

<p>Democritus proposed in 400 BCE:</p> <ul style="list-style-type: none"> Matter could be divided further and further until it no longer could be divided - he called it _____ Atomos means: _____ 	<p>Atomos =</p>
<p>John Dalton proposed in 1803:</p> <ol style="list-style-type: none"> All elements are composed of _____ particles called _____ Atoms of the _____ element are exactly alike Atoms of different elements are _____ Compounds are formed by joining atoms of two or more elements. 	<p>"Billiard Ball" Atomic Model</p>
<p>J J Thomson discovered _____ in 1897 He proposed that:</p> <ul style="list-style-type: none"> An atom was composed of a _____ charged material with _____ charged _____ scattered evenly throughout it. 	<p>"Cookie Dough" Atomic Model</p>
<p>Rutherford's Model (1908) Ernest Rutherford discovered the _____</p> <p style="text-align: center;">How? The Gold Foil Experiment</p> <ul style="list-style-type: none"> Some particles were _____ instead of passing right through as expected. Since alpha particles are positively charged, he proposed that a small region of positive charge in the atoms repelled them. Rutherford proposed that all the positively charged material in an atom formed a _____ called the _____ 	<p>Rutherford's Atomic Model</p>
<p>Niels Bohr added to Rutherford's model in 1913:</p> <ul style="list-style-type: none"> Electrons could only move in fixed regions or _____, instead of being able to move anywhere around the nucleus. For an electron to move from one energy level to another, it must absorb a specific amount of energy called a _____ 	<p>Bohr-Rutherford "Planetary" Atomic Model</p>

Atomic Models: Key Terms + Matching

A. Atom		a negatively charged particle within the atom
B. Electron		coined the term "Atomos", meaning indivisible
C. Subatomic Particle		the smallest particle of an element that retains the identity of the element
D. Nucleus		a positively charged particle that is part of every atomic nucleus
E. Proton		a particle that is smaller than the atom
F. Neutron		in chemistry, the positively charged centre of an atom
G. Bohr		came up with the "Billiard Ball" atomic model
H. Rutherford		added to Rutherford's model by proposing that electrons could only move in fixed regions called Energy Levels
I. Dalton		an uncharged particle that is part of almost every atomic nucleus
J. Thomson		came up with the "Cookie Dough" Atomic Model
K. Democritus		discovered the Nucleus using the Gold Foil Experiment