

Name: _____

Date: _____

Notes: History of Atomic Theory

The Building Blocks of Matter

Who created the 1st periodic table of the elements? _____

What were elements thought to be made of during the 1860s?

How did many scientists of the 1800s think elements were different from one another?

The Cathode Ray Tube

What is emitted through a cathode ray tube? _____

How can you deflect these electrons through the CRT? _____

The Discovery of the Electron

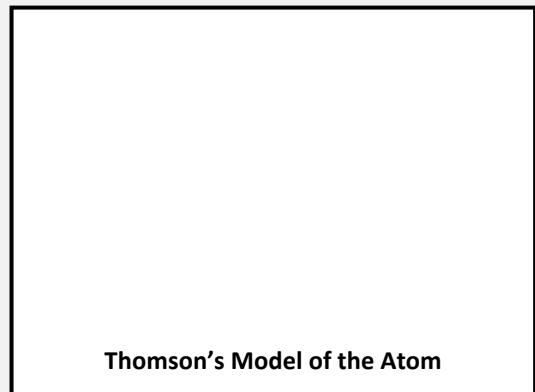
Who discovered the electron? _____

Other than magnets, what else can you use to bend a stream of electrons?

How does the mass of an electron compare to the lightest known atom?

The electron was the first of what kind of particle to be discovered?

Draw a diagram of Thomson's "bread pudding" model of the atom in the space to the right.



The Discovery of the Atomic Nucleus

What did Rutherford use to explore the structure of the atom?

What material did Rutherford use in his famous experiment? _____

If the atom had been exactly as Thomson had described, what should the beam of particles done? _____

What unexpected thing happened that suggested Thomson was not correct about the structure of atoms?

Why did some of the alpha particles shot at the gold not pass through the material?

Draw a diagram of Rutherford's atom to the right.

What makes up most of every atom, and therefore, most of everything we call matter?

What did Rutherford and Chadwick discover in 1932? _____

