Name _____ Date _____ Class _____

Key Concept Builder **LESSON 1**

Discovering Parts of an Atom

Key Concept How has the atomic model changed over time?

Directions: *Complete the chart by writing the name of the person who developed each theory.*

Name of Developer	Theory
1.	• Atoms are small solid objects that cannot be divided, created, or destroyed. • Atoms are constantly moving in empty space. • Different types of matter are made of different types of atoms.
2.	• Empty space does not exist. • Matter is made of fire, water, air, and earth.
3.	• During a chemical reaction, atoms of one element cannot be converted into atoms of another element. • Atoms of one element are identical to each other and different from atoms of another element. • Atoms combine in specific ratios.
4.	• An atom is a sphere that contains positive and negative charges. • The positive charge is evenly spread throughout the atom. • Negatively charged electrons are mixed through the positive charge.
5.	• Most of an atom's mass and positive charge is concentrated in a small area in the center of the atom called the nucleus. • The nucleus contains positively charged particles called protons. • Negatively charged electrons move in the empty space surrounding the nucleus.
6.	• In addition to protons, the nucleus contains neutrons. • Neutrons are neutral particles that exist in the nucleus of the atom.
7.	• Electrons move in circular orbits, or energy levels, around the nucleus. • Electrons that are closer to the nucleus have less energy than electrons that are farther away from the nucleus.

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