

CC4a Elements and the periodic table

Word	Pronunciation	Meaning
chemical property	<i>kem-ik-al</i>	How a substance reacts with other substances.
periodic table		An ordered list of all known elements.
physical property	<i>fi-zi-kal</i>	A description of how a material behaves and responds to forces and energy. Hardness is a physical property.
prediction	<i>pred-ik-shun</i>	What you think will happen in an experiment and why you think this.
relative atomic mass, A_r		The mean mass of an atom relative to the mass of one-twelfth of an atom of carbon-12, which is assigned a mass of 12. The A_r of an element is the mean relative mass of the isotopes in the element.

CC4b Atomic number and the periodic table

Word	Pronunciation	Meaning
atomic number		The number of protons in the nucleus of an atom (symbol Z). Also known as the proton number.
group		A vertical column of elements in the periodic table. Elements in the same group generally have similar properties.
inert		Does not react.
period		A horizontal row in the periodic table.
relative atomic mass		The mean mass of an atom compared to $1/12^{\text{th}}$ the mass of an atom of carbon-12. (One atom of carbon-12 has been assigned a mass of 12.)
X-ray		Electromagnetic radiation that has a shorter wavelength than UV but longer than gamma rays.

CC4c Electronic configurations and the periodic table

Word	Pronunciation	Meaning
electron		Tiny particle with a negative charge that is found in shells around the nucleus of an atom.
electron shell		Areas around a nucleus that can be occupied by electrons, usually drawn as circles. Also called an electron energy level.
electronic configuration		The arrangement of electrons in shells around the nucleus of an atom.