

# The Leprechaun's Shiny Gold

The Goal: To use a "magic" potion to strip away the dull "grime" on old pennies to reveal the bright, shiny copper underneath.

## Materials Needed

- Dull, dirty pennies (the older and browner, the better!)
- White Vinegar (The "Magic Potion")
- Salt (The "Magic Dust")
- A clear glass or plastic bowl
- Paper towels
- Water (for rinsing)



## Step-by-Step Process

- The Potion Mix: Pour about 1/4 cup of vinegar into your bowl and stir in 1 teaspoon of salt until it dissolves.
- The Prediction: Have students look at their dirty pennies. Ask: "What do you think will happen when we drop these in?"
- The Dip: Drop a few pennies into the liquid. You can even hold a penny halfway in for 10 seconds to see a "tan line!"
- The Reveal: After about 30 seconds, take the pennies out and rinse them in a bowl of plain water.
- The Shine: Pat them dry with a paper towel. They should be as bright and shiny as a new gold coin!

## How Does It Work?

Pennies are made of copper. Over time, the copper reacts with oxygen in the air to create Copper Oxide. This is the dull, brown stuff on the outside.

The Vinegar (an acid) and the Salt work together to dissolve the copper oxide. Once that brown layer is eaten away, you are looking at the pure, shiny copper that was hiding underneath all along!

Name \_\_\_\_\_

1. Which two ingredients were used to make the cleaning liquid?
  - a) Water and Sugar
  - b) Vinegar and Salt
  - c) Milk and Honey
  - d) Juice and Pepper
  
2. What is the name of the dull, brown "grime" that forms on pennies over time?
  - a) Copper Rust
  - b) Copper Oxide
  - c) Dirty Dust
  - d) Green Mold
  
3. What kind of substance is vinegar?
  - a) A metal
  - b) A base
  - c) A gas
  - d) An acid
  
4. Why did the pennies look "new" after being in the bowl?
  - a) The liquid dissolved the brown layer on top.
  - b) We painted the pennies with gold paint.
  - c) The salt turned the dirt into actual gold.
  - d) The water washed off the sticky juice.