

Introducing chemical change

Reactants and products

Key term	Definition
Chemical reaction/change	when one or more new substances are made from other substances
Conservation of mass	no atoms are lost or made during a chemical reaction, so the total mass of products equals the total mass of reactants
Product	a new substance that is made in a chemical reaction
Reactant	a substance that you start with in a chemical reaction

Representing chemical reactions

Key term	Definition
Balanced symbol equation	for a chemical reaction, this shows the chemical formulas of the reactants and products separated by an arrow. Whole numbers may be written before the formulas to balance the equation
Chemical formula	uses chemical symbols to show the relative number of the atoms of each element in a substance
Chemical symbol	a single letter or two letters that is used to represent an element, such as C for carbon, Na for sodium
State symbol	used sometimes to show the states of substances, where (s) is solid, (l) is liquid, (g) is gas and (aq) is aqueous
Word equation	for a chemical reaction, this shows the names of the reactants and products separated by an arrow