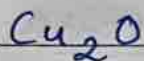
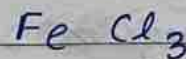
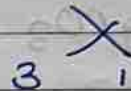


Derive the molecular formula:

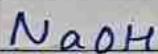
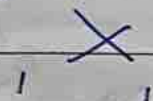
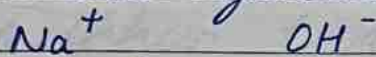
1. Copper oxide



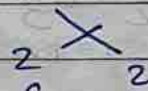
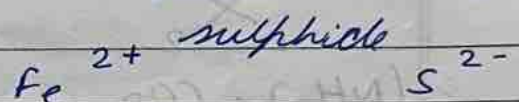
2. Iron(III) chloride



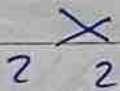
3. Sodium hydroxide



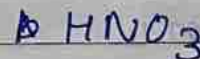
4. Iron(II) sulphide



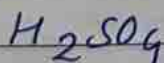
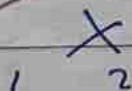
5. Lead(II) oxide



6. Hydrogen nitrate

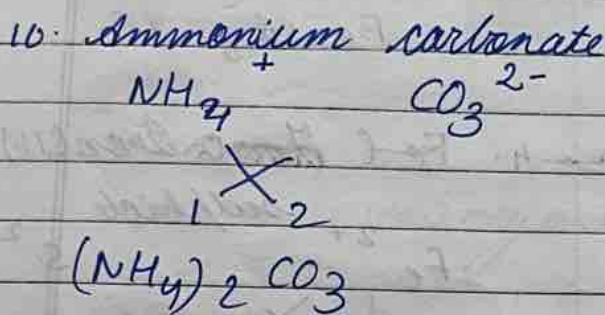
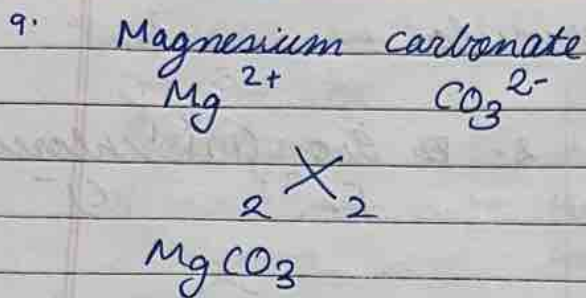


~~7. Hydrogen sulphate~~



8. Calcium hydroxide





27/4/23 Calculate the relative molecular mass of-

i) Water [atomic mass of H = 1, O = 16]

$$\begin{aligned} & \text{H}_2\text{O} \\ & = 2 \times 1 + 1 \times 16 \\ & = 18 \text{ a.m.u.} \end{aligned}$$

ii) Sodium Oxide

$$\begin{aligned} & \text{Na}_2\text{O} \\ & = 2 \times 23 + 1 \times 16 \\ & = 46 + 16 \\ & = 62 \text{ a.m.u.} \end{aligned}$$

~~[atomic mass of Na = 23, O = 16]~~

iii) Ammonium Chloride [atomic mass $N=14$, $H=1$, $Cl=35.5$]

$$NH_4Cl$$

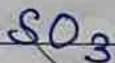
$$= 1 \times 14 + 4 \times 1 + 35.5$$

$$= 14 + 4 + 35.5$$

$$= 53.5 \text{ amu}$$

Write the molecular formula for each of the following compounds:

1. sulphur trioxide



→ 1 atom of sulphur and 3 atoms of oxygen

Molecular Mass



$$= 1 \times 32 + 3 \times 16$$

1. sulphur trioxide - SO_3

2. Iron sulphide - FeS

3. Ammonia - NH_3

> SO_3 - 1 atom of sulphur
3 atoms of oxygen

> FeS - 1 atom of Iron
- 1 atom of sulphur

> NH_3 - 1 atom of Nitrogen
3 atoms of Hydrogen

