Making Changes of Matter

Learn about two different kinds of changes of matter and learn to recognize them.

NOTE: An adult helper is needed for these investigations.

Materials and Tools:

- matches
- candle
- toaster
- salt
- table knife
- 2 egg whites
- lemonade powder
- water
- mixing bowl
- vinegar
- table or countertop
- baking soda
- spoons
- 6 small dishes
- cookie
- slice of bread
- egg beater
- ice cube
- alcohol
- aluminum foil
- antacid tablet
- data sheet

A CHEMICAL CHANGE is a change that results in a new substance

A PHYSICAL CHANGE is a change in size or appearance only
Directions:

- Using materials from the list, perform the tasks on the data sheet.

- For each one, examine the results and draw your own conclusions to decide whether the change was physical or chemical.
Does it change size or shape?

Has the appearance changed? Does it look different?

Has the substance itself (the actual stuff) changed into something different?
## Activity Data Sheet

### Making Changes

Put an “X” in each box on the right that describes the change. Then decide what kind of change happened. Write in “P” for physical changes and “C” for chemical changes.

<table>
<thead>
<tr>
<th>Physical or Chemical?</th>
<th>Size or Shape?</th>
<th>Appearance</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mix Vinegar + Baking Soda</td>
<td></td>
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<tr>
<td>Burn a match</td>
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<tr>
<td>Toast bread until it's burned</td>
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<tr>
<td>Mix lemonade + water</td>
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<tr>
<td>Melt an ice cube</td>
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<tr>
<td>Burn a wax candle</td>
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<tr>
<td>Set a few drops of water in a dish overnight</td>
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<td></td>
</tr>
<tr>
<td>Set a few drops of alcohol in a dish overnight</td>
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<tr>
<td>Crumple a square of foil into a ball</td>
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<tr>
<td>Beat egg whites 7 minutes</td>
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<tr>
<td>Slice a cookie in 4 pieces</td>
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<td></td>
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<tr>
<td>Drop antacid tablet in water</td>
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<td></td>
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</tbody>
</table>