Scientific Method Unit
(Practice Assessment)
Do this on a separate sheet of paper!

**Objective #1: To explain the steps of the scientific method.**

Explain the following steps of the scientific method in complete sentences:

- Question:
- Hypothesis:
- Test Variable/Independent Variable:
- Dependent Variable:
- Control/Constant Variables:
- Procedure:
- Materials:
- Table:
- Graphs:
- Conclusion:

**Objective #2: To identify variables as either test or constant variables when given scenarios.**

Example Scenario #1:

Jim and Joe want to know if Spider Wire fishing line is stronger than Stren fishing line. Help them identify the test variable and at least 5 controlled variables.

- Test Variable:
- 5 Controlled Variables:

Example Scenario #2:

Sara and Sam want to know if people can tell the difference between diet coke and regular coke. Help them identify the test variable and at least 5 controlled variables.

- Test Variable:
- 5 Controlled Variables:
**Objective #3:** To write a clear and easy procedure to follow and explain the importance in doing so.

Example ?:

- Write a procedure for one of the example scenarios in objective #2
- Why is it important to write a clear and easy procedure to follow?

**Objective #4:** To graph data (including key parts of a graph) and make conclusions from the data graphed.

Example ?:

Mr. Pallett had a question of which battery, Duracell or Energizer would last the longest. His educated guess was that Energizer would last the longest because it cost the most. As he did the experiment he collected the following data:

<table>
<thead>
<tr>
<th>Battery Brand</th>
<th>Trial 1</th>
<th>Trial 2</th>
<th>Trial 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duracell</td>
<td>10.5 Hours</td>
<td>10 Hours</td>
<td>10.5 Hours</td>
</tr>
<tr>
<td>Energizer</td>
<td>12 Hours</td>
<td>11.5 Hours</td>
<td>11.5 Hours</td>
</tr>
</tbody>
</table>

- Graph the data. Make sure to include a title, key, and labeled axis.

- Help Mr. Pallett come up with a conclusion for his experiment.

**Objective #5:** To apply the scientific method to a question.

- This objective will be assessed in your scientific method project!