



HORNCHURCH
HIGH SCHOOL
EXCELLENCE FOR ALL

Year 8

KNOWLEDGE
IS
POWER

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HALF TERM 2

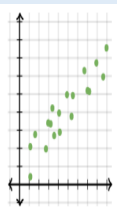
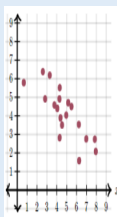
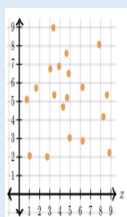
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English

Key Term	Definition
Direct Address	Talking to the person who is reading.
Alliteration	Words next to each other that start with the same letter.
Facts	Something that can be proven true.
Opinions	An idea that cannot be proven true.
Rhetorical Questions	A question that doesn't require an answer.
Repetition	Something said more than once.
Exaggeration	Saying something is more dramatic than it is.
Statistics	Using numbers to support a point.
Triplets	Three things next to each other. 'Bigger, better, faster'
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
Fractions	
Numerator	The top part of a fraction.
Denominator	The bottom part of a fraction.
Mixed number	Is an integer and fraction combined
Improper fraction	A fraction where the numerator is bigger than the denominator
Statistics	
Pie chart	A circular chart that shows proportion of each group
Two way table	A way to display frequencies for two categorical variables
Scatter graph	A graph to compare two variables
Correlation	Shows whether there is a relationship between the two variables
	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>Positive correlation</p>  </div> <div style="text-align: center;"> <p>Negative correlation</p>  </div> <div style="text-align: center;"> <p>No correlation</p>  </div> </div>
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 Diagram	Are made up of two or more circles and are a way of grouping information
Set	Is a collection of things. Set A may be odd numbers, Set B could be prime numbers
Surface area and Volume	
Cross section	A cross section is the shape we get when cutting straight through an object
Prism	Is a 3D shape with the same cross section all the way through
Volume	The amount of 3-dimensional space something takes up
Surface Area	Is the area of all the faces on a 3D shape
Plans and Elevations	
Plans and elevations	Are 2D representations of 3D shapes
Plan	Is the view from the top of the shape
Front elevation	Is the view from the front of the shape
Side elevation	Is the view from the side of the shape

Science

Key Term	Definition
Atom	The smallest unit of matter in an element
Element	A substance only made up of one type of atom
Compound	Two or more different atoms joined by chemical bonds
Mixture	Two or more different atoms or compounds not joined by chemical bonds
Molecule	Two or more atoms joined by chemical bonds
Chemical formula	Shows the atoms present in a compound
Proton	A positively charged subatomic particle
Neutron	A subatomic particle with no charge
Electron	A negatively charged subatomic particle
Ion	A charged atom (it has lost or gained an electron)
Group	A column down the periodic table
Period	A row across the periodic table
Trend	A pattern in data
Nucleus	The centre of an atom
Energy Levels	The shells surrounding the nucleus where electrons are held
Inert	An unreactive element
Chemical Property	Characteristics of how the element acts in reactions
Physical Properties	Basic features of a material that effects how it behaves e.g. melting point
Halogen	A group 7 non-metal.
Alkali metal	A group 1 metal. They form hydroxides in water which are alkaline
Noble Gas	A group 0 element. Sometimes called group 8.
Transition metal	Metals that do not belong to a group.
Melting point	The temperature point at which a solid turns into a liquid
Boiling Point	The temperature point at which a liquid turns into a gas
Displacement	When a more reactive element takes the place of a less reactive element in a compound
Electron Shielding	When the shells reduce the electrostatic attraction between electrons and the nucleus
Electrostatic attraction	The force of attraction between opposite charges (positive and negative)
Anion	Negatively charged ion
Cation	Positively charged ion

Spanish

Spanish	English
Me chifla	I'm mad about
Me flipa	I'm crazy about
Me mola	I'm crazy about
Me interesa	I'm interested in
Me fascina	I'm fascinated by
Me apasiona	Im passionate about
Me molesta	it annoys me
Prefiero	I prefer
Me fastidia	it irritates me

Spanish	English
No soporto	I can't tolerate
No aguanto	I can't stand
Detesto	I detest
Creo que	I believe that
Opino que	In my opinion
Me parece que	it seems to me
En mi opinion	in my opinion
Para mí	to me,
Pienso que	I think that
Pienso que	I think that

Descansar	To rest
Escuchar la música	To listen to music
Ir al cine	To go to the cinema
Leer libros/revistas	To read books/ newspapers
Usar el ordenador	To use the computer
Bailar	To dance
El baloncesto	Basketball
Los artes marciales	martial arts
El ciclismo	cycling
El atletismo	athletics
La equitación	horse riding
La escalada	climbing
La gimnasia	gymnastics
El patinaje	skating
La natación	swimming

Ver la tele	To watch tv
Una película de amor	love film
De acción	action film
De aventuras	adventure film
De ciencia ficción	science- fiction
De terror	horror film
El hip-hop	hip-hop music
El pop	pop music
La música clásica	classic music
Un concurso	A competition
Un programa de deporte	sport programme
Un documental	A documentary
Una telenovela	A soap opera
Una comedia	A comedy
Las noticias	The news

History

Key Term	Definition
French Revolution	A political and social upheaval in France (1789-1799) which ended the rule of French absolute monarchy
Absolute Monarchy	A form of government in which a society is completely ruled by one monarch
Three Estates	The estates of the realm under the Ancient Regime was characterized by the burden of taxation. The king was not part of any estates. The third estate were the 'everyday people' who paid the most in tax and made up 98% of the population
Age of Enlightenment	Also known as the Age of Reason, it was a period in European history characterized by the ideas of liberty (freedom), equality, and science
Estates General	An assembly/meeting between the three estates designed to resolve conflict
Divine Right	The concept that a monarch's right to rule a nation is derived from (comes from) God
National Assembly	The name was given to the Third Estate after it separated from the Estates-General in 1789. It claimed to legitimately represent the French population
The Bastille	Was a fortress in Paris, for most of its history was used as a state prison by the kings of France
Guillotine	An apparatus designed for efficiently carrying out executions by beheading, it is a tall, upright frame with a weighted blade that drops on the victim's neck
Jacobin	A radical political group led by Maximilien Robespierre, they called for democratic solutions to France's problems and spoke for the French urban poor and peasants
Radicalism	The beliefs or actions of people who advocate (want) thorough or complete political or social reform (change)
Declaration of the Rights of man	A human civil rights document Inspired by Enlightenment philosophers. the Declaration was a core statement of the values of the French Revolution – liberty and democracy for all
American Revolution	Fought against the British. France spent a lot of money and time fighting for American freedoms, but had very few themselves
The National Assembly	Group formed by the Third Estate who broke away. They demanded a new constitution and a fairer country. Louis XVI did not take the national Assembly seriously and fired Necker
Reign of Terror	September 1793 – July 1794. Thousands of people are sentenced to death by execution caused by conflict between the Jacobins and the Girondins

Geography—Ecosystems

Key Term	Definition
Ecosystem	An interconnected community of plants, animals and their surroundings
Biome	A large scale, global ecosystem
Abiotic	A non– living organism
Biotic	A living organism
Producer	An organism which produces its own food using energy from the sun.
Primary consumer	An organism which eats plant matter. Also known as a herbivore
Secondary consumer	An organism which eats other animals. Also known as a carnivore
Decomposer	An organism which breaks down dead organic (plant and animal) matter
Food chain	The connections between different organisms that rely on one another as a food source
Food web	A complex hierarchy of plants and animals relying on each other for food
Biodiversity	The variety of plants and animals in a given ecosystem
Adaptation	A change in an organism which has become better suited to its environment

Computing

Key Term	Definition
Web browser	These are programs used to access websites.
Responsive design	Websites are viewed on different size screens and must adjust automatically to fit. Set widths as percentages rather than pixels
HTML - Hyper text mark up language	The language used to write and display web page documents
Hyperlink	A link in a document or webpage that connects to another location (Internal or external)
Working with HTML	HTML is typically written (or generated) in two ways: <ul style="list-style-type: none">• using a plain text editor• using a What You See Is What You Get (WYSIWYG) editor
Plain text editor	An editor like Notepad offers greater control over the code because each and every character that forms the HTML and the resulting web page is hand typed
CSS (Cascading Style sheets)	Can be used to change the style of a whole website, one web page or a single occurrence of an element

P.E

Key Term	Definition
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	Guidelines that ensure training is effective and results in positive adaptations
PEP	Personal Exercise Programme
Frequency	How often the exercise takes place
Intensity	How hard the exercise is
Time	The length of the session
Type	The method of training used
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
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
Individual needs	All PEP's would differ depending on performers goals/target, strengths /weaknesses,
Overtraining	Occurs when you train too hard and do not allow the body enough rest/recovery time
Calculating Training	Karvonen formula used to calculate aerobic and anaerobic target training zones

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

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

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
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
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