

# Lesson 7 - Neutralisation

Chemistry - Key Stage 3

Chemical Reactions

Mrs Walsh



# What happens during neutralisation?



## Explain why a weak acid will not neutralise a strong alkali.

When an acid and an alkali react, the ..... and ..... particles combine to form .....

In a strong alkali there are .....

However, in a weak acid there are .....

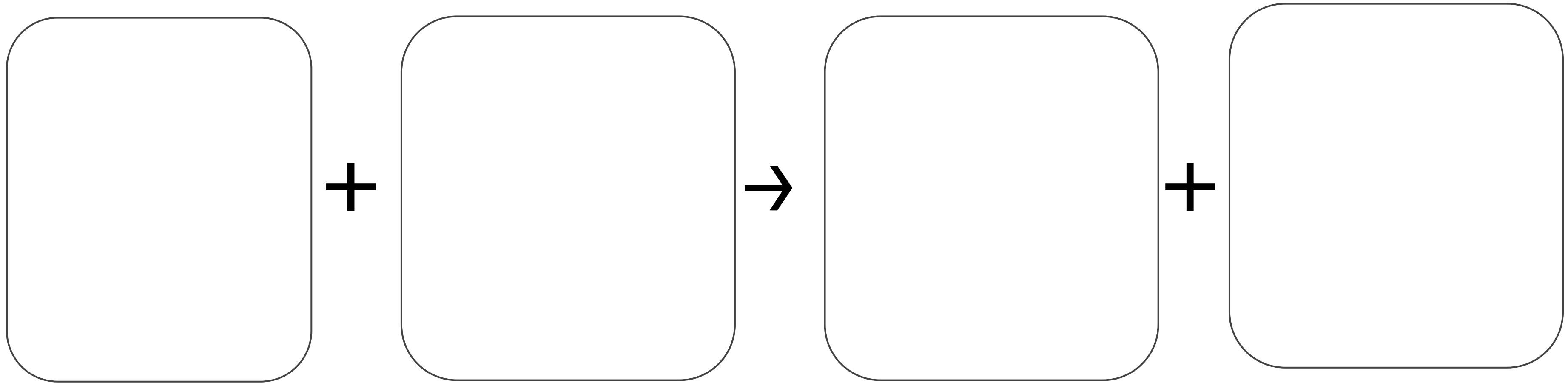
Therefore.....



# Acid and alkali reactions



# Sodium hydroxide and hydrochloric acid



**Sodium  
hydroxide**

**+**

**Hydrochloric  
acid**

**→**

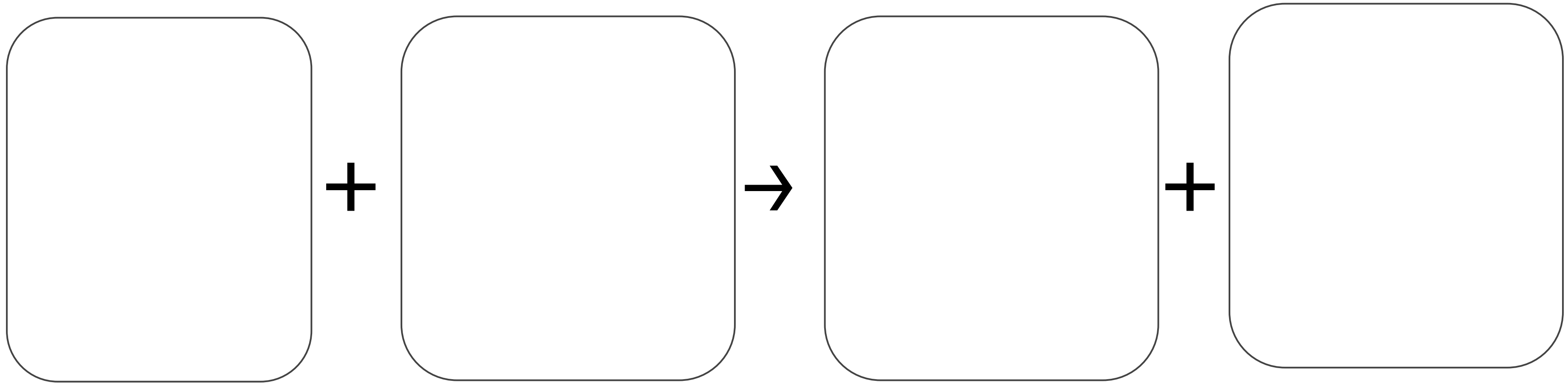
**Sodium  
chloride**

**+**

**Water**



# Lithium hydroxide and hydrochloric acid



**Lithium  
hydroxide**

**+**

**Hydrochloric  
acid**

**→**

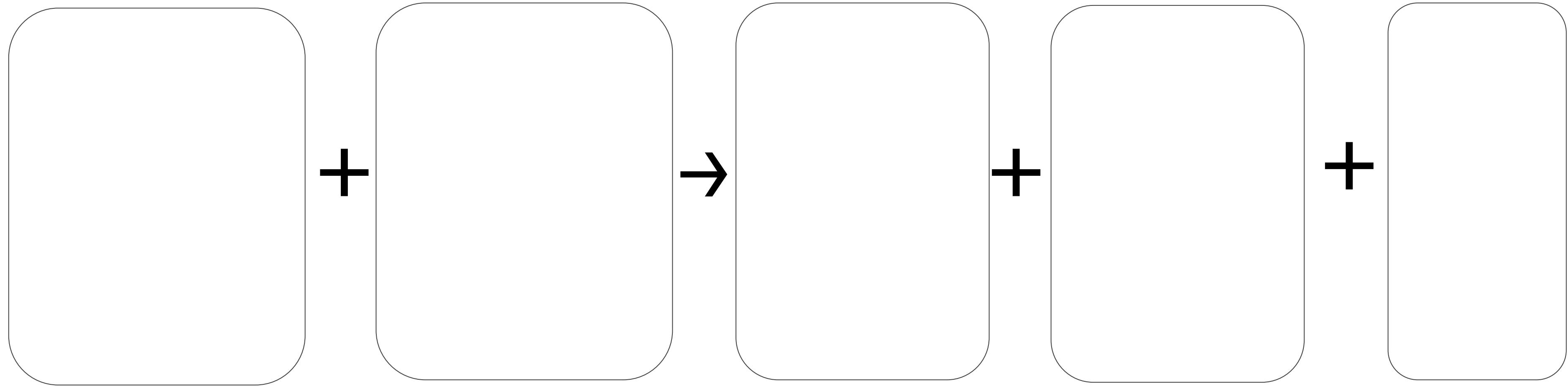
**Lithium  
chloride**

**+**

**Water**



# Magnesium carbonate and hydrochloric acid



**Magnesium  
carbonate**

**+**

**Hydrochloric  
acid**

**→**

**Magnesium  
chloride**

**+**

**Carbon  
dioxide**

**+**

**Water**



# Predicting names of salts





# Naming salts - Rules

- First name: **metal** from the alkali used
- Surname:
- **Hydrochloric acid** gives a **chloride** surname
- **Sulfuric acid** gives a **sulfate** surname
- **Nitric acid** gives a **nitrate** surname

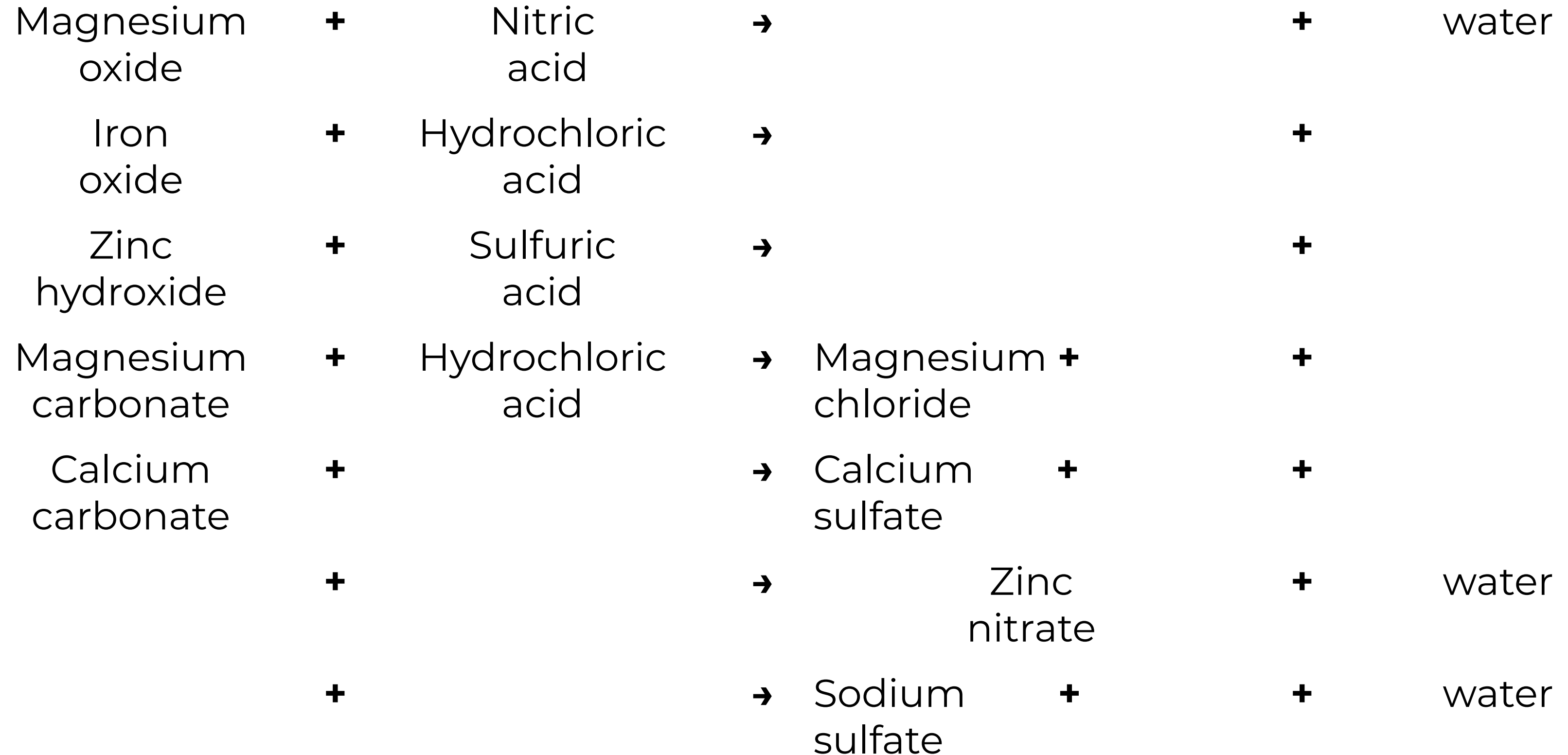
**Acid + alkali (metal oxide) → salt + water**

**Acid + alkali (metal hydroxide) → salt + water**

**Acid + alkali (metal carbonate) → salt + water + carbon dioxide**



# Naming salts - independent practice



**“Bicarb for bees, vinegar for wasps (wasps)”**  
**Explain the science behind this common saying.**

A bee sting is .....

Therefore.....  
.....

A wasp sting is .....

Therefore.....  
.....

Extra information:

Bee sting = pH 4.5 - 5.5

Wasp sting = pH 8

- Bicarbonate of soda is a weak alkali
- Vinegar is weak acid

