

Name _____

Due Date:

Atomic Theory & Structure Timeline Activity

100 points

Purpose:

To make an atomic theory and structure timeline (on construction paper), highlighting and discussing the main theories and/or discovery of subatomic particle (electron, proton, neutron) for the following people or ideas.

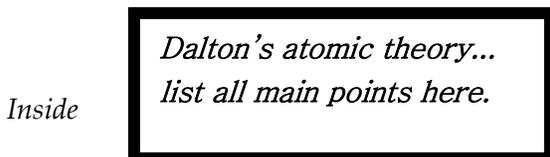
- Democritus
- Dalton/ Atomic Theory
- Lavoisier & Proust
- Thomson
- Millikan
- Rutherford
- Chadwick
- Bohr
- Moseley

Procedure:

1. Fold a piece of construction paper (hot dog; lengthwise).
2. On one of the flaps, use a ruler to neatly mark off nine (9) tabs.
3. Use scissors to make the eight (8) cuts on the one flap to create the divided tabs.
4. On the outside of the tab (flap), write the person's name and the year(s) associated with that person. FOLLOW THIS EXAMPLE. This labeling should be NEAT and LEGIBLE. The tabs must be in chronological order, the oldest starting at the top.



5. On the inside of the tab (flap), write the information necessary to highlight and discuss the main theories and/or discovery the person is responsible for. FOLLOW THIS EXAMPLE. This labeling should be NEAT and LEGIBLE. If needed, you may type this information on computer, print and glue paper onto the appropriate location inside the timeline. It may be helpful to border highlight the inside box/tab to provide separation between the people and information.



6. Each person must turn a timeline in to receive credit. You may work in groups to research the information.

7. Complete the following information correctly – 1 pt each answer.

<i>Particle</i>	<i>Symbol</i>	<i>Electrical Charge</i>	<i>Relative mass (amu)</i>

8. Matching. Select the term (on the right) that best matches the phrase (on the left)—1pt each answer.

- | | |
|---|-------------|
| ___ symbolized by n^0 | A. Electron |
| ___ Discovered in 1932 | B. Proton |
| ___ caused deflection in the gold foil experiment | C. Neutron |
| ___ -1 charge | D. Nucleus |
| ___ no charge | |
| ___ center of the atom | |
| ___ contains nearly all the atom's mass | |
| ___ very small mass (less than 1 amu) | |

Rubric: Atomic Theory and Structure Timeline

CATEGORY	20 points	15 points	10 points	5 points
Number of Contributors	Timeline includes all 9 listed contributors in the development of the structure of the atom and atomic theory.	Timeline includes 7-8 contributors to the development of the structure of the atom and atomic theory.	Timeline includes 5-6 contributors to the development of the structure of the atom and atomic theory.	Timeline includes 4 or fewer contributors to the development of the structure of the atom and atomic theory.
Labels of Tabs	Every tab (9) that needs to be identified has a label. It is clear which label goes with the correct person.	Almost all tabs (7-8) that need to be identified have labels. It is clear which label goes with the correct person.	Most tabs (5-6) that need to be identified have labels. It is clear which label goes with the correct person.	4 or less of the tabs that need to be identified have labels OR it is not clear which label goes with the correct people (on any tab).
Accuracy of Facts	Facts were accurate for all (9) events or accomplishments reported on the timeline.	Facts were accurate for almost all events (7-8) or accomplishments reported on the timeline.	Facts were accurate for 5-6 events or accomplishments reported on the timeline.	Facts were often inaccurate for events reported on the timeline; 4 or less events or accomplishments correct.
Readability	The overall appearance of the timeline is pleasing and easy to read.	The overall appearance of the timeline is somewhat pleasing and fairly easy to read.	The timeline is relatively readable.	The timeline is difficult to read.