

KEYWORD
GLOSSARY

SUMMER
TERM 5



YEAR 9

Topic Glossaries – Year 9

English:

Key word	Definition
Play	A form of drama that takes place on stage.
Shakespearean period	The time period from 1567-1616 when Shakespeare was alive.
Tragedy	A genre of play that deals with tragic events and has an unhappy ending, ending in the downfall of the main character.
Prologue	An introductory section of a play.
Patriarchy	A society in which men hold the power and women are largely excluded from it.
Fate	Destiny and predetermination.
Fortune	Luck, chance and opportunity.
Malcontent	A person who is dissatisfied and rebellious.
Adversary	Enemy or foe.
Predicament	A difficult situation.

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Maths:

Key Word	Definition
<i>Equations with 2 variables</i>	There are an infinite number of solutions to the equation $ax + by = c$ eg. $2x + 3y = 12$ $x = 0, y = 4$ $x = 1, y = 3.333...$ $x = 2, y = 2.6666...$
<i>Solving simultaneous equations graphically</i>	2 equations can be solved graphically by plotting the equations on a graph and finding the point of intersection. This can work with 2 linear equations (straight lines) or 1 quadratic and 1 linear equation.
<i>Elimination method</i>	An algebraic method used to solve 2 simultaneous equations by manipulating the equations to make either variable have the same coefficient hence elimination.
<i>Independent combined events</i>	When the outcome of one event has no impact on the chance of a second event happening eg rolling a dice and then flipping a coin.
<i>Dependent combined events</i>	When the outcome of one event has an impact on the chance of a second event happening eg picking and eating a red sweet will have an impact on the chance of picking another red sweet.
<i>Tree diagrams</i>	A structure used to visualise and calculate the chances (probabilities) of multiple events happening.
<i>Relative frequency</i>	How often something happens divided by the total outcomes.
<i>Reflection</i>	To reflect a shape is to flip a shape accurately over a mirror line. This mirror line can be vertical, horizontal and diagonal and can be outside or through the shape. You will need to be able to identify the equation of the mirror line.
<i>Rotation</i>	To rotate a shape is to move the shape in a clockwise or anti-clockwise direction about a given centre of rotation for a given number of degrees.
<i>Translation</i>	To translate a shape is to move the shape vertically and/or horizontally along a set of axis. The movement required to be given by a vector.
<i>Enlargement</i>	To enlarge a shape is to make the shape larger (positive) or smaller (fractional) or on the other side of the centre of enlargement (negative).
<i>Percentage increase</i>	To increase an amount by a given percentage
<i>Percentage decrease</i>	To decrease an amount by a given percentage
<i>Multiplier</i>	The value used to efficiently find a percentage of an amount, increase or decrease by a given percentage
<i>Reverse Percentages</i>	Finding the original amount prior to a percentage increase or decrease
<i>Compound interest</i>	The cumulative effect of increasing an amount by a given percentage each time period.

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Science: 9B2 Biology Topic 2 – Infectious Diseases, Defence Systems and Medicines

Topic Keywords for Lessons 1-3: Full list of keywords on the VLE Science Resources 9B2 Topic Page.

Key Word	Definition
microorganism	A living thing so small that it is only visible with a microscope.
pathogen	Microorganisms that cause infectious disease.
virus	A type of pathogen that reproduces rapidly inside body cells, causing cell damage. Causes measles, HIV and TMV.
bacterium	A unicellular microorganism that can be a pathogen. Reproduces asexually and rapidly inside the body and may produce toxins that damage tissues and make us feel ill. Causes salmonella, cholera, typhoid and gonorrhoea.
protist	A unicellular microorganism that can be a pathogen. Can reproduce sexually and asexually. Causes malaria and sleeping sickness.
fungus	A microorganism that can be a pathogen. Reproduce asexually by forming spores. Causes athlete's foot and rose black spot which tend to affect the surface of an organism.
transmission	How communicable diseases can be passed between organisms: by air, direct contact (including vectors), food and/or water.
toxin	A poisonous substance produced by bacteria, animals, or plants that damage tissues.
communicable diseases	Infectious diseases that can be passed from one individual to another.
vector	An organism that transmits a pathogen from one organism or source to another.
measles	A viral disease showing symptoms of fever and a red skin rash. Spread by inhalation of droplets from sneezes and coughs. Prevented by vaccination of children when young.
HIV	A viral disease that initially causes a flu-like illness and later attacks the body's immune cells. Spread by sexual contact or exchange of body fluids such as blood.
aids	Late-stage HIV infection that occurs when the body's immune system becomes so badly damaged it can no longer deal with other infections or cancers.
tobacco mosaic virus	A viral disease affecting plants, causing a distinctive 'mosaic' pattern of discolouration on leaves, causing a lack of photosynthesis and consequently affects plant growth.
salmonella	A bacterial disease producing toxins that cause fever, abdominal cramps, vomiting and diarrhoea. Spread by bacteria ingested in food, or on food prepared in unhygienic conditions.
gonorrhoea	A bacterial disease causing thick yellow or green discharge from the vagina or penis and pain on urinating. Spread by sexual contact. Controlled by treatment with antibiotics or using a barrier method of contraception such as a condom.
rose black spot	A fungal disease where purple or black spots develop on leaves, which often turn yellow and drop early, reducing photosynthesis and consequently plant growth. Spread by water or wind. Treated by using fungicides and/or removing and destroying the affected leaves.
malaria	A protist disease causing destruction of red blood cells, fever and uncontrollable shaking. Prevented by killing the mosquito vectors which spread it and using mosquito nets to avoid bites.

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Science: 9C2 Chemistry Topic 2 – The Earth’s Atmosphere and Using Earth’s Resources

Topic Keywords **SHORTLIST**: Full list of keywords on the VLE Science Resources 9C2 Topic Page.

Key Word	Definition
fossil fuels	Natural fuels such as coal and gas, formed in the past from the remains of living organisms.
global climate change	A long-term shift in global climate patterns.
global dimming	A gradual reduction in the amount of light reaching the Earth’s surface. This can be caused by carbon particulates.
greenhouse effect	The increase in the temperature of the Earth’s atmosphere due to the greenhouse gases in the atmosphere trapping infra-red radiation from the surface.
greenhouse gases	Greenhouse gases include water vapour, carbon dioxide and methane. Greenhouse gases in the atmosphere maintain temperatures on Earth high enough to support life.
particulates	Particulates cause global dimming and health problems for humans. Carbon particulates (soot) are a product of incomplete combustion.
photosynthesis	Oxygen was produced in the early atmosphere by photosynthesis of plants and algae. This simultaneously decreased the amount of carbon dioxide in the early atmosphere. Equation for photosynthesis: $6\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$
pollutants	A substance introduced into the environment that has undesired effects.
bioleaching	Bioleaching uses bacteria to produce leachate solutions that contain metal compounds.
desalination	The process of removing salt from seawater.
displacement	A chemical reaction in which a more reactive element displaces a less reactive element from its compound.
electrolysis	The splitting up of an ionic compound using electricity. The electric current is passed through a substance causing chemical reactions at the electrodes and the decomposition of the materials.
finite resources	A non-renewable resource that cannot be readily replaced by natural means at a quick enough pace to keep up with consumption.
ground water	Water held underground in the soil and crevices in rock.
life cycle assessment	Life cycle assessments are carried out to assess the environmental impact of products in each of these stages: extracting and processing raw materials, manufacturing and packaging, use and operation during its lifetime, disposal at the end of its useful life.

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Geography:

Key Word	Definition
<i>Birth Rate</i>	The number of babies born per 1000 people in a year
<i>Death Rate</i>	The number of people who die per 1000 people in a year
<i>Life Expectancy</i>	The average age that someone will live to in a country
<i>Natural Increase</i>	Where births exceed deaths, the population will rise
<i>Natural Decrease</i>	Where deaths exceed births, the population will fall
<i>Ageing Population</i>	A population that has an increasingly high life expectancy
<i>Population Distribution</i>	Where a population of people live within a country
<i>Population Density</i>	How close or far apart a population is spaced within a country
<i>Demography</i>	The study of populations
<i>Demographic Transition Model</i>	A model used to show how birth and death rates change as a population gets wealthier
<i>1-child policy</i>	A Chinese policy to reduced the number of births, between 1979 and 2015.
<i>Migration</i>	The movement of a person from one area of the world to another e.g. moving across the continent of Europe.
<i>Economic Migrant</i>	A person who moves to a new place for monetary gain e.g. for employment/to earn more money.
<i>Asylum Seeker</i>	Someone who is seeking help in order to be protected from a direct threat to their life/wellness. E.g. help from a county.
<i>Refugee</i>	Someone who is seeking 'refuge' (somewhere safe to live), fleeing war, natural disaster or conflicts.

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History: Tudors

Key Word	Definition
<i>alliance</i>	A formal agreement between two or more groups, like countries or organisations, working together for common goals
<i>recruitment</i>	The process of finding and attracting people to fill job openings or roles in the military
<i>trench</i>	A long, narrow ditch in the ground, often used for defence in military situations
<i>artillery</i>	Large guns like cannons used for long-range military attacks to support ground forces
<i>total war</i>	When a nation uses all its resources, including civilians and industries, to fight a war
<i>Remembrance</i>	The act of honouring people who died in war
<i>Armistice</i>	A formal agreement to temporarily stop fighting, usually to negotiate a more permanent peace
<i>treaty</i>	A formal agreement between countries often to do with peace, trade, or alliances
<i>revolution</i>	A sudden and significant change in a society's political, social, or economic structures
<i>conscription</i>	Making it the law to join the army in times of war

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Religious Education: Islamic Ethics

Allah	Arabic for God
Censorship	limit expression of material
Eid	A Muslim festival
Hadith	The 2 nd source of authority for Muslims – a collection of the prophet’s actions and sayings (the Sunnah and the Hadith)
Halal	Permitted/ allowed
Haram	Forbidden
Jannah	Paradise (like heaven)
Jihad	to struggle in the way of Allah
Kaba	The holiest place on earth for Muslims, the House of Allah. In Mecca
Laylat al qadr	The Night of Power. The night Muhammad became prophet in 610 CE. Commemorated every year on 27 th Ramadan.
Maroof	A good deed
Mecca	The town in Saudi Arabia where Muhammad was born and where the Kaba is located
Monotheism	belief in one God
Muhammad	Final prophet of Islam (born 570 CER, died 632)
Prophet	A messenger from God (in Arabic – rasul)
Quran	Islamic scripture/ holy book believed to be THE word of Allah
Ramadan	The holiest month in Islam when Muhammad became prophet on Laylat al Qadr. It is a month of sawm (fasting)
Salah	Praying 5 times a day facing Mecca(one of the 5 pillars of Islam)
Sawm	Fasting in the month of Ramadan in daylight hours (one of the 5 pillars of Islam)
Shahadah	The Islamic statement of faith – a Muslim states “there is no God but Allah and Muhammad is his prophet”.
Shirk	Associating something with Allah – this is haram
Sunni and Shia	The 2 main groups of Muslims in the world (80% and 15% respectively)
Tawhid	Muslim belief in one God and in the oneness of God (no parts or children)
Ummah	Community
Zakat	Giving 2.5% of wealth to less fortunate (one of the 5 pillars of Islam)

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Art: My Surroundings

AERIAL PERSPECTIVE	A way of making the illusion of distance by using cool, pale colours in the distance and warm strong colours in the foreground.
ATMOSPHERE	The tone or mood of a place, situation, or creative work.
BACKGROUND	The part of a picture or scene that appears to be farthest away from the viewer, usually nearest the horizon. This is the opposite of the foreground.
BLEND	To put or combine more than one thing together. Usually in art this refers to colour and the changing of one colour or tone into another.
DYSTOPIA	Surreal landscapes that depict a bleak or nightmarish vision of the future or an alternate reality.
ECOLOGY	The study of the relationships between organisms and their environments, relevant to how landscapes are depicted in art.
EN PLEIN AIR	The practice of painting outdoors, directly from the landscape subject, to capture the effects of natural light and atmosphere.
FOREGROUND	The part of a view that is nearest to the observer, especially in a picture or photograph. This sits in front of the mid and background.
HORIZON	The line we see when the sky meets the earth or where the sky meets the ocean. This is also termed the “horizon line”.
HORIZONTAL	Lines which move from left to right, or right to left, in other words across. They are usually described as being straight lines that are “flat” and “parallel” to the earth’s horizon.
LANDSCAPE	The natural landforms of a region; also, an image that has natural scenery as its primary focus.
ORTHAGONAL	Lines or edges that are parallel to each other and perpendicular to the picture plane. These lines converge at vanishing points on the horizon line, representing the edges or sides of objects receding into the distance in a two-dimensional representation of three-dimensional space.
PERSPECTIVE	The technique used to create an illusion of depth and space in a two-dimensional artwork.
RURAL	Characteristic of the countryside or rural areas, often featuring agricultural elements in a landscape.
SURREALISM	An artistic movement that explores the subconscious mind and often features dreamlike landscapes with unexpected juxtapositions.

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URBAN	Relating to cities or densely populated areas, with man-made structures dominating the landscape.
UTOPIA	Surreal landscapes that portray an idealised or perfect world, often with elements of harmony and beauty.
VERTICAL	Lines moving in an up and down or down and up direction and are known as being “perpendicular” to the earth’s surface/horizon, or any other horizontal line.
VIEWFINDER	A tool used in painting, drawing, and photography that helps artists and photographers frame and compose their images before creating them. It provides a preview of what the final artwork or photograph will look like, aiding in the decision-making process regarding composition and perspective.
VIEWPOINT	The place or position from which the artwork was created. Examples include eye level, from an elevated position and bird's eye view.

Design Technology: Accessory Holder

AESTHETICS	A set of principles concerned with the nature and appreciation of beauty. The way something looks or appears.
CONSUMER	A person who buys or uses products and services.
COST	How much does the product cost to buy and to make?
ENVIRONMENT	What impact does a product have on the environment? The world we live in. Where will the product be used.
SAFETY	Is the product safe to use?
SIZE	How big is the product? What sizes does it need to be?
FUNCTION	What the product is for; how it operates. What it does! Does the product work how it was meant too?
MATERIAL	What material is the product made from?
CAM	Computer-Aided Manufacturing usually works together with CAD (computer-aided design) to enable machines to create objects directly from computer designs and software rather than humans having to set up machines and processes manually. The CNC router is an example of CAD.
CAD	Computer-Aided Design is the use of computer-based software to aid in design processes. CAD software is frequently used by different types of engineers and designers. CAD software can be used to create two-

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	dimensional (2-D) drawings or three-dimensional (3-D) models. CorelDraw is an example of CAD software.
SPECIFICATION	A design specification is a list of criteria your product needs to address
MANUFACTURED BOARDS	Man-made material comprises of a range of sheet materials produced by pressing and bonding together wood particles, fibres or veneers to achieve a particular characteristic
SOFTWOOD	Softwoods come from coniferous trees. These often have pines or needles, and they stay evergreen all year round - they do not lose leaves in the autumn. They are faster growing than hardwoods, making them cheaper to buy, and are considered a sustainable material.
HARDWOOD	Hardwood comes from deciduous trees with broad leaves. Hardwood trees take a long time to grow, around 60 years (sometimes up to 100). This means that they are rarely planted and can be very expensive.
DOWEL	A wooden peg used for holding together components of a structure or joint.

Textiles: Zipper Pouch

BACKSTITCH	A sewing technique where stitches are made in reverse to secure the beginning and end of a seam, preventing unravelling.
BATTING	The layer of material used to add loft or thickness in quilting.
BOBBIN	A small spool that holds the lower thread in a sewing machine.
BIAS BINDING	Fabric strips cut diagonally across the grain of the fabric, folded in half, and used to encase raw edges for a clean finish, adding flexibility and stretch.
FASTENING	Devices or closures used to securely join or close fabric, such as zippers, buttons, hooks, or snaps, enhancing functionality and wearability.
HEM	The edge of a piece of fabric that has been neatened and stitched to prevent fraying and unravelling
LINING	A layer of fabric sewn to the inside of a garment or textile project for added durability, comfort, or to conceal construction details.
OVERLOCKER	A specialised sewing machine that trims, stitches, and finishes fabric edges simultaneously, creating a neat and professional seam.
PATCHWORK	A technique where small fabric pieces are sewn together to create a larger design or pattern, often using scraps or recycled fabric.

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PRESSER FOOT	The attachment on a sewing machine that holds the fabric in place while sewing.
QUILTING	The process of sewing together layers of fabric with batting in between to create a padded textile, often using decorative stitching to hold the layers together.
RECYCLED	Materials or products that have been processed or transformed from their original form for reuse or repurposing, reducing waste and conserving resources.
ROTARY CUTTER	A tool for cutting fabric neatly and easily, useful for cutting multiple straight edges. They are very sharp and need to be used with a cutting mat
SCRAPS	Small leftover pieces of materials remaining after cutting or manufacturing processes, which can be saved and reused in new products or projects to minimize waste.
SEAM ALLOWANCE	The area between the fabric edge and the stitched line on two (or more) pieces of material being sewn together.
TENSION	The force exerted on materials or components, often in response to external or internal factors, such as weight, pressure, or stretching, affecting stability and performance.
TOPSTITCHING	A visible line of stitching with a thicker thread, often in a contrast colour.
UPCYCLING	The process of transforming discarded or unused materials, products, or objects into new items of higher value or quality through creative redesign or enhancement, promoting sustainability and innovation.
ZIPPER	A closure device consisting of interlocking teeth or coils that can be opened or closed by sliding a slider along its length, commonly used in garments and bags.
ZIPPER FOOT	A sewing machine presser foot specially designed for stitching close to zippers, allowing for precise and even stitching along the zipper tape.

Food: Bake Off

AERATE	Incorporating air into a mixture
BIOLOGICAL RAISING AGENT	An organic raising agent, e.g. yeast. Using yeast to produce CO ₂ gas.
CARAMELISATION	A change in the food's molecular structure due to the removal of water resulting in a nutty flavour and brown colour.
CHEMICAL RAISING AGENT	Raising agents that are chemicals, e.g. baking powder or bicarbonate of soda to produce CO ₂ gas.

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COAGULATION	An irreversible change to proteins from a liquid or semi-liquid state to a solid state due to heating or change in PH level. E.g. Eggs harden and coagulate when cooked.
DENATURATION	The process of altering protein's molecular characteristics or properties by heat, enzyme action, or chemicals
DEXTRINISATION	The browning that occurs when foods containing starch are cooked, or exposed to an alkali, acid or enzyme, e.g. toast
ENDOSPERM	The main part of the grain, a starch and protein supply. White bread is made from the endosperm only.
FERMENTATION	The chemical breakdown of sugar to acid, gas or alcohol by bacteria, yeast or other microorganism. When yeast ferments it produces CO ₂ .
GLUTEN FORMATION	Formed from the two wheat proteins gliadin and glutenin, in presence of water. Gluten is developed by kneading. Gluten gives dough and bread elasticity and an open structure.
LAMINATION	A method of making pastry where alternate layers of dough and butter are pressed together.
LEAVENED	Breads with a raising agent, e.g yeast
MAILLARD REACTION	A chemical reaction between protein and a carbohydrate in the presence of dry heat. Food's colour and flavour become deeper and stronger. (Golden Brown and Delicious)
MECHANICAL RAISING AGENT	Whisking, beating, sieving, creaming, rubbing in or folding to trap air into the mixture
PHYSICAL RAISING AGENT	Steam aerates food such as in choux pastry and Yorkshire puddings. Water or liquids added to a mixture turn to steam when heated to high temperatures.
RAISING AGENT	A substance added to a food product that makes it rise when cooked.
SHORTENING	Butter, lard or other fat that remain solid at room temperature, used for making pastry or bread. Also, the ability for fat to shorten the length of the gluten molecules in pastry or shortbread.
STRONG FLOUR	Flour with a higher level of gluten, used in bread or pasta making. E.g. Durum wheat flour
WHISKING METHOD	A method of making cakes. Eggs and sugar are beaten to create a foam before the other ingredients are added.
YEAST	A microorganism belonging to the fungi family. Yeast can ferment sugar into alcohol and CO ₂ and is also used as a raising agent when making bread

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Music: Live Lounge

Key Word	Definition
<i>Chord</i>	Multiple notes played simultaneously
<i>Root position</i>	A chord where the root note is at the bottom. For example, if we are playing an F major chord (F, A and C) in root position it will have the note F on the bottom.
<i>Inversions</i>	Chords that are played with notes other than the root note on the bottom. For example, if we are playing an F major chord (F, A and C) but instead of F we have an A or a C on the bottom it would be inverted (either first inversion or second inversion).
<i>Cover</i>	A version of a song that is not by the original artist. It might also change the style of the music.
<i>Arrangement</i>	How we choose to organise parts of the music. We might, for example, play the melody of a piece on the piano instead of singing it. We might choose to change some of the chords of a piece. These are all ways we can vary the arrangement.
<i>Barre/bar chord</i>	Using one finger on a guitar to push down multiple strings at the same time.
<i>Homophony</i>	A description of texture in music where there is a melody with an accompaniment.
<i>Polyphony</i>	A description of texture in music where there are interweaving lines of melody.
<i>Time signature</i>	How many beats there are in a bar for a piece of music.
<i>Chord symbol</i>	A letter or symbol that sits above a line of music to explain what harmony / chord should be used to support a melody.
<i>Lead sheet</i>	A style of sheet music that usually has the melody with the chords written above. This can be used to arrange a piece of music or to improvise around.
<i>Coda</i>	A small section at the end of a piece of music. Literally translates to “tail”.
<i>First time / second time bars</i>	A type of repeat – when you play part of music the first time you will play a specific bar or section, then the second time you will skip this and go to the next bar or section.
<i>Block chord</i>	A chord where the notes are all played together to create one sound.
<i>Spread chord / arpeggiation</i>	Playing the notes of a chord individually, one after another. The speed of this can vary, but a spread chord tends to imply playing a block chord but spacing the notes out slightly in terms of timing, whilst an arpeggiation tends to imply more of a pattern / sequential playing of notes.

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Physical Education: Athletics

Key Word	Definition
Reaction Time	Time taken to react to the onset of a stimulus.
Personal Best	An individual's fastest time, furthest distance or greatest height in an event.
Foul throw ('No throw')	When either the shot putt, discuss or javelin has been released incorrectly, or you have crossed the throwing line.
Foul jump ('No jump')	When you have taken off past the 'take-off' board.
Take-off board	The white board that you jump off in the long jump and triple jump.
Power	Strength x speed.
Speed	The maximum rate at which an individual can perform a movement or cover a distance in a period of time.