Atomic Theory History Jigsaw Activity

Direction: students will be split into groups of five, with any remainders joining groups larger than five. These are you “Jigsaw Groups.” Within your groups, number off one through five. Next, groups will split up and each member will become an expert in one aspect of the topic. For this activity, each member will become an expert on one atomic model from history. After numbering off one through five, find all other students in the classroom who shares that number. These will be your “Expert Groups.” In your Expert Group, research the assigned topic and answer the following questions:

1. Who or what is your model named after?
2. When was your model first described?
3. Give a description of the main features of your atomic model.
4. What scientific experiment or evidence supported the adoption of your model?
5. Draw a diagram showing the main features of your atomic model.

After meeting with your Expert Groups, return to your Jigsaw Groups and present your findings to your group-mates. By the end of the activity, all members in each Jigsaw Group should have learned all five topics.

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| **MODEL: Greek Model and Dalton Model** |  |
| Who or what is your model named after? |  |
| When was your model first described? |  |
| Give a description of the main features of your atomic model.  |  |
| What scientific experiment or evidence supported the adoption of your model? |  |
| Draw a diagram showing the main features of your atomic model.  |  |
| **MODEL: Thomson Model**  |  |
| Who or what is your model named after? |  |
| When was your model first described? |  |
| Give a description of the main features of your atomic model.  |  |
| What scientific experiment or evidence supported the adoption of your model? |  |
| Draw a diagram showing the main features of your atomic model.  |  |
| **MODEL: Rutherford Model** |  |
| Who or what is your model named after? |  |
| When was your model first described? |  |
| Give a description of the main features of your atomic model.  |  |
| What scientific experiment or evidence supported the adoption of your model? |  |
| Draw a diagram showing the main features of your atomic model.  |  |
| **MODEL: Bohr Model**  |  |
| Who or what is your model named after? |  |
| When was your model first described? |  |
| Give a description of the main features of your atomic model.  |  |
| What scientific experiment or evidence supported the adoption of your model? |  |
| Draw a diagram showing the main features of your atomic model.  |  |
| **MODEL: Electron Cloud Model**  |  |
| Who or what is your model named after? |  |
| When was your model first described? |  |
| Give a description of the main features of your atomic model.  |  |
| What scientific experiment or evidence supported the adoption of your model? |  |
| Draw a diagram showing the main features of your atomic model.  |  |

**Turn in when you have all five models.**