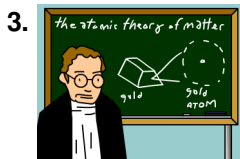


1. How do scientists know how atoms are structured?

- a. By looking at them under a microscope.
- b. By running experiments that expose their properties.
- c. By examining only the largest atoms.
- d. By splitting them apart.

2. What can you conclude from the fact that scientists continue to update the atomic model?

- a. New information about atoms continues to be discovered.
- b. Old information about atoms is completely useless.
- c. Scientists did not have any information about atoms until a few years ago.
- d. Scientists still have no idea what atoms look like.

**3. What contribution did John Dalton make to atomic theory?**

- a. He discovered that every atom was positively charged.
- b. He discovered that every element consisted of one type of atom.
- c. He discovered that atoms had nuclei.
- d. He discovered that atoms could be divided into smaller parts.

4. Place the following scientists in order, from earliest to latest: A) Ernest Rutherford; B) J.J. Thomson; C) John Dalton

- a. B, C, A
- b. C, A, B
- c. A, C, B
- d. C, B, A

5. The majority of an atom's mass exists where?


- a. In the nucleus
- b. In the electron cloud
- c. In the space between the nucleus and the electrons
- d. In the neutrons

6. What are electrons?

- a. Positively charged particles
- b. Neutrally charged particles
- c. Negatively charged particles
- d. Uncharged particles

7. Ernest Rutherford discovered that atoms were mostly:

- a. Negatively charged
- b. Positively charged
- c. Electrons
- d. Empty space

8.  What does the nucleus of an atom contain?

- a. Electrons and neutrons
- b. Protons and neutrons
- c. Neutrinos and positrons
- d. DNA and RNA

9. How are neutrons different from protons and electrons?

- a. They are more massive than protons and electrons.
- b. They have no electrical charge.
- c. They are less massive than protons and electrons.
- d. Protons and electrons exist in atomic nuclei; neutrons orbit the nucleus in a "cloud."

10. How are electrons arranged in an atom?

- a. In groups of five
- b. In energy levels
- c. By color
- d. By shape