**History of the Atom Project**

Using information from class discussion, text book, and internet, you are to create a timeline showing the development of the atomic model. Your time line must be computer generated and include each of the people, dates, pictures, and statements listed below. **Your job is to determine where each piece of information belongs and to show these pieces of information in chronological order, beginning at 450 B.C. and going to 1932.**

**People**

J.J. Thomson

Ernest Rutherford

Erwin Shrodinger

John Dalton

Democritus

Niels Bohr

James Chadwick

**Dates**

440 B.C.

1803

1897

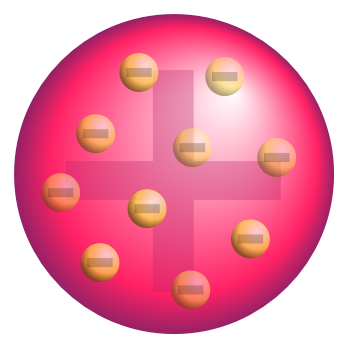
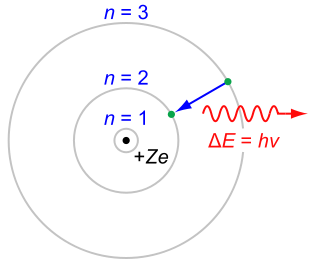
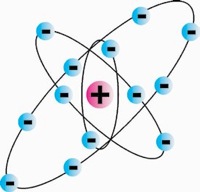
1911

1913

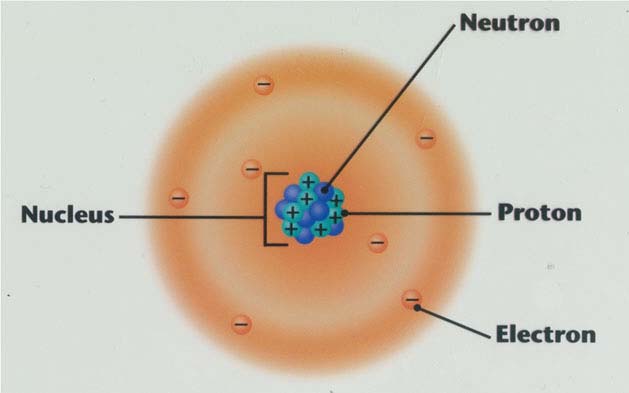
1926

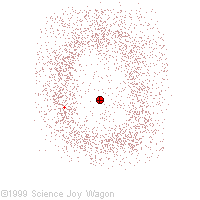
1932

**Pictures**







**Statements – 22 Total**

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| --- | --- |
| 1. All atoms of the same element have the same mass. | 12. Electrons move from one energy level to another. |
| 1. All elements are made of atoms. | 13. Electrons move in fixed orbits around the nucleus. |
| 1. Atoms always combine the same way to produce a compound. | 14. Electrons move randomly in the space around the nucleus. |
| 1. Atoms are uncuttable. | 15. Every electron has a specific amount of energy. |
| 1. Atoms cannot be divided. | 16. He conducted the cathode-ray tube experiment. |
| 1. Atoms contain negative particles called electrons. | 17. He conducted the gold foil experiment. |
| 1. Atoms of different elements have different masses. | 18. He provided the first evidence that atoms are made of smaller particles. |
| 1. Atoms of more than one element combine to form compounds. | 19. His model is called the “plum pudding” model of the atom. |
| 1. Different types of atoms have specific properties. | 20. Positive particles in the nucleus are called protons. |
| 1. Electrons do not move in predictable orbits. | 21. There is a small, dense, positively charged nucleus in the atom. |
| 1. Electrons exist in an “electron cloud.” | 22. Discovered the neutron. |