



HORNCHURCH
HIGH SCHOOL
EXCELLENCE FOR ALL

Year 8

KNOWLEDGE
IS
POWER

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HALF TERM 1

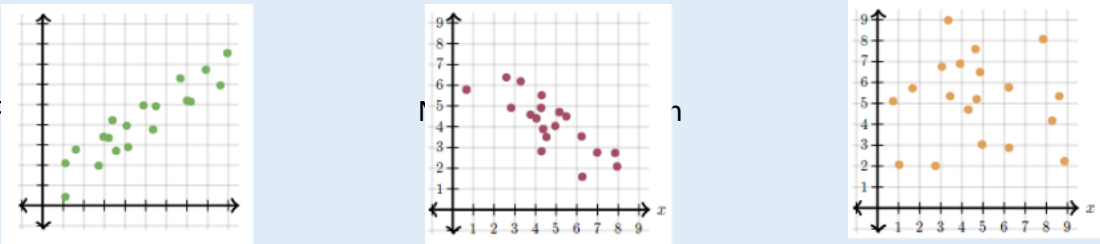
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English

Key Term	Definition
Protagonist	The main character of a text
Context	What was happening when the text was written or set
Hierarchy	Members of a group are ranked in order of status or authority
Setting	Where the story takes place
Segregation	Enforced separation of different racial groups
Language Terms	
Alliteration	Using the same letters at the beginning of words
Personification	Using human qualities to describe an object
Repetition	Repeating a word or phrase
Onomatopoeia	Words that sound like their meaning
Metaphor	When something is described as being something else
Imagery	Visually descriptive language
Simile	When something is described as being like something else
Emotive Language	Language used to evoke emotion in the reader
Word Groups	
Noun	A word for a person, place, thing or idea
Verb	A word that describes what a person or thing does or what happens
Adjective	A word that describes a noun
Adverb	A word that is used to give more information about a verb
Pronoun	Used in place of a noun that has already been mentioned or that is already known
Preposition	A word such as 'after', 'in', 'to', 'on', and 'with'. They show the relationship between the noun or pronoun and other words in a sentence.
Conjunction	A word such as 'and', 'because', 'but', and 'for'. Used to connect phrases, clauses and sentences
Determiner	A word that introduces a noun such as 'a', 'an', 'the', 'every', 'this', 'those', or 'many'.

Maths

Key Term	Definition
<u>Algebra</u>	
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
Equation	Two expressions which have the same value, separated by an '=' sign
Solve	Find the value of the letter (unknown) in an equation
Expand	Multiply out the brackets
Simplify	Group like terms together
<u>Number</u>	
Negative numbers	A number that is less than zero
Decimal numbers	A number whose whole number part and the fractional part is separated by a decimal point
Integer	A whole number
<u>Statistics</u>	
Stem and leaf diagrams	Is a table where the data is split into 'stems' and 'leaves'
Pie chart	A circular chart that shows proportion of each group
Scatter graph	A graph to compare two variables
Correlation	Shows whether there is a relationship between the two variables
	 <p>The image contains three scatter plots on a grid. The first plot on the left shows a positive correlation with green dots. The middle plot shows a negative correlation with red dots. The third plot on the right shows no correlation with orange dots.</p>
Line of best fit	A straight line that bests fits the data. It may pass through some or none of the points
Outlier	Is a point that does not fit the data set
Two-way table	A table that shows information from more than one category
Venn Diagrams	Are made up of two or more circles and are a way of grouping information
Set	Is a collection of items

Science

Key Term	Definition
Balanced Diet	Eating food containing the right nutrients in the correct amounts
Carbohydrates	Nutrients that provide the body with energy
Protein	Nutrient your body uses to build new tissues for growth and repair
Lipids	Nutrients that provide a store of energy and insulate the body
Iodine	A test for the presence of starch. If present the solution turns from orange to blue/black
Biuret Solution	A test for the presence of protein. If present the solution turns from blue to purple
Digestion	Process in which large molecules are broken down into small molecules
Villi	Finger-like projections in the small intestines that increase the surface area
Pancreas	An organ that produces digestive enzymes
Stomach	Organ where food is mixed with acidic juices to start the digestion of protein and to kill microorganisms
Small intestine	Upper part of the intestine where digestion is completed and nutrients are absorbed
Large Intestine	An organ that absorbs the water from the digested food back into the blood
Liver	Produces bile for digestion
Saliva	A liquid produced in the salivary glands in the mouth that contains enzymes
Optimum	The best
Enzyme	A biological catalyst
Catalyst	Speeds up the rate of a reaction without being used up
Active Site	The site where the substrate binds to the enzyme
Substrate	The substance being broken down
Enzyme Substrate Complex	When the enzyme is bound to the substrate which is being broken down
Protease	The enzyme that breaks down proteins into amino acids
Amylase	The enzyme that breaks down starch into glucose
Lipase	The enzyme that breaks down lipids into glycerol and fatty acids
Bile	Neutralises stomach acid and breaks fat into small droplets
Buffer	A chemical that maintains the pH of a solution
Water bath	A large container of water that maintains solutions at a particular temperature
pH	How acidic or alkaline a solution is
Rate	The amount of product produced over time

Spanish—Holidays

Spanish	English
¿Adónde fuiste de vacaciones?	Where did you go on holiday?
el año pasado	last year
el verano pasado	last summer
Fui a...	I went to...
¿Con quién fuiste?	Who did you go with?
Fui con...	I went with...
mis amigos/as	my friends
mi clase	my class
mi familia	my family
mis padres	my parents
¿Cómo fuiste?	How did you get there?
Fui/Fuimos en...	I/We went by...
autocar	coach
avión	plane
barco	boat/ferry
coche	car
tren	train
No fui de vacaciones.	I didn't go on holiday.
¡Qué bien!	How great!
¡Qué divertido!	What fun!/How funny!
¡Qué guay!	How cool!
¡Qué rico!	How delicious!/How tasty!
¡Qué aburrido!	How boring!
¡Qué lástima!	What a shame!
¡Qué rollo!	How annoying!

Spanish	English
¿Qué hiciste en tus vacaciones de verano?	What did you do on your summer holiday?
Bailé.	I danced.
Compré una camiseta.	I bought a T-shirt.
Descansé en la playa.	I relaxed on the beach.
Mandé SMS.	I sent texts.
Monté en bicicleta.	I rode my bike.
Nadé en el mar.	I swam in the sea.
Saqué fotos.	I took photos.
Tomé el sol.	I sunbathed.
No nadé en el mar.	I didn't swim in the sea.
Comí paella.	I ate paella.
Escribí SMS.	I wrote texts.
Vi un castillo interesante	I saw an interesting castle
¿Cómo te fue?	How was it?
Fue divertido.	It was fun/funny.
Fue estupendo.	It was brilliant.
Fue fenomenal	It was fantastic.
Fue flipante	It was awesome.
Fue genial.	It was great.
Fue guay.	It was cool.
Fue un desastre.	It was a disaster.
Fue raro.	It was weird.
Fue regular.	It was OK.
Fue horrible.	It was horrible.
Fue horroroso	It was terrible.

History

Key Term	Definition
Industrial Revolution	A time of great change in Britain when people started to make things by machine in factories. It spans from 1750 to 1900
Urban	Built-up areas in which people live in close proximity. This refers to either towns or cities
Rural	Countryside areas in which the population is spread thinly
Invention	Something new which is created, can be an idea or an object
Workhouse	An institution which would house and look after the poor. In return for food and lodging inmates would be expected to work to produce goods
Cholera	An infectious and often fatal bacterial disease of the small intestine typically contracted from infected water supplies and causing severe vomiting and diarrhoea
Industrial	Processing raw materials or manufacturing goods in factories
Manufacture	Making something on a large scale
Entrepreneur	Someone who sets up a business hoping to make profit
Laissez faire	Meaning 'leave well alone'. The attitude of the rich to the poor and the Government towards working conditions in factories
Destitute	To be extremely poor and not able to support yourself
Black Gold	Coal. Coal became such a profitable industry, that many started calling it black gold
Pauper Apprentice	Orphaned children who would be sent to work in factories to keep them off the streets
Smog	Air pollution that reduces visibility. The term was first used in the early 1900s to describe a mix of smoke and fog. The smoke usually came from burning coal
Textile	A flexible material made by creating an interlocking network of yarns or threads, which are produced by spinning raw fibres into long and twisted lengths
Pollution	Coal was used more than ever during the Revolution. The burning of coal created smoke, which led to terrible pollution in the cities
Overcrowding	Due to large numbers of people moving to the cities, there were not enough houses for all these people to live in. Sometimes whole families lived in one room
Disease	Typhus, typhoid, tuberculosis and cholera all existed in the cities of England. Overcrowding and poor quality water supplies all helped spread disease
Transport Revolution	As production and demand for British goods sky rocketed and more people lived and worked in towns, Britain experienced a transport revolution

Geography—Weather

Key Term	Definition
Weather	The short term day to day conditions in the atmosphere over a small/local area
Climate	The weather conditions measured over a large region across an average of 30 years
Precipitation	Water in any form that falls to Earth (rain, snow, sleet, hail)
Temperature	Measurement of how hot or cold
Relief rainfall	Rain being caused to rise over hills and mountains
Frontal rainfall	When warm air has to rise over cold air to cause rain
Convectional rainfall	Rain that is produced when air rises after being heated and evaporated
Latitude	A measurement of distance north or south of the equator, which has a latitude of 0° .
Altitude	Height above sea level, normally measured in meters
Ocean Currents	A continuous, directed movement of ocean water that flows in Earth's oceans
Air pressure	The weight of the air in the atmosphere pushing down to Earth
Low pressure	Caused by air rising
High pressure	Caused by sinking air
Microclimate	A very small area which has different weather conditions to the area as a whole
Tropical storm	A low pressure wind system formed over warm ocean water
Drought	A long period of time with little to no rainfall, causing water shortages
Extreme weather	Weather that is unseasonal, unusual or severe

Computing

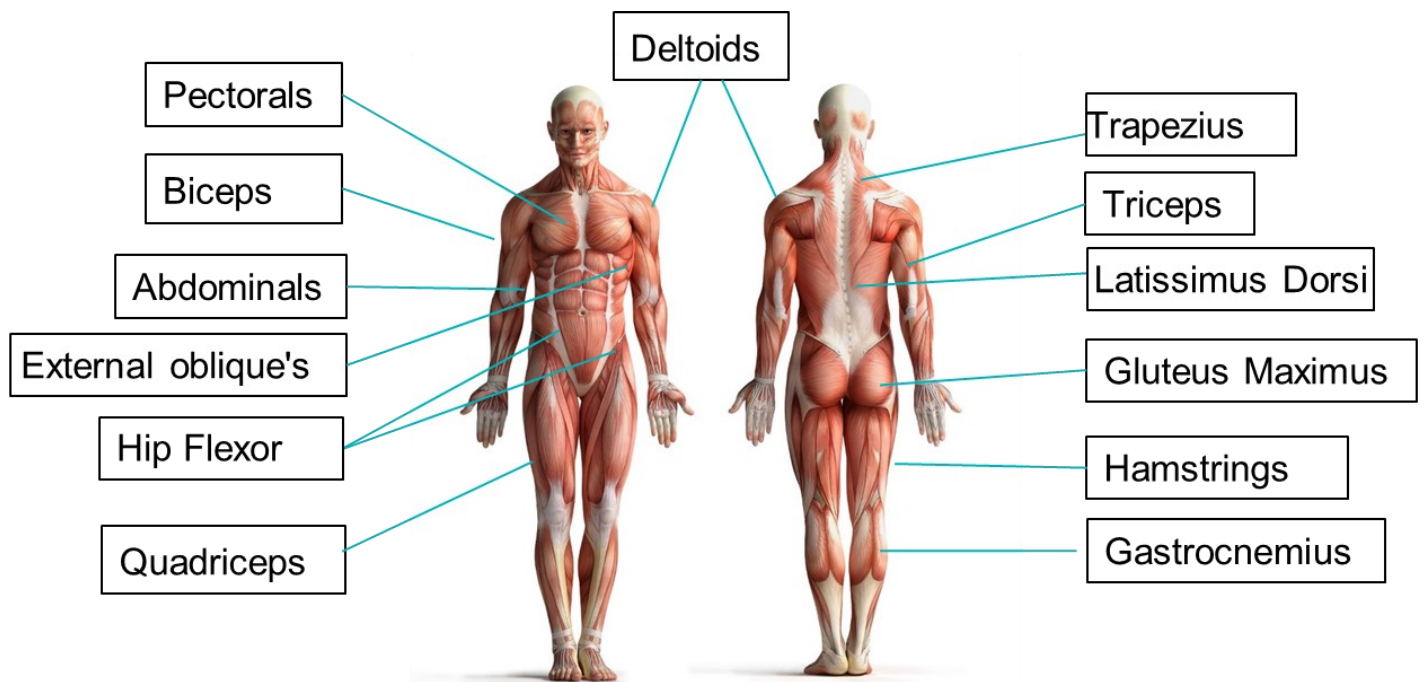
Key Term	Definition
E-mail scams	A deceptive way of getting you to part with money or trick you in to something you wouldn't usually do. May also damage your computer and files
Phishing	Tricking you into handing over sensitive details, such as security log-in details
Virus generated	Opening it can generate a similar email to be sent to all your email contacts. Can contain a forged link or a request for cash
Advanced fee fraud	Usually accompanied by a long, emotional plea, promises a large sum of money in return for a small advanced fee
Trojan horse/malware	Offers you something tempting to look at – like a funny video – and installs malware on your device
<u>Copyright and plagiarism</u>	
Copyright	© Protects the rights of an author/creator. Someone else's work cannot be copied without permission
Plagiarism	Is using someone else's creative work as if it is yours. This is not allowed
Copyrighted material	Can be music, films or pictures. Sharing or downloading these illegally is a copyright infringement.
Data protection (GDPR)	Data about you must be accurate and up to date
	You have a right to see this data if you so wish
	The data must be physically locked away or protected by passwords/encryption
	The data can only be held for as long as necessary by the organisation. After that it must be destroyed.
Passwords	is a string of characters used to verify the identity of a user. These should always be at least 8 characters long and include at least 1 uppercase letter, 1 lowercase letter, 1 number AND a special character

P.E

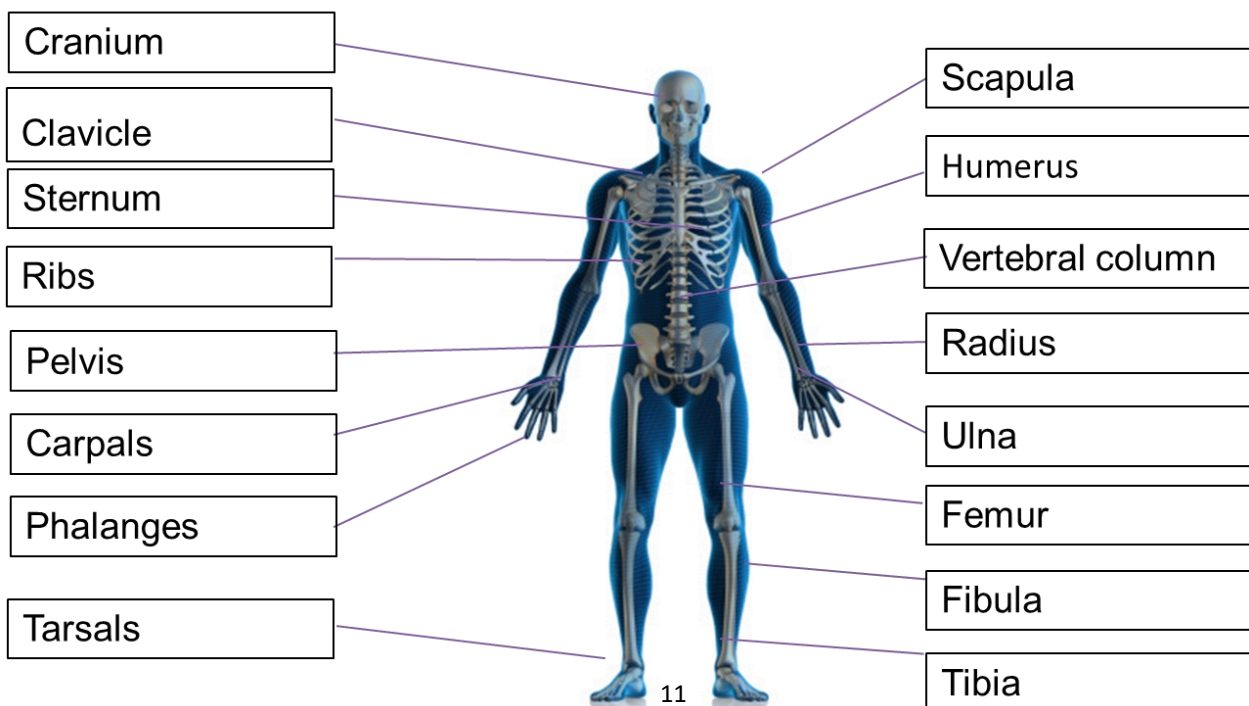
Key Term	Definition
Feedback	Vital part of information processing which provides confidence, motivation and improves performance
Intrinsic feedback	This comes from within the performer. Kinaesthetic senses provide feelings from muscles/joints about the action.
Extrinsic feedback	This comes from results and match analysis. <ol style="list-style-type: none">1. Knowledge of results – the outcome2. Knowledge of performance
Concurrent Feedback	Information provided to the athlete during the performance.
Terminal Feedback	Information provided to the athlete or 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

Food

Key Term	Definition
Energy	The ability to do work or to be active
Energy Balance	Eating the right amount of food for our energy needs (energy in =energy out)
Allergy	A condition where the body's immune system reacts unusually to some foods (allergens) and causes symptoms. It can be life threatening.
Intolerance	A long term condition where certain foods cause someone to feel unwell. It is usually not life threatening
Nutrients	Chemicals found in food that are needed for body functions
Macronutrients	Nutrients that are needed in the body in 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
Gelatinisation	When starch particles swell and burst, thickening a liquid
Yeast	A micro-organism used as a raising agent in bread making

Music

Key Term	Definition
Bass clef	A symbol used at the beginning of the stave to let the musician know that the notes are written in the bass clef
Bass	Low pitched sounds
Good Boys Deserve Football Always	The mnemonic used to remember the notes on the lines in bass clef
All Cows Eat Grass	The mnemonic used to remember the notes in the spaces in bass clef
Riff	A repeated pattern, usually catchy, used in popular music. Often played on the bass guitar or keyboard
Alberti Bass	A pattern played in the left hand on the Piano which was popular in the classical period. The notes of the chord are played in this order; 1 5 3 5
Walking Bass	A bass line used in Jazz/Blues music played on a bass guitar or an upright bass. There is a note played on each beat of the bar—never stopping
Plucked/Pizzicato	When an instrument with strings is played using the fingers instead of a bow. Walking bass lines are most often played using this technique

Performing Arts

Key Term	Definition
Soundscape	A collection of sounds that can be layered to create mood or atmosphere in a performance
Setting	The location, time or place in which the play or scene is set
Atmosphere	The overall feeling created in the space when a performance is happening
Playwright	The person who writes the play
Moral	A lesson that can be derived from a story or performance
Levels	Using different heights and positioning during a scene to make it visually interesting
Proscenium Arch	The classic staging used in most theatres where there is a set stage in front of the audience which is normally tiered. In larger theatres there is a classical arch above the stage
Thrust stage	A type of stage that has three sides of audience
Traverse Stage	A type of stage that looks like a cat walk with only two sides of audience
In the Round	A type of stage that allows the audience to be seated in a shape that goes all around the stage area
Hot seating	A technique used in rehearsal where the actor is questioned about their character and must improvise their answers. This allows the actor to get to know their character further

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. Form may also be free flowing
Self portrait	A portrait an artist makes using himself or herself as its subject, typically drawn or painted from a reflection in a mirror
Tone	The particular quality of brightness, deepness, or hue of a shade of a colour
Space	An element of art that refers to the distance or area between, around, above, below, or within things
Proportion	The correct, attractive, or ideal relationship between one thing and another or between the parts of a whole
Golden Ratio Art	Is a method that you can use to divide lines and rectangles in an aesthetically pleasing way. As an easier rule of thumb for your art, you can use a ratio of 3 to 5
Profile	The side view of an object or person
Full face	The head-on view of a person or object

Design Technology

Key Term	Definition
Sustainability	Meeting the needs of the present without compromising the ability of future generations to meet their own needs
Lifestyle	The way in which a person lives
Renewable energy	Energy that is collected from resources that are naturally replenished.. It includes sources such as sunlight, wind, rain, tides, waves and geothermal heat
Solar Energy	Is radiant light and heat from the Sun that is harnessed using a range of technologies such as solar power to generate electricity
Geothermal	Is heat within the earth. Geothermal energy is a renewable energy source because heat is continuously produced inside the earth
Wind Energy	Is mostly the use of wind turbines to generate electricity. Wind power is a popular,
Hydro Energy	Also known as water power, is the use of falling or fast-running water to produce
Life cycle	Can be defined as how the technology and its processes affect the business processes and impact the entire life cycle of the product offerings of the company