

# Describing O.C.s

## 1 Colour / smell of gases

$\text{Cl}_2$	very pale yellowish green gas
$\text{Br}_2$	brown gas
$\text{NO}_2$	brown gas
$\text{I}_2$	purple gas
$\text{SO}_2$	choking / pungent smell
$\text{NH}_3$	choking / pungent smell

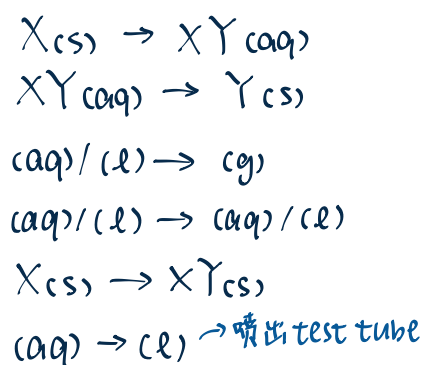
requires heat  
( $\text{Br}_2$  is gas in room conditions)

## 2 Colour of salts (s)



- both colourless in aq → usually white
- either one coloured → follow its colour
- both coloured → mix colours / choose more distinct colour

## 2 Observable changes

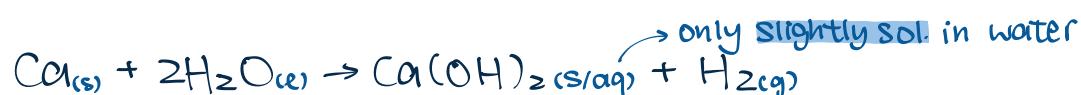


X dissolves  
<colour> solid deposits  
<colour> bubbles evolve  
sol<sup>n</sup> turns from <colour> to <colour>  
<colour> solid turns <colour>  
<colour> fumes evolve

## 3 Examples



- $\text{Cu}_{(s)} \rightarrow \text{Cu}^{2+}_{(aq)}$  copper dissolves → 只能说有什么 reactant, product 要用 colour + state 形容
- $\rightarrow \text{Cu}^{2+}_{(aq)}$  solution turns from colourless to blue
- $\rightarrow \text{SO}_{2(g)}$  colourless gas bubbles evolve
- $\rightarrow \text{SO}_{2(g)}$  choking smell



- $\text{Ca}_{(s)} \rightarrow \text{Ca}^{2+}_{(aq)}$  calcium dissolves
- $\text{Ca}_{(s)} \rightarrow \text{Ca}(\text{OH})_{2(aq)}$  white solid deposits
- $\rightarrow \text{H}_{2(g)}$  colourless gas bubbles evolve