



## Unit 2 Reading Assignment

4. Match the following terms to their definitions

Atomic Number	The number of protons in an atom
Mass Number	The mass of an atom
Atomic Mass	The number of protons and neutrons in an atom

5. Fill in the blanks

According to Dalton's Postulates

A compound consists of [\_\_\_\_\_] of two or more elements combined in a small, [\_\_\_\_\_-] number ratio. For a given compound, the atoms are always present in the same [\_\_\_\_\_].

6. Match the laws to their definitions

Law of Constant Proportions	The elements of a compound are present in fixed proportions
Law of Conservation of Mass	Mass is neither created or destroyed

7. Match the historical experiment to the result

J.J. Thompson's Cathode Ray Experiment	Determined the charge on the electron
R.A. Millikan's Oil Drop Experiment	Observed electrons and determined the charge to mass ratio
Rutherford's Gold Foil Experiment	Demonstrated the existence of the nucleus of the atom

8. Fill in blanks with either "protons", "electrons", or "neutrons"

Isotopes are atoms that contain the same number of [\_\_\_\_\_] but different numbers of [\_\_\_\_\_]

9. Which of the following are true statements for ionic compounds?

- Composed of a metal and a nonmetal
- Solids with high melting temperatures
- Conduct electricity when melted
- Formed by transferring electrons
- Composed of all nonmetals
- Formed by sharing electrons

10. Fill in the blanks

An anion has [\_\_\_\_\_] electrons to become [\_\_\_\_\_] charged

A cation has [\_\_\_\_\_] electrons to become [\_\_\_\_\_] charged