



HORNCHURCH
HIGH SCHOOL
EXCELLENCE FOR ALL

Year 7

KNOWLEDGE
IS
POWER

KNOWLEDGE ORGANISER

HALF TERM 1

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English

Key Term	Definitions
Dystopia	An imaginary place where there is a lot of suffering
Utopia	An imaginary place where everything is perfect
Civilisation	An organised collection of people
Savage	Fierce, violent and uncontrolled
Primitive	Very basic

Characters	Description
Ralph	The main character (protagonist). He's a twelve-year old English boy who is elected leader of the boys. He tries to maintain civilisation in the group.
Piggy	Ralph's right-hand man. A whiny but clever boy. He represents a scientific, rational side of humans. He is bullied by the other boys
Jack	The villain of the story (antagonist). He becomes leader of the hunters but wants complete power. Jack becomes increasingly wild, barbaric and cruel. He manipulates the other boys and shows how savage human beings can be
Simon	A shy, sensitive boy in the group. In some ways, he is the only naturally 'good' character on the island. He behaves kindly toward the younger boys and is willing to work for the good of the community
Roger	Jack's right-hand man. He is a cruel older boy who bullies the other boys
Sam and Eric	A pair of twins often called 'Samneric'
The Lord of the Flies	A pig's head that is put on a stake as an offering to the beast

Science

Key Term	Definition
Anomaly	A result that does not fit the pattern in your data
Cell	The smallest functional unit of a living organisms
Tissue	A group of one type of cells working together to carry out a function
Organ	A group of different tissues working together to carry out a function
Organ system	A group of organs working together to carry out a function
Organelle	Parts of a cell
Cell membrane	The cell component that surrounds the cell and controls the movement of substances in and out
Cell wall	The cell component that surrounds the cell and strengthens it. In plant cells it is made of cellulose
Nucleus	The cell component that contains genetic material (DNA) and controls the cells activities
Ribosome	The cell component that makes proteins for the cell
Mitochondria	Part of the cell that carries out respiration which releases energy to the cell
Cytoplasm	The jelly-like substance in a cell that is the site of chemical reactions
Chloroplasts	Part of the cell that absorbs light for photosynthesis to make food for the plant
Vacuole	The cell component that contains cell sap, it is used by plants to store substances and keep the cell rigid
Multi-cellular	Living things made up of many types of cells
Nerve cell	An animal cell that transmits electrical impulses around the body
Palisade cell	Cells at the top of the leaf that contain lots of chloroplasts for photosynthesis to take place
Root hair cell	A plant cell found in the roots that has a high surface area to help absorb minerals and water for the soil
Hypothesis	An explanation you can test which includes a reason and a science idea
Independent variable	What you change in an investigation to see how it affects the dependent variable
Dependent variable	What you measure or observe in an investigation when you change the independent variable
Control variable	A factor that is kept constant to stop it affecting the dependent variable
Mean	An average of a set of data, calculated by adding all the values and dividing by the number of values
Range	The maximum and minimum values of a variable
Precise	This describes a set of repeat measurements that are close together
Accurate	Close to the true value of what you are measuring

Maths

Key Term	Definition
<u>Number</u>	
Integer	A whole number
Product	Multiply
Prime number	A number which has exactly two factors. The number one and itself
The first 13 Prime numbers	2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41
Square number	The answer when an integer is multiplied by itself
The first 13 square numbers	1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169
Cube number	The answer when an integer is multiplied by itself three times
The first 6 cube numbers	1, 8, 27, 64, 125, 216
Square root	The number you would multiply by itself to get a value
Cube root	The number you would multiply by itself three times to get a value
Factor	A number that divides another number exactly
Multiple	A number which is part of another number's times table
HCF	Highest Common Factor. It is the largest factor common to a set of numbers
LCM	Lowest Common Multiple'. It is the smallest multiple common to a set of numbers
BIDMAS	Tells us the order of operations: Brackets, Indices, Division, Multiplication, Addition, Subtraction
Standard Form	Is a way to write really big or really small numbers
Standard Form notation	Number between 1 and $9.9 \times 10^{\text{jumps}}$
<u>Algebra</u>	
Variable	A letter used for a value we don't know
Term	A number, letter or combination of both which forms part of an expression
Expression	A collection of terms which can contain letters and numbers
Solve	An instruction used in algebra telling you to find the value of the variable in the equation

Spanish

Spanish	English
¿Cómo te llamas?	How are you called?
¿Cuántos años tienes?	How old are you?
¿Cuándo es tu cumpleaños?	When is your birthday?
¿Cuál es tu color favorito?	What is your favourite colour?
¿Qué hay en tu mochila?	What is in your school bag/rucksack?
Me llamo	I am called...
Tengo años	I am ... years old
Mi cumpleaños es el ... de ...	My birthday is on...
Mi color favorito es ...	My favourite colour is...
En mi mochila hay ...	In my school bag/rucksack there is/are...

Spanish	English
lunes	Monday
martes	Tuesday
miércoles	Wednesday
jueves	Thursday
viernes	Friday
sábado	Saturday
domingo	Sunday
enero	January
febrero	February
marzo	March
abril	April
mayo	May
junio	June
julio	July
agosto	August
septiembre	September
octubre	October
noviembre	November
diciembre	December

Spanish	English
Verde	green
Azul	blue
Amarillo	yellow
Naranja	orange
Rojo	red
Rosa	pink
Violeta	purple
marrón	brown
Negro	black
blanco	white
porque / ya que	Because
también	Also
pero	But
sin embargo	However
por la tanto / por eso	Therefore
Tengo	I have
Soy	I am
Hay	There is
¿Y tú?	And you?

Geography

Key Term	Definition
Contents page	A page at the start of the atlas which tells you where information will be. It will give you the page numbers
Index page	A page in the book, usually at the back of a book with a list of topics/names with reference to page numbers
Key	More detailed information provided from a map/ diagram. Often uses colours or symbols to represent features
OS Map	OS is short for Ordnance Survey map. It uses a range of symbols, abbreviations and language to show features on the landscape of GB.
Grid reference	Is a method of describing a location using intersecting vertical and horizontal grid lines
4 figure grid reference	Shows the location of a place in 4 figures. E.g. 45,90
6 figure grid reference	Shows the location of a specific place in 6 figures, this is more accurate than 4 figure. E.g. 457,901
Scale	The ratio of a distance on a map, graph or diagram to the corresponding actual distance
Relief	Height above sea level and is shown in many ways on a map
Spot height	It is an exact point on a map with a height recorded
Contour lines	This show the GRADIENT of the hill. This means contour lines tell us how steep the hill is
Layer colouring	It involves colouring the area between selected contours in different colours. The darker the colour the higher the land
Latitude	Lines of latitude circle the Earth in an east-west direction. They are parallel to each other
Longitude	Lines of longitude run from the top of the Earth to the bottom. They are not parallel as lines of latitude are – they meet at a point at the north and south poles
Physical geography	A branch of geography that looks at the natural features of the planet, such as the ocean, mountains and rivers
Human geography-	A branch of geography that looks at human activities and how humans have shaped the planets surface, such as cities, jobs and the economy
Environmental geography	A branch of geography that looks at how humans have affected the planet, such as pollution, impacts on wildlife and the earth natural features
Continents	Large and continuous land that is made up of several countries. 7 continents Africa, North America, South America, Asia, Europe, Antarctica , Oceania
Ocean	Large body of water. 5 main oceans Atlantic, Pacific, Indian , Artic, Southern

History

Key Term	Definition
Opinion	A view or judgement formed about something
Chronology	The arrangement of events or dates in the order of their occurrence
Historical sources	Historical sources include documents, artefacts, archaeological sites, oral transmissions, stone inscriptions, paintings, recorded sounds, images (photographs, motion picture)
Subjectivity	The quality of being based on or influenced by personal feelings, tastes, or opinions
Objectivity	The quality of not being based on or influenced by personal feelings, tastes, or opinions
Source reliability	Is a source evaluation skill which asks you to draw a conclusion about the trustworthiness of a source based on provenance and content
Provenance	Is a source evaluation skill which asks you to draw a conclusion about the trustworthiness of a source based on provenance (nature, origin and purpose) and content
Nature	Type of source, such as a diary, letter or newspaper
Origin	When the source was produced and by who
Purpose	Why was a source produced, and whether it gives a particular message
Interpretation	An explanation of past events, based on primary and secondary historical sources
Comparison	The act of evaluating two or more things by determining which characteristics are similar, different and to what degree
Evaluation	The ability to reach an informed judgment about your historical topic
Primary Source	A primary source provides a first-hand account of events recorded during or shortly after the events described occurred
Secondary Source	A secondary source of information is one that was created later by someone who did not experience first-hand or participate in the events

Computing

Key Term	Definition
E-safety	Staying safe online. Making sure that people are protected from harm of using any electronic device for online purposes
E-mail	Is short for electronic mail. An email is sent from one computer to multiple computers through the use of email addresses
Malware	Short for Malicious Software. Malware can be various different programs which will try to do something unwanted to your computer

Three Main Types of Malware

1. Virus	Like a normal common cold a virus spreads from one computer to another through programs. It can work by slowing your computer down or in severe cases you could lose all your programs and documents
2. Trojan	A Trojan horse will actually pretend to be a useful and safe program but it actually will try and attack your device
3. Worms	Very similar to viruses as they do duplicate and spread. However, they can do this hundred and thousands of times and infect other computers in minutes through email attachments
Phishing	Trying to trick someone into handing over sensitive information through the use of emails
Plagiarism	Copying work from another source and passing it off as your own
Digital footprint	A trail of data you leave when using the internet. Sites visited, emails, pictures sent etc.
Cyberbullying	bullying someone through any use of technology

Types of Cyberbullying

Harassment	Using text messaging, instant messaging and email to harass, threaten or embarrass the target
Impersonating someone	Developing a screen name that is similar to the victim's screen name and then posting rude or hurtful remarks while pretending to be the victim
Creating websites	Spreading rumours, lies or gossip about the victim online through websites or blogs
Trolling	Provoking or antagonising someone online and looking for a reaction
Grooming	When an adult befriends a child in preparation to commit a further criminal offence

Ways to Prevent Cyberbullying

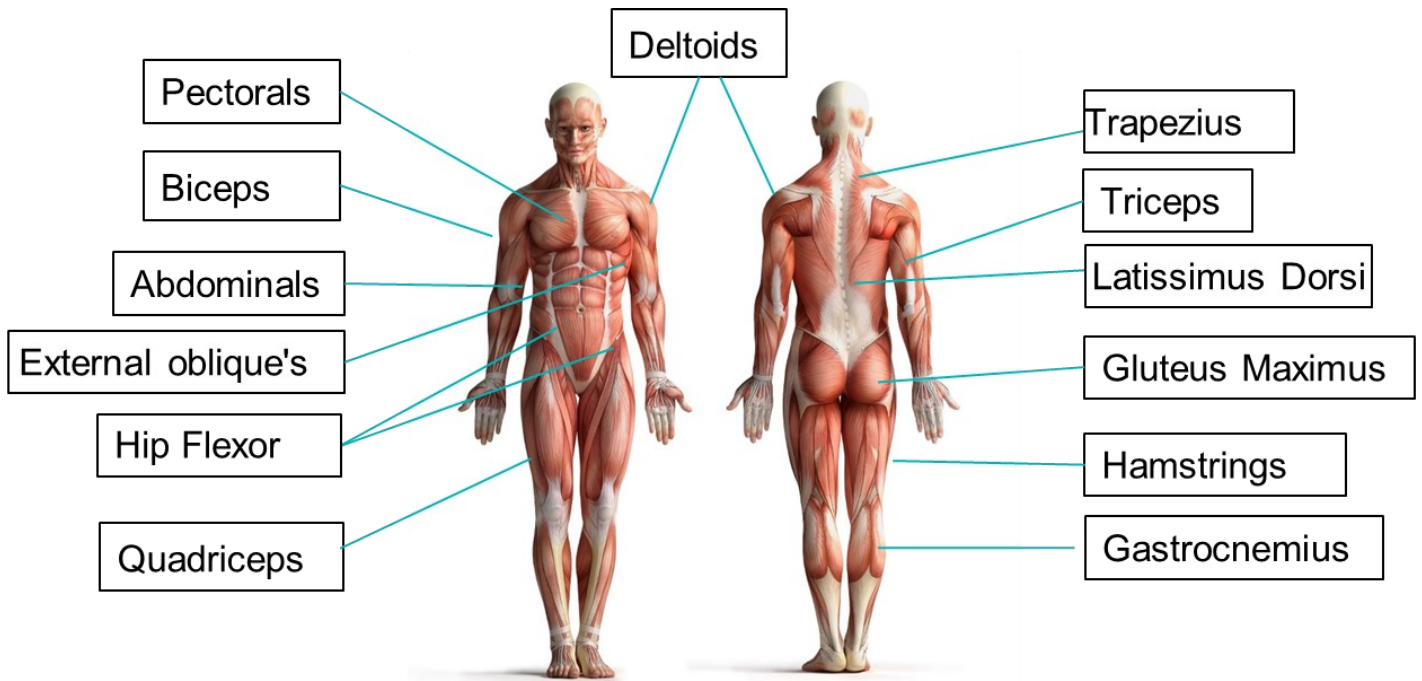
Notice	Recognize if there has been a change in mood or behaviour and explore what the cause might be
Talk	Ask questions to learn what is happening, how it started, and who is involved
Report	Most social media platforms and schools have clear policies and reporting processes. If a classmate is cyberbullying report it to the school
Support	Peers, mentors, and trusted adults can sometimes intervene publicly to positively influence a situation where negative or hurtful content posts about a child

P.E

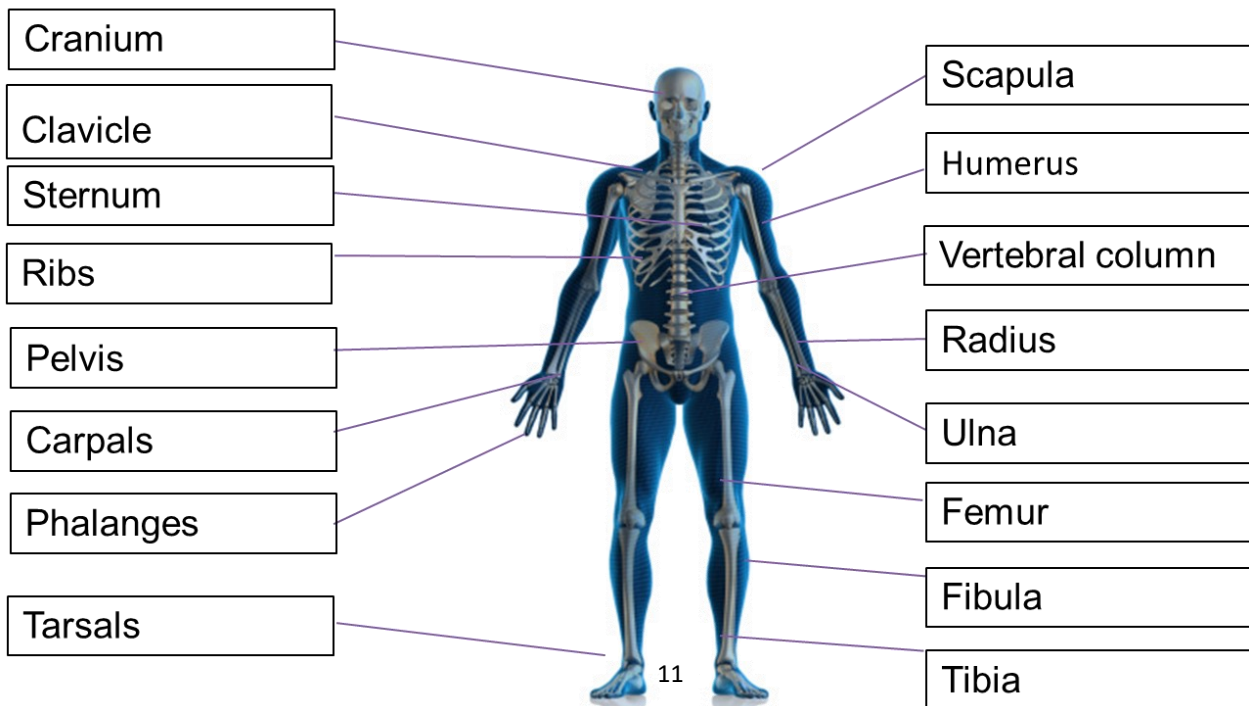
Key Term	Definition
Feedback	Vital part of information processing which provides confidence, motivation and improves performance
Intrinsic feedback	This comes from within the performer. Kinaesthetic senses provide feelings from muscles/joints about the action.
Extrinsic feedback	This comes from results and match analysis. 1. Knowledge of results – the outcome 2. Knowledge of performance
Concurrent Feedback	Information provided to the athlete during the performance.
Terminal Feedback	Information provided to the athlete after the performance
Visual Guidance	Learners are shown the whole action by the coach i.e. demonstration/use of the video playback
Verbal Guidance	Learners listen to information given to a performer and often using associated terminology. i.e. instructions told to a team
Manual guidance	Coaches will physically move a performer and support them in performing a skill i.e. Trampolining somersault support
Mechanical Guidance	Learners use equipment to help support the practicing of a skill. i.e. floats during swimming stroke development
Massed practice	When no rest intervals are given
Distributed practice	When a rest interval is given to allow recovery, feedback & coaching
Fixed practice	Uses repetition of the same activity to develop consistency in performance
Varied/Variable practice	Involves or performing a skill in different situations where conditions are changeable

P.E

Key Term	Definition
Muscular system	Works in conjunction with the skeleton to produce movement of the limbs and body
Antagonistic pairs	Muscles are arranged in antagonistic pairs. As one contracts, its partner relaxes
Agonist	The muscle that contracts to produce movement
Antagonist	The muscle that relaxes to allow the movement to occur



Key Term	Definition
Skeleton	Is the central structure of the body



Carousel Subjects

Performing Arts

Key Term	Definition
Performance	Where you show an audience what you have created during a rehearsal
Character	The person or thing that you are acting out at that time
Role	Your role is your job or character within a performance
Still Image	Where you create a picture that is entirely still. You will most likely do this with a group to show an audience an image of a moment in a scene
Body Language	When you use your body to show and audience what you are thinking/feeling
Facial Expressions	When you use your face to show and audience what you are thinking/feeling
Split scene	A way of showing two different times or places on stage at once. While one half of the
Thought Tracking	When a character speaks their inner thoughts and feelings while the scene is paused
Physical theatre	A style of theatre that uses our bodies to create objects and movements

Food

Key Term	Definition
Hazard	Anything that is dangerous
Kitchen Hygiene	Ensuring that everything is clean when preparing food
Kitchen Safety	Being safe in the kitchen
Cross contamination	Transfer of bacteria from one person , object or place, to another
Nutrients	Chemicals found in food that are needed for body functions
Macronutrients	Nutrients that are needed in the body large amounts
Micro-nutrients	Nutrients that are needed in the body in small amounts
Diet	All the foods that we eat
Balanced diet	Eating a variety of foods in the correct proportions to meet the body's needs
Eat well 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 finger tips are tucked out of the way and will not get caught by the knife
Bridge Hold	A method of cutting food that ensures that fingers are out of the way as the knife cuts through the food
Danger Zone	The range of temperatures in which bacteria multiply very quickly

Design Technology

Key Term	Definition
Hazard	A hazard is a potential source of harm that could cause damage to health, life or property
Geometric Shapes	A range of figures such as a square, triangle, or rectangle
Design	A plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is made
Acrylic sheets	Man-made sheets from plastic. Acrylic sheets can be used to build and make a variety of products. Acrylic can also be used on the laser cutter
Liquid Solvent Cement	General purpose plastic adhesive for Perspex and acrylic sheet, apply using a paint brush or pour directly
Laser Cutter	A machine that uses a laser to cut out a variety of materials such as wood and acrylic. The laser cutter can also etch and engrave onto materials
Mechanism	A system of parts working together in a machine, such as the mechanism of a clock
Strip Heater	Is a particular machine that heats up materials such as plastics and acrylic which softens the material to make it easy to bend and twist
Jig	Is a specially made piece of equipment used to guide another tool
2Design	A type of software to use to create designs/files than can be sent to the Laser cutter

Art

Key Term	Definition
Line	An element of art defined by a point moving in space. Line may be two-or three-dimensional, descriptive, implied, or abstract
Shape	An element of art that is two-dimensional, flat, or limited to height and width
Form	An element of art that is three-dimensional and encloses volume; includes height, width AND depth (as in a cube, a sphere, a pyramid, or a cylinder). Form may also be free flowing
Value	The lightness or darkness of tones or colours. White is the lightest value; black is the darkest. The value halfway between these extremes is called middle gray
Tone	Tone means how light or dark something is. The tones artists and designers use and the contrast between them can create very different moods and visual effects
Organic	Shapes that are not regular or even, using a combination of edges that are curved or angular
Contrast	Contrast is created by using opposites near or beside one another, such as a light object next to a dark object or a rough texture next to a smooth texture