

## Chemistry

### Chapter 4: Atomic Theory Timeline Project

**Purpose:** Students will learn how the understanding of the atom progressed throughout history and how scientific models change with the introduction of new evidence.

#### **Requirements:**

1) Create a timeline of atomic theory.

\*\*\*It must be an actual, physical timeline, not just an outline listing the events.

2) Include the following scientists:

Bohr	Chadwick	Dalton	Sir William Crookes
de Broglie	Democritus	Goldstein	
Rutherford	Schrodinger	Thompson	

3) Include the following information for each of the ten scientist:

- **Date** - What was the time or year of the scientist's work concerning the atom? (1 pt)
- **Observations/Experiments/Evidence** - Describe or explain what observation, evidence, or experiment the scientist used to devise his theory of the atom. (2 pts)
- **Discoveries/Conclusions** - Explain what discovery or conclusion the scientist came to about the atom. What was his atomic theory? (2 pts)
- **Contribution** - Explain how the scientist helped in the development of atomic theory. How did his work contribute to the theory? What did his experiment/discovery/conclusion do for the theory? Think about the larger picture and how the theory progressed as a result of his work. (2 pts)

4) Draw a diagram of the scientist's model of the atom for Democritus, Dalton, Thomson, Rutherford, Bohr, and Schrodinger. (2 pts. Each.)

5) You may use your Chapter 4 in the textbook, the library, the internet, or other credible sources to research the information needed to complete the timeline.

\*\*\*You must document your sources and include them on the project.

6) You may work alone or in groups of two.

**Grading: 100 points total for the project**

7 pts for each of the 10 scientist: 70 pts. Total

3 pts for each diagram: 18 pts. Total

12 pts for the physical timeline

**Due Date:**