

Science Planning Worksheet: Grade 8 Sample

Inquiry Construct Entry	
<div style="border: 1px solid black; padding: 5px; text-align: center;"> Inquiry Construct: Q P C A </div>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Science Domain: LS ESS PS </div>
<div style="border: 1px solid black; padding: 5px;"> Inquiry Construct: Planning: Identify information/evidence that needs to be collected and/or tool to be used in order to answer the question, hypothesis or prediction. </div>	<div style="border: 1px solid black; padding: 5px;"> AAGSE: LS1.2.1b Indicate one or more conditions a plant needs in order to grow and survive (e.g., light, soil, water, space, and/or air). </div>
<div style="border: 1px solid black; padding: 5px;"> Science Investigation Description: The eighth grade biology class is working on a life science unit on plants and their needs. They will look at a variety of plants, go on a field trip to a local greenhouse, and identify a question they want to answer such as "What do plants need to survive?" Partners will design an investigation, plan the materials needed, and develop a way to test, collect and record the data. Using the data collected, they will draw a final conclusion to answer the question. </div>	
<div style="border: 1px solid black; padding: 5px;"> Inquiry Construct Application Description: This assessment focuses on the planning aspect of the science investigation. Each group of partners designs an experiment to find out what plants need to survive. For example, a group could plan an experiment that deprives the plants of water, light, soil or air. Students identify and outline the steps they would follow and any tools that would be required. Students are given a planning sheet to list the steps and tools. The following ideas are ways students at different levels may participate in planning the investigation. <ul style="list-style-type: none"> • A student who writes using words can fill in the planning sheet with the steps and tools needed. • A student can select pre-typed sentence strips from a set that includes distracters to choose the steps and tools needed for the investigation, and the partner can glue them on the planning sheet. • The assessment may focus only on the student's ability to select tools needed for the investigation. The partner could fill in the steps and the student being assessed could choose from sets of 2 real objects (ruler/beaker) the 4 tools needed. </div>	
<div style="border: 1px solid black; padding: 5px;"> Student Evaluation of Inquiry Construct: Students are evaluated on their ability to plan for an investigation- this can include the steps to follow and/or the tools needed to collect the data that will answer the question. So what needs to be looked at? There might be 5 steps involved and 4 tools needed for the investigation. Assess students on their ability to identify the 5 steps and/or the 4 tools. <ul style="list-style-type: none"> • Assess identifying planning steps only- 5 opportunities • Assess identifying tools only- 4 opportunities • Assess identifying planning steps and tools- 9 opportunities The student would be evaluated on 5, 4 or 9 points. Be sure to score for accuracy: identify the steps and/or tools, and independence: identify those answered with no content assistance. </div>	