Chemistry 11 - Mole Crunching!

**1 mole = molar mass**

**Conversion Factors:**  **Mol or Molar mass**

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## Molar mass Mol

1. What is the molar mass of Ammonium nitrate (fertilizer)?
2. How many moles are there in a 25.0 kg bag of ammonium nitrate?
3. What is the mass of 2.07 x 10 -1 moles of ammonium nitrate?

4. What is the mass of 2.12 x 10 -3 moles of calcium carbonate (chalk)?

1. How many moles are there in 2.8 x 10 -2 g of hydrogen gas ? ***Remember that hydrogen is a diatomic gas.***
2. What is the mass of 2.3 x 10 2 moles of helium gas ? Remember that helium is not diatomic.
3. What is the mass of 2.03 moles of Iodine ? Iodine is not a gas at room temperature, but it is diatomic.
4. What is the mass of 1.033 mole of sodium acetate? This is the sour stuff in salt-and-vinegar potato chips.
5. How many moles are there in 0.089 g of sulfuric acid?

10. How many moles are there in 2.03 g of hydrochloric acid?