

Penny Experiment

Ever wondered what an atom is? Atoms are tiny little particles invisible to the human eye and are basic building blocks of almost everything we can see, touch, feel and taste. Even *you* are made up of trillions and trillions of atoms. Some things, like pennies, are made up of only a *single kind of atom*. **Copper** used to

make pennies are made up mostly of **copper atoms**. When those **copper atoms** contact other atoms, sometimes they join together. A **copper atom** that sticks to an **oxygen atom** creates a **molecule** called **copper oxide**. This is what makes a bright and shiny penny look dirty when that penny is old.

This experiment will show you how to take apart the copper oxide from the penny.

1. Collect six old, tarnished pennies.
2. Fill six cups with the following, and remember to label them:
Vinegar + Salt, Lemon Juice, Cola, Ketchup, Soap + Water, Your choice of fluid!
3. Toss a penny into each cup and soak them for 10 minutes. **Which solutions do you think will work? Which ones won't work? Which will work best?**
4. Dry the pennies on a paper towel and answer the questions below.



Questions

Which penny is the shiniest?

Which penny is the dullest?

Which result surprised you?
