Science glossary
Year 8

Terms	Meaning
absorbency	process of energy or matter being taken in by a material
change of state	a physical change between states of matter, for example; from solid to a liquid
chemical change	a process where substances (chemicals) react to form new substances
chemical properties	the properties of a substance related to its chemical reactivity
compounds	two or more elements chemically combined in a fixed, whole-number ratio
condensation	the change of state from gas to liquid
data	the plural of datum; the measurement of an attribute, for example: the volume of gas or the type of rubber Data is not necessarily from a single measurement; it may be the result of averaging several repeated measurements and these could be quantitative or qualitative
dissolving	to mix particles of a substance homogenously with a liquid to form a solution
elastic	property of a material or structure that returns to its original size and shape after deformation
element	a substance which cannot be split into simpler substances; atoms with the same number of protons, a pure substance that consists of the same type of particle
evaporation	the process of changing state from liquid to gas
fibre	natural or synthetic thread formed from living tissue or mineral substance
flammable	readily burns
freezing	to change state from liquid to solid
gas	the physical state in which matter takes the shape and occupies the volume of its container
group	*Chemical sciences*. a column on the periodic table
liquid	the physical state in which matter with a fixed volume takes the shape of its container
melting	changing in state from solid to liquid
metal	an element that is solid at room temperature (except mercury), has metallic lustre, conducts electricity and heat when solid or molten and is ductile and malleable
metalloid	an element that, under defined conditions, exhibits characteristics of both metals and nonmetals

Terms	Meaning
mixture	two or more substances combined with no fixed ratio
model	a representation that describes, simplifies, clarifies or provides an explanation of the workings, structure or relationships within an object, system or idea
natural materials	any product or physical matter that comes from plants, animals, or Earth and has undergone very little modification by humans e.g. minerals and the metals that can be extracted from them (without further modification) are considered natural materials AC
non-metal	an element that does not display the characteristics of metals, for example: does not conduct electricity and heat when solid or molten (except graphite) and is not malleable or ductile
particle	a small, localised piece of matter to which physical properties can be ascribed
particle model	a model used by scientists to explain the properties of matter; also referred to as particle theory
period	*Chemical sciences*. a row across the periodic table *Physical sciences*. the interval of time required for a cyclic motion or phenomenon to complete a cycle
periodic table	an arrangement of elements according to their atomic numbers so that elements with similar properties are grouped together
physical change	a change in the physical properties of a substance without changing its chemical composition
physical properties	measurable properties of a substance that can be observed or examined without changing the composition of the substance, for example: melting/ boiling points, hardness, strength, specific heat, conductivity
product	substance produced as the result of a chemical reaction
property	an attribute of an object or material, normally used to describe attributes common to a group AC
pure substance	a substance that has distinct properties and constant composition
reactant	a starting substance in a chemical change or reaction
reaction	*Chemical sciences*. a process where substances change the bonds within them to produce different chemicals
reliable data	data that has been judged to have a high level of reliability; reliability is the degree to which an assessment instrument or protocol consistently and repeatedly measures an attribute achieving similar results for the same population AC
secondary source	information that has been compiled from primary sources by a person or persons not directly involved in the original study or event AC
solid	state of matter with a fixed volume and shape regardless of the container
solidification	to change state from liquid to solid

Terms	Meaning
solubility	the amount of a substance that dissolves at a defined temperature to form a solution, measured in g/100 mL
states of matter	whether matter is solid, liquid, gas or plasma
strength	the ability to resist force
sublimation	change of state from solid to gas without passing through a liquid state
synthetic	a substance, material or product produced by humans
validity	the extent to which tests measure what was intended; the extent to which data, inferences and actions produced from tests and other processes are accurate