

Atomic Theory Worksheet

**Historical Development of the modern model of the atom.**

Draw below the model of the atom proposed by the following individuals

Dalton (1800)

Thompson (1897)

Bohr (1913)

How did Thompson's model differ from Dalton's model?

The gold foil experiment resulted in two major discoveries which were made about the structure of the atom. What were they?

1.

2.

How is an atomic spectra produced? Use the terms ground and excited state electrons in your answer.

How does the Bohr model represent electrons around the central nucleus? Why (think of spectra)?

The modern model of the atom is called the wave mechanical model. In the wave mechanical model electrons are located around the nucleus based on the probability of finding an electron in a certain area. These areas are called

a. shells      b. orbitals      c. rings      d. waves