## Lab #3: Take a Penny, Leave a Penny

## **Pre-Lab Question:**

• Give an example of a single displacement reaction.

# Materials:

- 1982 pennies or before
- 25 ml Sodium Hydroxide
- Zinc Metal

## Procedure:

- 1. Take a penny and drop it into the near boiling sodium hydroxide and zinc mixture
- 2. Let it sit for about two minutes
- 3. Pull the penny out of the solution with a pair of crucible tongs and drop it into a distilled water beaker.
- 4. Record the appearance:
- 5. With the tongs, hold the penny over the Bunsen burner until you observe a color change.
- 6. Stop heating and let cool on the lab table.
- 7. Record the appearance:

## Procedure II:

- 1. Repeat the experiment...But change something (only one)
  - a. Leave in the solution a longer/shorter time.

- b. Heat penny longer/shorter time.
- 2. Summarize what happened:

# Post Lab: Leave Space to Answer

- 1. What do you call a mixture of copper and zinc?
- 2. What word is used for this mixture?
- 3. Could you turn other metals into gold if you did the right reaction? Why or why not. (Research about Alchemy).
- 4. Why do you think you go a different result the second time you did the experiment? Explain what you think happened.

### Summary – 1 Paragraph