Acid Test

Procedure

Safety: Do not taste any of the liquids. Wear goggles as you perform the procedure.

1. Predict Predict whether each of the following liquids is an acid or a base: vinegar, solution of baking soda, lemon juice, apple juice, and ammonia solution. Record your predictions.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Prediction</th>
<th>Color Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinegar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baking soda solution</td>
<td></td>
<td></td>
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<tr>
<td>Lemon Juice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple Juice</td>
<td></td>
<td></td>
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<tr>
<td>Ammonia Solution</td>
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</tbody>
</table>

2. Observe Using a stirring rod, place one small drop of vinegar on a piece of blue litmus paper and one small drop on red litmus paper. Observe and record any color changes. Rinse and dry the stirring rod.

3. Observe Repeat step 2 for the other liquids. Remember to use fresh pieces of litmus paper for each liquid.

4. Experiment Drop a pinch of baking soda into a small sample of vinegar. Observe the results.
Conclusion

1. **Classify** Blue litmus paper turns red in the presence of an acid. Red litmus paper turns blue in the presence of a base. Classify each liquid as an acid or a base.

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2. **Infer** Based on your observations, do you think foods that contain acids taste sour or bitter?

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3. **Infer** How do acids and bases react with each other? Give an example from your observations.

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Experiment

Repeat step 4 of the procedure, then place the sample in sunlight. Observe what remains after the liquid evaporates. **Ask questions** about this substance. How might you identify it?

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