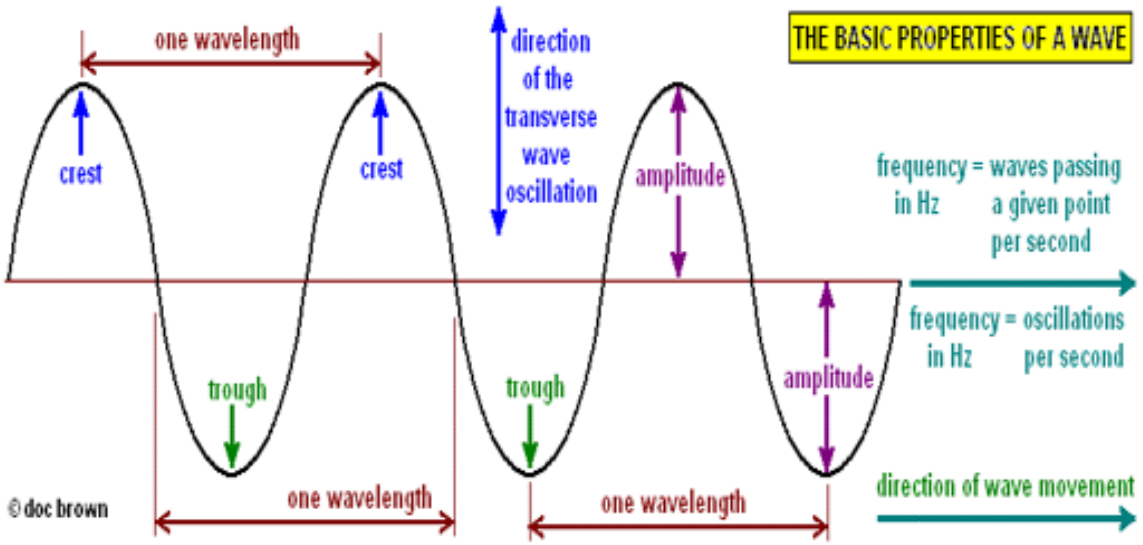
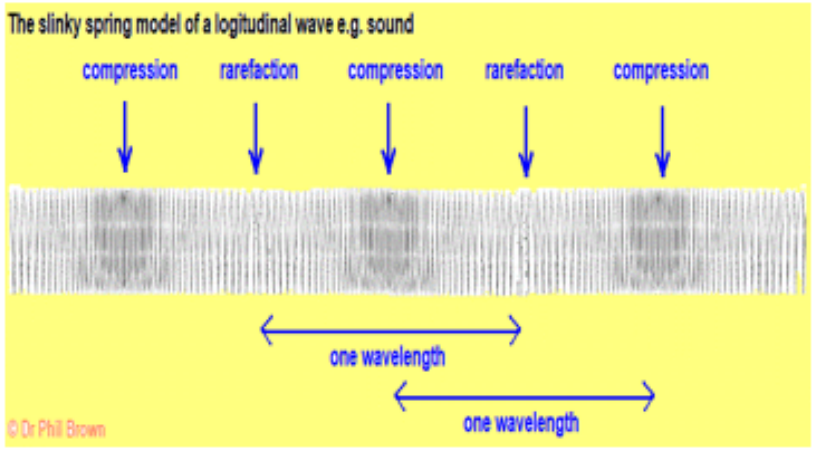


Keyword	Definition
Amplitude	Height of wave.
Wavelength	Length of wave peak to peak.
Frequency (Hz)	Waves passing a given point per second.



Keyword	Definition
compression	Wave causes particles to become closer together.
rarefaction	Wave causes particles to become further apart as it travels.
Wavelength	From one rarefaction to another or from one compression to another.

Prism: a glass or other transparent object in the shape of a triangle or cuboid with refracting surfaces that separates white light into the spectrum of colours

Lens: a piece of glass or other transparent material with curved sides for concentrating or dispersing light rays.

Convex: a lens that causes parallel rays to converge (come together)

Concave: a lens that causes parallel rays to disperse/diverge (spread apart)

Magnification: a lens that appears to increase the size of an object.

Boundary: the place where one medium (material) meets another, e.g. where air meets the side of a triangular prism.

Pathway: the route that a light ray is travelling.

Visible spectrum: parts of the electromagnetic spectrum that the human eye can see, different wavelengths are seen as different colours.

Colour filters: a transparent (see through), coloured material that blocks or absorbs some colours of light while allowing other colours to pass through.

Real image: an image created through projection rather than reflection, e.g. the images on a cinema screen are not reflection, they are projected images.

Periodic table

												group number					0
1	2						H					3	4	5	6	7	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	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra																

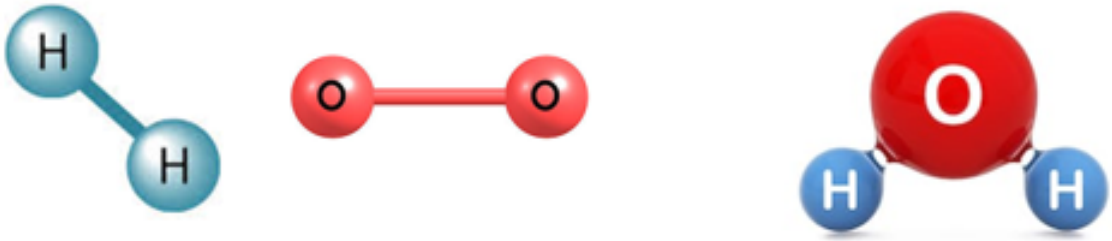
- Elements in a group all react in a similar way and sometimes show a trend in reactivity.
- As you go down a group and across a period the elements show trends in physical properties.
- Metals are found on the left side of the table, non-metals on the right.
- Group 1 contains reactive metals called **alkali metals.**
- Group 7 contains non-metals called **halogens**.
- Group 0 contains unreactive gases called **noble gases**.

Chemical Formulae

The small number to the **right** of an element shows how many atoms of that element are in a compound, as shown below. In this example, a molecule of hydrogen contains two hydrogen atoms. This is shown using the formula 'H_2'. Water contains two hydrogen atoms and one oxygen atom, so water has the formula 'H_2O'.

$$H_2 + O_2 \longrightarrow H_2O$$

Hydrogen Oxygen Water



Key Vocabulary:

Atom: The smallest part of a substance.
Compound: A substance that is made from different types of atoms that are chemically combined.
Chemical Formula: The way to show the number of each type of atom in a substance – for example 'H_2O' is the chemical formula for water.
Chloride: The type of salt formed in a reaction with hydrochloric acid.
Element: A substance made of only one type of atom.
Excess: More than is needed.
Formulae: Plural or 'formula'.
Halide: A substance containing a group seven element (halogen), for example chlorine, fluorine, bromine or iodine.
Hydroxide: A substance containing hydrogen and oxygen joined together in an '*OH*' group.
Insoluble: Does not dissolve.
Mixture: A substance that contains different types of atoms that are not joined together.
Nitrate: The type of salt formed in a reaction with nitric acid.
Observation: A significant change that should be noted during a scientific investigation.
Oxide: A compound containing oxygen.
Precipitate: An insoluble solid product formed in a chemical reaction.
Soluble: Does dissolve.
Sulfate: The type of salt formed in a reaction with sulfuric acid.