

Chemical Reactions Stage 7 - Knowledge Organiser

Key Vocabulary

Element	Pure substance made from only 1 type of atom
Compound	A substance made from 2 or more types of atom chemically joined together
Reactant	Substances on the left of the arrow, before a reaction has taken place
Product	Substances on the right of the arrow. Produced during a chemical reaction
Irreversible change	A change that results in the formation of a new substance
Acid	A substance with a pH between 1-6. Weak acids have a sour taste, strong acids are corrosive.
Alkali	A substance with a pH between 8-14. Alkalis feel soapy, strong alkalis are corrosive
Neutral	A substance with a pH of 7
pH scale	A numerical scale used to determine if a substance is acidic or alkaline.
Physical change	A reversible change e.g. a change of state like ice melting.
Base	A solid alkali can be dissolved in a solvent to form an alkali

Chemical Changes:

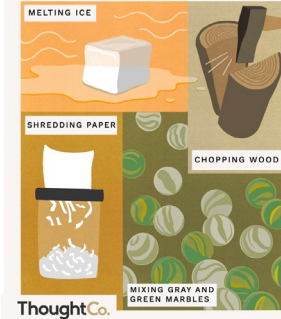
- Basic concepts of chemical reactions.
- Identification of chemical changes.
- Identifying elements and compounds from equations

Acids and Bases:

- Introduction to acids and bases.
- Simple reactions involving acids and bases.

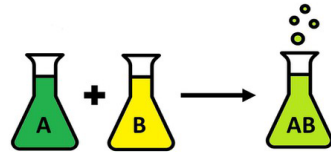
PHYSICAL CHANGES

In a physical change, matter changes form but not chemical identity.



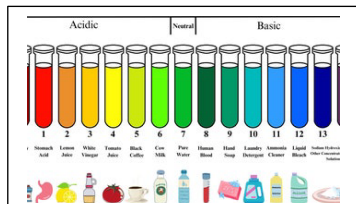
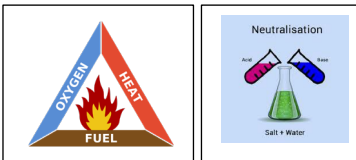
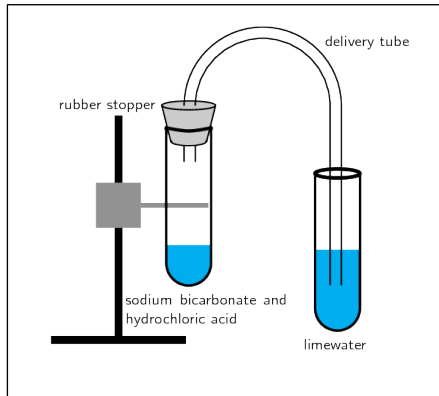
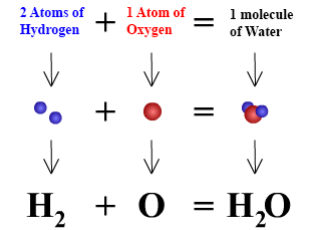
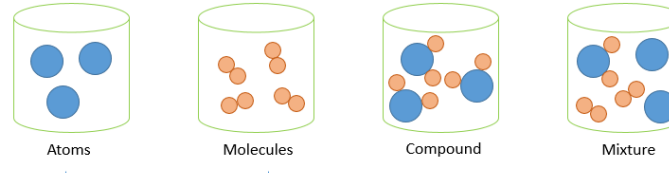
CHEMICAL CHANGES

In a chemical change, a chemical reaction occurs and new products are formed.



REACTANTS

PRODUCTS



Periodic Table of the Elements

H																		He													
Li	Be	B										C	N	O	F	Ne															
Na	Mg	Al										Si	P	S	Cl	Ar															
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr														
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe														
Cs	Ba	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn															
Fr	Ra	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	Fl	Mc	Lv	Ts	Og															
La																		Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Ac																		Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr