Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class period: \_\_\_\_\_\_

Define:

Atomic Mass Unit:

Neutral Atom:

Isotope:

Atomic Mass:

Mass Number:

Who:

Discovered the proton?

Said the atom is mostly empty space?

First thought about atoms?

Provided the first experimental evidence of an atom?

Used deflection angle to describe the nucleus?

Said atoms combine in whole number ratios?

Did the cathode ray experiment?

What are the parts of Dalton’s Theory?

What is the charge and density (high or low) of an atom?

For the proton, neutron, and electron, where are they, what is their atomic mass units, and what are their charge?

Calculate the protons, neutrons, and electrons of a neutral atom of:

Br-77

H-4

F - 35

What was observed in the Cathode Ray experiment? What was concluded about the structure of an atom?

What three observations did Rutherford observe from the Gold Foil Experiment? What were the three conclusions?

1. The reactant is undergoing alpha decay
2. The reactant is undergoing beta decay
3. The reactant is undergoing gamma decay
   1. \*
   2. \*
4. I have 15 grams of Dy-160, with a half-life of 2 years, and ended with .46875g. How long was it decaying for?
5. If I started with 224 grams of Po-218, with a half-life of 3 years, and ended with 7 grams, how long was it decaying for?