

Models of the Atom Exit Quiz

1. Match the Scientist with the discovery that they made.

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| a. Neils Bohr | i. Atoms of a particular element were identical |
| b. Ernest Rutherford | ii. Electrons could behave like waves as well as particles |
| c. Erwin Schrödinger | iii. That the atom was mostly empty space |
| d. J.J Thomson | iv. The arrangement of electron orbitals |
| e. John Dalton | v. The electron |

2. What conclusion can be drawn from the fact the atomic model continues to be updated?

- a. Scientists are still discovering new information about atoms.
- b. Old information about atoms is has no use.
- c. Scientists did not have any information about atoms until very recently.
- d. Scientists like to confuse everyone.

3. Why did Rutherford's gold foil experiment show that the atom is mostly empty space?

- a. All of the alpha particles passed directly through the foil.
- b. All of the alpha particles were deflected at large angles.
- c. Some of the alpha particles were deflected at large angles.
- d. Most of the alpha particles passed straight through the foil.

4. Place the following scientists in order, from earliest to latest:

1. Ernest Rutherford; 2. J.J. Thomson; 3. John Dalton

- a. 1, 3, 2
- b. 2, 3, 1
- c. 3, 2, 1
- d. 3, 1, 2