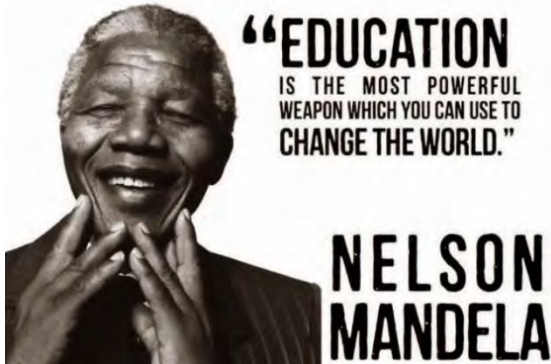




Westhoughton High School

Year 9 – Autumn Term – 2025

Knowledge Organisers



Name:

Form Group & Room:

Form Tutor:

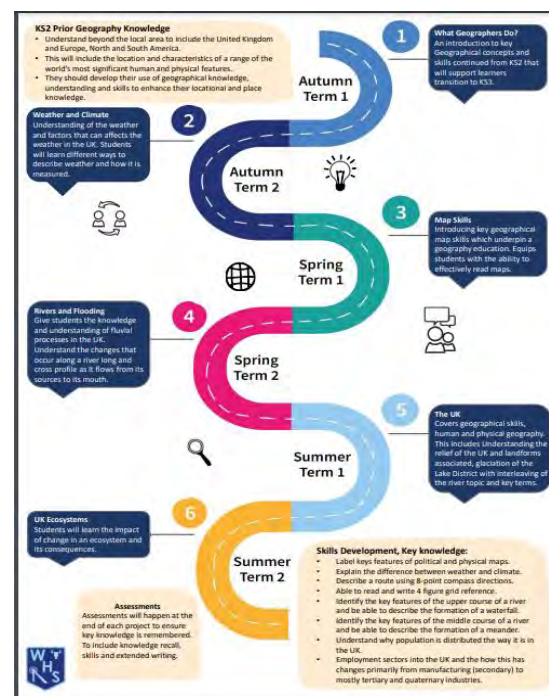
the “Knowledge” pyramid



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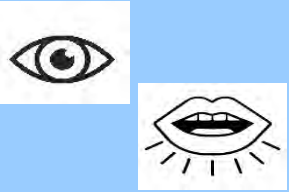
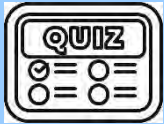
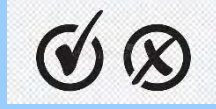
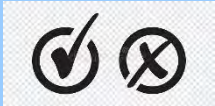
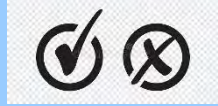
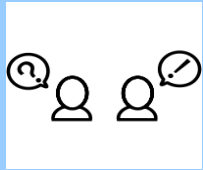
Introduction

The curriculum in each of your subjects at WHS has been carefully planned to help you learn new things, building upon what you know and preparing you for learning in the future. This is mapped out as a learning journey which each teacher will share with you, so you understand how your learning fits together as a whole. Each subject's roadmap is here <https://www.westhoughton-high.org/subjects/>.



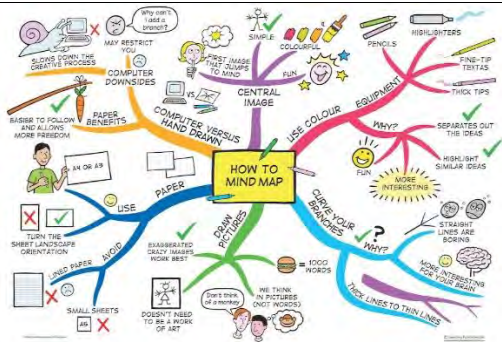
This booklet contains knowledge organisers for all the topics you will study in each subject this term. These give an overview of the essential knowledge that you MUST remember to be as successful as possible in Year 9 and as you move through each year of school. Your teachers will expect you to use them during lessons to find out about what you are going to be learning in a new topic, to retrieve information during a connect activity – connecting your brain to what you are going to learn that lesson and to test yourself or others to recall knowledge. You will also use them to complete home learning activities, to regularly revise from so that you begin to remember more knowledge over time, to discuss what you have been learning with family and friends and to catch up on any learning you might have missed due to absence. You must bring your booklet to school every day and keep it safe at the end of each term as you will continue to use it to support ongoing revision.

Learning Techniques to use with KOs – using them regularly is vital to make knowledge stick in your long-term memory (remember you need to revisit information at least 10 times before it is embedded in your memory).
Try using these ideas, choose different techniques to learn small sections of knowledge each day.

	Look, Say, Cover, Write, Check	Key Word Definitions	Flash Cards	Self-Quizzing	Mind Maps	Paired Retrieval
STEP 1	Look at and read aloud a specific area of your KO. 	Write down the key words and definitions in two columns. 	Use your KO to condense and write down key facts or information onto flash cards. 	Use your KO to create a mini quiz. Write down your questions relating to the information. 	Create a mind map with the information on your KO. 	Ask a partner, friend or family to use the KO or your flash cards. 
STEP 2	Cover or flip the KO over and write down everything you remember. 	Repeat the above but don't look at your KO 	Add pictures that might help you remember. Then self-quiz using the flash-cards. 	Answer the questions, remember to use full sentences. 	Check your KO to make sure there are no mistakes on your mind map. 	Make sure they test you on different sections of the KO and also on previous topics. 
STEP 3	Check what you have written down. Correct any mistakes and add anything you missed in purple pen. 	Use a purple pen to check and correct your work 	Ask a friend or family member to quiz you on your knowledge. 	Ask a friend or family member to quiz you using the questions. 	Try to make more connections, link the information together where you can. 	Repeat this regularly so that you are frequently looking at KOs past and present. 

How to make learning stick...

Mind Mapping



Mind mapping is a great way of representing key information from a topic in a visual way. Use colour and images to represent the knowledge you need to learn. Keep writing to a minimum; use only keywords/phrases.

Watch the clip for more tips and advice.



Flash Cards



Make flash cards using your KO. Write a question on one side and the answer on the other or record key- words and definitions. Test yourself frequently. For more advice, scan the code.



Look, Say, Cover, Write, Check



This technique is one that has been well used from primary school upwards. It is useful for rehearsing keywords, definitions and spellings. Look at the information, read it aloud, cover it up, write it down and then check it is correct.



Key Word Mnemonics

Mnemonic for the Planets
My → **Mercury**
Very → **Venus**
Educated → **Earth**
Mother → **Mars**
Just → **Jupiter**
Served → **Saturn**
Us → **Uranus**
Nine → **Neptune**
Pizzas → **Pluto**

A mnemonic is a sentence you make up where each word begins with the same letter as the word you want to remember. It is a useful technique for remembering a group of facts/words in a certain order.



Revision Clocks



Draw a basic clock and break your KO down into 12 chunks. Make notes on each chunk in the 12 clock sections, use colour and images to make it memorable. Revise each section for 5 minutes, turn over and test how much you can recall.

Watch the clip for more tips and advice.



Year 9 Art Knowledge Organiser Term 1

Ben Eine - street artist



#alwaysbekind

Street art



Harmonious Colours



Harmonious colours sit next to each other on the colour wheel. These colours work well together and can be blended into each other.

Typography - circus font



Complementary Colours



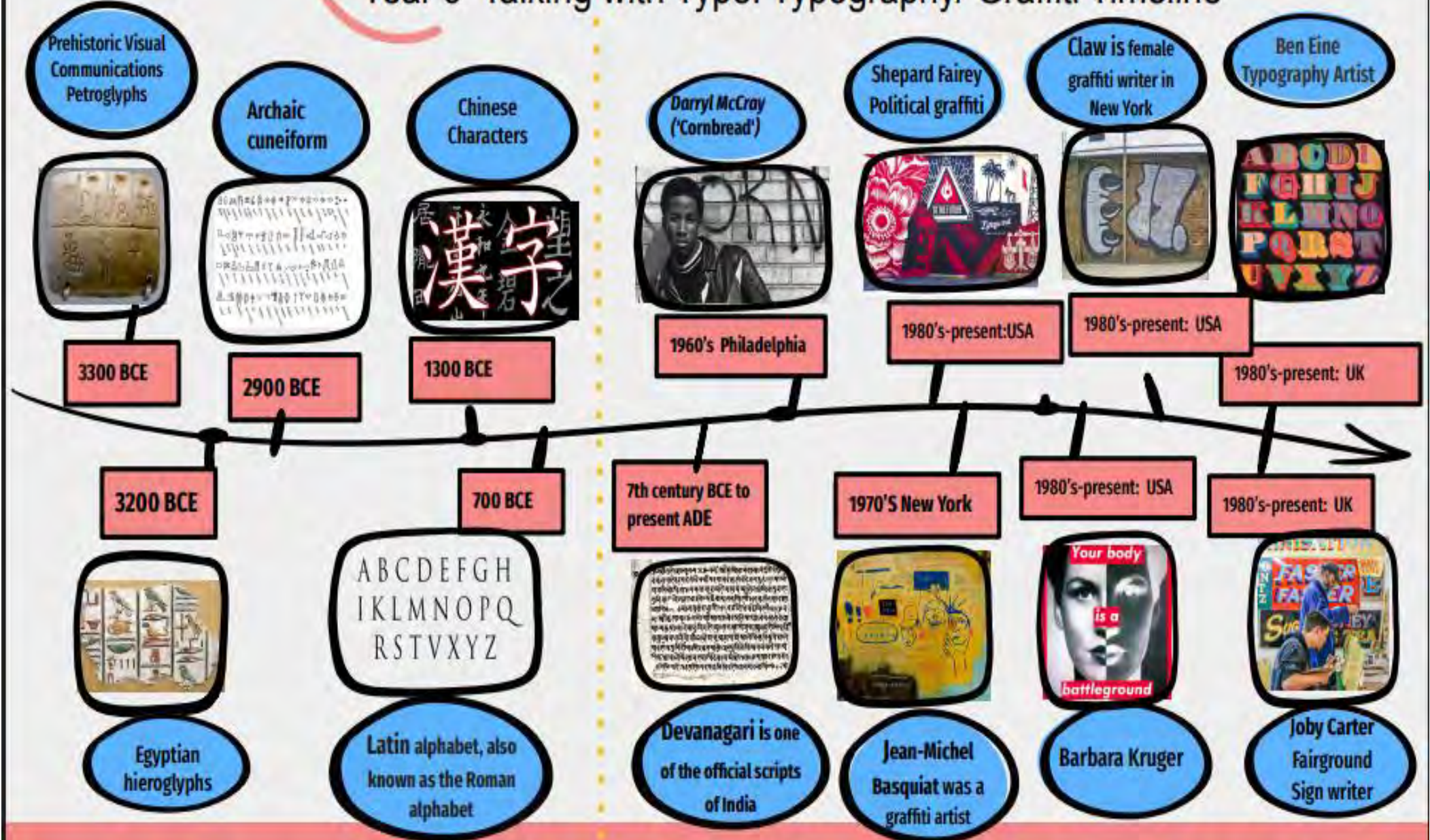
- RED + GREEN
- BLUE + ORANGE
- YELLOW + PURPLE
- YELLOW-ORANGE + BLUE-VIOLET
- RED-ORANGE + BLUE-GREEN
- RED-VIOLET + YELLOW-GREEN

Key Words and Definitions

Typeface	The <u>design of lettering</u>
Font	The <u>variations of a typeface</u>
Street art	Artwork that is created in a <u>public space</u>
Graffiti	Writing or drawings scribbled, scratched, or sprayed illicitly on a wall or other surface in a public place.
Graphic design	The art or skill of combining text and pictures in advertisements, magazines, or books.
Serif	A slight projection finishing off a stroke of a letter in certain typefaces.
Sans serif	Without serifs.
Typography	The art of <u>arranging type</u>
Inclusive	<u>Embrace all people irrespective of race, gender, disability, medical or other need.</u> It is about giving equal access and opportunities and getting rid of discrimination and intolerance (removal of barriers). It affects all aspects of public life, including inclusive design.

Colour Theory developed...

Year 9 Talking with Type: Typography/ Graffiti Timeline



Prehistoric - Egyptian - Chinese - Roman

Indian - Graffiti Art - Neo Expressionism - PostModernism - Contemporary Typography

Computing –Privacy and Surveillance

How could data be lost? What could criminals use the data for?

Hacking	Blackmail
Accidental deletion	Steal identities
Overwriting of files	Make online purchases
Power cuts	
Spilled liquids	
Hard drive worn out	
Natural disaster e.g. weather	
Fire	

Category	Explanation
Legal	Technology provides opportunities to criminals. To help protect people, their data, and their work, several laws have been introduced in the UK.
Environmental	The effect that technology has on the world around us
Cultural	How have society and the ways that we interact been impacted?
Ethical	Considerations about right and wrong, morality and power
Privacy	Once data is put on a computer, it can be easily copied or shared. In some cases, people have a right to choice in this matter.

Computers and the Law

Data Protection Act (DPA) 2018

Computer Misuse Act 1990

Copyright, Designs and Patents Act 1988

Freedom of Information Act 2000

Data Protection Act

Purpose: To control the way that data is handled and to give legal rights to people who have information stored about them.

Who is it for?: We are all "data subjects". That just means that we have data stored about us and have the right to have the data looked after properly and have the right to see that data. This is called the 'right of subject access'.

Who makes sure that companies stick to DPA? **Data Controller (DC) and Information Commissioner's Office (ICO)**

The DC is the person who is responsible for ensuring that the organisation stays within the principles of the Data Protection Act.

The ICO makes sure that the companies keep to the rules, and fines those that don't, sometimes heavily.

The principles of the Data Protection Act 2018

1. Personal data must be fairly and lawfully processed
2. Personal data must be obtained for specified, explicit and legitimate purposes
3. Personal data must be adequate, relevant and not excessive
4. Personal data must be accurate and up-to-date
5. Personal data must not be kept longer than necessary
6. Personal data must be handled in a way that ensures security



Legal

Computing –Privacy and Surveillance

Stakeholder

Stakeholders are groups or individuals who will be affected by or can change the way the technology is used.

Right to be forgotten

The right to be forgotten (part of GDPR) means that an individual can request that an organisation erases all their personal data. This right only applies in certain circumstances, e.g. the personal data is no longer necessary for the purpose for which an organisation originally collected or processed it.

Copyright, Designs and Patents Act 1988

The Copyright, Designs and Patents Act 1988 exists to protect people's creations. When a person creates something, they own it. E.g.

A picture, photograph, recording of music, television programme, film, text (book, article or report), algorithm (but only once the source code has been created)

When is it legal to copy, publish, distribute, or sell copyrighted material?

- When you are the copyright holder
- When you have the copyright holder's permission
- When the copyright holder has chosen to give up their copyright

Open Source V's Proprietary Software

Proprietary software cannot be copied/alterd (without permission of the copyright owner)

Open source software can be modified (provided it remains open source)

Proprietary software is distributed only as a completed program; the source code is not available

Open source software is distributed with its source code

Creative Commons (CC)

A creative commons licence is one of several public copyright licenses that enable the free distribution of an otherwise copyrighted work.

The work must not be used for commercial purposes and should not be changed

Use appropriately licensed material.

Legal use of other people's work

Credit the creators of the material.

Credit the source/website of the material.

Freedom of Information Act 2000

The Freedom of Information Act was introduced to give **any** member of the public the right to access any information recorded by public sector organisations. These organisations include: Schools, councils, government departments, health trusts and hospitals, libraries and museums.

Requests must be made in writing, either by letter or by email. The organisation then has 20 working days to provide the information.

When doesn't the organisation have to respond?

It would cost too much or take too much staff time to deal with the request

The request is vexatious (designed to create annoyance)

The request repeats a previous request from the same person

In addition, requests cannot be responded to if they contravene data protection or GDPR

Why is the Freedom of Information Act important? It promotes social justice. 'Social justice' refers to creating an equal society where everyone is treated fairly and has equal opportunities. Public organisations act on everyone's behalf and spend money that belongs to everyone; therefore, everyone has a right to know how that organisation operates, and what they spend public funds on.

Computing –Privacy and Surveillance

Computer Misuse Act 1990

The **Computer Misuse Act (1990)** and its amendments were created so that unauthorised access to computers and crimes committed using a computer could be prosecuted. The act is

PRINCIPLES	LEGAL ACTIONS
Unauthorised access to digital/computer material. This means a person asking a computer to perform any function with the intent of accessing anything on the computer for which they do not have permission, and for which they know they do not have permission.	Punishable by up to two years in prison and a £5,000 fine.
Unauthorised access to digital/computer material with intent to commit or facilitate the commission of further offences. This means a person gaining access to a computer without permission in order to commit another crime or to enable someone else to commit a crime.	Punishable by up to five years in prison and an unlimited fine determined by the damage caused and the severity of the crime.
Unauthorised acts with intent to impair, or with recklessness as to impairing, the operation of a computer. This means a person intentionally impairing the operation of any computer or program, or intentionally preventing access to any data or program on any computer. This includes creating or supplying materials that could be used to carry out this offence.	Punishable by a prison sentence of up to ten years and an unlimited fine, but if the act puts life at risk or endangers national security, the sentence may be extended to life imprisonment.

Cultural impact of technology

'Culture' means 'relating to the ideas, customs, and social behaviour of a society', i.e. 'how we do things around here'. 'Impact' means 'to have an effect on something'.

- Impact on daily lives
- Digital Divide
- Globalisation

E-Waste

Use of non-recyclable materials, Depletion of rare chemical elements, Harmful effect of pollution caused by disposal and recycling to environment and health of recyclers through exposure to toxins.

Downtime

'Downtime' describes situations where an organisation loses some or all of its IT systems for a period of time. This could be for any number of accidental or deliberate reasons, including:

- Planned maintenance and system upgrades
- Power or ISP failure
- Cyberattacks
- Human error
- Natural disasters

Artificial Intelligence (AI)

Artificial intelligence is technology that enables a computer to think or act in a more 'human' way.

Algorithm

An algorithm is a set of instructions that describes how to get something done.

The Digital Divide

The digital divide is the division that exists between people who have access to and can use technology, and people who don't have access or cannot use it:

People who live in rural areas-Slower internet speeds, delayed access to repairs

People who live in developing countries

People in low-income households

People with poor computer skills

Elderly people

Some people who have disabilities

The Investigatory Powers Act 2016

This act sets out rules on the use of investigatory powers by the police and security and intelligence agencies. Phone companies and internet service providers are required to keep copies of users' emails and browsing histories for 12 months. It also gives the police and security services the authority to access computers and phones to search for data.

Computing—How Computers Work

Name _____

Device	What is it?	Input, Output or Storage ?	What it is used for ?	Key Terms	
	Monitor	Output	Displaying images and text.	Hardware	Objects that you can touch, like a keyboard, mouse, monitor etc.
	Mouse	Input	Navigating and selecting items on a screen.		You cannot 'touch' software. Software refers to the programs that run on a computer. Examples of software: Windows, MS Word, MS Excel, Publisher etc.
	Optical Storage: Blu-ray, CD or DVD	Storage	Storing files e.g. documents, movies and audio.	Application Software	
	USB Flash Memory Stick	Storage	Backing up or transferring data from one computer to another.		
	Keyboard	Input	Typing.	Input Devices	An input device is computer hardware, which is used to enter data for processing. Examples of input devices include keyboard, mouse, image scanner, digital cameras and joysticks.
	Printer	Output	Printing.		
	Hard Disk Drive	Storage	Storing applications and files.		
	Speakers	Output	Audio.	Output Devices	An output device is any hardware device used to send data from a computer to another device or user. Typical examples of output devices are monitors, projectors, headphones, speakers and printers.
	Scanner	Input	Scanning to store digitally/electronically.		
	Sim Card	Storage	Storing mobile phone contacts.		
	Webcam	Input	Using video calling over the Internet.	Storage Devices	A piece of computer equipment on which information can be stored.
	Headphones	Output	Listening to audio		

Key terms

CPU	The central processing unit, is a large chip inside the computer. It is known as the brains of the computer.
RAM (Random Access Memory)	RAM is both readable and writable. You can add, change and delete data stored in RAM. It is volatile. When the computer is switched off, all the data stored in RAM is lost. It is fast to read/write.
ROM (Read only Memory)	ROM is read-only. ROM is non-volatile memory, which means it does not need power to keep the data inside it.
Hard Drive	The hard drive (sometimes called the hard disk) is the main storage device in your computer. If you have files and folders on your computer, they are stored on the hard drive. The operating system is also stored on the hard drive.
BIOS (basic input output system)	Contains all the basic code for controlling your computer hardware (such as key-boards, mice, monitors and hard drives).

The Fetch-Decode-Execute Cycle

FETCH

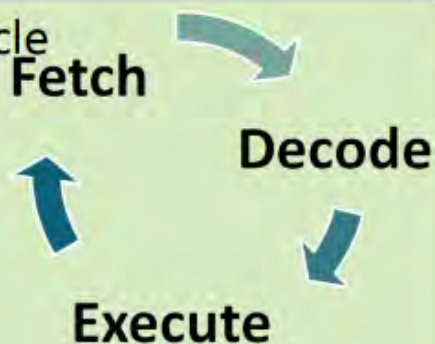
Instructions are loaded into memory (RAM) before the processor starts running the program. Each instruction is the fetched from memory (in order) and put into the appropriate registers. The control unit can then access the instruction for the next stages.

DECODE

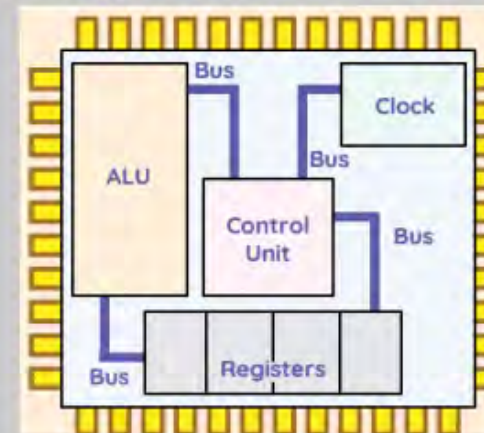
The binary representation of an instruction needs to be decoded before it can be run. This is the process the control unit uses to work out what the other components need to do. Each processor will have slightly different encodings for instructions.

EXECUTE

Once the instruction is understood, the instruction will be executed. The control unit will tell the other components what they need to do in order for the instruction to work.



The CPU Key Terms



The Control Unit	The control unit runs the show. It understands the instructions and tells the other components what each instruction needs from them. It manages the instructions and controls the other components.
Arithmetic logic unit (ALU)	The ALU is the calculator of the CPU. It handles mathematical and logical operations that are required as part of an instruction. It manages calculations and logic.
Clock	The CPU contains an internal clock that is used to regulate the number of cycles carried out per second and synchronise the other components. It manages the cycles per second.
Registers	These are very small, very fast memory locations located inside the CPU. There are a few key registers. (MAR) Memory address register stores memory addresses used when searching for data in RAM. (MDR) Memory data register Stores the data when fetched from memory. Current instruction register (CIR) Holds the binary representation of the instruction to be executed. Program counter (PC) This register counts up as each instruction is executed, keeping track of how many instructions are in a program. Accumulator (Acc) Stores important data being used in calculations.

Computing—Graphics: Photopea Name

Tool	What it is used for ?
Image Editing/Graphics Software	Software programs that allow you to manipulate digital images.
Brush 	A brush tool is one of the basic tools found in graphic design and editing applications . It is a part of the painting tool set which may also include pencil tools, pen tools, fill colour and many others. It allows the user to paint on a picture or photograph with the selected colour.
Spot Healing Brush	The spot healing brush can be used to clone areas from an image and blend the pixels from the sampled area seamlessly with the target area. The basic principle is that the texture from the sample area is blended with the colour and luminosity surrounding wherever you paint.
Clone	The clone tool is used in digital image editing to replace information for one part of a picture with information from another part. In other image editing software, its equivalent is sometimes called a rubber stamp tool or a clone brush.
Text	This <i>tool</i> allows <i>text</i> to be typed onto the current layer using the Primary colour. The <i>Text</i> Controls in the <i>Tool</i> Bar can be used to change the font.
Gradient 	The Gradient tool creates a gradual blend between multiple colours . You can choose from pre-set gradient fills or create your own. Note: You cannot use the Gradient tool with bitmap or indexed-colour images. To fill part of the image, select the desired area.
Adjust white balance levels	White balance is the adjustment of a digital photograph to make its colours appear more realistic 
Face Remixing	Mix faces together in different combinations.
Adjustment Layers	An adjustment layer applies colour and tonal adjustments to your image without permanently changing pixel values.
File Formats for digital Graphics	PSD, TIFF, PNG, JPEG, GIF
Best file type for printing	TIFF
Best file type for online use	PNG/JPEG

Year 9 Drama Knowledge Organiser – 1984

1984

This is a dystopian novel and cautionary tale by English writer George Orwell. The story takes place in an imagined future. Great Britain, now known as Airstrip One, has become a totalitarian superstate which is led by Big Brother, a dictatorial leader supported by an intense cult. The Party engages in surveillance and persecutes individuality and

Performance Techniques	
Repetition	The action of repeating something that has already been said or done
Creation of atmosphere	Using performance skills to create a particular feel or mood in a scene
Physical Theatre	Physical movement is the primary method of storytelling
Proxemics	The amount of space that people feel it necessary to set between themselves and others
Dialogue	A conversation between two or more people as a feature of a play



Tasks for this topic:

- Explore the links from the novel to our society
- Use dialogue to create stylised performance work to represent control
- Examine how character interact depending on relationships and mood
- Use movement to create a story
- Use your performance skills to create an atmosphere to your work





YEAR 9 AUTUMN TERM KNOWLEDGE ORGANISER: DYSTOPIAN NIGHTMARES THE HUNGER GAMES BY SUZANNE COLLINS



Plot Overview: In a dystopian future, the totalitarian nation of Panem is divided into 12 districts and the Capitol. Each year, two young representatives from each district are selected by lottery to participate in The Hunger Games: a televised fight to the death.

Chapter	Plot Summary
Chapter 1	- Introduction to Katniss Everdeen (the protagonist). - District 12 on the day of the reaping. - Katniss and Gale go poaching outside of the boundaries. - Prim's name (Katniss' younger sister) is drawn in the reaping for the Hunger Games.
Chapters 2-3	- Katniss takes Prim's place as tribute. - Peeta Mellark is drawn as the male tribute. - Katniss recalls Peeta being kind to her when she was starving after her father's death. - They say goodbye to their families. Katniss receives a gold pin of a bird.
Chapters 4-6	- Haymitch introduces himself as Katniss and Peeta's mentor. - Cinna, their stylist, dresses them as flames for the opening ceremony – a huge success with the public.
Chapters 7-9	- Training: Peeta is an excellent wrestler; Katniss is a skilled archer. - Katniss scores highly in training and attracts sponsors.
Chapters 10-12	- TV interviews: Peeta reveals his love for Katniss (a tactic to make them desirable to the public). - The Hunger Games begin. - Peeta joins career tributes and they hunt as a tribe; Katniss is alone.
Chapters 13-15	- Katniss rests up a tree after escaping a large fire. - The career pack attempt to kill her. - Katniss saws down a tracker jacker nest, killing one and causing the others to flee. - Katniss is stung – she hallucinates and passes out. - Alliance: Rue (District 11) helps Katniss with her stings.
Chapters 16-18	- Katniss and Rue raid the career pack's supplies – the Mockingjay call is their signal. - Rue is killed by a boy from District 1. - Katniss mourns Rue's death. - The rules are changed – recruits from the same district can now both win.
Chapters 19-21	- Alliance: Katniss finds an injured Peeta (his leg is infected). He needs medicine. - An announcer informs the tributes that something they need is at a 'feast'. - Katniss risks her life to get the medicine for Peeta.
Chapters 22-24	- Peeta is rejuvenated after receiving the medicine. - More tributes die (Thresh from District 11 is killed and Foxface from District 5 eats poisonous berries). - Katniss and Peeta take the berries to give to the last member of the careers pack: Cato. - Cato runs past them – he is being chased by something.
Chapters 25-27	- They realise that Cato is being chased by mutations – wolf-like creatures. - Final fight: Katniss shoots Cato with an arrow as he attacks Peeta. He is mutilated by the mutations. - The announcer informs the rules have been reversed: only one tribute can win. - Katniss and Peeta attempt to kill themselves with the poisonous berries. - Katniss and Peeta are crowned the winners but the Capitol is furious at their rebellious actions.

Key Characters

	Katniss Everdeen Protagonist / narrator / District 12 tribute (volunteer) / 16 years old / mature / responsible for her family / skilled hunter and archer / strong / courageous / resilient / independent		Peeta Mellark District 12 tribute / Katniss' love interest / strong / loyal / willing to sacrifice himself / kind / charitable / selfless / artistic
	Haymitch Abernathy Only surviving tribute from District 12 / Katniss and Peeta's mentor / alcoholic / previous winner of the Hunger Games / cunning / helpful / manipulative / calculated		Prim Katniss' younger sister / 12 years old / originally chosen as tribute / sweet / soft-spoken / loves her family / animal lover / nurturing / requires protection / well-liked
	Gale Hawthorne District 12 resident / Katniss' hunting partner / responsible for his family / hates the Capitol		Cinna Katniss' stylist for the Hunger Games / modest / kind / understanding / critical of the residents in the Capitol / calm
	Rue District 11 tribute / young / small / similar to Prim / skilled tree climber / Katniss' ally		Effie Trinket Escort of the tributes from District 12 / vain / materialistic / fashionista / caring
	Caesar Flickerman Host of the Hunger Games / flamboyant / vain / materialistic / entertaining		Mrs Everdeen Katniss and Prim's mother / mourns her husband / weak / emotional
	Cato District 2 tribute / antagonist / career pack / leader / strong / privileged		President Snow President of the Capitol and the 12 districts / cruel / manipulative / ruthless

Key Symbols

Mockingjay 	Bread / 'Panem' 	Fire 
Katniss 	Primrose 	Rue 



YEAR 9 AUTUMN TERM KNOWLEDGE ORGANISER: DYSTOPIAN NIGHTMARES THE HUNGER GAMES BY SUZANNE COLLINS

Big Ideas

Dehumanisation

The process of depriving a person or group of positive human qualities.



Exploitation

The action of treating someone unfairly in order to benefit from their work.



Hierarchy

A system or structure in which individuals are organised into different levels based on their status, authority or importance.



Oppression

Prolonged cruel or unjust treatment or exercise of authority.



Social Division

Divisions in society associated with social groupings, often causing conflict, inequality and disadvantage.



Context – *The Hunger Games* was written by Suzanne Collins and was published in 2008.



Suzanne Collins: author / her father was in the American Air Force and was a Vietnam veteran / influences: reality TV, TV coverage of the Iraq War, Greek myth: Theseus and the Minotaur, dystopian fiction

Capitalism: The Capitol and the Districts of Panem represent the rich-poor hierarchical divide within capitalist society. The Capitol is characterised by its surplus food, overindulgence, frivolous fashion and consumerism. This is juxtaposed with the rest of the districts – they experience extreme poverty and starvation while providing the manual labour to benefit The Capitol. The Capitol exploit the poor within the Districts through the Hunger Games: a reminder to the Districts who is in control.



The Panopticon: A critical theory, developed by Michel Foucault, stating that the threat of surveillance, as well as all forms of surveillance (CCTV, guards, authority figures) mean that society self-regulates, follows rules and is controlled. In *The Hunger Games*, this is shown through the televised Hunger Games, the Peacekeepers and monitoring devices, such as the jabber jays.

Displacement: A critical theory that examines the identity crisis caused by the forced movement of individuals or groups from their homes due to conflict, persecution or natural disasters. In *The Hunger Games*, this is presented through the forced movement of Katniss and the other tributes to the Capitol, then to the Hunger Games arena.



Nihilism: A critical theory, often associated with Friedrich Nietzsche, that rejects all religious and moral principle. It states that the world has no meaning or structure other than what we give it. In *The Hunger Games*, the reader is presented in a nihilistic world in which evil actions (including murder) can be excused based on necessity and survival.

Modern Mass Media and Technology: A criticism of the way the media and technology is used to indoctrinate, control, limit knowledge and surveil society. In *The Hunger Games*, reality TV promotes and engages its audience with the Hunger Games. Similar to contemporary reality TV shows, it exploits its contestants by forcing them to present themselves as attractive, consumerist objects.



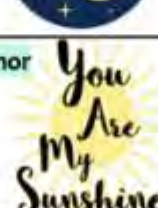
YEAR 9 AUTUMN TERM KNOWLEDGE ORGANISER: DYSTOPIAN NIGHTMARES

TECHNICAL ACCURACY & KEY DEVICES

'FOUR FOR MORE'-THE 4-PART SUCCESS STORY

Part	Key Features
SETTING 	- Introduce your story by focusing on the setting - Describe the weather / environment / surroundings / objects / décor - DEVICES: Personification / pathetic fallacy / symbolism / prepositions / foreshadowing
CHARACTER 	- Describe your character(s) within your setting - One or two characters – keep it minimal - Craft their actions / behaviour to reflect their personality and emotions - DEVICES: Sensory language / similes / metaphors / minimal dialogue
FLASHBACK 	- Include a flashback to teach the reader something about your character and / or their world - Begin this section with a trigger - This memory should contrast your character's current situation - DEVICES: Sensory language / juxtaposition / light imagery / similes / metaphors / symbolism
RETURN TO THE SCENE 	- Begin this section with a trigger that forces your character back to their current world - Offer a glimpse of change / a subtle change to end your story - Return to something that you described in your opening paragraph to create a cyclical structure - DEVICES: Sensory language / personification / pathetic fallacy / symbolism / cyclical structure

Device / Feature

Cyclical structure The end of the text repeats an idea / image / character from the beginning 	Pathetic fallacy Giving human emotions to something non-human (usually nature) 
Foreshadow Hints / clues of future events 	Personification Giving living qualities to something non-human 
Imagery Metaphors, similes, symbols 	Sensory language Five senses 
Juxtaposition Contrasting ideas / images 	Simile Comparing something to something else: 'as', 'like' 
Metaphor Describing something by stating it is something else 	Symbolism Objects, colours, sounds, places 

Tenses

PAST Something that has already happened Had / went / said / walked
PRESENT Something that is currently happening Have / go / say / walk
FUTURE Something that will happen Will have / will go / will say / will walk

Common Homophones

There	The
They're	They're
Your	You're
Its	It's
Which	Witch

Word Classes

Adjective Describes a noun or pronoun. Blue / young / powerful 	Adverb How, when or where something happens. Furiously / yesterday / here 	Preposition Where something is; the time, direction or cause of something. On / under / above 	Pronoun Words that replace nouns or noun phrases. She / he / they 	Noun Person, place, thing, idea or state of being. Manchester / cat / love 	Verb An action or state of being. Jump / write / be 
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YEAR 9 AUTUMN TERM KNOWLEDGE ORGANISER: DYSTOPIAN NIGHTMARES

TECHNICAL ACCURACY & KEY DEVICES

Sentences are created by using different types of clauses

Main clause

A main clause contains one subject and one verb. It has one main idea and it forms a complete sentence (it makes sense on its own).



Subordinate clause

A subordinate clause adds extra information to a sentence and does not function as a complete sentence (it does not make sense on its own). It depends on the main clause to make sense and is usually separated by a comma.



Sentence Structure

Example

Simple sentence: one main clause



The prisoner escaped.

Compound sentence: two main clauses linked with a connective / conjunction



The prisoner escaped and he never returned.

Complex sentence: one or two main clauses with embedded dependent / subordinate clauses



The prisoner escaped despite the elaborate security system.

Prepositional phrase: begin your sentence with a prepositional phrase



Under the cover of darkness, the prisoner escaped.

2V/3V: use two or three verbs



The prisoner anxiously sprinted, jumped and climbed over any barrier that blocked his way.

2A/3A: use two or three adjectives



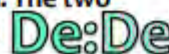
The road was long, empty and bewildering.

Fronted adverbial: begin your sentence with an adverb



Quickly, he leapt over the wall.

Description: Details: the first part of the sentence gives a description. The second part gives further information. The two parts are separated by a colon



The sun had lost the battle for today: it would be back to fight once again.

As / When / Although: use any of these words at the beginning of your sentence to introduce a subordinate clause



Although sweat trickled down her face, she continued to climb.

Punctuation

Capital Letters

- Start of a sentence
- Proper nouns: names of places, people or things
- The pronoun 'I'
- Months and days of the week



Commas

- Separate three or more items in a list
- After a fronted adverbial
- Before and after a subordinate clause (like brackets)
- After subordinate clauses and phrases that begin a sentence
- Separate question tags
- Separate direct speech from non-speech
- Before and after a relative clause



Apostrophes

- To show that letters are missing in a word
- To show possession



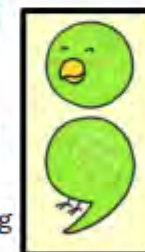
Full Stops

- To end a sentence



Semicolons

- Separate two main clauses that are closely connected to each other but could stand alone as two separate sentences
- To replace a coordinating conjunction
- To break up a list using longer phrases to signal which items are together



Colons

- At the end of a clause to elaborate / give more details
- At the end of a clause to give an explanation
- At the end of a clause to show an answer



Exclamation Mark

- To show strong feelings
- To show a raised voice



Question Mark

- After a direct question



Speech Marks

- Around direct speech (after the punctuation)



Introductions

Comment t'appelles-tu? – What is your name?

Je m'appelle... – My name is...

Mon meilleur ami/ma meilleure amie s'appelle... – My best friend is called...

Quel âge as-tu? – How old are you?

J'ai treize / quatorze ans – I'm 13 / 14 years old

Quelles langues parles-tu? – What languages do you speak?

Je parle anglaise / français – I speak English / French

De quelle nationalité es-tu? – What nationality are you?

Je suis anglais / anglaise / français / française – I am English / French

Tu passes des heures à faire quoi? – What do you spend hours doing?

Je passe des heures à... – I spend hours...

Familial relationships

Tu t'entends bien avec ta famille? – Do you get on well with your family?

Je m'amuse avec mon frère – I have fun with my brother

Je m'entends bien avec mes parents – I get on well with my parents

Avec mes copains/copines, on se confie des secrets – With my friends (m/f), we share secrets

Avec mon copain/ma copine, on se dit tout – With my friend (m/f), we tell each other everything

On s'ennuie ensemble – We get bored together

On s'excuse – We apologise

Key ideas

Personality and relationships

Music and fashion

Clothes and fashion

Qu'est-ce que tu portes normalement? – What do you wear normally?

Normalement je porte... – Normally I wear...

Mon copain/ma copine porte... – My friend (m/f) wears...

Qu'est-ce que tu as porté le weekend dernier? – What did you wear last weekend?

Le weekend dernier j'ai porté... – Last weekend I wore...

Mon père a porté... – My dad wore...

Qu'est-ce que tu vas porter le weekend prochain?

– What are you going to wear next weekend?

Ce weekend je vais porter... – This weekend I'm going to wear...

Ce weekend on va porter... – This weekend we're going to wear...

des baskets – trainers

des chaussures – shoes

une chemise – a shirt

un chapeau – a hat

une jupe – a skirt

un pantalon – trousers

un pull – a jumper

une veste – a jacket

un haut – a top

une robe – a dress

J'ai un style plutôt classique – I have a rather classic style

J'ai un style plutôt sportif – I have a rather sporty style

C'est chic – it's chic/smart

C'est à la mode – it's fashionable

C'est démodé – it's old-fashioned



Year 9 Topic 1: Mon identité – My identity

Music

Quelle musique écoutes-tu? – What music do you listen to?

J'écoute de la musique classique – I listen to classical music

J'écoute de la musique pop – I listen to pop music

Avant, j'aimais écouter du jazz – Before, I used to like listening to jazz

Quand j'étais petit(e), je détestais écouter du jazz

– When I was little, I used to hate listening to jazz

Qui est ton chanteur/chanteuse préféré(e)?

– Who is your favourite singer?

Mon chanteur préféré/ma chanteuse préférée, c'est...

– My favourite singer (m/f) is...

Mon groupe préféré, c'est... – My favourite group is...

J'adore la musique de (Stormzy) – I love (Stormzy)'s music

Je déteste la musique de (Justin Bieber) – I hate (Justin Bieber)'s music

J'adore la chanson – I love the song

Pourquoi écoutes-tu de la musique? – Why do you listen to music?

Ça me donne envie de danser – it makes me want to dance

Ça me donne envie de pleurer – it makes me want to cry

Ça me donne envie de chanter – it makes me want to sing

Ça me donne envie de dormir – it makes me want to sleep

Ça me rend joyeux / joyeuse – it makes me happy

Ça me rend triste – it makes me sad

Personality

Quelles sont tes qualités?

– What are your qualities?

Je suis... – I am...

Je ne suis pas (du tout)... – I am not (at all)...

Je ne suis jamais... – I am never...

Avant / Quand j'étais petit(e), j'étais...

– Before / When I was little, I used to be

Mon meilleur ami / ma meilleure amie est...

– My best friend is...

adorable – adorable

amusant / amusante – fun / funny

casse-pieds – a pain in the neck

drôle – funny

égoïste – selfish

fidèle – loyal / faithful

fier / fière (de) – proud (of)

gentil / gentille – nice/kind

intelligent / intelligente – intelligent

paresseux/paresseuse – lazy

patient / patiente – patient

pénible – a pain in the neck / annoying

sympa – nice

Porter – to wear

Present tense

Je porte – I wear

Tu portes – You wear (singular / informal)

Il porte – He wears

Elle porte – She wears

On porte – We wear

Nous portons – We wear

Vous portez – You wear (plural / polite)

Ils portent – They wear (m / m+f)

Elles portent – They wear (f)



Perfect tense

J'ai porté – I wore

Tu as porté – You wore (singular / informal)

Il a porté – He wore

Elle a porté – She wore

On a porté – We wore

Nous avons porté – We wore

Vous avez porté – You wore (plural / polite)

Ils ont porté – They wore (m / m+f)

Elles ont porté – They wore (f)

Immediate future tense

Je vais porter – I'm going to wear

Tu vas porter – You are going to wear (singular / informal)

Il va porter – He's going to wear

Elle va porter – She's going to wear

On va porter – We're going to wear

Nous allons porter – We're going to wear

Vous allez porter – You are going to wear (plural / polite)

Ils vont porter – They are going to wear (m / m+f)

Elles vont porter – They are going to wear (f)

Etre – to be

Je suis – I am

Tu es – You are (singular / informal)

Il est – He is

Elle est – She is

On est – We are

Nous sommes – We are

Vous êtes – You are (plural / polite)

Ils sont – They are (m / m+f)

Elles sont – They are (f)

Remember adjectives usually follow the noun and agree with the object they are describing!

Un pull *bleu*

A *blue* jumper

Une jupe *bleue*

A *blue* skirt

blanc/blanche / blancs/blanches – white
bleu (foncé/clair/marine) – (dark/light/navy) blue
bleu/bleue / bleus/bleues – blue
gris / grise/grises – grey
jaune(s) – yellow
marron (chocolat) – (chocolate) brown
noir/noire / noirs/noires – black
orange – orange
rouge/rouges – red
rose/roses – pink
vert/verte / verts/vertes – green
vert (kaki) – (khaki) green
violet/violette / violets/violettes – purple

Comparatives

Jean est plus *amusant* que Pierre – Jean is more *fun* than Pierre

Marie est moins *amusante* que Danielle – Marie is less *fun* than Danielle

Superlatives

Le chanson est le plus amusant – The song is the most fun

La musique pop est la plus amusante – Pop music is the most fun

Le meilleur / la meilleure – the best

Le pire / la pire – the worst

Using a range of language improves the quality of our speaking and writing and allows us to access more challenging texts!

Se disputer – to argue

Je me dispute – I argue

Tu te disputes – You argue (sing. / informal)

Il se dispute – He argues

Elle se dispute – She argues

On se dispute – We argue

Nous nous disputons – We argue

Vous vous disputez – You argue (plural / polite)

Ils se disputent – They argue (m / m+f)

Elles se disputent – They argue (f)

S'entendre bien – to get on well

Je m'entends bien – I get on well

Tu t'entends bien – You get on well (sing. / informal)

Il s'entend bien – He gets on well

Elle s'entend bien – She gets on well

On s'entend bien – We get on well

Nous nous entendons bien – We get on well

Vous vous entendez bien – You get on well (plural / polite)

Ils s'entendent bien – they get on well (m / m+f)

Elles s'entendent bien – they get on well (f)

Year 9 Topic 1: Transferable language

Reflexive verbs

s'amuser – to have fun

s'entendre – to get on

se confier des secrets – to share secrets

se dire tout – to tell each other everything

s'ennuyer – to get bored

s'excuser – to apologise to each other

In Paris – What there is

À Paris il y a la tour Eiffel

In Paris there is the Eiffel Tower

À Paris il y a la Seine

In Paris there is the river Seine

À Paris il y a les Catacombes

In Paris there are the catacombs

À Paris il y a l'Arc de Triomphe

In Paris there is the Arc de Triomphe

À Paris il y a la cathédrale de Notre-Dame

In Paris there is the Notre-Dame Cathedral

À Paris il y a le stade de France

In Paris there is the Stade de France

À Paris il y a le musée du Louvre

In Paris there is Louvre museum

À Paris il y a le Moulin Rouge

In Paris there is the Moulin Rouge

In Paris, I did with regular verbs

Qu'est-ce que tu as fait à Paris?

What did you do in Paris?

À Paris - In Paris

Ici - Here

Là-bas - There

J'ai visité la cathédrale de Notre-Dame

- I visited the Notre Dame Cathedral

J'ai mangé au restaurant

- I ate at a restaurant

J'ai admiré la Pyramide du Louvre

- I admired the Louvre Pyramid

J'ai regardé le feu d'artifice

- I watched the fireworks

J'ai acheté des souvenirs

- I bought souvenirs

J'ai rencontré un beau garçon/une belle fille

- I met a handsome boy/beautiful girl

J'ai envoyé des cartes postales

- I sent postcards

J'ai joué au foot

- I played football

Je suis allé(e) à la pêche

- I went fishing

In Paris, I did with irregular verbs

J'ai fait les magasins

I went shopping (I did the shops)

J'ai pris des photos

I took photos

J'ai bu un coca light

I drank a diet coke

J'ai vu la tour Eiffel

I saw the Eiffel Tower

In Paris, I didn't...

Qu'est-ce que tu n'as pas fait à Paris?

- What didn't you do in Paris?

Je n'ai pas visité - I didn't visit

Je n'ai pas regardé - I didn't watch

I would like to return there...

Je voudrais y retourner

- I would like to return there

Je ne voudrais pas y retourner

- I would not like to return there

J'aurais préféré visiter...

- I would have preferred to visit...

J'aurais préféré regarder...

- I would have preferred to watch...

J'aurais préféré manger...

- I would have preferred to eat...

Key ideas

Describing Paris

Describing a visit to Paris

Giving opinions

How I got there

J'ai passé une semaine à Paris

- I spent a week in Paris

Je suis allé(e) à Paris

- I went to Paris

Comment es-tu allé à Paris?

- How did you get to (go to) Paris?

Je suis allé(e) en avion

- I went by plane

Je suis allé(e) en train

- I went by train

Je suis allé(e) en voiture

- I went by car

Je suis allé(e) en métro

- I went by underground

Je suis allé(e) en bus

- I went by bus

Je suis allé(e) en car

- I went by coach

Je suis allé(e) à vélo

- I went by bike

Je suis allé(e) à pied

- I went by foot



Year 9 Topic 2 Part 1 : Les vacances- Holidays

Using a range of language improves the quality of our speaking and writing and allows us to access more challenging texts!

Time phrases

Dans le passé – In the past

Avant – Before

Hier - Yesterday

Vendredi dernier – Last Friday

L'année dernière – Last year

L'an dernier – Last year

Le mois dernier – Last month

L'été dernier – Last summer

Il y a deux mois – Two months ago

Samedi matin – Saturday morning

Dimanche après-midi – Sunday afternoon

Jeudi soir – Thursday evening

Tout d'abord / D'abord - Firstly

Puis - Then

Ensuite - Next

Après - After

Enfin / Finalement – Finally



Auxiliary verbs

Être – to be

Je suis – I am

Tu es – You are (sing. / informal)

Il est – He is

Elle est – She is

On est – We are

Nous sommes – We are

Vous êtes – You are (pl. / polite)

Ils sont – They are (masc. / mixed)

Elles sont – They are (fem.)

Avoir – to have

J'ai – I have

Tu as – You have (sing. / informal)

Il a – He has

Elle a – She has

On a – We have

Nous avons – We have

Vous avez – You have (pl. / polite)

Ils sont – They are (masc / mixed)

Elles sont – They are (fem.)

Forming the perfect tense

Most verbs take avoir but some take être which are auxiliary verbs.

To make the perfect tense, choose your pronoun and the correct part of avoir or être then add the past participle.

When using être, the past participle must agree with the subject of the phrase.

Regular past participles

-er verbs = é (e.g. manger – mangé)

-ir verbs = i (e.g. finir – fini)

-re verbs = u (e.g. vendre – vendu)

Irregular past participles

Faire – fait (e.g. j'ai fait...)

Boire – bu (e.g. j'ai bu...)

Voir – vu (e.g. j'ai vu...)

Prendre – pris (e.g. j'ai pris...)

Opinions

À mon avis – In my opinion

Je pense que – I think that

Je crois que – I believe that

Je dirais que – I would say that

Selon moi – According to me

C'était – it was

J'ai trouvé ça – I found it/that

très – very

assez – quite

vraiment – truly

réellement – really

un peu – a bit

peu – little

trop – too

extrêmement – extremely

tellement – so

ennuyeux / barbant – boring

nul – rubbish

assez bien – quite good

amusant / marrant – funny

passionnant – exciting

intéressant – interesting

génial – great

pratique – practical

cher – expensive

What we study

¿Te gusta el inglés? - Do you like English?
Me gusta el inglés - I like English
¿Te gustan las ciencias - Do you like sciences?
Me gustan las ciencias - I like science

¿Qué estudias? - What do you study?
Estudio inglés - I study English
Estudio ciencias - I study sciences

(el) dibujo - art
(el) inglés - English
(el) español - Spanish
(el) teatro - drama
(la) música - music
(la) religión - RE
(la) historia - history
(la) tecnología - DT
(las) ciencias - sciences
(las) matemáticas - maths

In the cafe

¿Qué quieres? - What do you want?
Quiero... - I want...
Quisiera... - I would like...
¿Algo más? - Anything else
No, nada más - No, nothing more
¿Y de beber? - And to drink?
¿Cuánto es? - How much is it?
Es un euro - It's one euro
Son dos euros - It's two euros
Son tres euros setenta -
It's three euros seventy

Key ideas

School subjects
My school
Break time
The school day



Year 9 Topic 1: El colegio – School

Time

¿Qué hora es? - What time is it?
Es la una - It is one o'clock
Son las dos - It is two o'clock
y cinco - 5 past
Y diez - 10 past
Y cuarto - quarter past
Y veinte - 20 past
Y veinticinco - 25 past
Y media - half past
Menos cuarto - quarter to

¿A qué hora? - At what time?
A la una - At one o'clock
A las dos - At two o'clock



In our school

¿Qué hay en tu insti(tuto)? -
What is there in your school?
En mi instituto hay... - In my school there is...
un gimnasio - a gym
un campo de fútbol - a football pitch
un patio - a yard
una clase de informática - an IT room
una piscina - a swimming pool
una biblioteca - a library
unas clases - some classrooms
No hay (gimnasio) - there isn't (a gym)

Describing the teachers

El professor / La profesora es... - The teacher is...
Los profesores / Las profesoras son... - The teachers are...

During break

¿Qué haces durante el recreo? -
What do you do during break?
Durante el recreo... - During break
Durante la hora de comer - During lunch

Como... - I eat...
un bocadillo - a sandwich
fruta - fruit
unas patatas fritas - some crisps
pan con tomate - tomato bread
pescado - fish
tortilla - omelette
paella - paella
chocolate - chocolate
arroz - rice

Bebo... - I drink
agua - a bottle of water
leche - milk
un café - coffee
un té - tea

Leo (mensajes / SMS) - I read (messages / texts)
Escribo (correos / mensajes / SMS)
- I write (emails / messages / texts)
(No) hago mis deberes - I (don't) do my homework

Opinions

Me gusta(n) – I like

Me gusta (n) mucho – I really like

Me encanta(n) – I love

Prefiero – I prefer

No me gusta(n) – I don't like

No me gusta (n) nada – I really don't like

Odio – I hate

Me gustaba(n) – I used to like

No me gustaba(n) – I didn't used to like

Antes odiaba – I used to hate

Me gustaría – I would like

Quiero – I want

Quisiera – I would like

Tengo – I have

Hay – There is

No hay – There isn't

Year 9 Topic 1: Transferable Knowledge

My favourite day

Mi día preferido es el... -

My favourite day is

lunes - Monday

martes - Tuesday

miércoles - Wednesday

jueves - Thursday

viernes - Friday

sábado - Saturday

domingo - Sunday

Reasons for opinions

porque – because

es – it is

no es – it isn't

son – they are

era / eran – it was / they were

sería / serían – it would be / they would be

muy – very

bastante – quite

un poco – a bit

aburrido / aburrida / aburridos / aburridas – boring

divertido / divertida / divertidos / divertidas – fun

práctico / práctica / prácticos / prácticas – practical

simpático / simpática / simpáticos / simpáticas – kind

moderno / moderna / modernos / modernas – modern

antiguo / antigua / antiguos / antiguas – old

bonito / bonita / bonitos / bonitas – pretty

pequeño / pequeña / pequeños / pequeñas - small

grande / grandes – big

difícil / difíciles – difficult

fácil / fáciles – easy

útil / útiles – useful

inútil / inútiles - useless

interesante / interesantes – interesting

Times of the day

Por la mañana – In the morning

Por la tarde – In the afternoon

Por la noche – In the evening

Primero – First / Finalmente – Finally

Luego – Then / Después – Afterwards

Using a range of language improves the quality of our speaking and writing and allows us to access more challenging texts!

The Indefinite Article – A / An / Some

Un = masculine

Una = feminine

Unos = masculine plural

Unas = feminine plural

The Definite Article - The

El = masculine

La = feminine

Los = masculine plural

Las = feminine plural



Manners

Por favor – Please

Gracias – Thank you

Estudiar – to study

Estudio – I study

Estudias – you study

Estudia – he/she studies

Estudiamos – we study

Estudiáis – you plural study

Estudian – they study

Key verb in the present tense

En el futuro, me gustaría estudiar –

I would like to study

Antes me gustaba estudiar –

Before I used to like to study

Where we live

¿Cómo es tu casa o tu piso?

- What is your house and flat like?

Vivo en – I live in

una casa – a house

un piso – a flat

En el futuro – In the future

me gustaría vivir en – I would like to live in

preferiría vivir en – I would prefer to live in

sería – It would be

¿Dónde está? – Where is it?

Está en – It is in

el norte – the north

el sur – the south

el este – the east

el oeste – the west

el centro – the centre

el campo – the countryside

la ciudad – the city

la costa – the coast

la montaña – the mountain

el pueblo – the town/village

Key ideas

Our homes

In our town

What we do in town



Year 9 Topic 2: Mi casa y mi ciudad

– My house and my town

Comparatives

Mi pueblo es más pequeño que Bolton – My village is smaller than Bolton

Superlatives

Mi pueblo es el más bonito – My village is the prettiest

What we do in our town

¿Qué haces en la ciudad?

Salgo con mis amigos

Voy al cine – I go to the cinema

Voy al parque – I go to the park

Voy a la playa – I go to the beach

Voy de compras – I go shopping

Voy de paseo – I go for a walk

No hago nada – I don't do anything

¿Qué hiciste en la ciudad?

Salí con mis amigos

– I went out with my friends

Fui (al parque) – I went (to the park)

¿Qué vas a hacer en la ciudad?

Voy a salir con mis amigos

– I am going to go out with my friend

Voy a ver la television

– I am going to watch the television

Voy a ir de paseo – I am going to go for a walk

Voy a chatear – I am going to chat online

Voy a hacer los deberes – I am going to do homework

Opinions of where we live

Me gusta (mucho) vivir en

- I (really) like to live in

No me gusta (nada) vivir en

- I (really) don't like to live in

In our town

¿Qué hay en tu ciudad?

What is there in your town/city?

En mi ciudad – In my town/city

En mi pueblo – In my (small) town/village

En mi barrio – In my neighbourhood

Allí – There

Aquí – Here

hay – there is

un bar – a bar

un castillo – a castle

un centro commercial – a shopping centre

un estadio – a stadium

un mercado – a market

un museo – a museum

un parque – a park

una piscina – a pool

una plaza – a square

un restaurante – a restaurant

una tienda – a shop

una universidad – a university

unos museos – some museums

unas tiendas – some shops

muchos museos – many/lots of museums

muchas tiendas – many/lots of shops

No hay (parque) – There is no (park)

Opinions

¡Qué fantástico! – How fantastic!
¡Qué interesante! – How interesting!
¡Qué divertido! – How fun!
¡Qué aburrido! – How boring!
Es fantástico – It is fantastic
Es interesante – It is interesting
Es divertido – It is fun
Es aburrido – It is boring
Fue fantástico – It was fantastic
Fue interesante – It was interesting
Fue divertido – It was fun
Fue aburrido – It was boring
Va a ser fantástico – It is going to be fantastic
Va a ser interesante – It is going to be interesting
Va a ser divertido – It is going to be fun
Va a ser aburrido – It is going to be boring

Intensifiers

muy – very
bastante – quite
un poco – a bit
poco – few/little
realmente – really
demasiado – too
simplemente – simply
especialmente – especially
totalmente – totally
completamente – completely
absolutamente – absolutely

Adjectives

bonito / bonita – pretty
moderno / moderna – modern
antiguo / antigua – old
cómodo / cómoda – comfortable
pequeño / pequeña – small
grande – big

Many/A lot of/Lots of (these words agree with the noun they describe)

Mucho
Mucha
Muchos
Muchas

The Indefinite Article – A / An / Some

Un = masculine
Una = feminine
Unos = masculine plural
Unas = feminine plural

The Definite Article - The

El = masculine
La = feminine
Los = masculine plural
Las = feminine plural



To the

al – masculine (a + el contracted)
a la – feminine
a los – masculine plural
a las – feminine plural

Year 9 Topic 2: Transferable Knowledge

Time expressions

Normalmente – Normally
A veces – Sometimes
De vez en cuando
– From time to time
A menudo – Often
Siempre – Always
Primero – First
Luego – Then
Después – Afterwards
Finalmente – Finally
El fin de semana – At the weekend
El sábado – (On) Saturday
El sábado por la mañana
– (On) Saturday morning
El sábado por la tarde
– (On) Saturday afternoon
El sábado por la noche
– (On) Saturday evening
A las (tres) de la (tarde)
– At (three) in the (afternoon)

Ir – to go

The present tense

Voy – I go
Vas – You go
Va – He/She goes
Vamos – We go
Vais – You go
Van – They go

High
frequency
verb

The preterite (past) tense

Fui – I went
Fuiste – You went
Fue – He/She went
Fuimos – We went
Fuisteis – You went
Fueron – They went

The near future tense

Voy a ir – I am going to go
Vas a ir – You are going to go
Va a ir – He/She is going to go
Vamos a ir – We are going to go
Vais a ir – You are going to go
Van a ir – They are going to go

Using a range of language
improves the quality of our
speaking and writing and
allows us to access more
challenging texts!

1. Resource Management

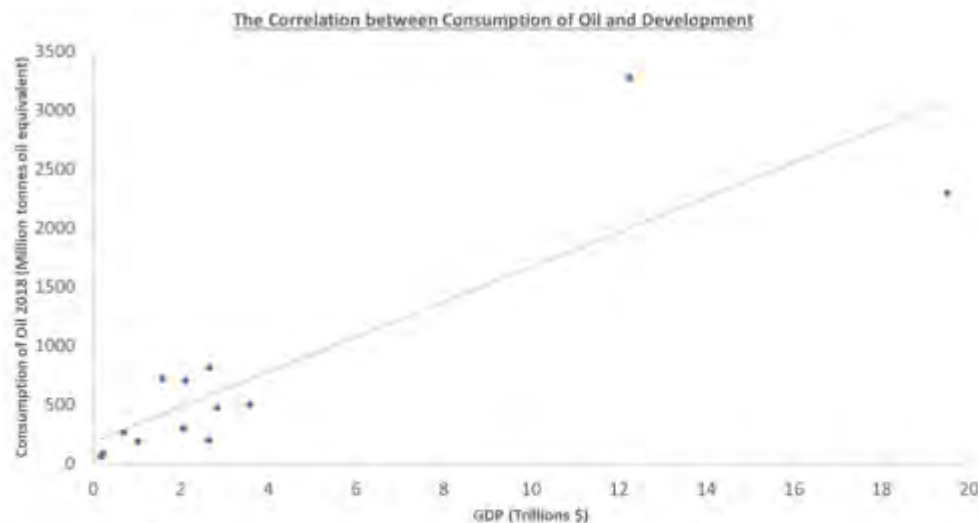
Resources are things that humans require for life or to make our lives easier. Humans are becoming increasingly dependent on **exploiting** (making use of) these resources, and as a result they are in high demand. Resources such as food, energy and water are what is needed for basic human development. For example without enough nutritious food, people can become **malnourished**. This can make them ill. This can prevent people working or receiving education. There are significant global differences in the global use and availability of food, water and energy this can seriously on quality of life. The choropleth map opposite clearly shows the countries where people do not have access to safe clean drinking water. A clear pattern can be seen.



Key Terms	
Carbon footprint	A measurement of all the greenhouse gases we individually produce
Energy mix	The range of energy sources of a region or country
Food miles	The distance covered supplying food to consumers
Fossil fuels	A natural fuel formed in the geological past from the remains of living organisms
Resource	Something that we use to make human life better.
Pollution	Human actions putting harmful materials into the water, sea, soil and air.
GNI	A measure of the wealth of a country given in dollars
Water stress	Water stress occurs when the demand for water exceeds the available amount
Micro plastics	Micro plastics are fragments of any type of plastic less than 5 mm in length

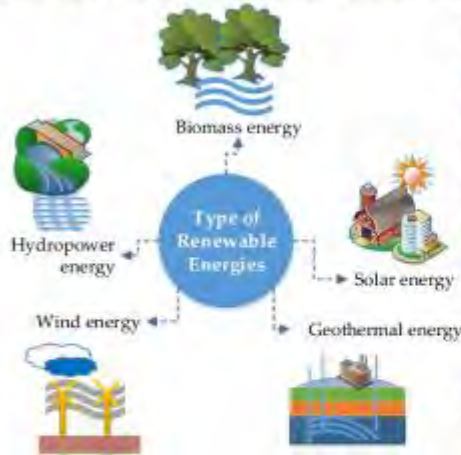
Is oil black gold?

Oil is a fossil fuel that powers much of our society. However, it is **finite** (it will run out) and mining and burning oil can cause pollution issues. **Fossil fuels** like oil are **non-renewable**. They take a very long time to form and we are using them up faster than they can be replaced – so They will run out. Countries oil use is tied to their development and oil is vital for countries industry and economic development.



The correlation between wealth and oil consumption the scattergraph shows the link between countries wealth and their oil consumption. The line of best fit shows us that there is a positive correlation. It shows us that the more oil a country consumes the bigger its economy is. This shows us that oil is still a very important resource.

Are renewable all they're cracked up to be?



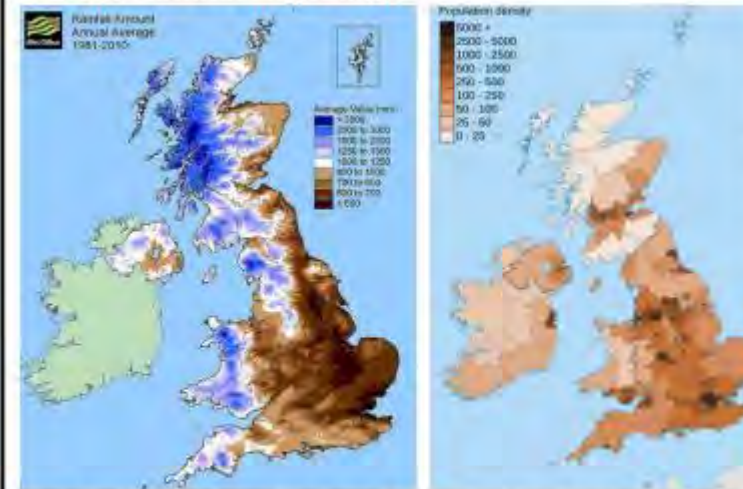
Renewable energy produces less CO₂ and they will last forever. However, they do not provide enough power to fulfil our energy mix yet. Which means we are still reliant on fossil fuels and nuclear. A huge current issue with renewables are that on a windy day we can create 50% of our energy needs from wind turbines. But on a calm day this drops to zero.

Where does our food come from?

The UK population is increasing which increases our demand for food. We import approximately 50% of foods which gives us greater choice at a cheaper price. In addition, this means we can enjoy seasonal food whenever we want and gives us greater choice as some foods we are unable to grow in the UK due to the climate. However, it leads to a carbon footprint on our food miles (how far our food has travelled to reach us.) There are a number of environmental issues associated with transporting food large differences. Some are listed below:

- Ships, aeroplanes and lorries emit CO₂ and other greenhouse gases when transporting our food contributing to the enhanced greenhouse effect.
- Some food can end up being wasted if it is travelled long distances due to issues with transport.
- Some countries grow food just to export at a higher price rather than feed their own population.
- The packaging we use to transport food is usually made of plastic which has its own environmental issues.
- We do not buy local which would support local farmers and communities as it is cheaper to import from abroad.

Why is water so precious?



Water is essential for people to maintain health and wellbeing. In addition access to enough water is also vital for a countries economy to grow.

The north and west of the UK receives the highest rainfall and the south and east the lowest. There is a water surplus in the west as there is more than we require whereas the south east has a deficit.

Our country uses dams and reservoirs, water transfer and abstraction to ensure water demand can be satisfied.

Is plastic fantastic?

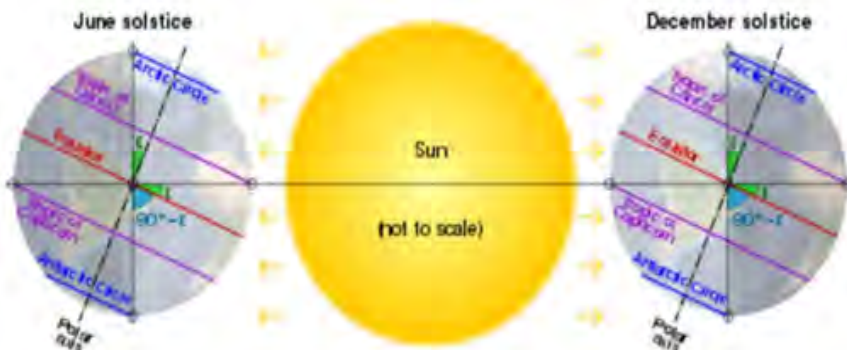
- There are many benefits to using plastic and it is undeniable plastic products have made our lives easier; durable, lighter, hygienic etc.
- Though there are many problems associated with plastic including animals becoming entangled, the fact that it is made from oil which in a non-renewable resource and they take hundreds of years to break down. When it breaks down it forms microplastics which never completely decompose. These are toxic to organisms when eaten.
- Our reliance on plastic is causing serious problems for ocean life and also microplastics which are caused when plastics are eroded by the sea could cause further significant issues for people.



Year 9 – Cold Environments

Key Terms	
Environment	The surroundings or conditions in which a person, animal or plant lives; the natural world
Polar	Regions near North and South Poles that are permanently frozen.
Tundra	Flat, treeless mostly frozen Arctic regions of Europe, Asia and North America.
Mountainous	Every 100 meters you climb the temperature decreases by 1 degree hence ice.
Adaptation	Living things are adapted to their habitats. This means that they have special features that help them to survive.
Producer	Create the energy to sustain themselves from the sun. E.g. plants
Consumer	These are organisms that eat the producers or other consumers
Threat	Inflicting punishment or harm. For example sea pollution can harm animals.
Extreme environment	A habitat that is considered very hard to survive in due to its considerably extreme conditions such as temperature and lack of food.

Why are polar regions so cold?

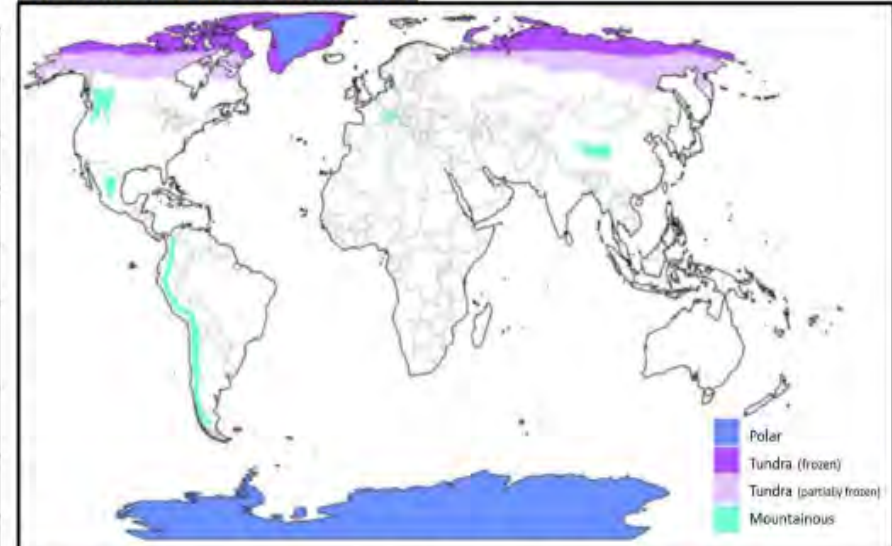


1. The surface of Antarctica has a high albedo effect. This means that a lot of the energy received from the Sun is reflected back into space by the white ice so does not warm up the ground.

2. It is far away from the equator, so the angle of the Sun is low in the sky. This means the energy from the Sun spreads out over a large area.

3. The area has 24 hours of darkness for some of the winter. Therefore, there is no sunlight for long periods of time to warm the surface.

Location of Cold Environments



Polar environments are found in the **Arctic** which is far north and **Antarctica** which is the most southerly point on earth. **Tundra** is mostly found just south of the **Arctic** in Northern Europe, Asia and North America. **Alpine/mountainous** environments are found mostly down the Western side of the Americas and in Europe (the Alps) and Central Asia (The Himalayas).

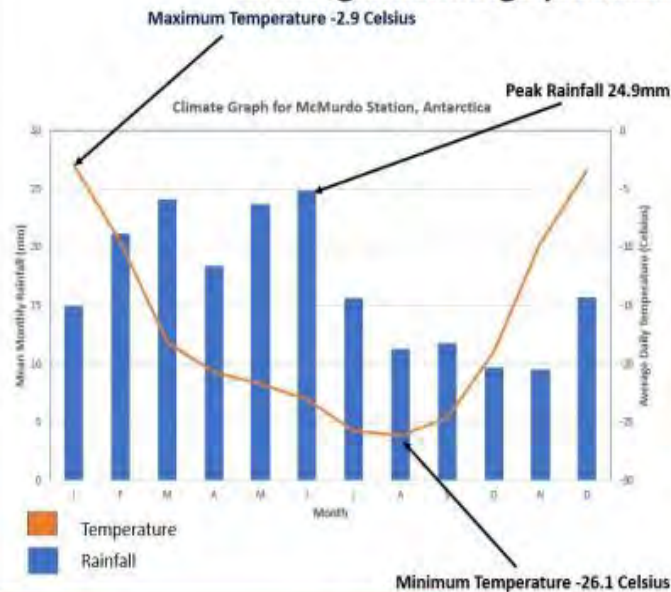
Polar Bear Adaptations

Two layers of fur – air gets trapped between their fur and heats up helping them to stay warm in the freezing Arctic conditions.

Camouflage – the white fur helps to keep them hidden in the snow and ice so they can sneak up on prey. They need this because there are not many animals in the Arctic due to the extreme environment.

Large paws – the large surface area of their paws helps them to spread the weight so they don't sink into the snow so they use less energy walking long distances looking for prey.

Reading a climate graph for Antarctica



Blue Bars show precipitation (snow/rain) they show that the McMurdo Research station in Antarctica get more snow from February to June. Peak Precipitation is in June (Antarctica's winter)

The red line shows temperature change across the year. Notice the highest temperature is -2.9 in January which is the Antarctic summer (because its in the southern hemisphere.)

Threats to Polar Environments



Pollution is a huge issue. There are many minerals in the Arctic that are mined or drilled for which can have negative environmental impacts such as the oil spill caused by a ship above which destroyed vegetation and killed birds and fish.



Both the Arctic and Antarctica are becoming more popular with tourists as wealth increases and people seek adventurous holidays. Environmentalists worry that the disruption to wildlife and damage created by vehicles will have lasting damage.

People in Cold Environments: Svalbard

Longyearbyen, is the capital of Svalbard, it is tiny with 2,400 residents from almost 53 different countries. The small Arctic town is inhabited by nature enthusiasts who live in tough climatic conditions with the High Arctic wilderness right on their doorstep. The range of services on offer to residents and guests is surprisingly extensive with a wide range of shops, restaurants and bars. In Longyearbyen, the North Pole is right around the corner from the pub.

The residents of Longyearbyen feel that we live completely normal everyday lives. However, those looking from the outside often perceive everyday life as extraordinary. The polar bears are never far away, so it's a necessity to carry weapons. The climate is harsh and unpredictable. Some people find the contrasts and changes between light and dark challenging, while others think it's wonderful.



Antarctica: A scientists dream

Scientists have been studying Antarctica for over 100 years. Captain Scott's failed attempt at the South Pole took twelve scientists on the ship that took him down to Antarctica. There are now 70 permanent research stations in Antarctica! Some of the biggest research involves:

Climate Sciences: Investigating changes in the atmosphere, temperature and sea-ice can help determine how much of the observed change is due to human activity and how much is a result of natural factors.

Zoologists & wildlife biologists : Antarctica is a natural laboratory for studying plants and animals. Microbial life, invisible to the naked eye, plays a vital role in Antarctic ecosystems and studying it could unlock new science.

Year 9 Knowledge Organiser: The Rise of Dictators

What do I need to know?

- ✓ What are the differences between a democracy and a dictatorship?
- ✓ Why Adolf Hitler was able to become dictator of Germany?
- ✓ What was it like to live in a country controlled by a dictator (with a focus on whether this benefitted the people who lived in Nazi Germany)?

KEY VOCABULARY

Dictatorship	A country ruled by one strong leader who has total power (a dictator).
Totalitarian	A form of government that attempts to assert total control over the lives of its citizens.
Democracy	A system that allows people to vote for who should be in the government.
Fascism	A form of government with one strong leader; usually a totalitarian state.

WHAT WERE THE DIFFERENCES BETWEEN A DEMOCRACY AND A DICTATORSHIP?

Democracy 	Dictatorship 
Elections will be held regularly to vote for who leads the country.	There are no elections (and no rival political parties) so the people have no say in who leads the country.
The people will be able to vote in secret. There will be a choice of political parties for the people to choose from.	Freedom of the press does not exist. The news is censored so the people only see what the government wants them to see.
Freedom of the press exists – the news can report events without government interference.	Freedom of speech does not exist – people learn to keep their views to themselves for fear of what will happen if they are overheard or reported.
Freedom of speech is important - people are free to share their views even if they criticise the government.	No opposition of any kind is allowed. Those people who oppose the government are often sent to prison camps or even killed.
People can protest to show their opposition to the government <u>as long as</u> they do not break the law.	

WHAT WAS THE IMPACT OF THE FIRST WORLD WAR ON GERMANY?

When the First World War ended a new democratic government was formed in Germany after the Kaiser abdicated. The first act of the new government was to sign the Armistice that ended the fighting on 11th November 1918. Its next job was to sign the **Treaty of Versailles** on 28th June 1919.

The terms of the Treaty of Versailles were very harsh.

- ✓ The German army limited to 100,000 soldiers, the navy limited to 6 battleships and no submarines and the air force disbanded.
- ✓ Germany lost 10% of its land.
- ✓ In the War Guilt Clause, Germany had to admit that she alone caused the war.
- ✓ Germany forced to pay reparations (compensation) to the Allies. This was later set at £6,600 million.



Germany was humiliated by this treaty. A day of national mourning was declared after the Treaty of Versailles was signed.

What was life like in Germany after the First World War?

KEY VOCABULARY



Weimar Republic	The name given to the government of Germany in the 1920s and 1930s.	Revolt	A violent action against a government, often an attempt to overthrow the government.
Putsch	The German word for a revolt - a violent action against a government, often an attempt to overthrow the government.	Hyperinflation	When the value of money goes down and prices of goods rises rapidly.

WHAT POLITICAL PROBLEMS WERE THERE IN THE WEIMAR REPUBLIC ?

The early years of the Weimar Republic saw many revolts against the government.

The Spartacist Revolt 1919

They wanted a communist government. They occupied public buildings and radio stations in Berlin and tried to organise a general strike. The government used the Freikorps (ex-soldiers) to put down the rebellion, killing its leaders and 100 Spartacists.



Kapp Putsch 1920

The Freikorps wanted a strong style of government like the Kaiser. They marched Berlin and attempted to take over, naming Wolfgang Kapp as Germany's new leader. The putsch had the support of the army and police, but Kapp was not popular with the people. The putsch collapsed.



The Munich Putsch 1923

Hitler and 600 Nazis broke into a meeting being held by the leaders of the Bavarian government. Hitler announced that he was taking over the government of Bavaria and at gunpoint the men agreed to support him. The next day the Bavarian leaders went back on their word and ordered the army to stop the putsch when the Nazis marched on Munich. 16 Nazis were killed, and Hitler escaped with a dislocated shoulder. He was later arrested and sentenced to 5 years in prison for treason.

WHAT ECONOMIC PROBLEMS WERE THERE IN THE WEIMAR REPUBLIC ?

Germany managed to pay the first instalment of reparations but was unable to pay the second. The government asked for permission to suspend reparations but this was refused. Instead, France invaded the Ruhr industrial area in January 1923 and attempted to run the factories there at a profit. The German government responded by ordering the workers to go on strike.



This was disastrous for Germany. It increased shortages of materials and this pushed prices up. Germany became even poorer. The government was forced to hand out unemployment benefit, but it had little money to do this.

To solve these problems the government began to print large amounts of paper money but this made things worse. As more money was printed, its value went down and prices went up. More money then has to be printed to meet the increasing prices. Money became worthless. This is called hyperinflation.



November 1918
Armistice signed

January 1919
The Spartacist Revolt

June 1919
The Treaty of Versailles
is signed

March 1920
The Kapp Putsch

November 1923
The Munich Putsch

What was it like to live in Nazi Germany?

KEY VOCABULARY



SA	Also, known as 'storm troopers', they were the private army of the Nazi Party.
Propaganda	Information used to make people believe an idea or support a leader; often misleading.
Fuhrer	The German word for supreme leader.

WHO WAS ADOLF HITLER?

- ✓ He was born in Austria in 1889.
- ✓ He wanted to be an artist but he failed to exam for the Vienna Art Academy. He ended up living on the streets of Vienna doing odd jobs and painting postcards for money.
- ✓ He moved to Germany in 1913 and fought for Germany in the First World War. He was injured twice and received the Iron Cross for bravery.
- ✓ After the war he joined the German Workers Party. He soon became its leader and changed its name to the National Socialist German Workers Party (Nazi Party).
- ✓ In November 1923, Hitler attempted to overthrow the government of Bavaria in Germany. This was unsuccessful and Hitler was arrested and sent to prison. He served 9 months of a 5-year sentence.
- ✓ In prison he wrote his book, Mein Kampf, and realized that he would have to change the Nazi Party so that he could legally be elected as leader of Germany.

WHY WAS HITLER ABLE TO BECOME CHANCELLOR?

The following helped Hitler to be elected as Chancellor of Germany:

- ✓ The Great Depression caused 6 million people to be unemployed as businesses closed. The Weimar government dealt with this badly but Hitler seemed to be a strong leader who had the answers to the problems caused by the Depression.
- ✓ Hitler's message was attractive to people – he promised to tear up the Treaty of Versailles, make Germany a great country again.
- ✓ The SA –to target the Communists, who were the Nazis main opposition, by breaking up their meetings and making it difficult for them to campaign in elections.
- ✓ Propaganda –The Nazis spread their ideas through posters, pamphlets and Nazi controlled newspapers. Posters showed Hitler as 'Our Last Hope' and used catchy slogans like 'work and bread.'

By January 1933, the Nazis were the largest party in the Reichstag and Hitler was Chancellor of Germany.



HOW DID HITLER BECOME DICTATOR?

- ✓ 27 February 1933 – the Reichstag was set on fire. Hitler said this was the start of a Communist plot to take over the country.
- ✓ The Law for the Protection of People and State banned Communists from taking part in March elections. As a result, the Nazis won the elections. 
- ✓ Hitler got the Reichstag to agree to pass the Enabling Law which used to ban all political parties other than the Nazis and to ensure that Nazis were placed in important positions in the government.
- ✓ Hitler needed the support of the army if he was to become dictator but the army hated the SA. On the night of 30th June 1934, now known as the Night of the Long Knives, Hitler used the SS to arrest and shoot leading members of the SA. Hitler's position was greatly strengthened. The army supported him and he was able to become 'the Fuhrer.'

1929 - 32
The Great Depression

January 1933
Hitler becomes
Chancellor of Germany

February 1933
The Reichstag Fire

August 1934
Hitler becomes
dictator of Germany

What was it like to live in Nazi Germany?

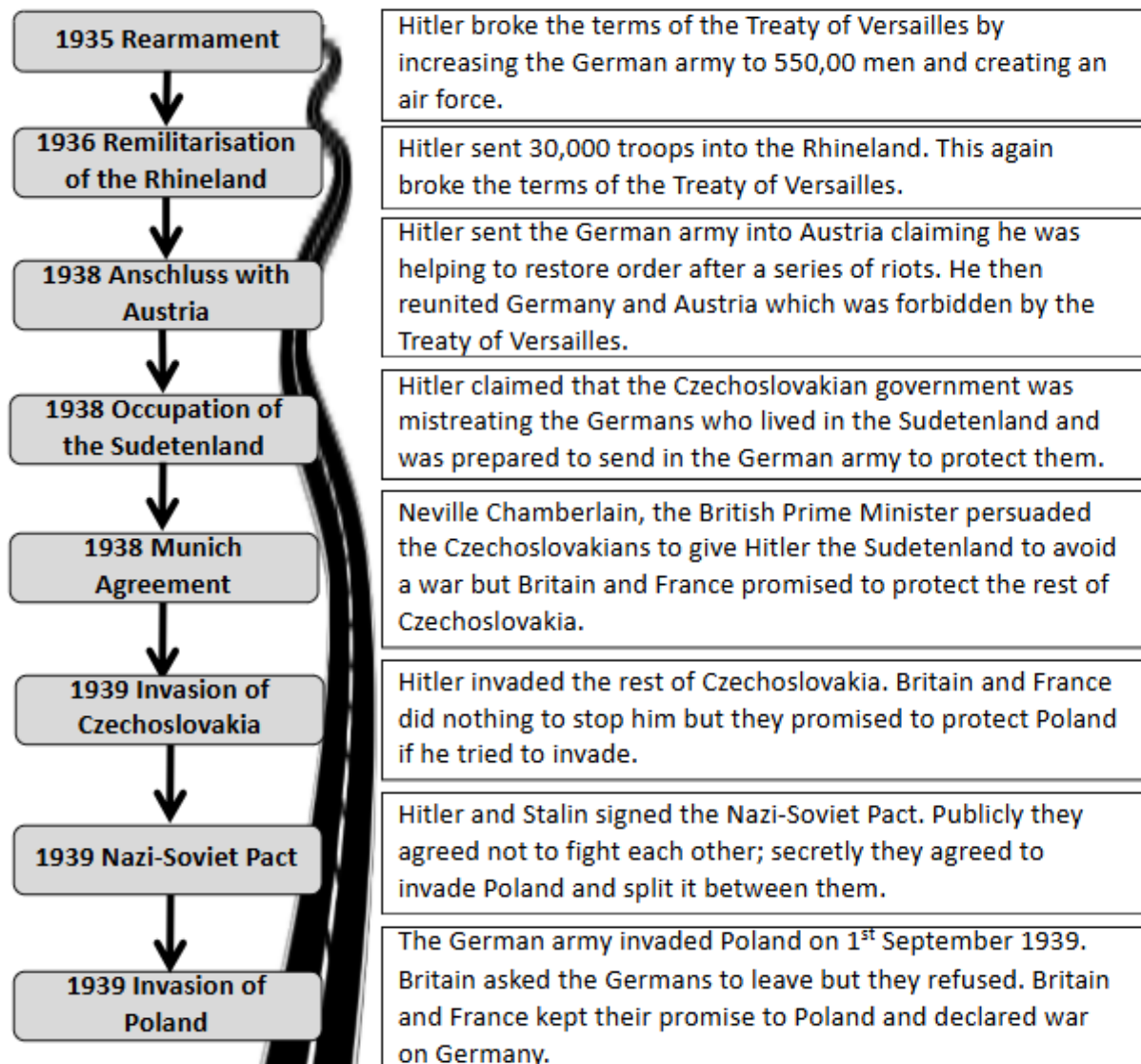
KEY VOCABULARY 		HOW DID HITLER REDUCE UNEMPLOYMENT?	
Censorship	Controlling what information people are allowed to see.	✓ National Labour Service (RAD) - This was for young men between 18 and 25. They did various jobs such as digging ditches and planting forests.	
Persecution	Unfair or cruel treatment over a period of time- usually because of race or religion.	✓ German Labour Front – organised public works schemes such as new motorways (autobahns) were built, as were hospitals, schools, sports stadiums and other public buildings. These schemes created thousands of jobs.	
Indoctrination	To brainwash people with a set of ideas or beliefs.	✓ Rearmament - <u>he</u> army grew from 100,000 in 1933 to 1.4 million in 1939. Huge amounts were spent on producing military equipment such as aircraft and tanks. This also employed thousands of men.	
HOW DID HITLER CONTROL THE GERMAN PEOPLE?		✓ Some groups were not included in the unemployment statistics such as women who were forced out of their jobs to look after their families and Jews who were dismissed from their jobs.	
✓ The Gestapo (secret police) arrested anyone who criticised the Nazis. They spied on people and used informants to identify suspects. In 1939 alone, 160,000 people were arrested. ✓ Opponents of the Nazis were sent to concentration camps. This included political opponents, such as communists, anyone who spoke out against them and minority groups such as Jews and homosexuals.  ✓ The Nazis used propaganda to promote ideas which they supported e.g. the Nazis made around 1,300 films which were shown in cinemas. ✓ The Nazis used censorship to stamp out ideas which they didn't support e.g. new books could not be published without Nazi approval.		HOW DID HITLER INDOCTRINATE YOUNG PEOPLE?	
		Hitler used education to make sure that young people were loyal to him and to the Nazi Party. ✓ All teachers had to swear an oath of loyalty to Hitler and join the German Teachers' League. They taught students to do the Nazi salute, started and ended each lesson with the children saying 'Heil Hitler', and decorated their classrooms with Nazi posters. ✓ The teaching of school subjects was changed to indoctrinate pupils. History celebrated German victories and all disasters were blamed on Jews. Race Study explored the differences between races, explaining the greatness of the Aryan race and the inferiority of other races, especially Jews. From 1935, all new textbooks had to be approved by the Nazis. Hitler Youth ✓ It was made compulsory for all young Germans to join Nazi youth groups from the age of 10. Boys joined the Hitler Youth and girls joined the League of German Maidens.  ✓ It was very attractive to young people – they liked the uniform and the sense of discipline and importance it gave them. ✓ It was designed to prepare them for the roles they were to play in Germany's future. Boys received military training, while girls were trained in the skills of housewifery, including cooking, ironing and sewing. ✓ It was also used to teach Nazi ideas e.g. members were taken to the <u>cinema</u> to see a film called 'The Eternal Jew' which was anti-Jewish propaganda.	

Year 9 Knowledge Organiser: Turning Points in the Second World War

What do I need to know?

- ✓ Why and how did the Second World War begin?
- ✓ What were the key turning points in the Second World War and why they can be seen as turning point?

Why and how did the Second World War begin?



KEY VOCABULARY



Appeasement	Giving in to demands made by Hitler to avoid war
Rearmament	When a country begins to build up its armed forces and weapons
Remilitarisation	Rearming an area that had previously been disarmed e.g. Putting soldiers into an area they had not been allowed in before.
Invasion	When one country used its army to enter and take control of another country by force.

Was appeasement a mistake?

No because ...

- ☐ Britain reduced the size of her army after the First World War and needed time to build up her armed forces.
- ☐ Most people could remember the effects of the First World War. They would agree to anything to avoid war.



Yes because ...

- ☐ Each time Hitler got away with an act of aggression, he became more confident that Britain and France would never act.
- ☐ Every time Hitler took land, Germany grew stronger. It gained soldiers, weapons and raw materials.

KEY VOCABULARY



Turning point	An event or moment in history that leads to a decisive change (usually with positive results).	Evacuation	The action of moving people from a place of danger to a place of safety.
Occupation	When a country uses its army to establish control of land or another country.	Retreat	When an army moves back or withdraws from fighting the enemy.

What were the key turning points in the Second World War?

1. Evacuation – was it a success?

In September 1939, the British government began the evacuation of children from British cities to protect them from German air raids.

Yes because ...

- ☐ It was well organised - the transport system of the entire country was taken over for 4 days to evacuate 1,500,000 people.
- ☐ The health of many children improved because of better food and fresh air in the countryside.
- ☐ Many lives were saved as a result.

No because ...

- ☐ Some evacuees ended up in villages that were expecting pregnant women.
- ☐ Some children were exploited by those who took them in e.g. made to work hard on farms.
- ☐ By January 1940, many parents had brought their children home as no bombs were dropped during 'The Phony War.'



2. Dunkirk – was it a triumph or a disaster for the British?

In June 1940, the British and French armies retreated from the advancing German army. They became stranded on the beaches of Dunkirk. It looked as though all would be killed or taken prisoner. Operation Dynamo was launched to rescue them.

A triumph because ...

- ☐ More than 338,000 men were brought back to Britain. This meant that the war could continue to be fought.
- ☐ It was a propaganda victory for the British – the government turned a military defeat into a positive.

A defeat because ...

- ☐ The Germans captured 1200 field guns, 1250 anti-aircraft guns, 11,000 machine guns and 75,000 vehicles.
- ☐ The beaches at Dunkirk were attacked by the German air force; 68,000 men were lost.
- ☐ The morale of the army was low after Dunkirk.



3. The Battle of Britain – was it a turning point?

By July 1940 Nazi Germany occupied most of Europe. Operation Sea Lion was the German attempt to take over Britain; to do this they needed to destroy the RAF (British air force). Throughout the summer of 1940, German and British pilots fought each other in the skies above southern England. Britain won.

It was a turning point because ...

- ☐ The Luftwaffe had failed to destroy the RAF in time for an invasion to take place. If the Luftwaffe had won Britain would have been invaded and conquered.
- ☐ Britain was able to carry on fighting and played a key role in events such as D-Day that led to eventual German defeat.
- ☐ Germany had been defeated for the first time in the war. It made victory seem possible.



September 1939 –
April 1940
The Phony War

September 1940
Evacuation of
children

June 1940
Evacuation of
Dunkirk

Summer 1940
Battle of Britain

September 1940
The Blitz begins



KEY VOCABULARY



Turning point	An event or moment in history that leads to a decisive change (usually with positive results).	Allies	Countries who work together. In the Second World War the Allied Powers were Britain, France, the USSR and the USA.
Surrender	Giving into an enemy and letting them win or take control.	Liberation	Freeing a country or a person from cruel treatment

4. Operation Barbarossa – was it a turning point?

In June 1941, the German army invaded the USSR. However, the Soviet army destroyed anything that might be of use to the Germans and a harsh Russian winter slowed the German advance. At the Battle of Stalingrad, 100,000 German soldiers surrendered. Gradually the German army was forced out of the USSR and back towards Germany.

It was a turning point because ...

- ☐ This was the first time that the Germans had been forced to retreat in large numbers.
- ☐ The USSR took the full force of the German army, giving Britain and the USA time to build up their forces.
- ☐ The strength of the German army was reduced with almost 775,000 casualties and many German soldiers being captured.



5. Pearl Harbor – was it a turning point?

For the first two years of the war, the USA was not involved in the fighting. However, it did lend Britain supplies of food and weapons. This changed when Japan, an ally of Germany, launched a surprise attack on the American naval base at Pearl Harbor in Hawaii, hoping to cripple the American Pacific Fleet that was stationed there. In under two hours, on the morning of 7th December 1941, Japan sank 18 warships, destroyed 177 planes and killed over 2300 men.

It was a turning point because ...

- ☐ The attack brought the US into the war. Many US soldiers fought in Europe and on D-Day.
- ☐ American military forces were crucial in the Allied victory against Germany and Japan. They had a major influence on the war.



7. Was the dropping of the atomic bomb justified?

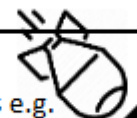
To force the Japanese to surrender the USA dropped two atomic bombs, the first on Hiroshima and the second on Nagasaki.

Yes because ...

- ☐ The USA believed Japan would never surrender.
- ☐ The USA could have invaded but it would have led to huge loss of American lives.

No because ...

- ☐ There were alternatives e.g. invasion of Japan leading to supply shortages.
- ☐ Japan was seeking peace talks before the bomb was dropped on Hiroshima.



6. D-Day – was it a turning point?

On 6 June 1944, the Allies launched Operation Overlord to liberate Western Europe from Nazi Germany's control. Allied troops successfully stormed Normandy's beaches. By the end of August 1944, the Allies had liberated Paris and the Germans had been removed from north-western France.

It was a turning point because ...

- ☐ Western Europe was liberated from Nazi control – the Allies now had a way to send troops to fight the German army in Europe.
- ☐ The Germans had to split their army to fight Russia in the East and the Allies in the West.
- ☐ Less than a year later the Allies formally accepted the unconditional surrender of Nazi Germany'.



June 1941
Operation
Barbarossa

December 1941
Attack on Pearl
Harbor

June 1944
D-Day

August 1945
Dropping of the atomic
bomb on Japan



Life Lessons – Summer Term KS3 – Health and Wellbeing

Topics	For Further Information and Advice	
Puberty 	For help and advice: • Childline: Scan the QR code for lots of free resources for all teenagers to better understand puberty. • If you have concerns about your health speak to your GP or our school nurse.	
Healthy Eating 	For help and advice: • Health For Teens: Scan the bar code for information about diet, nutrition and staying healthy. • Healthy eating recipe ideas: Why not search on BBC Good Food.	
Drugs, smoking and vaping 	For help and advice: • Childline: Whether you're worried about yourself or someone else, you can find information about drug and alcohol use and smoking by scanning the QR code.	
Mental Health 	For help and advice: • The Mix: Life can feel overwhelming, and that's okay. Whether you are struggling with anxiety, feeling low or just need someone to talk to, we're here. Find real stories, practical advice and support from people who get it by scanning the QR code.	



Using a calculator

Component Knowledge

- know the various positions and key functions
- Be able to use the calculator for index calculations
- Be able to use the calculator to find the square/cube root of a number
- Be able to use the negative number and fraction functions in calculations

Key Vocabulary

Brackets	Used to assist in setting out the order of operations for a calculation
Indices	Also known as powers, e.g. $3^2 = 9$
Negative	Having a value less than zero, not to be mistaken for subtraction

Key buttons

It is vital that you know how to use it properly and confidently. Being familiar with the layout of your own scientific calculator will help save time, allowing you to concentrate on the maths you're working on.

	Pressing the 3 button means you will select the instruction written above the next button you press, rather than what is written on the button itself.
	The replay button has four arrows on it and allows you to direct your cursor on-screen. It's useful if you enter a large calculation incorrectly, as you can use the arrows to go back and insert or remove characters. Replay also allows you to move between the numerator and denominator when you're working with fractions, or to move out of a root or index.
	The delete button erases characters. when you press it, the character to the left of the cursor will be erased. It can be useful to fix a calculation, when used with the replay button.
	The Ans button can be used to put an answer you have just found back into your next calculation.
	This button allows you to square numbers.
	This button allows you to write a number to any power e.g. 4^3
	This button allows you to square root numbers.
	SHIFT followed by this button, allows you to find any root.
	This button allows you to calculate using fractions.
	SHIFT followed by this button, allows you to write a mixed number.
	This button allows you to change to format of your answer- from a fraction to a decimal and vice versa.
	You should input negative numbers into your calculator using (-) . NOTE: When inputting a negative number which is raised to a power, you should write them in brackets.

Examples of using a calculator

Find the value of 86^2

Type



The answer is 7396.

Find the value of $\sqrt{2209}$

Type



The answer is 47.

Find the value of $\frac{2}{5}$ of 990

Type



The answer is 396.

Convert $2\frac{4}{5}$ to a decimal.

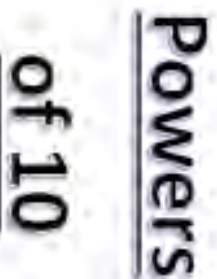
Type



The answer is 2.8.

Online clips

M757



Powers of 10

- Multiply and divide by powers of 10
- Understand what a square and a cube number is

Key Vocabulary

Index	The index of a number says how many times to use the number in a multiplication
Power	Another word for an 'index'. These include square/cube

Powers of 10: We can use index form to write powers of 10 to a positive power.

$$100000 = 10 \times 10 \times 10 \times 10 \times 10$$

$= 10^4$

$$100 = 10 \times 10$$

$\approx 10^{-2}$

We can also use index form to write powers of 10 to a negative power

$$\frac{1}{10} = 10^{-1}$$

We are diving by 10

$$\frac{1}{1000} = 10^{-3}$$

We are diving by 10x10x10 or we are diving by 10³

Powers of 10 and calculations

Powers of 10: Using place value we know the value of each column is ten times greater than the column to the right.

Multiplying by 10, means the number is ten times greater, and moves one column to the left

Example:

$$5,7 \times 10^3 = 5700$$

This means that 6.7 is 10 times and then 10 times bigger (or moves two columns to the

[illegible]

Example:

$$35219 \times 10^{-3} = 35.219$$

This means that 35219 is 10 times, then 10 times and then 10 times smaller (or moves three columns to the right)

Online Clip

M113

Index Laws



Component Knowledge

- To be able to apply the different index laws
- To be able to calculate negative indices

Key Vocabulary

Index notation	A way of writing numbers or letters that have been multiplied by themselves a number of times
Square number	The product of a number multiplied by itself
Cube number	The product of a number multiplied by itself three times.
Root	The inverse of a square number is a square root. The inverse of a cube number is a cube root
Reciprocal	1 divided by the number

Multiplication law

When multiplying the terms, we add the powers together

$$3^7 \times 3^5 = 3^{7+5} = 3^{12}$$

$$x^3 \times x^4 = x^{3+4} = x^7$$

The base number does not change

Brackets law

$$(4^5)^3 = 4^5 \times 3 = 4^{15}$$

When raising to the power we multiply the powers together

$$(2x^4)^3 = 2^3 \times x^{4 \times 3} = 8x^{12}$$

Negative indices

A negative power performs the reciprocal

$$x^{-a} = \frac{1}{x^a}$$

Example

$$2^{-3} = \frac{1}{2^3} = \frac{1}{8}$$

Division law

When dividing the terms, we subtract the powers.

$$2^7 \div 2^3 = 2^{7-3} = 2^4$$

Divides can only be written as fractions

$$\frac{5^{11}}{5^2} = 5^{11-2} = 5^9$$

$$\frac{y^5}{y^{-1}} = y^{5-(-1)} = y^6$$

Subtracting a negative is the same as adding a positive

Facts

$$p = p^1$$

$$y^0 = 1$$

$$456^0 = 1$$

Anything to the power of zero is equal to 1

Index Laws – You can only use index laws when the base number is the same.

$$2^3 \times 4^5 \neq 8^{15}$$

Online clips

M135, M608, M120

Negative indices

A negative power performs the reciprocal

$$x^{-a} = \frac{1}{x^a}$$

Example

$$2^{-3} = \frac{1}{2^3} = \frac{1}{8}$$

Fractional

The denominator of a fractional power acts as a "root". The numerator of a fractional power acts as a normal power.

General rule

$$x^{\frac{a}{b}} = \left(\sqrt[b]{x}\right)^a$$

$$64^{\frac{2}{3}} = \left(\sqrt[3]{64}\right)^2 = 4^2 = 16$$

Changing the base

Write

$(4)^3$ as a power of 2

$4 = 2^2$, so

$$(\mathbf{4})^3 = (\mathbf{2^2})^3 = 2^6$$

Example

Given that

$$3 \times \sqrt{27} = 3^n$$

Find the value of n

$$\mathbf{27 = 3^3}$$

$$3 \times \sqrt{\mathbf{3^3}}$$

$$3^1 \times (3^3)^{\frac{1}{2}}$$

$$3^1 \times 3^{\frac{3}{2}} = 3^{1+\frac{3}{2}} = 3^{\frac{5}{2}}$$

A square root
can be changed
to the power of $\frac{1}{2}$

Online clips

M135, M608, M150, M120 X647, X783

Standard form



Component Knowledge

- Identify numbers in standard form
- Write an ordinary number in standard form
- Write a standard form number as an ordinary number

Key Vocabulary

Power/index	A notation and word used to show repeated multiplication of the same number
Standard form	A method of writing numbers that uses multiplication with powers of 10
Integer	Whole number

Multiplying by powers of 10

The Positive Powers of 10

$$10^1 = 10$$

$$10^2 = 100$$

$$10^3 = 1000$$

$$10^4 = 10000$$

$$10^5 = 100000$$

$$2.5 \times 10^4$$

$$10^4 = 10000$$

$$2.5 \times 10000$$



25,000

Each digit is shifted 4 places values higher

The power of 10 indicates how many place values each digit is

increased/decreased in value

(move left for positive powers of 10, and move right for negative powers)

The Negative Powers of 10

$$10^{-2} = \frac{1}{10^2} = \frac{1}{100}$$

$$10^{-1} = 0.1$$

$$10^{-2} = 0.01$$

$$10^{-3} = 0.001$$

$$10^{-4} = 0.0001$$

$$10^{-5} = 0.00001$$

$$62000 \times 10^{-4}$$

$$10^{-4} = 0.0001$$

$$62000 \times 0.0001$$



$$62000 \times 10000$$

6.2

Writing in standard form

Ordinary Form

200

Standard Form

2×10^2

A number,
 $1 \leq x < 10$ integer power
of 10

Any (positive) number can be written in standard form: a number greater than or equal to 1 but less than 10, multiplied by an integer power of 10

3,500

3.5×10^3

A number,
 $1 \leq x < 10$ integer power
of 10

Why is 12×10^2 not in standard form?

12 is greater than

$1 \leq x < 10$ so we need to convert it into standard form.

$$= 12 \times 10^2$$

$$= 12 \times 100$$

$$= 1200$$

$$= 1.2 \times 10^3$$

a)

5,430,000

5,430,000

$$= 5.43 \times 10^6$$

m)

0.00608

0.00608

$$= 6.08 \times 10^{-3}$$

Writing standard form as ordinary numbers

$$5.23 \times 10^4$$

$$= 5.23 \times 10 \times 10 \times 10 \times 10$$

$$= 5.23 \times 10,000$$

$$= 52,300$$

Remember that multiplying by a power of 10 has the effect of increasing/decreasing the place value of each digit

$$4860 \times 10^{-2}$$

48.6

$$0.0486 \times 10^4$$

486

$$48.6 \times 10^{-1}$$

4.86

[Online clips](#)

M719, M678



Standard form

-Arithmetic

Component Knowledge

- Write an ordinary number in standard form
- Write a standard form number as an ordinary number
- Perform arithmetic operations on standard form numbers, giving the answer in standard form

Key Vocabulary

Power/index	Shows how many times to multiply the same number by itself.
Standard form	A method of writing numbers that uses multiplication with powers of 10.

Adding and Subtracting with Standard Form

1

Calculate the following giving your answer in ordinary form:
 $(3.6 \times 10^6) + (4.2 \times 10^7)$

Step 1

Write each in ordinary form:

$$\begin{array}{r} 3.6 \times 10^6 \\ \downarrow \\ 36,000 \end{array} \quad \begin{array}{r} 4.2 \times 10^7 \\ \downarrow \\ 42,000,000 \end{array}$$

Step 2

Add with column addition

$$\begin{array}{r} 42000000 \\ + 36000 \\ \hline 42036000 \end{array}$$

42,036,000

You can leave the answer in ordinary form ...

2

Calculate the following giving your answer in standard form:
 $(3.6 \times 10^6) - (1.4 \times 10^6)$

Step 1

Write each in ordinary form

$$\begin{array}{r} 3.6 \times 10^6 \\ \downarrow \\ 3,600,000 \end{array} \quad \begin{array}{r} 1.4 \times 10^6 \\ \downarrow \\ 1,400,000 \end{array}$$

Step 2

Subtract with column subtraction

$$\begin{array}{r} 3600000 \\ - 1400000 \\ \hline 2200000 \end{array}$$

Step 3

Give your answer in standard form

3

$$2.2 \times 10^6$$

... unless the question asks for answer in standard form too

Multiplying and dividing with standard form

$$\begin{array}{l} \boxed{2 \times 10^3} \times \boxed{4 \times 10^4} \\ \downarrow \quad \quad \downarrow \\ 2 \times 4 \quad \times \quad 10^3 \times 10^4 \\ 8 \quad \quad \times \quad 10^7 \\ = 8 \times 10^7 \end{array}$$

$$\begin{array}{l} \boxed{5 \times 10^2} \times \boxed{3 \times 10^6} \\ \downarrow \quad \quad \downarrow \\ 5 \times 3 \quad \times \quad 10^2 \times 10^6 \\ 15 \quad \quad \times \quad 10^8 \\ = 1.5 \times 10^9 \end{array}$$

Remember the rules of indices:

- Add powers when multiplying (and the base numbers are the same)
- Subtract powers when dividing

$$\begin{array}{l} \boxed{8 \times 10^5} \div (\boxed{2 \times 10^3}) \\ \downarrow \quad \quad \downarrow \\ 8 \div 2 \quad \times \quad 10^5 \div 10^3 \\ 4 \quad \quad \times \quad 10^2 \\ = 4 \times 10^2 \end{array}$$

$$\begin{array}{l} \boxed{3 \times 10^6} \div (\boxed{6 \times 10^3}) \\ \downarrow \quad \quad \downarrow \\ 3 \div 6 \quad \times \quad 10^6 \div 10^3 \\ 0.5 \quad \quad \times \quad 10^3 \\ = 5 \times 10^2 \end{array}$$

Not in
standard
form

Not in
standard
form

[Online clips](#)

M719, M678, U264, U290, U161

Circles



Component Knowledge

- Identify parts of a circle
- Calculate the area of a circle
- Calculate the circumference of a circle
- Find the area of a sector
- Find arc length

Key Vocabulary

Circle	A 2 dimensional shape made by drawing a curve that is always the same distance from the centre
Radius	The distance from the centre to the circumference of a circle
Diameter	The distance from one point on a circle through the centre to another point on the circle
Circumference	The distance around the edge of a circle
Tangent	A line that just touches a curve at a point, matching the curve's slope at that point
Chord	A line segment connecting two points on a curve
Arc	Part of the circumference of a circle
Sector	A "pie slice" part of a circle – the area between two radiuses and the connecting arc of a circle
Segment	The smallest part of a circle made when it is cut by a line



Formula to remember

$$\text{Radius} = \frac{\text{diameter}}{2}$$

$$\text{Diameter} = 2 \times \text{radius}$$

$$\text{Area} = \pi \times \text{radius}^2$$

$$\text{Circumference} = \pi \times \text{diameter}$$

$$\text{Arc length} = \frac{\theta}{360} \times \pi \times \text{diameter}$$

$$\text{Area of a sector} = \frac{\theta}{360} \times \pi \times r^2$$

Sectors

Fraction of areas

Semi-circle		Area = $\pi \times r^2 \times \frac{180^\circ}{360^\circ}$
Quarter-circle		Area = $\pi \times r^2 \times \frac{90^\circ}{360^\circ}$
30°		Area = $\pi \times r^2 \times \frac{30^\circ}{360^\circ}$
165°		Area = $\pi \times r^2 \times \frac{165^\circ}{360^\circ}$
283°		Area = $\pi \times r^2 \times \frac{283^\circ}{360^\circ}$

What is Pi?

Pi is the ratio between the circumference of a circle and its diameter

Pi is denoted by the Greek symbol π

The value of Pi is approximately 3.14159265.....

Example 1

Calculate the area of a circle with a radius of 5cm

$$\text{Area} = \pi \times \text{radius}^2$$

$$= \pi \times 5^2$$

$$= 78.5\text{cm}^2$$

Example 2

Calculate the circumference of a circle with a radius of 12cm

$$\text{Circumference} = \pi \times \text{diameter}$$

$$= \pi \times 24$$

$$= 75.4\text{cm}$$

Example 3

Calculate the area of a sector with a radius of 7cm and an angle of 50°

$$\text{Area of a sector} = \frac{\theta}{360} \times \pi \times r^2$$

$$50$$

$$= \frac{50}{360} \times \pi \times 7^2$$

$$= 21.4\text{cm}^2$$

Example 4

Calculate the arc length of a sector with a radius of 11cm and an angle of 75°

$$\text{Arc length} = \frac{\theta}{360} \times \pi \times \text{diameter}$$

$$75$$

$$= \frac{75}{360} \times \pi \times 22$$

$$= 14.4\text{cm}$$

Example 5

Calculate the area of a semicircle with a diameter of 8cm

$$\text{Area} = \pi \times 4^2$$

$$= \pi \times 4^2$$

$$= 50.27\text{cm}^2$$

This answer is the area of the full circle so we need to half it to find the area of the semicircle

$$= 25.13\text{cm}^2$$

Example 6

Calculate the perimeter of a semicircle with a diameter of 8cm

$$\text{Circumference} = \pi \times \text{diameter}$$

$$= \pi \times 8$$

$$= 25.13\text{cm (full circle)} = 12.57 \text{ (curved edge of semicircle)}$$

Total perimeter = curved edge + straight edge

$$= 12.57 + 8 = 20.57\text{cm}$$

Online clips

M595, M169, M280, M231, M430

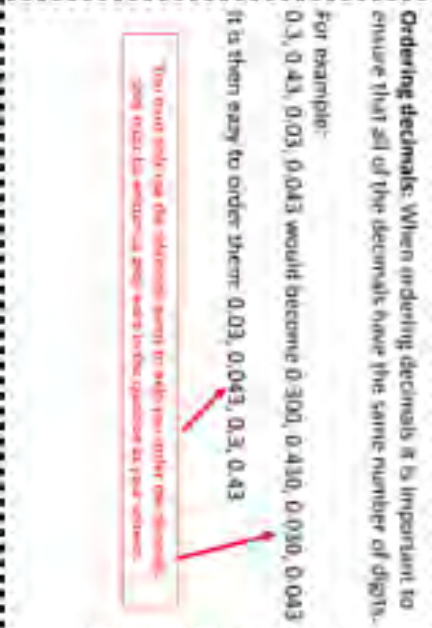


- To be able to use place value to order decimals

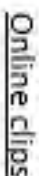
Decimal	Part of a whole in base 10
Decimal Point	A point or dot placed after a figure representing units in decimal fraction
Digit	Numerals (0-9) representing part of a number
Order	Arranging things in a certain way
Place value	The value of digits in a number based on its place
Ascending	Increasing or going up
Descending	Decreasing or going down

Place Value			
Trillions	Billions	Millions	Thousands
Hundred Trillion	Hundred Billion	Hundred Million	Hundred Thousand
Ten Trillion	Ten Billion	Ten Million	Ten Thousand
Trillion	Billion	Million	Thousand
			Hundred
		2	Ten
		7	Unit
		1	Tenths, $\frac{1}{10}$
		0	Hundredth, $\frac{1}{100}$
		1	Thousandth, $\frac{1}{1,000}$
		2	Ten thousandths

Comparing decimals: It is important when comparing decimals to compare each digit in the same column. For example, compare the tenths with each other as they have the same place value.



Once we can compare decimals, we can place them in ascending and descending order.



MISS3, MISS22



Fractions, decimals, & Percentages

Component Knowledge

- Convert between simple fractions, decimals and percentages.
- Order fractions, decimals and percentages by converting.

Key Vocabulary

Fraction	Made up of a numerator (top) and denominator (bottom). Compares parts in question to total number of parts.
Integer	Whole number
Ascending order	Place numbers in order from smallest to largest
Descending order	Place numbers in order from largest to smallest
Percentage (percent)	'Out of' (per) one hundred (cent)
Decimal	Comparable number to a fraction or mixed number, written using place value, e.g. $\frac{2}{5} = 0.4$, or $3\frac{3}{4} = 3.75$

Convert % to fraction:

% "means out of 100" = $\frac{\quad}{100}$
 eg 65% = $\frac{65}{100}$ simplify where possible
 $= \frac{13}{20}$

Convert decimal to a fraction

Use place value to convert to fraction out of 10, 100, 1000, etc
 eg $0.8 = \frac{8}{10}$
 then simplify where possible
 eg $\frac{8}{10}$ becomes $\frac{4}{5}$

Place Value	
Units	Decimal
Ten	Tenths
One	Hundredths
One	Thousandths
One	Ten thousandths
One	Hundred thousandths
One	Millionths
One	Ten millionths
One	Hundred millionths
One	Billionths

Convert % to fraction to decimal:

Convert to fraction out of 100, $\frac{\quad}{100}$
 as % "means out of 100" = $\frac{\quad}{100}$
 eg 9% = $\frac{9}{100}$ use place value table to write as a decimal

Units	Decimal
Ten	Tenths
One	Hundredths
One	Thousandths
One	Ten thousandths
One	Hundred thousandths
One	Millionths
One	Ten millionths
One	Hundred millionths
One	Billionths

place the 9 in the hundredths column
 fill in with any zeros

Convert decimal to a percentage

Use place value to convert to fraction out of 10, 100, 1000, etc
 eg $0.126 = \frac{126}{1000}$
 % means out of 100 so convert to equivalent fraction out of 100 = $\frac{126}{1000} = \frac{12.6}{100} = 12.6\%$

Convert fraction to decimal

Convert to fraction out of 10, 100, 1000, etc" = $\frac{0r}{10} - \frac{0r}{100} - \frac{0r}{1000}$
then use place value to write as a fraction.

$$\frac{3}{8} = \frac{x}{10} = \frac{x}{100} = \frac{375}{1000}$$

Place Value	
Units	Decimals
Thousands	
Tens	
One	
Tenths	
Hundredths	
Thousandths	

place the end digit

in the thousands column

Fill in with any zeros

Convert fraction to percentage

Convert to fraction out of 10, 100, 1000, etc. =

$$\frac{\partial T}{\partial t} \quad \frac{\partial T}{\partial x} \quad \frac{\partial T}{\partial y} \quad \frac{\partial T}{\partial z}$$

$$E\theta \frac{3}{200} = \frac{x}{10} = \frac{y}{100} = \frac{15}{1000}$$

then write as an equivalent fraction "out of 100" as percentage.

eg $\frac{15}{1000} = \frac{1.5}{100}$ once "out of 100" write as a percentage = 1.5%

Ordering FDP

To be able to order FDPs, we need to write them all in the same format:

Example: Order from smallest to largest

You can choose to convert them all into fractions, decimals or percentages as long as you convert them all into the same.

changing them to percentages:

$\frac{1}{4} = 25\%$	$0.19 = 19\%$	$0.3 = 30\%$	$\frac{1}{5} = 20\%$
----------------------	---------------	--------------	----------------------

$\frac{1}{4} = 25\%$	$0.19 = 19\%$	$0.3 = 30\%$	$\frac{1}{5} = 20\%$
----------------------	---------------	--------------	----------------------

$\frac{1}{4} = 25\%$	$0.19 = 19\%$	$0.3 = 30\%$	$\frac{1}{5} = 20\%$
----------------------	---------------	--------------	----------------------

25%, 19%, 30%, 26%, 20%

From smallest to biggest:

19%, 20%, 25%, 26%, 30%

Answer:

0.19, $\frac{1}{5}$, $\frac{1}{4}$, 26%, 0.3

Follow your own nose

Fluoride (the big red dot) numbers all in the same format.

Online clips

M1958, M1264, M1553

Percentages



Key Vocabulary

Percentage	Parts per 100. The unit is %.
Increase	Make bigger.
Decrease	Make smaller.
Multiplier	Decimal used to calculate percentages with a calculator.
Simple Interest	The amount of interest is fixed over a period of time.

Component Knowledge

- To be able to calculate percentages of amounts with a multiplier.
- To be able to calculate percentage increases and decreases.
- To be able to calculate simple interest

Percentage of an amount – non calculator

Calculate 15% of 250

Find 10% by dividing by 10

$$250 \div 10 = 25$$

Find 5% by halving the 10% value

$$25 \div 2 = 12.5$$

Add the 10% and the 5% value together

$$25 + 12.5 = 37.5$$

Percentage increase using a multiplier

Increase 50 by 15%



15% = 0.15 convert percentage to a decimal

0.15 + 1 = 1.15 add to 1 as we are adding on to 100%

50 x 1.15 = 57.5 now multiply

Percentage decrease using a multiplier

Decrease 70 by 25%

25% = 0.25 convert percentage to a decimal

1 - 0.25 = 0.75 subtract from 1 we are decreasing

70 x 0.75 = 52.5 now multiply

Percentage of an amount – using a multiplier

When we have a calculator we can use a multiplier, this is a decimal equivalent of the percentage.

80% of 120: $80\% = 0.80$

$$80\% \text{ of } 120 = 0.80 \times 120 = 96$$

33% of 90: $33\% = 0.33$

$$33\% \text{ of } 90 = 0.33 \times 90 = 29.70$$

Calculating an original amount

Sinead buys a watch, 20% VAT is added to the price of the watch. Sinead then has to pay a total of £60. What is the price of the watch with no VAT added?

120 % = £60 original amount (100%) + 20%

120% = 1.2 convert percentage to a decimal

£60 ÷ 1.2 = £50 divide new amount by multiplier

Original cost of watch = £50

The population of an island has decreased by 40% over 50 years. The population in 2018 was 360. What was the population in 1968?

60% = 360 original amount (100%) - 40%

60% = 0.6 convert percentage to a decimal

360 ÷ 0.6 = 600 divide new amount by multiplier

Population in 1968 = 600

Percentage Change

$$\text{Percentage change} = \frac{\text{change}}{\text{original}} \times 100$$

Change = New amount - Original amount

The population of an island in 2017 was 30,000. In 2018, the population was 31,500. Calculate the percentage increase.

Difference in populations

$$\text{Percentage change} = \frac{31500 - 30000}{30000} \times 100$$

Original population

$$\text{Percentage change} = \frac{1500}{30000} \times 100$$

$$\text{Percentage change} = 5\%$$

$$\text{Percentage profit} = \frac{\text{sales} - \text{cost}}{\text{cost}} \times 100$$

Keira buys a coffee table for £120 and sells it for £204. Work out her percentage profit.

$$\text{Percentage profit} = \frac{204 - 120}{120} \times 100$$

$$\text{Percentage profit} = \frac{84}{120} \times 100$$

$$\text{Percentage profit} = 70\%$$

Simple Interest

To calculate simple interest we start by calculating the percentage and multiplying it by the period of time.

Example: £250 is in a bank account which is paying 5% simple interest per year. How much would be in the account at the end of 3 years?

$$5\% = 0.05$$

$$0.05 \times 250 = £12.50 \quad \text{find the amount of interest per year}$$

$$3 \times £12.50 = £37.50 \quad \text{3 years X amount of interest per year}$$

$$£250 + £37.50 = £287.50 \quad \text{add the total interest to the original amount}$$

Online clips

M437, M905, M476, M533, M528, M235



Recurring Decimals

Component Knowledge

- To be able to convert recurring decimals to fractions with one or more recurring digits.
- To be able to convert a recurring decimal (with non-recurring and recurring digits)

Key Vocabulary

Recurring Decimal	It is a decimal fraction in which a figure or group of figures is repeated indefinitely, as in 0.666... or as in 1.851851851.... It is denoted by a dot above the recurring parts. E.g. $0.\dot{6} = 0.666\dots$ or $0.\dot{3}\dot{4} = 0.343434\dots$
-------------------	--

When there are no non-recurring digits after the decimal point:

To convert a recurring decimal to a fraction, use the following steps

- Name out decimal (write as $x = \dots$)
- Identify the number of places that are recurring
- Multiply by a power of 10 to move the recurring part past the decimal. (This should make the recurring parts line up).
- Subtract x from the new power of x to cancel out the decimal part.
- Then divide to leave x in a fractional form and simplify if possible.

Convert $0.\dot{5}$ to a fraction.

Let $x = 0.\dot{5}$,
 $10x = 5.\dot{5}$
 $\begin{array}{r} 10x = 5.\dot{5} \\ - x = 0.\dot{5} \\ \hline 9x = 5 \end{array}$
 $x = \frac{5}{9}$

How could we remove the recurring parts?

Convert $0.\dot{4}2\dot{7}$ to a fraction.

Let $x = 0.\dot{4}2\dot{7}$,
 $1000x = 427.\dot{4}2\dot{7}$
 $\begin{array}{r} 1000x = 427.\dot{4}2\dot{7} \\ - x = 0.\dot{4}2\dot{7} \\ \hline 999x = 427 \end{array}$
 $x = \frac{427}{999}$

How could we remove the recurring parts?

Convert $2.\dot{4}8$ to a fraction.

Let $x = 2.\dot{4}8$,
 $100x = 248.\dot{4}8$
 $\begin{array}{r} 100x = 248.\dot{4}8 \\ - x = 2.\dot{4}8 \\ \hline 99x = 246 \end{array}$
 $x = \frac{246}{99} = \frac{41}{16.5}$

How could we remove the recurring parts?

When there is a non-recurring digit after the decimal point:

Use the same steps as previously however we will need to multiply x two separate ways, once by a power of 10 to move the non-recurring digits before the decimal point and secondly by a different power of 10 to move the recurring digits before the decimal point. (Again, all recurring digits should line up in the two equations.)

Convert 0.72 to a fraction.

Let $x = 0.\overline{72}$,

$$100x = 72.\overline{2}$$

$$10x = 7.\overline{2}$$

$$90x = 65$$

$$\div 90 \quad x = \frac{65}{90} = \frac{13}{18}$$

How could we remove the recurring parts?

$$\begin{array}{r} 72.\overline{2} \\ - 7.\overline{2} \\ \hline \end{array}$$

Convert 0.481 to a fraction.

Let $x = 0.\overline{481}$,

$$1000x = 481.\overline{81}$$

$$10x = 4.\overline{81}$$

$$99x = 477$$

$$\div 99 \quad x = \frac{477}{990} = \frac{53}{110}$$

How could we remove the recurring parts?

$$\begin{array}{r} 481.\overline{81} \\ - 4.\overline{81} \\ \hline \end{array}$$

Online clips

M701, M922

What Makes a Good Song?

Exploring Popular Songs and Musical Arrangements



A. Popular Song Structure

SONG STRUCTURE – How a song is made up of or divided into different sections (see below) and the order in which these sections occur. To work out the structure of a song, it's helpful to analyse the **LYRICS** and listen to a recording for the song (for instrumental sections).

INTRO – often shortened to 'intro', the first section of a song which sets the mood of the song and is sometimes, but not always, an instrumental section using the song's chord pattern.

VERSES – songs normally have several verses. Verses introduce the song's theme and have the same melody but different lyrics for each verse which helps develop the song's narrative and story. Songs made up entirely of verses are called **STROPHIC**.

LINK – a optional short section often used to join different parts of a song together, often instrumental, and sometimes joins verses together or appears at other points within a song.

PRE-CHORUS – an optional section of music that occurs before the **CHORUS** which helps the music move forward and "prepare" for what is to come.

CHORUS – occurs several times within a song and contains the most memorable **HOOK/RIFF**. The chorus relays the message of the song and is repeated with the same melody and lyrics each time it is heard. In popular songs, the chorus is often repeated several times towards the end of the song.

MIDDLE 8/BRIDGE – a section (often 8 bars in length) that provides contrasting musical material often featuring an instrumental or vocal solo using new musical material allowing the performer to display their technical skill on their instrument or voice.

CODA/OUTRO – The final section of a popular song which brings it to an end (Coda is Italian for "tail"!)

B. Key Words

LYRICS – The words of a song, usually consisting of **VERSES** and a **CHORUS**.

HOOK – A 'musical hook' is usually the 'catchy bit' of the song that you will remember. It is often short and used and repeated in different places throughout the piece. Hooks can be either **MELODIC**, **RHYTHMIC** or **VERBAL/LYRICAL**.

RIFF – A repeated musical pattern often used in the introduction and instrumental breaks in a song or piece of music. Riffs can be rhythmic, melodic or lyrical, short and repeated.

MELODY – The main tune of the song often sung by the **LEAD SINGER**.

COUNTER-MELODY – An 'extra' melody often performed 'on top of' the main melody that 'fits' with it a **DESCANT** or **INSTRUMENTAL SOLO**.

TEXTURE – The layers that make up a song e.g., *Melody, Counter-Melody, Hooks/Riffs, Chords, Accompaniment, Bass Line*.

C. Lead Sheet Notation and Arrangements

A **LEAD SHEET** is a form of musical **NOTATION** that contains only the essential elements of a popular song such as the **MELODY**, **LYRICS**, **RIFFS**, **CHORDS** (often as guitar chord symbols) and **BASS LINE**; it is not as developed as a **FULL SCORE ARRANGEMENT** and is open to interpretation by performers who need to use and adapt the given elements to create their own musical **ARRANGEMENT**: their "version" of an existing song.

COVER (VERSION) – A new performance, remake or recording by someone other than the original artist or composer of the song.



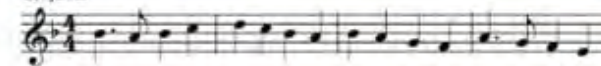
D. Conjunct and Disjunct Melodic Motion

CONJUNCT MELODIC MOTION – Melodies which move mainly by step or use notes which are next to or close to one another.

DISJUNCT MELODIC MOTION – Melodies which move mainly by leap or use notes which are not next to or close to one another.

MELODIC RANGE – The distance between the lowest and highest pitched notes in a melody.

Conjunct



Disjunct



E. Song Timbre and Sonority (Instruments that are used to Accompany Songs)



Pop Bands often feature a **DRUM KIT** and **PERCUSSION** to provide the rhythm along with **ELECTRIC GUITARS** (**LEAD GUITAR**, **RHYTHM GUITAR** and **BASS GUITAR**) and **KEYBOARDS**. Sometimes **ACOUSTIC INSTRUMENTS** are used such as the **PIANO** or **ACOUSTIC GUITAR**. **ORCHESTRAL INSTRUMENTS** are often found in pop songs such as the **STRINGS**, **SAXOPHONE**, **TROMBONE** and **TRUMPET**.



Singers are essential to a pop song - **LEAD SINGER** – Often the "frontline" member of the band (most famous) who sings most of the melody line to the song. **BACKING SINGERS** support the lead singer providing **HARMONY** or a **COUNTER-MELODY** (a melody that is often higher in pitch and different, but still

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Passing/ Receiving

- Head down and eye on the ball.
- Ensure that non-kicking foot is planted along side the ball.
- Side footed pass- strike the ball in the centre of the ball.
- Laces pass- strike the ball with the top of your boot to ensure ball stays along the floor.
- Chip pass- strike ball slightly under the ball to gain height.
- Follow through in the direction you want the ball to go.
- When receiving the ball, ensure head is up.
- Eye contact with the passer to receive the ball.
- On the balls of your feet.
- Check shoulder to see of any defenders

Dribbling

- Keep the ball close to your feet.
- Use the inside and outside of your foot
- Keep head up.
- Use your body to throw the defenders off balance to create space.
- Look for spaces to move the ball into.

Moving with the ball

- Big touches.
- Use the laces to knock the ball forwards so you can run onto it.
- Accelerate into the run and keep speed up

Shooting

- Lean forward when you go to kick the ball.
- Make sure your leg is fully extended.
- Lock your ankle into the kick.
- Kick the ball in the centre of the ball.

Attacking Play

- Using different tactics to beat your opponent.
- Working on attacking overloads i.e 2v1 or 3v1.
- Breaking on set plays i.e Corners or Free kicks to gain advantage.

Heading

- Use the middle of your forehead to head the ball.
- Aim for the centre of the ball.
- Attacking heading and defensive headers. _

Defensive Play

- Jockeying your opponent, don't dive in and be patient.
- Force the attacker on their weaker foot.
- Be on your toes.
- Keep your eye on the ball.

Key Words:

Side foot pass
Lofted pass
Corner
Free Kick
Throw-in
Dribble
Shoot
Heading
Tackle
Jockey
Marking
Attacking
Defending
Crossing



WESTHOUGHTON HIGH SCHOOL KS3 PE KNOWLEDGE ORGANISER – ACTIVITY: FOOTBALL

Tactics:

- Teams attack and defend together
- Create width to create more space
- Tactics are also used in different formations and how best they suit different teams.
- 4-3-3, This formation is great with having the extra midfielder in the middle of the pitch which can add that overload system.
- 5-3-2, This formation gives more a defensive option but allows the two wing backs to push forward, giving more attacking options.



Rules:

- The Game is started by one team in the middle of the pitch
- One referee officiates the game with the help of two assistant referees
- Players are not allowed to use their hands or arms to control the ball unless they are the goalkeeper
- Usually a game consists of 45 minutes each half
- Depending on the level of football will depend on how many substitutes you can use



Positions:

1. Goalkeeper
2. Left Back
3. Right Back
4. Centre Back
5. Centre Defensive Midfielder
6. Centre Attacking Midfielder
7. Left Wing
8. Right Wing
9. Striker/ Number 9



- Year 7's will play 9 a side which will consist of different formations such as: 3-3-2 or 2-4-2. Year 7 will also play 30-minute games.
- Year 8-11 will be 11 a side games. 35–40-minute games.

Scoring System:

- To score a goal, the ball must be put over the line into the goal
- The team with the most goals at the end of the game wins.
- In case of a cup game and both teams have scored the same, it will then go to extra time and penalties



Key Words:

Side foot pass
Lofted pass
Corner
Free Kick
Throw-in
Dribble
Shoot
Heading
Tackle
Jockey
Marking
Attacking
Defending
Crossing

Skills and Techniques: → Actions (eg travel, turn, elevation, gesture, stillness, use of different body parts, floor work, transfer of weight) → Dynamics (eg fast/slow, sudden/sustained, strong/light, flowing/abrupt) → Space (pathways, levels, directions, size of movement, patterns, spatial design) → Relationships - lead and follow, mirroring, action and reaction,, complement and contrast, formations) → Timing → Rhythm	Choreographic devices: → Motif and development → Repetition → Contrast → Highlights → Climax → Changes in numbers of dancers → Unison and canon. → Chance Choreography	Positions and groupings: Solo Duet Trio Group Centre stage Upstage Downstage Stage Left Stage Right Onstage Offstage	Performance skills: → Posture → Alignment → Balance → Coordination → Control → Flexibility → Mobility → Strength → Stamina → Extension → Focus	Key Words: Choreography Pathways Direction Level Speed Extension Timing Phrase Stimulus
				

WESTHOUGHTON HIGH SCHOOL KS3 PE KNOWLEDGE ORGANISER – ACTIVITY: NETBALL

Skills and Techniques:

→ Catching:

Hands form W shape behind ball. Catch at speed, catch with one hand and catch a ball at different heights

→ Passing:

Perform different types of passes selecting the right pass under pressure. Place throwing hand behind ball, move opposite foot in front of body. Full extend arm when passing, following through with pass.

→ Footwork:

Land correctly with one foot landing or two-foot landing. Pivot to send the ball in a different direction.

→ Shooting:

Ball on fingertips, use non-throwing hand to steady ball. Bend knees and elbows, lifting ball up to net.

Rules:

→ Game is started by centre pass within the centre third

→ Two umpires officiate the game

→ Players are not allowed to travel with the ball

→ Players must remain within their designated zones

→ A defending player must stand three feet away from the person with the ball.



Positions:

GK - Goalkeeper
GD - Goal Defence
WD - Wing Defence

C - Centre

WA - Wing Attack
GA - Goal Attack
GS - Goal Shooter

7 players in total

Scoring System:

→ To score a goal, the ball must be put through the opposition's goal ring

→ The team with the most points at the end of the game wins.

Tactics:

→ Quick Passing
→ Dodging and changing speed to receive ball

Key Words:

Chest Pass
Bounce Pass
Shoulder Pass
Intercept
Marking
Defensive Third
Centre Third
Attacking Third
Goal Circle
Net Attacking
Defending
Centre Pass

NETBALL POSITIONS



Westhoughton High School KS3 PE KNOWLEDGE ORGANISER – ACTIVITY: HANDBALL

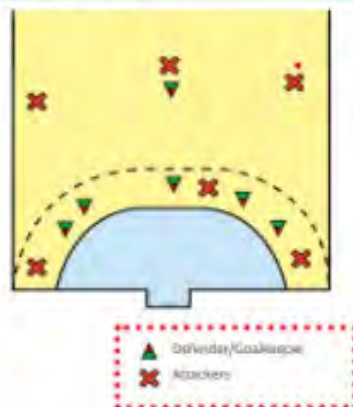
Skills and Techniques:

- Dribbling used to keep possession of the ball and travel around the court.
- The ball should always be kept close to the body (under control) Dribbling with one hand.
- Shooting-Used to score points for the team(See Scoring system for how to score)
- Passing-Used to get up the court quickly. Another way for the team to maintain possession. Can be used to find a better scoring or dribbling opportunity.



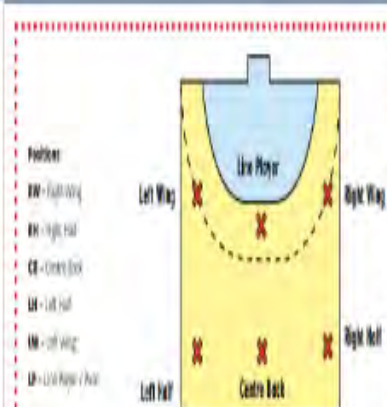
Rules:

- Each team can have a maximum of 7 players on the court at any one time.
- The ball can only be moved by either dribbling (bouncing the ball) or passing the ball.
- Violations in Handball include travelling (taking more than three step without bouncing the ball), double dribble (picking the ball up dribbling, stopping then dribbling again with two hands)



Positions:

- Keeper- net only making sure no handballs go in.
- Right/Left Half- wide and fast players getting the ball up the court quick but first back to defend.
- Line player/Pivot- controller of the game in the middle passing and moving the ball.
- Centre back-Holds the defence strong, command the defensive shapes needed.
- Right/Left Half- attacking players, widest points of the pitch to create space, fast movement and quickness needed.



Scoring System:

- A goal is worth one point regardless of where it is scored and is registered when the ball completely breaks the vertical plane of the goal line. After a scored goal, the game is restarted with a free throw from the goalie

Tactics:

- Defend the D when your team hasn't got the ball. (Target Zone Defence)
- Man to man marking when defending.
- Short and quick passing when attacking.
- Try to always play the ball to the forward. (target player)
- Shoot on sight.

Key Words:

- Bounce Pass
- Shoulder Pass
- One arm throw
- Intercept
- Marking
- Defensive wall
- Goal
- Circle
- Net
- Dribbling
- Double Dribble
- Attacking Play
- Defensive Play
- Jump Shot
- Throw in
- Corner

WARM-UP

1. Pulse Raising Activity

- ❖ Pulse raising activities gently raises the heart rate.
- ❖ E.g. Jogging, cycling, skipping.



2. Stretches

- ❖ Stretches should be dynamic (moving, not held). They prepare the muscles.
- ❖ E.g. High knees to stretch the hamstrings, heel flicks to stretch the quadriceps.



3. Skill-Based Activity

- ❖ This is the final part of the warm-up.
- ❖ This is where you familiarise yourself with the skills and actions that will be needed in the session.
- ❖ E.g. Passing the ball in rugby.



Cool down- starts with low intensity exercise such as light jogging, medium pace walking or easy cycling, anything that allows the heart rate to maintain an increased rate then gradually decrease. This is followed by stretching, which is usually more static (held) in a cool down.

Muscular system

Label and locate all the muscles and bones in arms, core and hands/feet



Year 9 Term 1: Health Knowledge Organiser

Sedentary lifestyle

A sedentary lifestyle is one with no or irregular physical activity and an excessive amount of daily sitting.

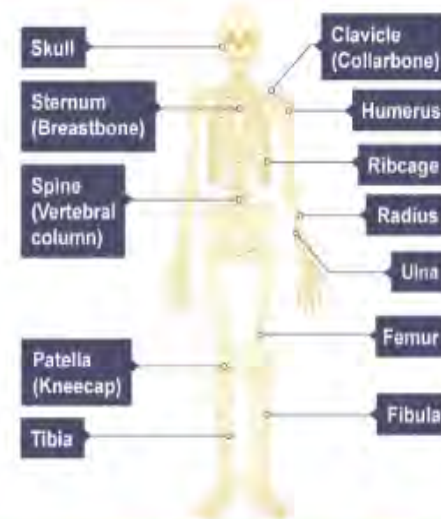
Consequences of a Sedentary lifestyle-obesity, Depression, Type 2 diabetes, Poor muscle tone, osteoporosis.



Short term effects of exercise

on HR and breathing rate =increase
Long term effect of exercise
=decrease

Skeletal System



Key Vocabulary: Pulse raiser Sedentary. Triceps Biceps Humerus Radius. Ulna Femur Patella Tibia Fibula
Abdominals Tarsals. Metatarsals Phalanges

COMPONENTS OF Health related Fitness – FABS MS

1. **Flexibility** – The ability to move a joint fluidly through its complete range of movement.
2. **Body Composition** – The relative ratio of fat mass to fat-free mass in the body.
3. **Speed** – Measured in metres per second. The faster an athlete runs over a given distance, the greater their speed.
4. **Cardiovascular endurance** – The ability of the heart, lungs and blood to transport oxygen during sustained exercise



COMPONENTS OF SKILL RELATED FITNESS – CRAP B

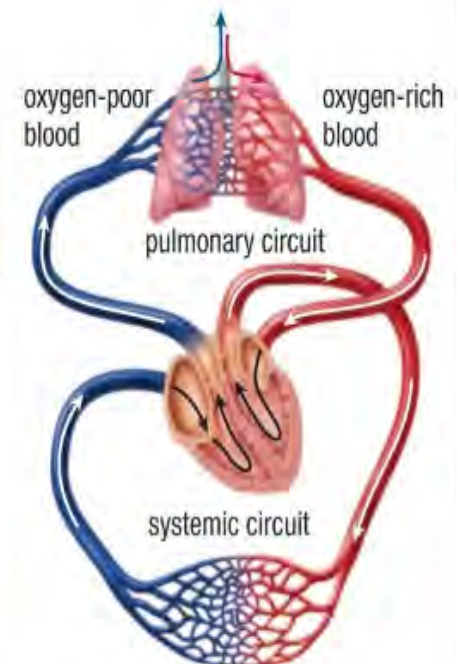
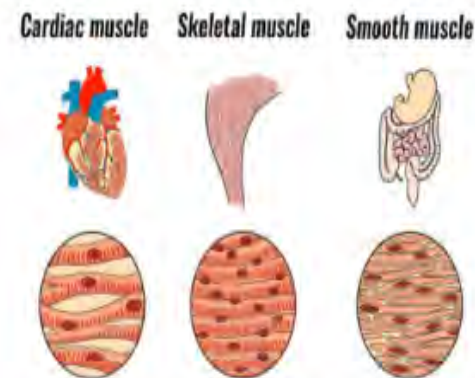
1. **Co-ordination** – The smooth flow of movement needed to perform a motor task efficiently and accurately e.g. do more than one thing at the same time.
2. **Reaction Time** – The time taken for a sports performer to respond to a stimulus.
3. **Agility** – The ability of a sports performer to quickly and precisely move or change direction without losing balance.
4. **Power** – The product of strength and speed. Power is needed in many sports.
5. **Balance** – The ability to maintain centre of mass over a base support; dynamic and static.

The cardiovascular system and respiratory system working together

The lungs bring oxygen into the body, to provide energy, and remove carbon dioxide, the waste product created when you produce energy. The heart pumps the oxygen to the muscles that are doing the exercise. When you exercise and your muscles work harder, your body uses more oxygen and produces more carbon dioxide

Year 9: Term 1 Health Knowledge Organiser

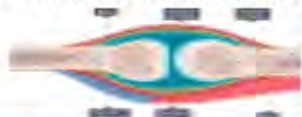
Different types of muscle



Key Vocabulary: Cardiovascular. Carbon dioxide Pulmonary circuit Skill related fitness components Health related

Joints

A joint is a place where two or more bones meet and is also called an articulation



Hinge - these can be found in the elbow, knee and ankle. They allow flexion and extension of a joint.

Ball and socket - these types of joint can be found at the shoulder and hip and allow movement in almost every direction.

Pivot - this joint can be found in the neck between the top two vertebrae. It allows only rotational movement such as moving your head from side to side as if you were saying 'no'.

Condyloid - this type of joint is found at the wrist. It allows you to flex and extend the joint and move it from side to side.



• Short term effects of exercise

- Cardiovascular system-Increase in stroke volume (SV); increase in heart rate (HR); increase in cardiac output (Q); increase in blood pressure (BP)
- Respiratory system-Increase in breathing rate; increase in tidal volume
- Cardio-respiratory system-increase in oxygen uptake; increase in carbon dioxide removal
- Energy system--increase in lactate production
- Muscular system-increase in temperature of muscles; increased pliability; muscle fatigue

Long term effects of exercise

Cardiovascular system	Cardiac hypertrophy; increased stroke volume (SV); decrease in resting heart rate (HR); increase in maximum cardiac output (Q); capillarisation at the lungs and muscles; increase in number of red blood cells; increased size and strength of the heart; drop in resting blood pressure due to more elastic muscular wall of veins and arteries
Respiratory system	Increased vital capacity; increased number of functioning alveoli; increased strength of the respiratory muscles (internal and external intercostals and diaphragm); increased lung capacity and volume
Energy system	Increased production of energy from the aerobic energy system; increased tolerance to lactic acid
Muscular system	Muscle hypertrophy; increased strength of tendons; increased strength of ligaments
Skeletal system	Increase in bone density

Year 9: Term 1 PE Theory Knowledge Organiser

Fitness Components

Strength = The maximum force that can be generated by a muscle or muscle group.

Muscular Endurance = The ability of muscles to continually contract over a period of time against a light to moderate resistance load.

Power = The product of strength and speed.

Agility-Ability to rapidly change body direction, accelerate, or decelerate.

Cardiovascular endurance-The ability of the heart, lungs and blood to transport oxygen during sustained exercise

Fitness Test

- Strength - Hand grip dynamometer
- Maximal strength - One rep max test
- Select the body part that is to be tested and use the weightlifting technique for that body part - for example, quadriceps - leg extension, pectorals - bench press
- Cardiovascular endurance - Multi-stage fitness test
- Flexibility - Sit and reach test
- Speed - 30 metre sprint test
- Muscular endurance - 60 second press-up test
- Muscular endurance - 60 second sit-up bleep test
- Agility - Illinois agility test
- Coordination - Alternate hand wall toss test
- Reaction time - Ruler drop test
- Balance - Standing stork test
- Power - Vertical jump test



Key vocabulary: Hinge Ball and Socket. Hypertrophy. Vital Capacity. Tidal Volume Lactic acid Fitness Component

Year 9 Religion & Society - What Really Matters?

Unit 1: Citizenship – The UK Political System

How does the political system work in the UK



Lesson 1 - What's the difference between Government & Parliament?

- A **government** is the group of people who have been **elected** and given **authority** to govern a country or state.
- The Government is the **executive branch**, and it runs the country's day-to-day affairs, like public services and national security.
- Government is led by the **Prime Minister**, who chooses a **Cabinet** to make decisions over how the country is run.
- **Parliament** is the **legislative branch**, made up of the **House of Commons**, **House of Lords** and the **monarch**. In the House of Commons, the MPs are elected by the public. Those in the House of Lords are appointed.
- Parliament's main roles are to **represent** the public and to **scrutinise** the Government. It also debates and passes laws, which the Government then implements.

Common misconception:

That government is the same thing as parliament

Parliament is the law-making branch, made up of elected MPs. The Government, including the Cabinet, is in charge of running the country and implementing those laws. It is led by the Prime Minister. Parliament scrutinises Government actions/decisions.

KEY TERMS:

Government - the individuals who have been elected and given the authority to run the state, led by the Prime Minister (PM) in the UK

Authority - the power or right to have official responsibility, to give orders and make decisions

Parliament - comprises three parts: the House of Commons, the House of Lords and the monarch. Its purpose is to debate, make laws and scrutinise the government

Lesson 2 - How do elections work?

- A **general election** in the UK is when MPs are elected per **constituency**. Each constituency has roughly the same size **electorate** so that **representation** remains fair and equal.
- When a general election is called by the current **Prime Minister**, a chain of events is set in motion: **dissolution of Parliament**, **candidate nominations**, campaigning, new voter registration, polling day and announcing the results.
- The leader of the party with the most seats will become the Prime Minister, the head of the UK Government.

Common misconception:

The Prime Minister is directly elected by the public during general election

The Prime Minister is not elected by the people; instead, they are the leader of the party that has the most seats in the House of Commons after the election.

KEY TERMS:

Election - when people vote to choose their leaders or representatives

Constituency - the specific geographical area that is represented by each MP in the House of Commons

Prime Minister - the leader of the political party who is in power and head of the Government

Year 9 Religion & Society - What Really Matters?

Unit 1: Citizenship – The UK Political System How does the political system work in the UK



Lesson 3 - What happens after a general election?

- After a general election, the Prime Minister is accepted by the monarch and is invited to make a government. MPs are sworn in and the Prime Minister chooses the **Cabinet**. **Parliament** is then officially opened by the **monarch** in the **State Opening**.
- Governments may be run with a **majority**, **minority** or **coalition**.
- A **majority** means that one party has 50%+1 of all the seats in Parliament.
- A **coalition** is when typically, two parties join together to form a government. They share the roles in Cabinet and compromise over policies.
- A **minority** government is when a party rules with a majority. Their MPs hold the roles in Cabinet, but they may set up a deal with smaller parties, where they agree to vote the same way on certain issues.

Common misconception:

The party that wins the most seats will form the Government and have all the power

If a party does not have the majority of seats (50%+1) in Parliament, they may not be able to form a government. They might have to form a formal coalition or a voting agreement with a smaller party to get the majority. Power may have to be shared.

KEY TERMS:

Election - when people vote to choose their leaders or representatives

Prime Minister - the leader of the political party who is in power and head of the Government

Majority - holds more than half of the total seats in a legislative body, such as a Parliament

Coalition - a government formed jointly by more than one political party

Minority - a government formed by a political party that does not have an overall majority of MPs.

Lesson 4 - What do political parties do?

- A **political party** is organised group with shared beliefs on how society should be run.
- Its main roles are **representing the people**, **supporting members**, **creating policies** and **holding the Government to account**.
- Political party's **policies** reflect their **values**, which shape their **manifesto** and the plans they will implement if in power.
- The UK has many political parties to ensure that **diverse** opinions and values are represented.
- Whilst it does have some flaws, the **political spectrum** shows where parties stand from left wing to right wing.

Common misconception:

Political parties are all either left wing or right wing

Many parties mix both views or focus on specific issues. Like regional concerns. Some parties are centrist or have ideas that don't fit neatly into either side.

KEY TERMS:

Political party - an organised group of people who share similar beliefs and goals about how society should be run

Policies - courses of action or goals that people plan to carry out, or are in the process of carrying out

Political spectrum - a concept that models political beliefs and ideologies as a continuum (from left wing to right wing)

Year 9 Religion & Society - What Really Matters?

Unit 1: Citizenship – The UK Political System How does the political system work in the UK



Lesson 5 - What do MPs do?

- An **MP** is voted by residents to represent the people in their **constituency** in Parliament.
- Their main duties in Parliament include **debating** and **making laws**, **scrutinising government actions** and **representing constituency views**.
- Main duties in their constituency include working directly with constituents on local issues and **casework**, **campaigning**, **building relationships** and communicating with local people.
- If on the **Cabinet**, additional responsibilities include leading a government department and working closely with the Prime Minister to shape **UK policy**.
- **Skills** that may be useful for MPs to have are **time management**, **collaboration**, **communication**, **empathy** and **debating**, amongst others.

KEY TERMS:

Member of Parliament (MP) - a person elected to represent citizens' interests and concerns in the House of Commons

Constituency - the specific geographical area that is represented by each MP in the House of Commons

Skill - the ability gained through training and experience to do a job or action well.

Common misconception: **MPs only work in Parliament**

MPs spend a lot of time helping constituents, attending local events and managing casework.

Lesson 6 - How is the UK Government organised?

- The **UK State Government** has three branches: **legislative**, **executive** and **judicial**.
- The **Head of State** is the monarch' who carries out **ceremonial duties**.
- The **UK Government is the executive branch**, led by the PM.
- The PM appoints senior ministers on the **Cabinet**. These are the heads of **government departments** and they make **policies** for the UK
- **Junior ministers** support senior ministers by overseeing smaller areas within a government department. They work closely with the **Civil Service**, a politically neutral body which carries out the implementation of government policies. The employees are called **civil servants**.
- **Arms-length bodies** also carry out government work. The workers are called **civil servants** or **public sector workers**.

KEY TERMS:

Government - the group of people with the authority to govern a country; in the UK, the Government is chosen and led by the Prime Minister (PM)

Cabinet - a group of senior MPs who lead major government departments; the Cabinet meets weekly to make decisions about how government policy will be carried out

Common misconception:

Civil servants and public sector workers make political decisions.

Civil servants and other public sector workers are neutral professionals who work to implement government policies and decisions made by elected ministers, but they do not make political decisions themselves.

KS3 Genetics

Variation

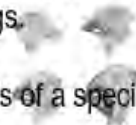
Variation: Is the difference amongst a species. This can be due to the environment or genetics or both.

Characteristic: Features on organisms e.g. eye/hair colour

Species: Individuals of the same species are able to interbreed to produce fertile offspring.

Environment Differences between individuals of a species due to factors in their surroundings.

Inherited: Differences between individuals of a species due to their genetic information.



DNA

DNA: Deoxyribonucleic acid, found in the nucleus of cells, carrying the genetic information of a living being.

Gene: A gene is a section of DNA

Chromosome: The structure made of DNA that codes for all the characteristics of an organism



Keywords

Variation

Characteristic

Species

DNA

Gene

Inherited

Population

Evolution

Natural Selection

Adaptation

Extinction

Endangered Species

Biodiversity

Ecosystem

Evolution

Evolution: Change over time resulting in the formation of a new species.

Natural Selection: Best-adapted individuals survive longer, have more offspring.

Adaptation: A feature of an organism's body which helps it to survive.



Extinction

Extinct: A species that has completely died out

Endangered Species: Animals that are close to extinction because of their low numbers.

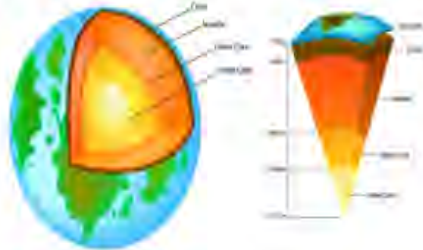
Biodiversity: The number and variety of organisms found in an area.

Ecosystem: a biological community of interacting organisms and their physical environment



KS3 Earth resources

- The Earth's structure comprises:
 - The **crust** (the solid, outermost layer)
 - The **mantle** (a semi-solid which flows slowly)
 - The **outer core** (liquid iron and nickel which generates magnetic field)
 - The **inner core** (solid iron and nickel, very hot).
- The crust of the Earth is divided into **tectonic plates** which move on the surface of the mantle.
- Scientists study how seismic waves from earthquakes travel through the layers of the planet to work out the structure of Earth



Weathering is the process where rocks are **eroded** in 3 ways:

- Physical weathering:** Breakdown of rocks by temperature changes and mechanical forces.
- Chemical weathering:** Decomposition of rocks through chemical reactions which alter their mineral composition.
- Biological weathering:** Disintegration of rocks by plants, animals, and microbial activity.

There are 3 main types of rock:

- Igneous rocks:** Formed from cooled magma or lava; crystalline structure; example: granite.
- Sedimentary rocks:** Compressed sediments in layers (called **strata**) ; often porous; example: limestone.
- Metamorphic rocks:** Altered by heat and pressure; may appear to have a distorted strata structure; example: marble.

Keywords

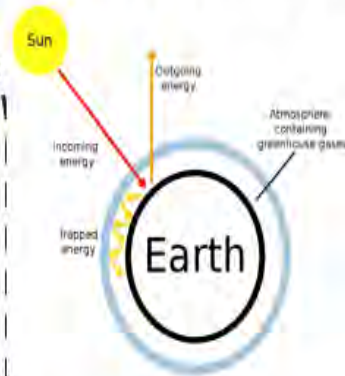
- Core
- Crust
- Erosion
- Igneous
- Lava
- Magma
- Mantle
- Metamorphic
- Rock cycle
- Sedimentary
- Strata
- Tectonic plates
- Weathering

- The rocks within the crust are recycled from one type of rock to another through processes of weathering, sedimentation and metamorphism.
- The **rock cycle** describes how rocks transform:
 - Lava or Magma cool to form **igneous** rocks
 - Rocks erode into sediments that compress into **sedimentary** rocks
 - Sedimentary rocks undergo heat and pressure to become **metamorphic** rocks
 - Metamorphic rocks can melt into magma, restarting the cycle



KS3 Earth resources

- The greenhouse effect is caused mainly by human activities such as burning fossil fuels (coal, oil, gas), deforestation, and farming which releases **carbon dioxide** and **methane** gases into the atmosphere.
- Thermal energy from the sun is **absorbed** by the planet's surface and emitted back out towards space.
- Greenhouse gases absorb the escaping thermal energy and **re-radiate** it back towards the surface of the planet, leading to global warming.
- The greenhouse effect describes the similarities with how a greenhouse traps thermal energy.
- The 96% carbon dioxide atmosphere on Venus causes it to have an extreme version of the greenhouse effect, making it the hottest planet in the solar system
- Climate change is the term used to describe changes to the normal climate of the planet including more extreme **weather** patterns, melting ice caps leading to coastal flooding, and impacts on ecosystems and food chains.



The earth's atmosphere is a layer of gases between the Earth's crust and outer space.

The atmosphere is composed of 78% Nitrogen, 21% Oxygen with a final 1% Argon with other gases. A mere 0.04% Carbon dioxide in the atmosphere is in a delicate balance because of human activities.

Recycling conserves **finite** resources by reducing the need to extract raw materials, saving energy, and minimizing waste disposal.

Reduce, Reuse, Recycle are important to promote environmental sustainability

Ceramics are hard & brittle materials which are able to resist high temperatures

Polymers are large molecules made of repeating units.

Composites are materials made by combining two or more different materials to create a new material with enhanced properties

Keywords

- Atmosphere
- Biomass
- Carbon cycle
- Carbon sink
- Ceramic
- Climate
- Combustion
- Composite
- Decomposition
- Finite
- Fossil fuel
- Global warming
- Greenhouse effect
- Polymer
- Radiate
- Recycle
- Sustainable
- Weather

The **carbon cycle** is the natural process where carbon atoms move between the atmosphere, oceans, the rocks of the Earth's crust and the biomass of living organisms. The processes of photosynthesis, respiration, decomposition, and combustion regulate the atmosphere's carbon balance and climate linked to the greenhouse effect.



KS3 Space

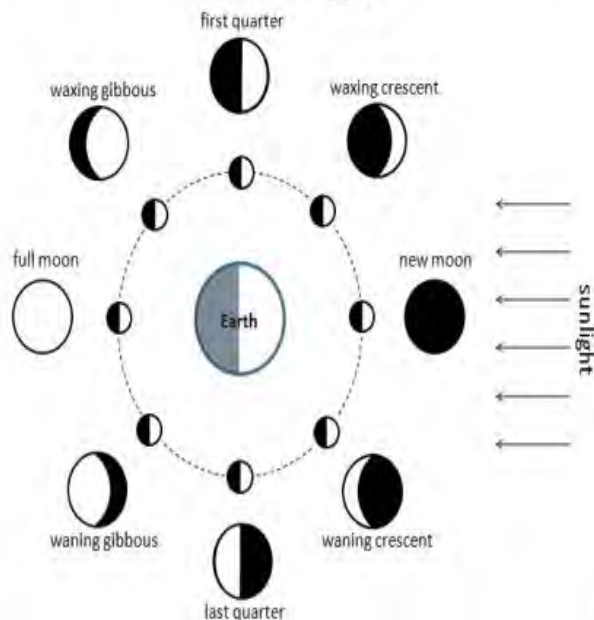
The Night Sky

When we look up at the sky we can see:

- Stars (ball of fire)
- Constellations (groups of stars that make patterns)
- The Moon (Earth's **natural satellite**)
- Comets
- Planets



Moon Phases



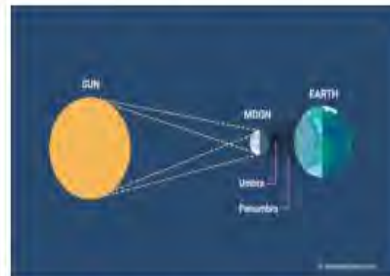
The Moon (Luna)

The **Moon** orbits Earth every 29.5 days. The Moon rotates on its axis at the same speed as it revolves around the Earth.

A lunar eclipse is where the Earth is between the Sun and the Moon.



A solar eclipse is where the Moon casts a shadow on Earth.



Keywords

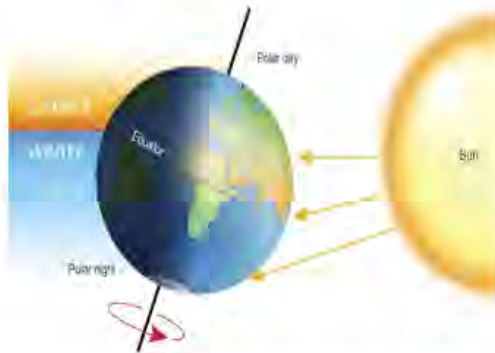
- Astronomical unit
- Light Year
- Universe
- Big Bang
- Red Shift
- Galaxy
- Nebula
- Vacuum
- Big Crunch
- Explore
- Extra-terrestrials
- Radio waves
- NASA
- SETI
- Astronaut
- Atmosphere

Keywords

- Rotates
- Revolves
- Moon phase
- Orbit
- Eclipse
- Time Zones
- Axis
- Anticlockwise
- Equator
- Hemisphere
- Geocentric
- Heliocentric
- Gravity
- Comet
- Dwarf Planet
- Natural Satellite

KS3 Space

EARTH'S SEASONS



There are four seasons on Earth, Winter, Spring, Summer, and Autumn.

The Earth tilts at an angle of 23.5° allowing these four seasons. Summer in the northern hemisphere means the northern hemisphere of Earth is facing the Sun.

Winter is facing away from the Sun.

Day and Night

Earth rotates anticlockwise on its axis every 24 hours.

Day time is when the Earth is facing the Sun. Nighttime is when the Earth is facing away from the Sun. 1/2 of the Earth is in Day at one time.

The Universe and beyond

Dwarf planets (e.g Pluto) are smaller than planets.

Comets are balls of rock and ice that orbit the Sun, some (Haley's comet) with large orbits.

Natural Satellites are objects that orbit larger objects in space (e.g. moons).

Galaxies are large collections of stars (millions or billions). The Milky Way is our galaxy.

The Universe started with the Big Bang. The Universe is spreading out as a result (that is, expanding). Red shift is evidence that supports the Big Bang theory. The more red shifted the galaxy the further it is from Earth and the faster it is moving away.

Exploration

Humans have explored the universe for centuries. Starting with their eyes, new technology has improved exploration.

- Red shift – elongation of light waves to show light is moving away
- Telescopes (land or orbital)
- Hubble and James Webb Telescopes
- SETI – is searching for intelligent life in space
- Mars rovers
- Space probes
- Manned missions (Moon 1969)
- Mission to Mars

The Solar System

