What colors can you get?

Acids, bases, and pH
Scientists measure acids and bases using a scale that goes from 0-14, called the pH scale. Different acids and bases fall at different places along the scale.

<table>
<thead>
<tr>
<th>Acids (Lime, vinegar, lemon)</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control (Un-altered)</td>
<td>7</td>
</tr>
<tr>
<td>Bases (Baking soda, soap, soda ash)</td>
<td>14</td>
</tr>
</tbody>
</table>

Why does the color change?
Molecules in red cabbage, called anthocyanins, are sensitive to the pH of their environment. Changes in pH affect the molecule's shape. This alters how they interact with light, making them a different color!

What else might impact my colors?
In addition to the acids and bases you add, paint colors can also be affected by the chemistry of your water source, ingredient choices, type of paper, and even variation between cabbages!

Learn More
Why is Red Cabbage Special?
Check out Cabbage Inks on The Tech Interactive at Home