

Hi there!

I'm glad you're using this resource. Continue to check our website (realsciencechallenge.com) to find more resources. And, sign up for our newsletter to receive updates on materials that will be available soon.

I spend countless hours writing, researching, editing and generating graphics/charts for each question. I want to continue creating useful content for you to use - however, I also want to ensure my work is fairly compensated.

Therefore, below are the terms and conditions for use of our materials.

What is allowed:

- photocopying our content for your students to use.
- posting a copy of our content (ie. questions, rubrics) on a password protected site for your students to access and/or complete.
- copying our questions into your tests or assignments. Please give credit in this case.

What is not allowed:

- Selling our content.
- Repackaging our content in your own materials and then selling it. NOTE: giving credit to us still does not make this okay.
- Distributing and/or posting our content online (for example, on social media or a blog).

Thank you for supporting us. And, we look forward to helping you with your teaching practice. Please feel free to reach out to us if you have any questions or suggestions.

Sincerely,

Kent
REAL Science Challenge Founder
Science Department Head (Burnaby South Secondary)

The key to ensuring there's no grade inflation while using SBA is to:

1. Be intentional with what you're looking for when assessing each competency, and
2. Have a good rubric.

For example, for me, communication is assessed by how well students are able to write an argument using Claim Evidence and Reasoning.

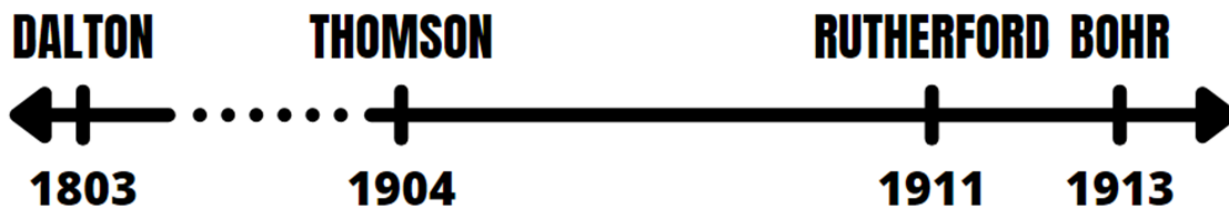
	Emerging	Developing	Proficient	Extending
Characteristics	<i>[Claim] Provides an opinion or argument statement.</i>	<i>[Evidence] Provides a summary of key data, trends, observations.</i>	<i>[Reasoning] Provides scientific explanations of how data and observations support the argument.</i>	<i>[Rebuttal] Offers a counter argument that is addressed and proven false..</i>
Included Keywords	<i>"I believe..."</i>	<i>According to the data...</i>	<i>...because...</i>	<i>However... On the other hand...</i>

See sample below.

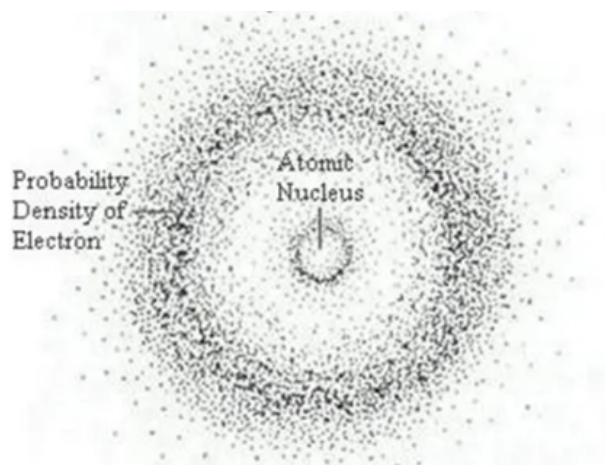
Sample Question - Atomic Theory

Category: Communicating

Dalton, Thomson, Bohr, and Rutherford all contributed to the model of the atom. Consider the timeline below, which outlines the years in which each scientist proposed their revised model of the atom.



Consider the following scenario: Chad is a librarian at a university. One day, Chad finds an old science textbook – but it doesn't say what year it was published. He opens the textbook and finds this illustration for the model of the atom (see right).



What time period do you believe the book was published?

- A. Before 1803
- B. Between 1804 and 1903
- C. Between 1905 and 1910
- D. 1912
- E. After 1913

Explain. Be sure to use the CER format in your response.

Sample Student Response - Developing

The book was published in 1912. The diagram shows a model of an atom with a nucleus and electrons surrounding the nucleus.

Sample Student Response - Proficient

The book was published after 1913. The diagram shows a model of an atom with a nucleus and electrons in an orbital surrounding the nucleus. It was Rutherford who proposed that atoms had a nucleus. And, it was Bohr who proposed that electrons in atoms were held in orbits around the nucleus. The diagram would have been created after Bohr published his findings in 1913 and, therefore, the textbook containing this new model would have been pushed after 1913 as well.