

Physical Science

Atomic Model Evolution Timeline – due Tuesday, 11/26 in class*

Your assignment is to create a vivid “mini-poster” showing the timeline and evolution of our understanding of the “atom” from the initial view of Democritus (circa 400 BC) to one with protons and neutrons in a nucleus, and electrons in specific energy levels surrounding the nucleus. The mini-poster can be no larger than 18x24 inches. You may use any materials or marking devices you wish, but the mini-poster must be flat when complete.

At a minimum, it must include:

1. A graphic or pictorial representation of each distinctly different model of the atom as the idea evolved
2. A picture or drawing of who is generally credited with developing that particular view of the atom, including at least:
 - Democritus
 - John Dalton
 - J J Thomson
 - Ernest Rutherford
 - Neils Bohr
 - James Chadwick
3. A graphic or pictorial representation of how they came up with their improvement to the model
4. A clear sequence and approximate dates

A simple typed or clearly printed timeline with this information clearly and accurately presented in black and white will earn a Level 2 “C”.

You can earn more credit for:

- Including other relevant people who contributed to our understanding of atomic structure and their contributions at the appropriate times. Each of these must include the information listed above for credit.
- Providing additional relevant information about the individuals, models, or experiments above
- Presenting the information in a way that...
 - attracts attention
 - allows someone to get a high level understanding quickly and learn more details as desired

A mini-poster that earns a Level 1 “A” would be of the quality you would expect to find included with a modern textbook.

You may use any internet or other non-human resources you wish, but you must complete this assignment on your own. This means no help from your parents, even if you consider them non-human.

If you use information, ideas, graphics, photos, or any other materials from any resources other than your class notes, including the version of them posted on the class web site, you must cite these sources fully on a separate, typed sheet of paper, and clearly indicate what information was used from each. Failure to cite sources explicitly will result in no credit for that information. Full website URLs and the date accessed are acceptable as citations.

**20% deduction for every class day or part thereof late*