


Chemistry Content Standards:

The conservation of atoms in chemical reactions leads to the principle of conservation of matter and the ability to calculate the mass of products and reactants.

Standard 3b. Students know the quantity one mole is set by defining one mole of carbon 12 atoms to have a mass of exactly 12 grams.

Standard 3c. Students know one mole equals 6.02×10^{23} particles (atoms or molecules)

Standard 3d. Students know the how to determine the molar mass of a molecule from its chemical formula and a table of atomic masses and how to convert the mass of a molecular substance to moles, number of particles, or volume of gas at standard temperature and pressure.

- 10.1.1: Describe methods of measuring the amount of something
- 10.1.2 Define Avogadro's number as it relates to the mole
- 10.1.3 Define atomic mass and molar mass
- 10.1.4 Describe how the mass of a mole of a compound is calculated

Stamp:

Notes 10.1

Hand Out:

Vocabulary # 10

Lecture:

The Mole PPT.

Counting Atoms

- How many in a Mole?
Avogadro's number
- Mass of a Mole of Atoms
- Molar Conversions for Elements
- Molar Conversions for Compounds

Classwork :

Molar Mass Worksheet
Mole Calculation Worksheet

HWK:

WB 10.1
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