

1. How many atoms are in .5 moles?

a)  $8.3 \times 10^{-25}$  atoms

b)  $3 \times 10^{23}$  atoms

c)  $1.2 \times 10^{24}$  atoms

d)  $6.02 \times 10^{23}$  atoms

2. How many grams are in 3.8 moles of Calcium?

a) .095 grams

b) 10.52 grams

c)  $6.02 \times 10^{23}$  grams

d) 152 grams

3. How many moles are in 87 grams of Magnesium?

a) .27 moles

b) 3.6 moles

c) 2114.1 moles

d) 1 mole

4. What is the molar mass of  $\text{MgSO}_4$ ?

a) 120.3 grams

b) 72.3 grams

c) 64 grams

d)  $6.02 \times 10^{23}$  grams

5. How many grams are in .7 moles of  $\text{MgSO}_4$ ?

a) .006 grams

b) 171.9 grams

c) 10 grams

d) 84.21 grams

6. How many grams are in 3.5 moles of  $\text{BeF}_2$ ?

- a) 164.5 grams
- b) .07 grams
- c)  $3.5 \times 10^{26}$  grams
- d)  $2.7 \times 10^{-22}$  grams

7. How many moles are in 52.5 grams of  $\text{Na}_2\text{O}$ ?

- A) 3255 moles
- B) 1.2 moles
- C)  $1.24 \times 10^{24}$  moles
- D) .02 moles

8. How many moles are in 82 grams of  $\text{CaO}$ ?

- a) .7 moles
- b)  $8.8 \times 10^{23}$  moles
- c)  $2.5 \times 10^{-24}$  moles
- d) 1.5 moles

9. How many formula units are in 37 grams of  $\text{MgSO}_4$ ?

- a.  $2.2 \times 10^{25}$  formula units
- b.  $1.85 \times 10^{23}$  formula units
- c.  $7.4 \times 10^{-21}$  formula units
- d.  $1.9 \times 10^{24}$  formula units

10. What is the mass of  $4.2 \times 10^{25}$  molecules of  $\text{NO}_3$ ?

- a) 69.8 grams
- b) 4325.6 grams
- c)  $4.1 \times 10^{47}$  grams
- d) .9 grams