Name: Date: pd:

Unit 10: Water

Acids and Bases

In this activity you will be scientifically classifying many common items as being either acidic or basic. Answer the questions below, and then, based on what you already know about these items, predict if they are acids or bases.

1. What are the defining characteristics of an acid?

2. What are the defining characteristics of a base?

Materials Needed:

Samples of the following:

- Vinegar
- Orange Juice
- Rainwater
- Ammonia
- Baking Soda
- Antacids
- Coca-Cola
- Tap Water
- Coffee
- Egg
- Salt Water
- Sugar Water
- Laundry Detergent
- pH indicator paper

Safety Precautions:

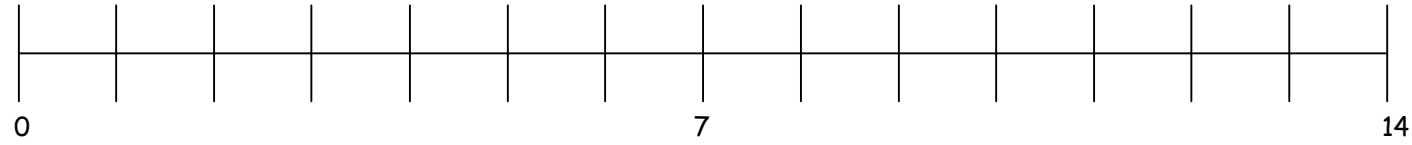
- Goggles must be worn at all times
- Do not mix any of these substances
- Do not taste any of these substances

To Do:

- Based on what you already know about these items, classify them as an acid or a base in the table below.

Predictions:	
Acids	**Bases**

- Using your pH indicator, take the pH of each substance and label each substance on the scale below.



Questions:

- How did your predictions compare to your actual results? Did any of your results surprise you?
- What was the most acidic and most basic substance that you tested?
- How many more times acidic is your most acidic substance compared to your most basic substance?