

Assessment

Quiz**Section: The Development of Atomic Theory**

In the space provided, write the letter of the term or phrase that best completes each statement or best answers each question.

- _____ 1. Democritus's original atomic theory was revised because it
a. claimed matter is made of atoms. c. explained what electrons are.
b. claimed atoms could be divided. d. did not have a scientific basis.
- _____ 2. Which of these statements is *not* part of Dalton's atomic theory?
a. Atoms cannot be divided.
b. Atoms of an element are alike.
c. Atoms are made of electrons.
d. Atoms of different elements form compounds.
- _____ 3. A subatomic particle that has a negative charge is called a(n)
a. molecule. c. element.
b. electron. d. compound.
- _____ 4. Who determined that atoms could be divided?
a. Democritus c. Dalton
b. Thomson d. Rutherford
- _____ 5. Thomson made his discovery about the atom during an experiment using
a. thermal energy. c. cathode rays.
b. kinetic energy. d. X rays.
- _____ 6. Thomson is responsible for discovering that an atom contains
a. electrons. c. anodes.
b. molecules. d. a nucleus.
- _____ 7. Which of the following statements *not* true?
a. Protons have a positive charge. c. Neutrons have no charge.
b. A nucleus has a positive charge. d. Neutrons have a negative charge.
- _____ 8. What is an atom's nucleus made of?
a. protons and neutrons c. only neutrons
b. only protons d. anodes
- _____ 9. In _____ atomic model, negative electrons orbit the positively charged nucleus.
a. Dalton's c. Rutherford's
b. Thomson's d. Democritus's
- _____ 10. Whose model determined that an atom's positive charge is concentrated in the atom's center?
a. Rutherford's c. Democritus's
b. Dalton's d. Thomson's