

# 9th Grade Honors Physical Science 'B' Prerequisites/Application

## *Lake City High School*

### **Overview**

Students interested in enrolling in the 9th Grade Honors Physical Science 'B' course must meet the following requirements in their Physical Science 'A', and in addition, receive recommendation by their 9th grade Physical Science 'A' teacher.

1. *Hold at least an 85% average grade in Physical Science 'A'.*
2. *Demonstrate safe/appropriate laboratory and classroom behavior at all times.*
3. *Demonstrate mastery of the required Scientific Methods Assessment Report in Physical Science A.*

### **Scientific Methods Assessment Report**

All Physical Science A students interested in Honors Physical Science B will complete a thorough, authentic, and cohesive scientific investigation on a given topic of the student's choice.

The report will challenge students to demonstrate their skills in designing a meaningful experiment, collecting sufficient and relevant data, processing and presenting data, drawing reasonable conclusions, and communicating results. The final product will be on a poster and will be submitted to Science Department faculty for review. The report must fulfill the following guidelines for completion:

- 1.) Develop a focused research question.
- 2.) State a testable hypothesis.
- 3.) Select appropriate variables to be tested and controlled.
- 4.) Provide a description of methods and procedures.
- 5.) Present collected data in the form of tables and graphs.
- 6.) State a reasonable conclusion based on the data collected.

The report should be completed on a ½ standard-sized poster board (22in. x 14in.). If students are in need of poster board/paper, please notify Science Department faculty.

### **Notification of Acceptance**

Students accepted into 9th Grade Honors Physical Science 'B' will be notified of their acceptance by Science Department faculty and/or the Lake City Counseling Department.

### **Application/Acceptance Clause**

Lake City High School Science Department faculty reserve the right to include/exclude an individual into Honors Physical Science 'B' based on a case-by-case, independent analysis.

# Scientific Method Assessment Report Scoring Rubric

## Physical Science B Application

Student Name: \_\_\_\_\_ Project Title: \_\_\_\_\_

Current Grade in Physical Science A: \_\_\_\_\_ Initials of Physical Science A Instructor: \_\_\_\_\_

Why are you interested in honors science classes? \_\_\_\_\_

	<b>1</b>	<b>2</b>	<b>3</b>	<i>List Score Here</i>
<b>Question Hypothesis and Variables</b>	<ul style="list-style-type: none"> <li>▪ Question/Problem is <b>not clear</b></li> <li>▪ Hypothesis/Prediction is <b>not</b> present or <b>doesn't</b> address the question at all</li> <li>▪ Variable(s) are not included</li> </ul>	<ul style="list-style-type: none"> <li>▪ Question/Problem is <b>somewhat clear</b></li> <li>▪ Hypothesis/Prediction <b>somewhat</b> addresses the question</li> <li>▪ <b>Some</b> variable(s) are included but are not complete or are not clearly identified</li> </ul>	<ul style="list-style-type: none"> <li>▪ Question/Problem is specific and <b>very clear</b> and can be answered by doing an experiment</li> <li>▪ Hypothesis/Prediction addresses the question <b>very clearly</b></li> <li>▪ Independent (manipulated), Dependent (responding) and Controlled variable(s) are included and are clearly identified</li> </ul>	
<b>Experimental Procedure</b>	<ul style="list-style-type: none"> <li>▪ Materials list is <b>not</b> detailed and complete and clear</li> <li>▪ Experimental procedure is <b>not clear</b></li> <li>▪ Includes <b>no</b> trials</li> </ul>	<ul style="list-style-type: none"> <li>▪ Materials list is <b>somewhat</b> detailed and complete and clear</li> <li>▪ Experimental procedure is <b>very clear</b></li> <li>▪ Includes <b>only 2</b> trials</li> </ul>	<ul style="list-style-type: none"> <li>▪ Materials list is <b>very</b> detailed and complete and clear</li> <li>▪ Experimental procedure is <b>very clear</b></li> <li>▪ Includes <b>at least 3</b> trials</li> </ul>	
<b>Data</b>	<ul style="list-style-type: none"> <li>▪ Data is <b>not clear</b></li> <li>▪ <b>Poor or No</b> use of photos/charts/graphs to display data.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Data is <b>somewhat clear</b></li> <li>▪ <b>Good use</b> of photos/charts/graphs to display data</li> </ul>	<ul style="list-style-type: none"> <li>▪ Data is <b>very clear</b></li> <li>▪ <b>Excellent, proper use</b> of photos/charts/graphs to display data</li> </ul>	
<b>Conclusions and Error Analysis</b>	<ul style="list-style-type: none"> <li>▪ Conclusions are <b>not supported</b> by the data and limitations/errors are <b>not discussed</b>.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Conclusions are <b>not clearly supported</b> by the data and limitations/errors are <b>not clearly discussed</b>.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Conclusions are <b>clearly supported</b> by the data and errors/limitations are <b>clearly and appropriately</b> discussed.</li> </ul>	
<b>Display</b>	<ul style="list-style-type: none"> <li>▪ Display is <b>neither</b> neat, creative, <b>nor</b> organized</li> <li>▪ <b>No</b> attention to detail</li> </ul>	<ul style="list-style-type: none"> <li>▪ Display is <b>somewhat</b> neat, creative and organized</li> <li>▪ <b>Minor</b> attention to detail</li> </ul>	<ul style="list-style-type: none"> <li>▪ Display is <b>very</b> neat, creative and organized</li> <li>▪ <b>Significant</b> attention to detail</li> </ul>	
<b>Creativity</b>	<ul style="list-style-type: none"> <li>▪ Project shows a <b>low</b> amount of creativity.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Project shows a <b>medium</b> amount of creativity.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Project shows a <b>high</b> amount of creativity.</li> </ul>	

