

LAUNCH

M, 9/21/15

Directions: Open notes to the Golden Penny Lab.
Begin and entry with today's date:

What do you think happened to change the color of the penny...?

- 1) To silver?
- 2) To gold?
- 3) Do you think the penny you made is real gold? Why/Why not?
- 4) How could you find out using tools and techniques we have used in class?

Silver chemical reaction
between zinc (Zn) and
Copper and sodium hydroxide
evidence - zinc was blackish-grey

→ silver may be a coating
since it rubbed off
when the tongs touched.

Gold real gold is soft
gold on the penny wore off.

How could we prove it is
real gold.

density - is a physical
property unique to a
substance and can be
used to identify a substance.

$$\text{density}_{\text{gold}} = 19.32 \text{ g/mL}$$

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9/21/15
Period 5

Turned Silver because
of the Zinc and Sodium hydroxide.

— silver grey zinc

— Copper atoms on the Penny
reacted with something (Zn)
to form the silver penny.

Turned gold when we put
on the hot plate.

→ heat did something to the
silver penny —

silver color could be like a
coating — maybe copper underneath.

— heat broken down the coating
— maybe the gold color coating
is like bronze —

Cu and Zn \Rightarrow alloy.
(Copper)