

# Observations of Compounds

## 1. H<sub>2</sub>

- **Gas evolved burns with a pale blue flame producing a pop sound.**
- Brisk effervescence
- Colourless, odourless gas
- Neutral to litmus

## 2. O<sub>2</sub>

- **Gas evolved rekindles a glowing splinter.**
- A colourless odourless gas.
- A decriptating sound is heard.
- Neutral to litmus

## 3. CO<sub>2</sub>

- **Gas evolved turns lime water milky.**
- Brisk effervescence.
- A colourless, odourless gas.
- Turns moist blue litmus to pink, hence acidic.
- **Do not decolourise KMnO<sub>4</sub>**

# Distinguish Between

1. dil. HCl and dil. HNO<sub>3</sub>

Reagent- AgNO<sub>3</sub>

<ul style="list-style-type: none"><li>• A curdy white precipitate is formed which is insoluble in HNO<sub>3</sub> and soluble in excess of NH<sub>4</sub>OH (<b>AgCl</b>↓)</li></ul>	<ul style="list-style-type: none"><li>• No such observations</li></ul>
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2. MnO<sub>2</sub> and CuO

Reagent- conc. HCl

<ul style="list-style-type: none"><li>• A greenish yellow gas is evolved</li><li>• Turns moist starch iodide paper bluish black</li><li>• Damp blue litmus paper turns red then bleaches it (<b>Cl<sub>2</sub></b>)</li></ul>	<ul style="list-style-type: none"><li>• No such observations</li></ul>
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3. K<sub>2</sub>SO<sub>3</sub> and K<sub>2</sub>CO<sub>3</sub>

Reagent- dil. HCl

<ul style="list-style-type: none"><li>• Turns acidified K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> solution from orange to green (<b>SO<sub>2</sub></b>)</li></ul>	<ul style="list-style-type: none"><li>• No such observations</li></ul>
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