Atomic Time-line

Complete this worksheet using the information from your outline. The table below contains a number of statements connected to major discoveries in the development of atomic theory.

1. In each box, write the name of the scientist(s) associated with the statement. Choose from the list below. You will have to put some names in more than one box.

Democritus	Rutherford	Thomson
Dalton	Bohr	Schrödinger and Heisenberg

2. On a **separate piece of paper**, construct a time-line, and label the following: 440 B.C., 1803, 1897, 1911, 1913, and the twentieth century. Cut out the boxes below along the lines, and tape or glue each box of information on your time-line in chronological order (you can go sideways). Draw a line from the correct box to the proper time that the discovery happened in your time line.

There are small, negatively charged particles inside an atom. This theory of atomic structure became the "plum-pudding" model	Electron paths cannot be predicted
There is a small, dense, positively charged nucleus.	Electrons travel in definite paths
Most of an atoms mass is in the nucleus Atoms contain mostly empty space	Elements combine in specific proportions
Electrons jump between levels from path to path	Atoms are "uncuttable." Atoms of the same element are exactly alike. Atoms constantly move. Never experimented.
He conducted the cathode-ray tube experiment.	Electrons are found in electrons clouds, not paths.
Atoms are the smallest particle of a substance. Atoms combine to make different substances. He conducted experiments in combining elements.	He conducted the gold foil experiment.

3. Now find any 10 other important historical events and mark them in on your time-line to get an idea of what else was happening during that time.