

# THE MOLE

Q1. Find the number of moles by using the formula.

$$\text{No. of moles} = \frac{\text{mass in grams}}{\text{relative formula mass}}$$

MASS IN GRAMS	NO. OF MOLES
12g of Mg	
2g of H <sub>2</sub>	
51g of NH <sub>3</sub>	
0.25g of C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	
25g of H <sub>2</sub> O	
134.6 moles of Li <sub>2</sub> O	
24.0 grams of FeF <sub>3</sub>	
458 grams of Na <sub>2</sub> SO <sub>4</sub>	
122 grams of NO <sub>2</sub>	
237 grams of CCl <sub>4</sub>	

(10 marks)

**Q2.** Calculate the mass in grams from the given moles by using the formula.

**Mass in grams = no. of moles x relative formula mass**

<b>MOLES</b>	<b>MASS IN GRAMS</b>
1 mole of carbon	
0.5 moles of HCl	
0.2 moles of CO <sub>2</sub>	
3.7 moles of Na <sub>2</sub> O	
4.8 moles of NaOH	
0.5 moles of CaCl <sub>2</sub>	
1.7 moles of H <sub>2</sub> O	
2 moles of Br <sub>2</sub>	
3.8 moles of C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	
5.3 moles of H <sub>3</sub> PO <sub>4</sub>	

(10 marks)