

## Unit 1 Subatomic Particles Test

1. Evaluate the importance of ions and isotopes when considering the electrical charge of atoms.
2. Describe the significance of sub-atomic particles on elemental identity.
3. Create a Bohr model of an average Hydrogen atom with a neutral charge. Particles should be represented by small circles. Charges should be indicated by symbol with the circles (+, -, 0). Electrons should be connected with a circular line in their appropriate orbits.
4. Create a Bohr model of an average Helium atom with a neutral charge. Particles should be represented by small circles. Charges should be indicated by symbol with the circles (+, -, 0). Electrons should be connected with a circular line in their appropriate orbits.
5. Create a Bohr model of an average Lithium atom with a neutral charge. Particles should be represented by small circles. Charges should be indicated by symbol with the circles (+, -, 0). Electrons should be connected with a circular line in their appropriate orbits.

6. Create a Bohr model of an average Carbon atom with a neutral charge. Particles should be represented by small circles. Charges should be indicated by symbol with the circles (+, -, 0). Electrons should be connected with a circular line in their appropriate orbits.

7. Create a Bohr model of an average Nitrogen atom with a neutral charge. Particles should be represented by small circles. Charges should be indicated by symbol with the circles (+, -, 0). Electrons should be connected with a circular line in their appropriate orbits.

8. Create a Bohr model of an average Oxygen atom with a neutral charge. Particles should be represented by small circles. Charges should be indicated by symbol with the circles (+, -, 0). Electrons should be connected with a circular line in their appropriate orbits.

9. Create a chart of sub-atomic particles classifying them by charge, mass, and location within the atom.

10. Create a Bohr model of a Hydrogen Ion with a charge of +1 . Particles should be represented by small circles. Charges should be indicated by symbol with the circles (+, -, 0). Electrons should be connected with a circular line in their appropriate orbits.

11. Create a Bohr model of Hydrogen Isotope with a neutral charge and an Atomic Mass of 2. Particles should be represented by small circles. Charges should be indicated by symbol with the circles (+, -, 0). Electrons should be connected with a circular line in their appropriate orbits.

12. Create a visual representation of the Dalton model of the atom and give a brief description of the key aspects of the model.

13. Create a visual representation of the Thompson model of the atom and give a brief description of the key aspects of the model.

14. Create a visual representation of the Rutherford model of the atom and give a brief description of the key aspects of the model.