

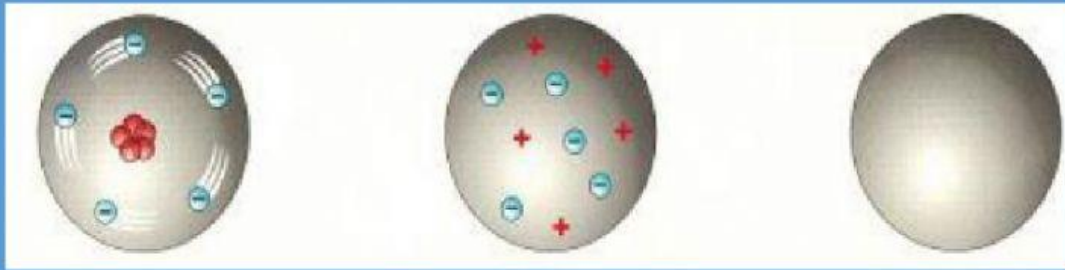
Chapter 4 Atomic Structure

4.1 Studying the atom

Answer the following questions:

1. The first Greek scientist who named the smallest particle of matter as atom was
2. The word atom or atomos means
3. **True / False:** Dalton gathered evidence for the existence of atoms by studying gases.
4. check all the letters that represents the main points of Dalton's theory of atoms:
 - a) All elements are composed of atoms
 - b) In a compound, atoms of different elements always combine in the same way
 - c) All atoms have the same mass
 - d) Compounds contain atoms of more than one element
5. . Objects with like electrical charges, and objects with different charges
.....
6. In Thomson's Cathode ray experiment, the glowing beam deflected the positively charged plate.
7. Thomson concluded that the particles of the glowing beam have Charge.
8. **True/False:** Thomson's experiment provided the 1st evidence of subatomic particles in an atom.
9. Rutherford used Alpha particles that carries a charge.
10. According to Rutherford, most of alpha particles passes in a straight path because the atom is
.....
11. Chose the letter of the sentence that states what Rutherford concluded from his experiment:
 - a) An atoms negative charge is concentrated in the nucleus
 - b) Thomson's model of the atom was correct.
 - c) An atom's positive charge is concentrated in its nucleus.
 - d) An atom's positive charge is spread evenly throughout the atom.

12. Match the model of an atom with the scientist:



Dalton

Rutherford

Thomson