## Science 8 Scientist Research Project

Name\_\_\_\_\_ Date\_\_\_\_\_

The discovery of the atom has a rich and complex history, filled with fascinating ideas, experiments, debates, and human drama. In this activity, you will research the work of some of the most brilliant scientists in history.

## What to Do

- 1. Select a name from the list that follows.
- 2. You need to find out who these person was and how he/she contributed to the theory of the atom
- 3. Questions to try to answer in your research
  - a. Where did he/she live?
    - b. When did he/she live?
    - c. What new information did he/she contribute to our understanding of the atom?
      - i. What was the accepted idea or world view before?
      - ii. How did he/she find this new information?
    - d. What experiment(s) did they do?
      - i. What were the results of the experiment?
    - e. How did this information affect our understanding of the atom?
- 4. For your presentation, you may choose to
  - a. Write a summary of up to 500 words.
  - b. Create a PowerPoint presentation, explaining what you have found.
  - c. Create an information poster including your own drawings or photographs with captions.
  - d. If you have another idea for a presentation, please see me first to discuss it.
- 5. You must
  - a. Include your notes with your presentation
  - b. Document you resources using APA format including in-text citations
  - c. Include a reference list using APA format
- Aristotle
- Democritus
- Isaac Newton
- Robert Boyle
- Antoine Lavoisier
- John Dalton
- Michael Faraday
- Joseph Priestley
- Jöns Berzelius
- Joseph Louis Proust
- Dmitri Mendeleev
- Albert Einstein
- Robert Millikan
- William Crookes
- Henry Moseley

- J. J. Thomson
- Hans Geiger
- Ernest Rutherford
- Harriet Brooks
- Niels Bohr
- Henri Becquerel
- Marie Curie
- Max Planck
- James Chadwick
- Louis de Broglie
- Werner Heisenberg
- Richard Feynman
- Murray Gell-Mann
- Gerd Binnig
- Heinrich Rohrer

Criterion D: Reflecting on the impact of Science (Year 3)				
8-7	6-5	4-3	2-1	0
<b>describe</b> the ways in which science is applied and used to address a specific problem or issue	summarize the ways in which science is applied and used to address a specific problem or issue	outline the ways in which science is used to address a specific problem or issue	state the ways in which science is used to address a specific problem or issue	Not met any of the descriptors listed
<b>discuss</b> and analyze the implications of using science and its application to solve a specific problem or issue, interacting with a factor	<b>describe</b> the implications of using science and its application to solve a specific problem or issue, interacting with a factor	<b>outline</b> the implications of using science to solve a specific problem or issue, interacting with a factor	state the implications of the use of science to solve a specific problem or issue, interacting with a factor	Not met any of the descriptors listed
<b>consistently</b> apply scientific language to communicate understanding clearly and precisely	<b>usually</b> apply scientific language to communicate understanding clearly and precisely	sometimes apply scientific language to communicate understanding	apply scientific language to communicate understanding but does so with <b>limited</b> success	Not met any of the descriptors listed
document sources <b>completely</b> .	<b>usually</b> document sources correctly	sometimes document sources correctly	document sources, with <b>limited</b> success.	Not met any of the descriptors listed

Criterion D: Reflecting on the impact of Science (Year 3)