

## Assessment Rubric for Chapter Challenge on Cool Chemistry

<p><b>Meets the standard of excellence.</b></p> <p style="text-align: center;"><b>5</b></p>	<ul style="list-style-type: none"> <li>• Chemical and physical properties and changes are specifically and correctly addressed.</li> <li>• Acids and bases, and chemical reactions that involve color changes, are specifically and correctly addressed.</li> <li>• Chemistry terminology from the chapter is used correctly.</li> <li>• Explanations are given for chemistry concepts presented. They are clear, concise and coherent.</li> <li>• A large variety of chemistry concepts is presented.</li> <li>• The show is appropriate for the intended audience of fourth- and fifth-graders.</li> <li>• The show has terrific entertainment value. It contains humor and excitement.</li> </ul>
<p><b>Approaches the standard of excellence.</b></p> <p style="text-align: center;"><b>4</b></p>	<ul style="list-style-type: none"> <li>• Chemical and physical properties and changes are addressed mostly correct.</li> <li>• Acids and bases, and chemical reactions that involve color changes, are addressed mostly correct.</li> <li>• Chemistry terminology from the chapter is incorporated as applicable.</li> <li>• Explanations are given for most of the chemistry concepts presented. The explanations lack somewhat in clarity.</li> <li>• A variety of chemistry concepts is presented, but some topics are not addressed.</li> <li>• The show is generally appropriate for the intended audience.</li> <li>• The show has entertainment value. It contains some humor and excitement.</li> </ul>
<p><b>Meets an acceptable standard.</b></p> <p style="text-align: center;"><b>3</b></p>	<ul style="list-style-type: none"> <li>• Chemical and physical properties and changes are addressed with some errors.</li> <li>• Acids and bases, and chemical reactions that involve color changes, are addressed with some errors.</li> <li>• Chemistry terminology from the chapter is incorporated to a limited extent.</li> <li>• Explanations are given for some of the chemistry concepts presented. The explanations are generally accurate, but contain some minor errors and/or are not clear.</li> <li>• The show is mostly appropriate for the intended audience.</li> <li>• The show has some entertainment value.</li> <li>• Some attempt at coordination of the show is made, and the show flows smoothly at times.</li> </ul>
<p><b>Below acceptable standard and requires remedial help.</b></p> <p style="text-align: center;"><b>2</b></p>	<ul style="list-style-type: none"> <li>• Very little about chemical and physical properties and changes is addressed.</li> <li>• Very little about acids and bases, and chemical reactions that involve color changes, is addressed.</li> <li>• A limited amount of chemistry terminology from the chapter is incorporated as applicable.</li> <li>• Few explanations are given for the chemistry concepts presented. The explanations are unclear and/or fraught with error.</li> <li>• The show is somewhat appropriate for the intended audience.</li> <li>• The show has limited entertainment value.</li> <li>• Little attempt at coordination of the show is visible.</li> <li>• Safety procedures are often violated.</li> </ul>
<p><b>Basic level that requires remedial help or demonstrates a lack of effort.</b></p> <p style="text-align: center;"><b>1</b></p>	<ul style="list-style-type: none"> <li>• Chemical and physical properties and changes are not addressed.</li> <li>• Acids and bases, and chemical reactions that involve color changes, are not addressed.</li> <li>• Chemistry terminology is not used.</li> <li>• No attempt is made to provide explanations for the chemistry concepts presented.</li> <li>• The show is inappropriate for the intended audience.</li> <li>• The show has no entertainment value.</li> <li>• No coordination is apparent in the show and it is difficult to follow.</li> <li>• Safety procedures are not followed.</li> </ul>

## Assessment Rubric for Challenge: Cool Chemistry Show

The challenge is to develop a program for grade-school children. Your demonstration will involve you and your team. Your team will use two or three of the different activities in your presentation. You will be evaluated on how well you demonstrate your knowledge and understanding of the chemistry concepts that you present.

The following table will be used to score your presentation:

ITEM: Cool Chemistry Show	Points Possible	Students Self Grade	Teacher Grade
		Points Earned	Points Earned
<b>Lab Safety</b> <ul style="list-style-type: none"> <li>•Goggles</li> <li>•Aprons</li> <li>•Gloves</li> <li>•Chemical measurement and handling</li> <li>•Correct usage of glassware</li> <li>•All chemicals are secure at all times</li> </ul>	<b>30</b>		
<b>Activities used in the demonstration</b> <b>A:</b>  <b>B:</b>  <b>C:</b>	<b>60</b>		
<b>Knowledge of chemical concepts used in each activity</b> <b>A:</b>  <b>B:</b>  <b>C:</b>	<b>60</b>		

*(continued on next page)*

<b>ITEM: Cool Chemistry Show</b>	<b>Points Possible</b>	<b>Students Self Grade</b>	<b>Teacher Grade</b>
		<b>Points Earned</b>	<b>Points Earned</b>
<b>Presentation</b> <ul style="list-style-type: none"><li>•Organization of paper</li><li>•Visual aids</li><li>•Overall quality</li><li>•Overall appeal</li></ul>	<b>30</b>		
<b>Active Chemistry Log Book</b>	<b>20</b>		
<b>Total Points Earned</b>	<b>200</b>		