# Milk and Vinegar

## Procedure

1. **Collaborate**  Work with a partner. **Safety:** Wear goggles during this investigation.

2. **Observe**  Pour 100 mL of milk into one jar and 100 mL of vinegar into the other jar. Study the properties of each liquid. Record your observations in the chart below.

<table>
<thead>
<tr>
<th>Properties</th>
<th>Milk</th>
<th>Vinegar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior after shaking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **Observe**  Tightly cover the jar of milk, shake it vigorously, and set it on your work surface. Observe how the milk returns along the sides to the bottom of the jar. Record your observations below.

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4. **Record Data**  Repeat step 3 with the jar of vinegar. Record your observations below.

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5. **Experiment**  Uncover the jars and carefully pour a small amount of vinegar into the milk. Observe the interaction of the two liquids. Record your observations below.

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**Student Resources**

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6. **Experiment**  Pour the rest of the vinegar into the milk. Stir the mixture and allow it to settle. Record your observations below.

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**Conclusion**

Write the answers to the questions below.

1. **Compare**  Compare and contrast the properties of milk and vinegar.

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2. **Hypothesize**  What happened when the milk and vinegar were mixed? Form a hypothesis that answers this question.

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**Investigate More!**

**Design an Experiment**  Try the experiment with different substances, such as lemon juice, baking soda, water, and salt. Compare the results with those obtained when vinegar is mixed with milk.