Unit 1 REVIEW – The Scientific Method

1. Understands the steps of the Scientific Method

Write the Scientific Method Steps in order, below:

1. ___________________ - specific idea that can be tested
2. ___________________ — read about the topic, ask advice, think about background knowledge
3. ___________________ — an 'if, then statement' with scientific reasoning
4. ___________________ — create a materials list and procedure (step-by-step)
5. ___________________ — perform the experiment, record data on a table
6. ___________________ — look for patterns in data, find the mean, graph data
7. ___________________ — an answer to your question with evidence and reasoning

2. Generates scientific questions based on observations, labs, and research

Which of the following is the best example of a good scientific question?

a. How fast does a Ford truck travel to the corner store?

b. What tastes better, pop or lemonade?

c. Does the thickness of the paper in a paper airplane affect the speed it travels?

d. Which plant is more beautiful, daisies or roses?

Develop a strong scientific question you think scientists could test in class.

_________________________________________________________________________

3. Analyze information from a data table to answer scientific questions

% of questions answered correctly in Jeopardy practice

<table>
<thead>
<tr>
<th>Student</th>
<th>Round 1</th>
<th>Round 2</th>
<th>Round 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bart</td>
<td>54%</td>
<td>66%</td>
<td>73%</td>
</tr>
<tr>
<td>Homer</td>
<td>69%</td>
<td>98%</td>
<td>64%</td>
</tr>
<tr>
<td>Marge</td>
<td>88%</td>
<td>92%</td>
<td>85%</td>
</tr>
<tr>
<td>Maggie</td>
<td>93%</td>
<td>96%</td>
<td>95%</td>
</tr>
</tbody>
</table>
Mrs. Roy chose Maggie to compete in the Jeopardy challenge. Did she make the best choice? YES or No (circle one) Why or why not?

Mr. Thelen selects Homer because he has the highest score of all the rounds. Did he make the best choice? YES or No (circle one) Why or why not?

4. **Identifies the need for evidence in making scientific decisions (explanations)**

   Why are scientific explanations so important?

Name 3 components that are required within your scientific explanation.

1. ________________________________

2. ________________________________

3. ________________________________