

### Molar Conversion Worksheet

*Hint:* -Start with the given value  
-Set up a conversion factor  
-Make sure your units are canceling

1. What is the mass of 1 mole of Barium acetate,  $\text{Ba}(\text{C}_2\text{H}_3\text{O}_2)_2$ ?
2. What is the molar mass (g/mol) of cyclohexanol,  $\text{C}_6\text{H}_{11}\text{OH}$ ?
3. How many moles are in 2.35 g of  $\text{H}_2\text{O}$ ?
4. If we have 0.072 g of  $\text{FeCl}_3$  then how many moles are there?
5. If there are  $9.6 \times 10^{15}$  particles of sugar in a solution then how many moles of sugar are there?
6. When there are 0.0314 moles of candy canes how many candy canes are there?
7. What volume (L) is 0.00353 moles of He gas at  $0^\circ\text{C}$  and 1.0 atm?
8. A gas at STP is 4.38 L, how many moles are there?
9. How heavy (g) will  $6.14 \times 10^{25}$  atoms of gold be?
10. How many atoms are there in 10.2 L of Ar gas at STP?