

Moles Worksheet

- 1) Define "mole".
- 2) How many moles are present in 34 grams of $\text{Cu}(\text{OH})_2$?
- 3) How many moles are present in 2.45×10^{23} molecules of CH_4 ?
- 4) How many grams are there in 3.4×10^{24} molecules of NH_3 ?
- 5) How much does 4.2 moles of $\text{Ca}(\text{NO}_3)_2$ weigh?
- 6) What is the molar mass of MgO ?
- 7) How are the terms "molar mass" and "atomic mass" different from one another?
- 8) Which is a better unit for expressing molar mass, "amu" or "grams/mole"?

Mole Calculation Worksheet

- 1) How many moles are in 15 grams of lithium?
- 2) How many grams are in 2.4 moles of sulfur?
- 3) How many moles are in 22 grams of argon?
- 4) How many grams are in 88.1 moles of magnesium?
- 5) How many moles are in 2.3 grams of phosphorus?
- 6) How many grams are in 11.9 moles of chromium?
- 7) How many moles are in 9.8 grams of calcium?
- 8) How many grams are in 238 moles of arsenic?

What are the molecular weights of the following compounds?

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| 9) NaOH | 12) H ₃ PO ₄ |
| 10) H ₂ O | 13) Mn ₂ Se ₇ |
| 11) MgCl ₂ | 14) (NH ₄) ₂ SO ₄ |