

Standards Alignment with Gifted and Talented Assessments and Strategies

Standard	Assessment/Strategy	Explanation
<p><b>H.C.1A.2</b> Develop, use, and refine models to (1) understand or represent phenomena, processes, and relationships, (2) test devices or solutions, or (3) communicate ideas to others.</p>	<p><b>Create-A-Graph</b></p>	<p>According to the standards, students must be able to communicate their data from investigations using models. The Create a graph website allows students to organize lab data so that they are able to discuss patterns in the data and to construct meaning in their results based on phenomena studied in class.</p>
<p><b>H.C.1A.6</b> Construct explanations of phenomena using (1) primary or secondary scientific evidence and models, (2) conclusions from scientific investigations, (3) predictions based on observations and measurements or (4) data communicated in graphs, tables, or diagrams.</p>	<p><b>ChemCollective</b></p>	<p>Offers students access to virtual lab simulations which allows student to observe experiments and construct meaning and explanations based on what they learned with their observations.</p>
<p><b>H.C.1A.6</b> Construct explanations of phenomena using (1) primary or secondary scientific evidence and models, (2) conclusions from scientific investigations, (3) predictions based on observations and measurements or (4) data communicated in graphs, tables, or diagrams.</p>	<p><b>Storyboard That</b></p>	<p>Provides a platform that allows students to communicate their explanation on phenomena learned in class or their conclusions drawn from informational text.</p>
<p><b>H.C.1A.3</b> Plan and conduct controlled scientific investigations to answer questions, test hypotheses, and develop explanations: (1) formulate scientific questions and testable hypotheses based on credible scientific information, (2) identify materials, procedures, and variables, (3) use appropriate laboratory equipment, technology, and techniques to collect qualitative and quantitative data, and (4) record and represent data in an appropriate form. Use appropriate safety procedures.</p> <p><b>H.C.1A.8</b> Obtain and evaluate scientific information to (1) answer questions, (2) explain or describe phenomena, (3) develop models, (4) evaluate hypotheses, explanations, claims, or designs or (5) identify and/or fill gaps in knowledge. Communicate using the conventions and expectations of scientific writing or oral presentations by (1) evaluating grade-appropriate primary or secondary scientific literature, or (2) reporting the results of student experimental investigations.</p>	<p><b>Screencastify</b></p>	<p>Provides a platform that allows students to communicate their explanation on phenomena learned in class or their conclusions drawn from informational text. It allows students to create an oral and visual presentation as a means to communicate their experimental results.</p>

Standards Alignment with Gifted and Talented Assessments and Strategies

<p>H.C.1A.1 Ask questions to (1) generate hypotheses for scientific investigations, (2) refine models, explanations, or designs, or (3) extend the results of investigations or challenge scientific arguments or claims.</p> <p>H.C.1A.4 – Students will analyze and interpret data from informational texts and data collected from investigations using a range of methods (such as tabulation, graphing, or statistical analysis) to reveal patterns and construct meaning (2) support or refute hypotheses, explanations, claims, or designs, or evaluate the strength of conclusions.</p> <p>H.C.1A.7 Construct and analyze scientific arguments to support claims, explanations, or designs using evidence and valid reasoning from observations, data, or informational texts.</p>	<p><b>Science Daily</b></p>	<p>Students will be able to pull engaging, age and content appropriate articles from this website in order to begin to use it to support claims, hypotheses and explanations of concepts taught in class. This website also gives them a chance to find articles that they are able to challenge what they read based on what is taught in class.</p>
<p>H.C.1A.1 Ask questions to (1) generate hypotheses for scientific investigations, (2) refine models, explanations, or designs, or (3) extend the results of investigations or challenge scientific arguments or claims.</p> <p>H.C.1A.3 Plan and conduct controlled scientific investigations to answer questions, test hypotheses, and develop explanations: (1) formulate scientific questions and testable hypotheses based on credible scientific information, (2) identify materials, procedures, and variables, (3) use appropriate laboratory equipment, technology, and techniques to collect qualitative and quantitative data, and (4) record and represent data in an appropriate form. Use appropriate safety procedures.</p> <p>H.C.1A.7 Construct and analyze scientific arguments to support claims, explanations, or designs using evidence and valid reasoning from observations, data, or informational texts.</p>	<p><b>PHET Simulations</b></p>	<p>Students will be able to use the simulations and lab activities from this sight to conduct their own virtual experiments. Students will be able to test out hypotheses and construct explanations based on what they observe in the simulations. It is beneficial to students in that it allows for variable manipulation and choice by the students so that they are able to draw their own conclusion from their own personalized virtual investigation.</p>