

# Models of the Atom Exit Quiz

## Teacher Edition

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

- |                      |  |
|----------------------|--|
| 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?

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

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

- All of the alpha particles passed directly through the foil.
- All of the alpha particles were deflected at large angles.
- Some of the alpha particles were deflected at large angles.
- 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

- 1, 3, 2
- 2, 3, 1
- 3, 2, 1
- 3, 1, 2

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Answers: a/iv, b/iii, c/ii, d/v, e/i

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- b. 2, 3, 1
- c. 3, 2, 1
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Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

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