



Year 9 Knowledge Organiser HT3

Knowledge is Power

Name: _____

Form: _____

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English

Week 1- Form (Play)

Scene	A brief moment in a play consisting of dialogue and action.
Act	Several scenes following on from each other. Each act forms the different parts of the plot.
Stage Directions	An instruction in the script of a play, directing the movements of the actors, arrangement of scenery and details of any special effects.
Playwright	The writer of the play.
Soliloquy /Monologue	An act of speaking one's thoughts aloud when by oneself or regardless of any hearers, especially by a character in a play.

Week 2 – Dramatic Devices

Foreshadowing	A device in which the writer gives a warning or indication about what will happen in the future.
Dramatic Tension	A sense of excitement or anticipation that the audience feels.
Dramatic Irony	When the audience are aware of a detail that the characters are not.
Low Comedy	A funny scene in an otherwise serious play that acts as comic relief for the audience.

Week 3 - Structure

5 Act play	A drama is often divided into five parts, or acts, which some refer to as a dramatic arc.
Exposition	The opening section where the setting is fixed in a particular place and time, the mood is set, and characters are introduced.
Rising Action	An exciting force or inciting event.
Climax	The climax is the turning point, which changes the protagonist's fate.
Falling Action	The tension decreases and it wraps up the narrative, resolves its loose ends, and leads toward the closure.
Denouement	The ending with some sort of resolution and the tying up of loose ends.

Week 4 – Literary Devices I

Connotation	What a word makes the reader feel, think or imagine.
Symbolism	The way an object is given greater meaning within the novel so it has added importance.
Motif	A recurring symbol within the novel
Personification	Giving human characteristics to an inanimate object.
Allusion	A reference to a person, place or event without mentioning it directly. These are usually towards the bible, mythology or historical events.

Week 5 – Literary Devices 2

Repetition	Repeated words or ideas.
Imagery	Creating a mental picture for the reader through appealing to the senses (smell, touch, taste, see, hear).
Simile	Comparing one thing to another.
Metaphor	Describes an object or action in a way that isn't literally true, but helps explain an idea or make a comparison.

Week 6 – Shakespeare's Style

Verse	Speech written in poetic form.
Blank Verse	a formal poetic form where each foot of a line is stressed on the second syllable (de-DUM) and each has five feet creating IAMBIC PENTAMETER.
Prose	A form of written speech that reflects the style of ordinary speech without a rhythmic structure.
Iambic Pentameter	Usually spoken by characters who have a high status in society.
Genre	Shakespeare wrote his plays in three main categories: Comedies, Tragedies and Histories.

Maths

Sequences

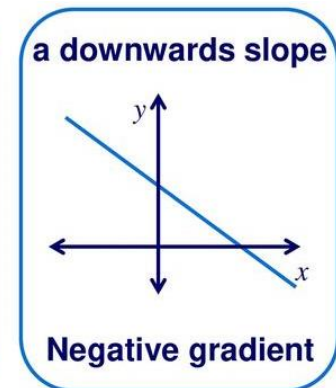
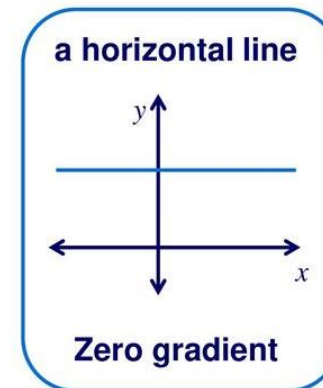
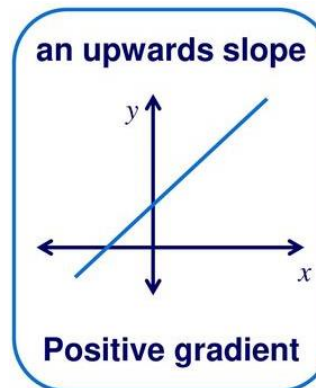
Sequence	A number or picture pattern with a specific rule
Term	Each value in a sequence is called a term
Rule	The value that a sequence increases or decreases by
Nth term	A way of writing the rule of the sequence with algebra It allows you to calculate the term that is the nth position of the sequence
Substitute	Replace the letter with a given value in order to solve an equation
Generate	When we substitute values into the nth term to calculate the original sequence

For example...

Sequence	3	7	11	15	19	23	27
n (position)	1	2	3	4	5	6	7

Straight Line Graphs

X-axis	Horizontal axis (goes across)
Y-axis	Vertical axis (goes up)
Co-ordinate	Two numbers that locate a specific points on a grid (x, y)
Linear graph	A straight line on a graph
$y = mx + c$	This is the format of a linear graph (straight line). m = gradient, y = y-intercept
Gradient	The steepness of a line. The steeper the line, the higher the gradient.
Positive gradient	Line slopes upwards
Negative gradient	Line slopes downwards
y – intercept	Where the line crosses the y-axis



Science

Key Terms	Definitions
Renewable energy	Comes from natural sources or processes that won't run out
Work done	Energy has been transferred from one energy store to another
Kinetic energy	Energy in a moving object
Potential energy	Stored energy
Pathway	A way that energy can be moved between stores
Specific heat capacity	The amount of energy needed to raise the temperature of 1kg of a substance by 1o Celsius
Efficiency	The amount of useful energy transferred into an object
Conservation of energy	Energy can not be created or destroyed, only transferred from one form to another
Specific latent heat of fusion	Energy needed to melt 1kg of a substance with no change of temperature.
Specific latent heat of vaporisation	Energy needed to boil away 1kg of a substance with no change of temperature
Thermal conductivity	Property of a material that determines the energy transfer through it by conduction.

Equations to learn	
Kinetic energy	$E_k = \frac{1}{2} \times \text{mass (kg)} \times \text{velocity (m/s)}^2$
Elastic energy	$E_e = \frac{1}{2} \times \text{spring constant (K)} \times \text{extension (m)}^2$
Gravitational Potential Energy	G.P.E $E_p = \text{mass (kg)} \times \text{gravity} \times \text{height (m)}$
Power (2 equations)	Power (W) = Work done (J) ÷ time (s)
	Power (W) = Energy (J) ÷ time (s)
Efficiency	Efficiency = useful energy ÷ total energy

History

Key Terms	
Ideology	A set of shared beliefs. In 1941, the USA and the Soviet Union had different ideologies concerning how a country should be governed and how its society should work.
Capitalism	Capitalists believe everyone should be free to own property and business and make money. The USA's economic ideology was capitalist.
Communism	Political system of the USSR (Russia). All property is owned by the community and each person contributes and receives according to their ability and needs.
Democracy	A system of government by the whole population or all the eligible members of a state, typically through elected representatives.
Satellite State	A nation that was once independent but is now under the control of another.
Colonialism	Economic, political, and cultural control of another country.
Veto	Forbid or refuse. Permanent members of the United Nations Security Council could stop resolutions being passed with a single 'no' vote.
Isolationism	Staying apart, not getting involved in the affairs of others. The USA followed this policy following World War One.
Containment	Limiting the spread of something. The USA used this policy to stop the spread of communism.

Key Terms	
Conventional Weapons	Defined by the International Committee of the Red Cross as any weapons that are not nuclear, chemical or biological.
Nuclear Deterrent	Politicians thought countries would not use nuclear weapons if their enemy could reply with an equally devastating nuclear attack.
Ultimatum	A final demand, often backed up with a threat to take action.
Free City	A city with its own independent government.
Brinkmanship	Pushing disagreements to the point where there is a risk of war.
Non-Proliferation	Stopping the spread of something, usually weapons or armaments.
Doctrine	A belief or philosophy.
Detente	A period of peace between two groups that were previously at war or hostile to each other.

Key Word	Definition
Cold desert	Regions that have very short summers with long cold winters and low levels of precipitation (dry).
Glacier	A large body of compressed snow and ice that move s slowly.
Ice Sheet	Large continental mass of glacial ice.
Expedition	A journey undertaken by a group of people with the purpose of research, education or exploration.
Plankton	Microscopic organisms floating in the sea.
Extinct	Species which no longer exist.
Conservation	The preservation or protection of something e.g. a species, habitat etc.
Research Station	Purpose built facilities to conduct scientific investigations via collection and analysis of data.
Endangered species	A species of plant or animal which is at serious risk of extinction.
Isolines	lines drawn on a map connecting data points of the same value.
Invasive species	a species which has been introduced by humans but harms the environment.
Exploitation	treating something/one unfairly in order to gain a benefit.
Commercial fishing	catching fish and other seafood for large profits.
Natural resource	materials which occur naturally and used to make a financial gain/ profit.
Treaty	an agreement between two or more countries.

Spanish

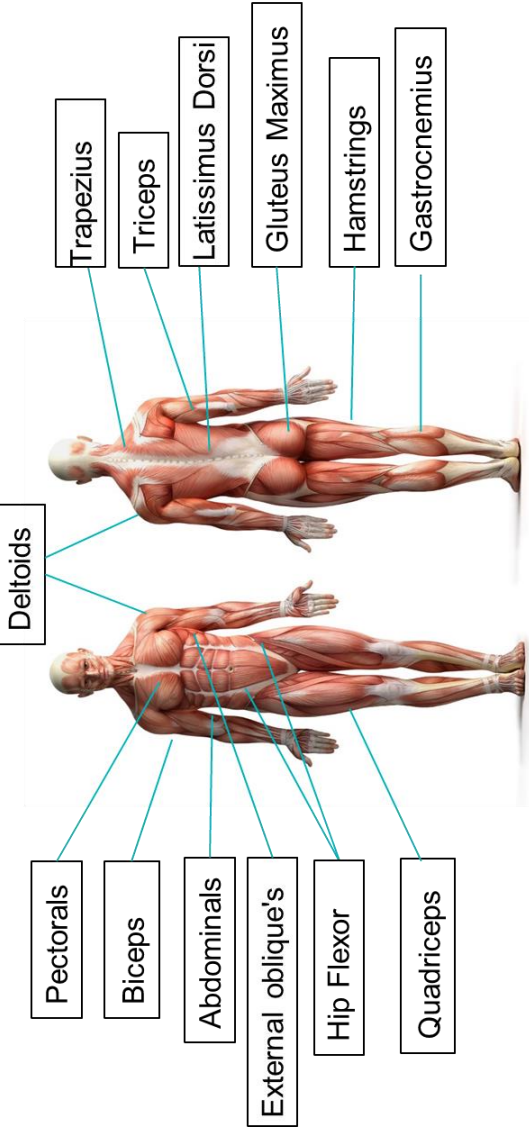
Spanish	English
El español	Spanish
El inglés	English
Las ciencias	Science
Las matemáticas	Maths
Mi profe (de inglés) es...	My English teacher is...
joven	young
viejo/a	old
severo/a	strict
tolerante	easy-going
impaciente	impatient
paciente	patient
gracioso/a	funny
serio/a	serious
simpático/a	nice / friendly
antipático/a	unfriendly
más divertido/a que	more fun than
menos creativo/a que	less creative than
tan interesante como	as interesting as
Tengo que llevar...	I have to wear...
El uniforme	uniform
Cómodo/incómodo	Comfortable/uncomfortable

Spanish	English
Está prohibido...	It is forbidden...
No se permite...	You are not allowed...
No se debe...	You / One must not...
el estrés de los exámenes	exam stress
el acoso escolar	bullying
la presión del grupo	peer pressure
Mi instituto / colegio es...	My school is...
Mixto/ femenino/masculino	Mixed/ all girls / all boys
En mi escuela primaria...	In my primary school...
(no) había...	there was/were (not any)...
Las clases empiezan ...	Lessons start at...
y terminan a las...	and finish at...
Tenemos... clases	We have... lessons
al día /por la mañana /por la tarde	per day /in the morning/ in the afternoon
Cada clase dura...	Each lesson lasts...
el recreo/ la hora de comer	Break/lunch
lo bueno / malo es que...	the good / bad thing is that
lo mejor / peor es que...	the best /worst thing is that
mejora la disciplina	improves discipline
limita la individualidad	limits individuality

Health and Fitness

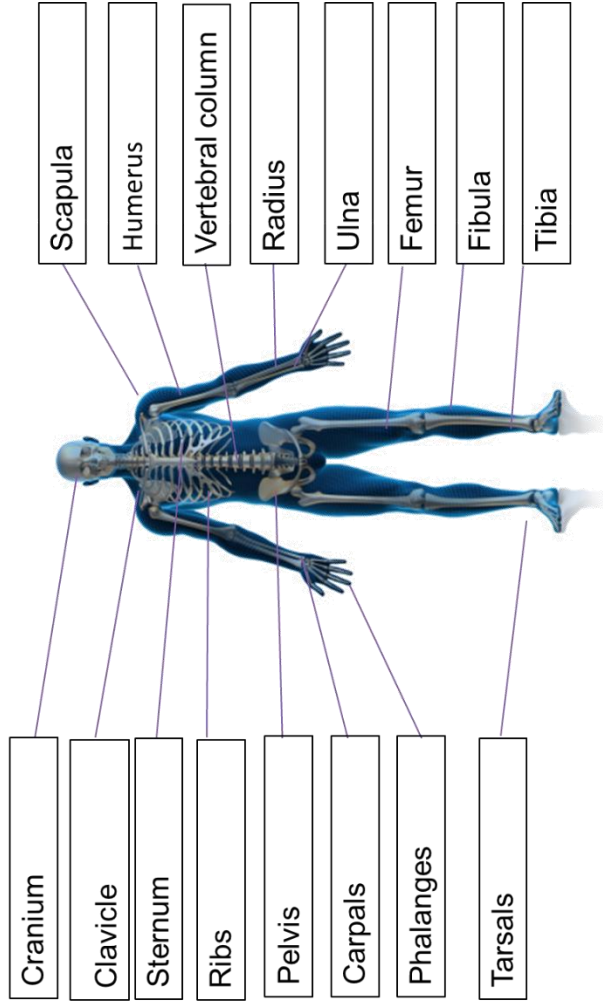
Muscular Strength	The amount of the force muscles can generate against a resistance
Muscular Endurance	The ability to use voluntary muscles, over long periods of time without getting tired
Flexibility	The range of movement at a joint
Cardiovascular Fitness (Aerobic Endurance)	The ability of the heart and circulatory system to meet the demands of the body for a long period of time
Body composition	The percentage of a body that is fat, muscle, bone and water
Coordination	The ability to move two or more body parts at the same time
Reaction Time	The time taken for a response to occur after a stimulus
Agility	The ability to change direction at speed
Balance	The ability to keep the body steady when in a static position or when moving
Speed	The time taken to cover a set distance/complete a movement
Power	The ability to combine speed and strength
Principles of training	
Progressive Overload	Working the body harder than normal/gradually increasing the amount of exercise you do
Reversibility	If training is not regular, adaptations will be reversed. This can happen when suffering from illness, injury or after an off season
Specificity	Training should be matched to the requirements of the sport or position the performer is in. Training must be specifically designed to develop the right muscles, type of fitness or skills
Individual needs	All PEP's would differ depending on performers goals/target, strengths /weaknesses, age/gender and current health/fitness levels
Overtraining	Occurs when you train too hard and do not allow the body enough rest/recovery time Signs include extended muscle soreness, frequent illness & increase injuries

Muscular System

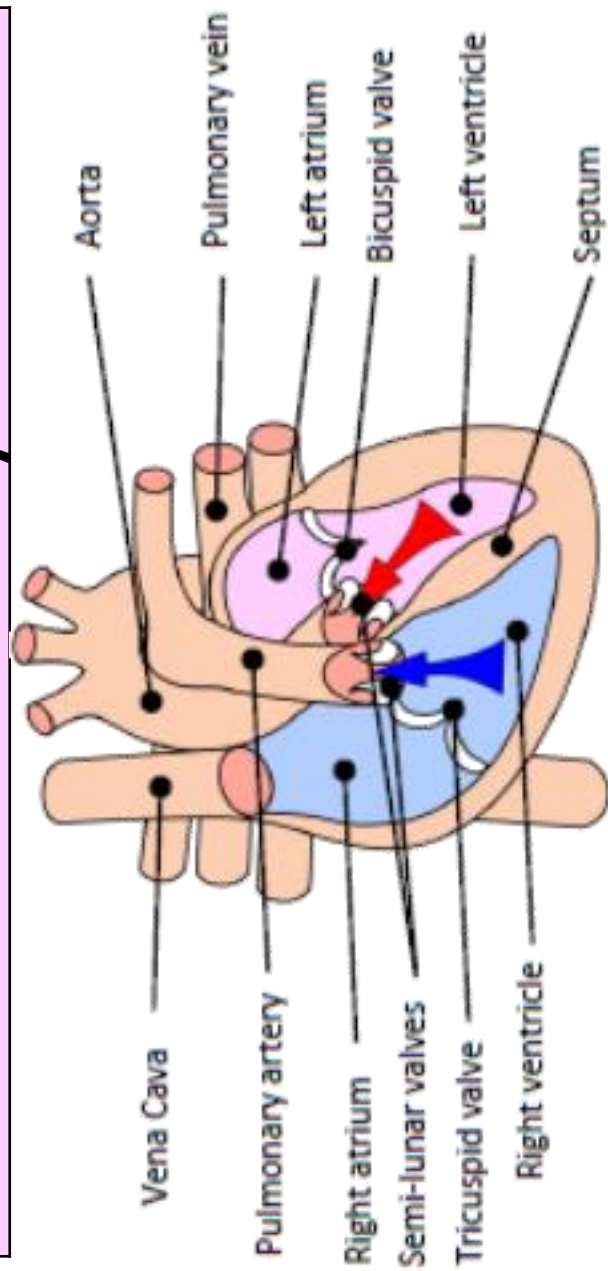


PE

Skeletal System

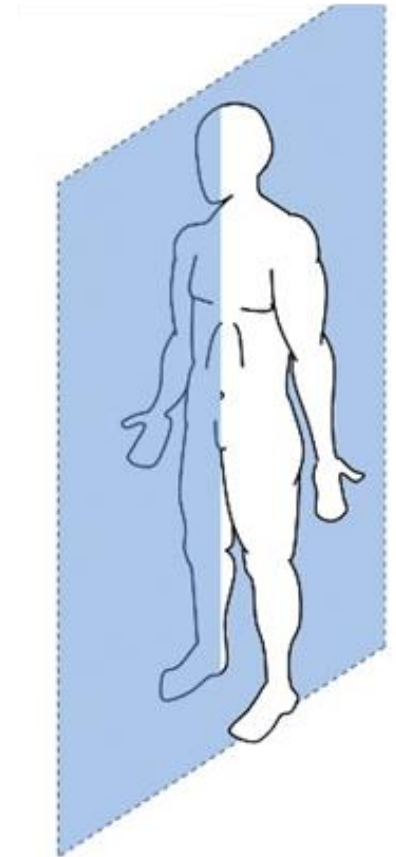
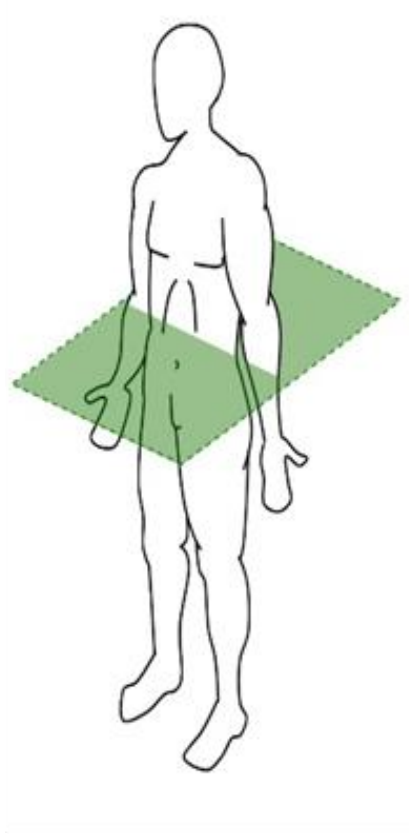
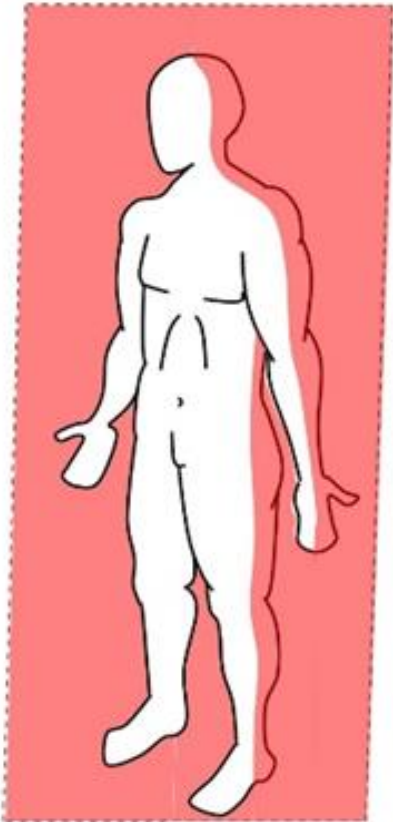


Cardiovascular System



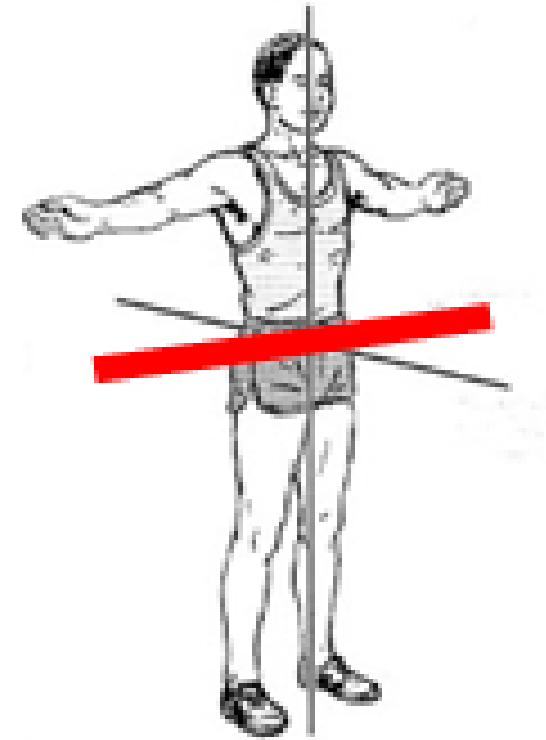
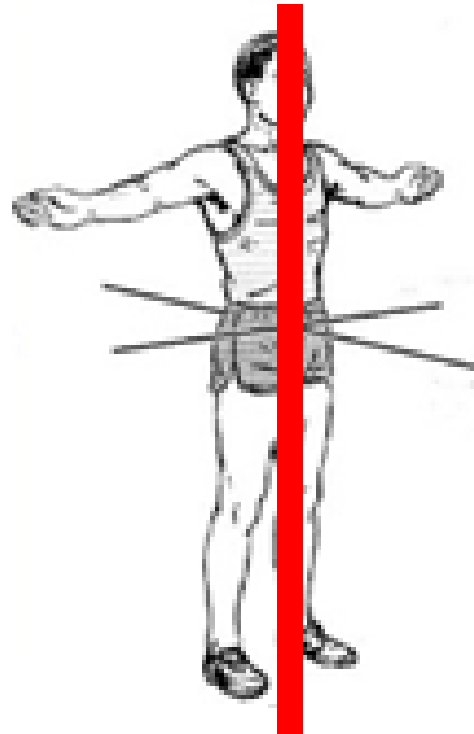
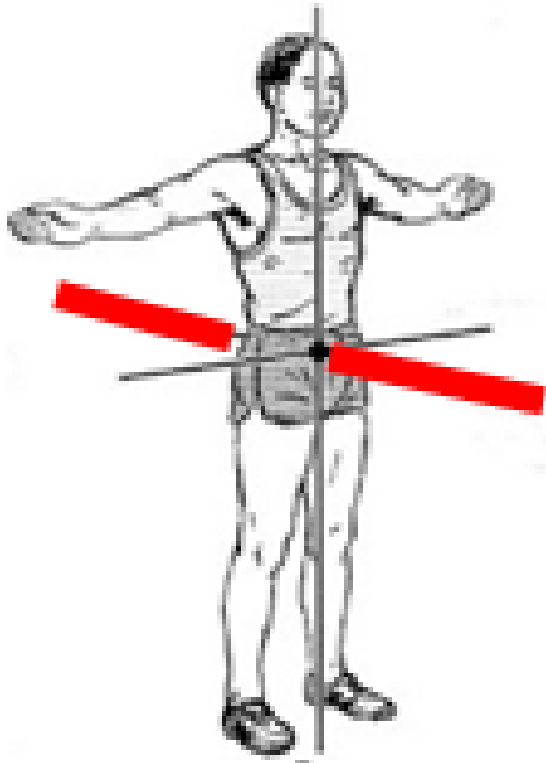
BIOMECHANICS - Planes and axes for movement

Plane	An imaginary line that divides the body into two
Frontal Plane (left picture)	A vertical plane that divides the body into front and back.
Transverse plane (middle picture)	A horizontal plane that divides the body into upper and lower halves.
Sagittal plane (right picture)	A vertical plane that divides the body into right and left sides.



BIOMECHANICS - Planes and axes for movement

PAxes for movement	An axis is an imaginary line at right angles to the plane
Sagittal axis (left picture)	Runs through the body horizontally from the back to front.
Vertical axis (middle picture)	Runs through the body vertically from the top to bottom.
Frontal axis (right picture)	Runs through the body horizontally from the left to right.



Themes

Social Class	Family and friendship for characters from two different social classes form the heart of the play.
Example	Russell shows how wealth brings privilege, even down to the way the Johnstone's and the Lyons are treated differently by the law.
Nature vs Nurture	The debate is about how much a life is determined by inherited genetics (their 'nature') and how much is determined by the environment ('nurture').
Example	The boys are identical twins and so the difference in the way their lives turn out must be a result of their different upbringings/social positions.
Money	Materialism as a theme. Mrs. Johnstone's life in debt leads to problems. Mrs Lyons' wealthy existence fails to bring her contentment.
Example	Once Edward returns from university as a wealthy, he cannot appreciate Mickey's reaction to being jobless. And nor can Mickey's pride allow him to accept financial help from Edward.
Growing Up	Life, for the children, is shown to be a carefree game in Act One. But the pressures of growing up are evident in Act Two.
Fate and Destiny	Mrs Lyons manipulates Mrs Johnstone's superstitious character. Each of the leading characters are trapped by misfortune.

Drama Techniques

Dramatic Irony	The audience are aware throughout the entire play that both Mickey and Edward are twins, but the characters do not find out until the very last scene,
Monologue	a speech presented by a single character, most often to express their mental thoughts aloud
Split Scene	the term is used to describe two or more scenes which are performed on stage at the same time
Improvisation	something created spontaneously
Foreshadowing	be a warning or an indication of future events
The fourth wall	The Narrator and Mrs Johnstone break the fourth wall when they speak to the audience directly.
The features of tragedy	<ol style="list-style-type: none"> 1. The tragic hero 2. Hamartia - The fatal character flaw of the tragic hero 3. Catharsis - The release of the audience's emotions through empathy with the characters. 4. Internal Conflict - The struggle characters engage with over incidents/flaws

Computing

Promotional Designs

Promotion	A very important element of the Marketing Mix (4 P's). How you will make the public aware of your product/service
Sales promotions	Can be used to: to get people into the shop, To sell off old stock, To boost sales, To attract new customers, increase market share

Digital Marketing

Direct mail	Brochures, flyers, letters sent directly to customers
Telemarketing	Phoning customers to tell them about the latest products
Digital	E-mails directly to existing customers—photos, descriptions etc. (Websites, emails, texts, social media Radio adverts, Spotify, adverts TV, adverts YouTube)
Catalogues	Latest products in the range and most up to date prices
Magazines	In-house magazines with products and stories relating to products, stores, locations

Methods

Coupons	A token or voucher in the packaging that can be traded for a discount
BOGOF	Buy one get one free (2 for the price of one)
Loyalty cards	Rewards for repeat custom. Customer build up points or stamps which can be exchanged for good later
Free samples	Encouraging to buy by giving small samples
Discounts	Money off the original price, e.g. 10% off
Branding	Using your recognised name, colours, font style, logo to help sales of new products
Celebrity endorsement	Using celebrities to be seen wearing, driving, using the product will make the public aware and push sales.
Advertising	Is used to: Persuade the customers to buy your product/ service b) To inform people about your products/ services
Print	Posters, newspapers, magazines

Key Word	Definition
Mark-making techniques	describes the different lines, dots, marks, patterns and textures created in a drawing. It can apply to any drawing materials. It can be loose and expressive or controlled and neat. The results will depend on your choice of media, tools and techniques
Graduated Tone	is a tone that fades smoothly from one shade to another across an area. They are often made by varying the pressure on the tool used to make the tone, but can also be made by using overlapping layers of the medium used to make the tone.
Tonal contrast	the range of tones used in a drawing. A wider range means a greater contrast. You can manipulate the contrast depending on how much you want the object or specific part of the art work to stand out. If you are drawing from observation, the contrast can depend on how bright your light source.
Highlight	the area of an object where the light effects is most intense. In painting the highlight of an object should not be pure white as it should contain some of the local colour of the object. White highlights refer to pure reflected light as for example occur on a metal object, but do not occur on or are reflected from coloured glass.
Proportion	refers to the relationship between the different sized components within one whole composition. Proportion can be used to make a composition appear more realistic or more stylised depending on the type of proportion used.
Texture	concerns the surface quality of a piece of work. In three-dimensional artwork, the term refers to how the piece feels when it's touched. In two-dimensional artwork, texture invokes the visual 'feeling' the piece gives off.
Outline	Lines that are used to define the shape or form of an object or to show key details are called outlines.
Mixed-Media	refers to a visual art form that combines a variety of media in a single artwork.
Graphite	a form of carbon and is useful as a writing and drawing tool, as only the slightest pressure is needed to leave a mark. It leaves a shiny metallic grey colour on a surface when moved across it and can be removed with an eraser.
Fine Liner	pens with plastic or fine fibre needle-point tips that generally use water-based ink but sometimes use oil-based. Tips come in various thicknesses but are all relatively thin — hence the name 'fineliner'. They are ideal for drawing, sketching, illustration, technical drawing.
Opaque	not able to be seen through; not transparent.
Mono Printing	The monoprint is a form of printmaking where the image can only be made once, unlike most printmaking which allows for multiple originals
Exquisite Corpse	Cadavre exquis (exquisite corpse) is a collaborative drawing approach first used by surrealist artists to create bizarre and intuitive drawings
Hybrid	created by combining different elements.
Mood board	collection of images, materials, colour palettes, text and other elements that help to communicate your art and design concepts and ideas.
Design ideas	the core idea (s) driving the design of a product or final outcome, explained through a sketches, images, and annotation.

Cooking and Nutrition

Key Word	Definition
Sauce	A well flavoured liquid which has been thickened
Reduction	Simmering a liquid over heat until it thickens
Simmer	To cook food in a liquid that is just below boiling point, where the water is bubbling gently but not boiling
Cross contamination	Transfer of bacteria from one person, object or place to another
Eatwell Guide	A pictorial food guide showing the amounts and types of foods that are needed to make up a healthy balanced diet
Claw grip	A method of cutting food that ensures that the finger tips are tucked out of the way and will not get caught by the knife
Food poisoning	An illness caused by eating contaminated food
En papillote	When food is placed in a paper bag made with greaseproof or baking paper and baked in the oven
Recipe Amendment	Changing or altering a recipe eg changing some ingredients and/ or cooking methods
Seasonality	Foods that grow at certain times of the year and are dependent on the seasons for the correct weather and temperature required for growth
Ramadan	The month of fasting that is set by the Muslim calendar
Diwali	A Hindu feast that takes place in October or November
Kosher food	Food that is specified for a Jewish Diet
Vegan	Someone who does not eat meat or fish, or any animal products

Music

Key Word	Definition
Chords	A chord in music is a combination of three or more notes played simultaneously, forming the harmonic foundation of a piece.
Structure in pop	organization and arrangement of various song sections like verses, choruses, bridges, and the overall layout, creating the framework for the composition.
Harmony	is the combination of different musical notes played simultaneously, creating a rich and pleasing sound that adds depth and character to a musical piece.
Time signature	It tells you how many beats are in each measure and which note gets one beat, helping you keep track of the rhythm while playing or singing.
Dynamic	The volume of a sound or piece of music – loud/soft
A Round/Canon	A round , also called canon, is a musical composition with a minimum of three voices sing exactly the same melody at the unison but with each voice beginning at different times so that different parts of the melody coincide in the different voices, but nevertheless fit harmoniously together
Timbre	Each instrument own unique 'tone quality' and the voice as an instrument had different Timbre
The diaphragm	The diaphragm is basically the muscle below the human lungs and slightly above the stomach responsible for controlling inhalation and exhalation of breath. Most people have heard singers being advised to breathe using their diaphragm every time they sing
Texture	Sometimes voices sing different parts at the same time creating Harmony . Not all vocal music is accompanied by instruments, unaccompanied singing is called A Cappella .
Rhythm	Rhythm is the pattern of sounds and beats in music that creates a sense of movement and flow. It is like the heartbeat of a song that helps us feel the music and dance or sing along. Rhythm can be fast or slow, simple or complex, and is created by combining different beats and notes in a particular order. It is an essential element of music that makes it enjoyable and exciting to listen to.
Tempo	Tempo refers to the speed of music. It's how fast or slow a song sounds.