

- 1) 2500 years ago the Greek philosopher _____ and his pupil _____ were first to come up with the idea that matter was composed of _____ particles. They thought that if you cut something in half enough times you will eventually reach a _____ that can't be cut anymore. They gave these particles the name _____, which means _____ or _____.
- 2) The atomic theory as we know it today is the product of _____ if not _____ of different insights.
- 3) The French chemist Antoine _____ proposed the “_____ of Conservation of _____”. This law states that even though matter may change shape or form its _____ stays the same.
- 4) _____ stated that elements exist as discrete packets of _____.
- 5) Joseph John Thomson proposed the _____ are distributed randomly in a _____ charged matrix. He recognized this as a English dessert calling this the _____ model.
- 6) In 1909, a New Zealand scientist named Ernest Rutherford concluded that the entire positive charge in an atom particles must be concentrated in a very small area; this area, he called the _____. Rutherford also concluded most of the atom is _____ space, and he was correct.
- 7) In 1911, Niels Bohr travelled to _____ to study with Rutherford. Bohr's created model is sometimes called the _____ model. This model represents the _____ in orbits around a central _____. Each orbit can have a specific _____ of electrons.
- 8) Verner _____ got everyone to understand how huge the _____ problem was. He with other new wave Chemists and Physicists proposed the _____ Theory. This theory mentions that electrons are not _____ or waves. Instead they have properties of both and neither. There are regions where electrons are likely to be found called _____.
- 9) Even though after 2500 years we can't see them, we do know what they are like because a long succession of _____ contributed to the whole fantastic picture.