

**Stage 1 Desired Results 1<sup>st</sup> quarter 8<sup>th</sup> grade Science**

**ESTABLISHED GOALS (CCSS)**

**CCSS Writing (W): 1, 2, 4, 6, 7, 8, 9, 10**

**CCSS Reading (R): 1, 2, 3, 4, 6, 7, 8, 9, 10**

**Goal: 1.2, 1.3, 1.6, 1.8, 5.2**

**Transfer**

***Students will be able to independently use their learning to...***

This quarter you have been learning about lab procedures such as safety and measurement, as well as concepts relating to matter. In this performance task, you will demonstrate your ability to use these skills with proficiency in order to understand a real-world problem and its solution.

**Meaning**

**UNDERSTANDINGS**

- Lab Safety
- Following a multi-step scientific procedure
- Metric Measurement
- Ability to gain scientific information from written sources
- Ability to express scientific information in written form

**ESSENTIAL QUESTIONS:**

How do fire extinguishers work and which type of extinguisher would be most effective in certain kinds of fires? What kind do we have in our lab and why?

**Acquisition**

***Students will know...***

- How to safely follow a multi-step scientific procedure
- How to measure using the metric system
- How to read critically for scientific information
- How to present scientific ideas in written form

***Students will be skilled at...***

Writing arguments focused on discipline-specific content.  
 Writing informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.  
 Use technology, including the internet, to produce & publish writing & present the relationships between information & ideas clearly & effectively.  
 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of the others while avoiding plagiarism and following a standard format for citation.  
 Draw evidence from informational texts to support analysis reflection, and research.  
 Write routinely over extended time frames (time for reflection and revision) and shorter time

		<p>frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p> <p>Cite specific textual evidence to support analysis of science and technical texts.</p> <p>Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.</p> <p>Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.</p> <p>Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.</p> <p>Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.</p> <p>Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).</p> <p>Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</p> <p>Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.</p> <p>By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.</p> <p>Understand concepts &amp; processes of evidence, models, &amp; explanations</p> <p>Understand constancy, change, &amp; measurement</p> <p>Understand scientific inquiry &amp; develop critical thinking skills</p> <p>Understand technical communication</p> <p>Understand the relationship between science &amp; technology</p>
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**Stage 2 - Evidence**

Evaluative Criteria	Assessment Evidence
<p><b>PERFORMANCE TASK</b></p>	<p><b>CURRICULUM EMBEDDED PERFORMANCE ASSESSMENT (PERFORMANCE TASKS):</b>                      Check off each item as you complete it. Turn in all finished materials WITH this checklist.</p> <p>1. ____ Complete the "It's a Gas" Lab and lab sheet.                      2. ____ Read the article "How Fire Extinguishers Work" and study the diagram.                      3. ____ Use the information gained from completing #1 &amp; 2 above, to explain the following in at least 2 <b>well-written paragraphs</b>:</p> <p><i>1<sup>st</sup> paragraph: Why are CO<sub>2</sub> fire extinguishers effective in putting out some kinds of fires? What are some disadvantages to using them? What kinds of fires are they NOT effective on? What is an alternative to a CO<sub>2</sub> fire extinguisher in this situation?</i></p> <p><i>2<sup>nd</sup> paragraph: What kind of fire extinguisher do you think a science lab should have and why?</i></p>
	<p><b>OTHER EVIDENCE:</b>                      Previous labs &amp; lab reports                      Reading assignments                      Written work</p>
<p>CLAIMS</p>	<p><b>CLAIM 1      CLAIM 2      CLAIM 3      CLAIM 4</b></p>
<p>DEPTH OF KNOWLEDGE LEVELS</p>	<p><b>DOK 1                  DOK2                  DOK 3</b></p>
<p>ACHIEVEMENT LEVEL DESCRIPTORS</p>	<p><b>ALD 1      ALD 2      ALD 3      ALD 4</b></p>
<p><b>Stage 3 – Learning Plan</b></p>	
<p><i>Summary of Key Learning Events and Instruction</i></p>	<p>See weekly calendars and daily lesson plans</p>