

**DIRECTIONS: FOR EACH PROBLEM. DRAG THE VALUES INTO THE CORRECT PLACES.
THEN, CALCULATE THE ANSWER (round to 3 decimal places)**

1. How many grams are in 6.3 moles of sulfur? **32.07 g** **6.3 moles** **1 mole** **6.02×10^{23} atoms**

$$\frac{\boxed{\hspace{2cm}}}{\boxed{\hspace{2cm}}} \times \frac{\boxed{\hspace{2cm}}}{\boxed{\hspace{2cm}}} = \boxed{\hspace{2cm}}$$

1

2. How many moles are in 7 g of carbon? **7 g** **1 mole** **12.01 g** **6.02×10^{23} atoms**

$$\frac{\boxed{\hspace{2cm}}}{\boxed{\hspace{2cm}}} \times \frac{\boxed{\hspace{2cm}}}{\boxed{\hspace{2cm}}} = \boxed{\hspace{2cm}}$$

1

3. How many atoms are in 7.1 g of sodium? **6.02×10^{23} atoms** **7.1 g** **1 mole** **22.99 g**

$$\frac{\boxed{\hspace{2cm}}}{\boxed{\hspace{2cm}}} \times \frac{\boxed{\hspace{2cm}}}{\boxed{\hspace{2cm}}} = \boxed{\hspace{2cm}}$$

1 **x** **1**

4. How many atoms are in 0.35 moles of aluminum? **6.02×10^{23} atoms** **1 mole** **0.35 moles** **26.98 g**

$$\frac{\boxed{\hspace{2cm}}}{\boxed{\hspace{2cm}}} \times \frac{\boxed{\hspace{2cm}}}{\boxed{\hspace{2cm}}} = \boxed{\hspace{2cm}}$$

1

5. How many moles are in 22,000,000 atoms of calcium? **22,000,000 atoms** **6.02×10^{23} atoms** **1 mole** **40.08 g**

$$\frac{\boxed{\hspace{2cm}}}{\boxed{\hspace{2cm}}} \times \frac{\boxed{\hspace{2cm}}}{\boxed{\hspace{2cm}}} = \boxed{\hspace{2cm}}$$

1