

# Cleaning Pennies

## **Action**

Dirty pennies will become clean again.

## **Grade Level**

Grade 6 - Chemicals and Reactions

Grade 8 - Solutions

Grade 9 - Chemistry and You

Grade 10 - Chemical Change

## **Materials**

- Several dirty pennies
- Salt (NaCl)
- White vinegar (acetic acid)
- Small clear glass bowls or dishes (petri dishes work too)
- A beaker of water (250 ml is enough)

## **Instructions**

- Fill one of the small bowls half full with vinegar. Stir in approximately 1/2 teaspoon of salt. (Note: The more salt present in the solution, the faster the reaction will be.)
- Place the pennies in the vinegar and salt solution. Wait until they are clean and then rinse them in the water.

## **Safety**

No safety concerns, except do not drink the vinegar solution, especially after cleaning pennies.

## **Hints**

Make sure to rinse the pennies off in the water or a blue residue will be left behind.

## **Science Principle**

This experiment demonstrates a chemical reaction. The vinegar and salt react with the topmost layer of copper on the penny. This removes the dirt and top layer of copper leaving a clean layer of copper exposed.