

Materials

- 6 dull pennies
- 5 cups
- Water
- Dish soap
- Lemon juice
- Baking soda
- Vinegar
- Paper towels

Click the coin below to learn more about pH!









Students will learn about the pH scale and which pH balance is best at cleaning oxidized pennies.

6th - 8th Grade

Directions

- 1. Click the image to the left and watch the BrainPop video about the pH scale. Determine whether the liquids in this experiment are bases, acids, or neutral.
- 2. In one cup mix together water and baking soda to create a thick liquid. In another cup mix together water and dish soap.
- 3. In the remaining cups, fill one with water, one with lemon juice, and one with vinegar.
- 4. Place 1 penny in each cup. Leave one to the side as the control penny.
- 5. Leave the pennies in the cups for at least 10 minutes. Take them out and dry with paper towels. Make sure to record which liquid the penny was soaking in.

Additional Questions

- 1. Which liquid was able to clean the pennies the best? Why do you think it was the best?
- 2. Was the best cleaning liquid an acid, base, or neutral?

