



Equations

Equations use symbols (see page 53) and formulas (see page 34) to show the changes that happen to substances during a chemical reaction. The substances that react together are called reactants. The chemical reaction is represented by an arrow. The new substances that form after the reaction has taken place are called products.

Sodium chloride

These equations show the elements sodium and chlorine (reactants) reacting to form sodium chloride (product).



Key Facts

- ✓ Equations show how chemical reactions change reactants into products.
- ✓ Equations can be made up of words, symbols, or formulas.
- ✓ Equations may contain symbols to indicate the state of matter.

This reaction is often contained within a flask because it produces a lot of heat and light.

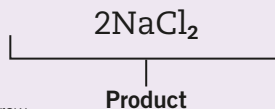
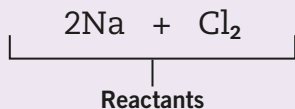
Word equation

Sodium + chlorine



Sodium chloride

Formula equation



The reaction is represented by an arrow.

State symbols

Equations may also contain state symbols (see page 98). These are in parentheses that show the states of matter of the substances.

Sodium and chlorine atoms bond to make a solid substance; sodium chloride.

