperative <input type="checkbox"/> Independent</p>	<p>The prediction from Stage I is compared to what actually happened in the inquiry.</p>

<p>Communicate the Results: How did the student share findings from this investigation?</p> <p><input type="checkbox"/> Directed <input type="checkbox"/> Cooperative <input type="checkbox"/> Independent</p>	<p>The results/conclusions are presented, questions answered, or explanations provided for a specific audience.</p>
<p>Stage III Product Description</p> <p>Assessment Product Options (<i>Select one</i>):</p> <p><input type="checkbox"/> Analyze the Data and Construct a Conclusion <input type="checkbox"/> Evaluate the Prediction <input type="checkbox"/> Communicate the Results</p> <p>Product Format (<i>Select one</i>):</p> <p><input type="checkbox"/> Original student work + Printed copy of Form 5- Science Inquiry Worksheet <input type="checkbox"/> Graphic representation (photos, videos) + Printed copy of Form 5- Science Inquiry Worksheet</p> <p>Include all of the following:</p> <ul style="list-style-type: none">• Task content• Materials• Results of the student's performance <p>Assessment Administration: (<i>VTAAP products must represent independent student performance. Briefly describe the roles of the teacher and student and the use of teacher-free supports for development the Stage III Product.</i>)</p> <p>Teacher role:</p> <p>Student role:</p> <p>Supports used:</p>	