

## Lesson 9 Acids and Bases Activity

**Acid:** a group of chemical substances that have similar properties when dissolved in water. Some of the properties they share are sourness and the ability to dissolve metals and conduct electricity. Acids include the numbers 1-6 on the pH scale.

**Base:** a group of chemical substances that have similar properties when dissolved in water. Some of the properties they share are bitterness, slipperiness or oiliness, and the ability to conduct electricity. Another word for base is alkali. Bases include the numbers 8-14 on the pH scale.

**Neutral:** a 7 on the scale; balanced

Predict whether each item will be an acid or a base. **YOU MUST PREDICT FOR ALL SUBSTANCES BEFORE STARTING.**

1. Dip an indicator strip half way into the cup labeled vinegar.
2. Pull out strip and compare it to the indicator chart.
3. Record the color you see in the cup and the pH number that matches that color. Record the number.
4. Write whether the substance is an acid, a base, or a neutral based on the number.
5. Repeat steps 2-5 with each substance listed below.

Substance tested	Prediction: Acid, Base, or Neutral?	Color with pH indicator	pH number according to scale	Results: Acid, Base, or Neutral?
Vinegar				
Tap water				
Liquid soap				
Lemon juice				
Baking soda solution				
Shampoo				
Antacid				
Cream of tartar				
Ammonia				