

Name : _____ Date : _____

Mole to Grams Conversions Worksheet

Answer the following questions.

- 1) Convert 5 moles of H_2O to grams.
- 2) Convert 3.5 moles of O_2 to grams.
- 3) Convert 2 moles of $\text{C}_6\text{H}_{12}\text{O}_6$ to grams.
- 4) Convert 2.4 moles of S to grams.
- 5) Convert 11.9 moles of Cr to grams.

Mole to Grams Conversions Worksheet

Answers

- 1) Convert 5 moles of H_2O to grams.

Molar mass of H_2O = 18 grams/mol
1 mole of H_2O weighs 18 grams
5 moles of H_2O weigh 90 grams

- 2) Convert 3.5 moles of O_2 to grams.

Molar mass of O_2 = 32 grams/mol
1 mole of O_2 weighs 32 grams
3.5 moles of O_2 weigh 112 grams

- 3) Convert 2 moles of $\text{C}_6\text{H}_{12}\text{O}_6$ to grams.

Molar mass of $\text{C}_6\text{H}_{12}\text{O}_6$ = 180.16 grams/mol
1 mole of $\text{C}_6\text{H}_{12}\text{O}_6$ weighs 180.16 grams
2 moles of $\text{C}_6\text{H}_{12}\text{O}_6$ weigh 360.32 grams

- 4) Convert 2.4 moles of S to grams.

Molar mass of S = 32 grams/mol
1 mole of S weighs 32 grams
2.4 moles of S weigh 76.8 grams

- 5) Convert 11.9 moles of Cr to grams.

Molar mass of Cr = 51.996 grams/mol
1 mole of Cr weighs 51.996 grams
11.9 moles of Cr weigh 618.75 grams