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GENERAL INFORMATION

The knowledge organiser is a book that sets out the **important**, **useful** and **powerful knowledge** of a single topic on one page.

When used effectively, Knowledge Organisers are useful in:

- Helping build a foundation of <u>factual knowledge.</u>
- Embedding **revision techniques** for now and future studies (A-Level, College, University)
- Allowing knowledge to become stored in **long term memory** which frees up working memory for more complex ideas. It also allows you to connect concepts together, even across subjects

HOMEWORK EXPECTATIONS

EACH NIGHT you should spend *at least* **1 hour** per night on homework. <u>3 subjects per night x 20 minutes per subject= 1 hour.</u> Use the homework timetable as a guide to what subjects to complete each night.

Complete all work in your exercise book and make sure you bring your knowledge organiser to school EVERYDAY (in your coloured folder).

Every FRIDAY morning the week's worth of KNOWLEDGE ORGANISER homework will be <u>checked in Family Group time</u> and detentions issued for work not complete, or not up to standard.

<u>SUBJECT HOMEWORK</u>

All students will also be assigned **ENGLISH** reading activities on <u>www.CommonLit.org</u> with each assignment taking 20-30 minutes to complete and **MATHS** activities with short explanatory videos on the online platform <u>https://mathswatch.co.uk</u>.

It is also recommended to take advantage of FREE online revision tools such as <u>www.senecalearning.com</u> or the recently updated BBC BITESIZE.

It is also recommended that students regularly **READ** a variety of **fiction and non fiction books** of their choosing. This extra reading will develop and broaden general understanding and context in all subjects.

<u>MICROSOFT TEAMS</u>

Remember to check TEAMS regularly for updates and additional home learning files including copies of your mastery booklets.

You can also ask your teachers questions on teams and view videos of 'how to use your knowledge organiser'.



HOMEWORK TIMETABLE

Year 8	Subject 1	Subject 2	Subject 3
Monday	Maths	History	PE
Tuesday	English	Geography	ICT
Wednesday	Maths	RE	Music
Thursday	English	Science	Creative
Friday	Maths	Languages	Drama

EQUIPMENT CHECKLIST

Pencil case	Knowledge Organiser	2 Black or Blue pens
2 pencils and Eraser	Green Pen	Pencil Sharpener
Mini whiteboard and pen	Calculator	Ruler
Maths geometry set	Class book	

HOMEWORK CHECKLIST

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	
		Halfte	rm				
Week 1	Week 2	Week 3	Week 4		Week 5	Week 6	
						1	

<u>RETRIEVAL PRACTICE IDEAS</u>

Here are some activities that you can try at home with your knowledge organiser to help revise. There are even more strategies on page 3.



After you have retrieved as much as you can go back to your books & check what you've missed. Next time focus on that missing information

EARNING — LOVING — LIVING

SCIENCE OF LEARNING - HOW TO REVISE EFFECTIVELY

DUAL CODING

Dual coding is the process of combining visual and written materials. You can visually represent materials using methods such as info graphics, timelines, cartoon/comic strips, diagrams and graphic organisers. Combing images with words or explaining an image makes it more likely to 'stick'.



CONCRETE EXAMPLES

When you're studying, try to think about how you can turn ideas you're learning into concrete examples. Making a link between the idea you're studying and a real life example, concrete example, can help students understand abstract ideas and make it 'stick'.

SPACED PRACTISE

Divide up your revision into short manageable chunks of time . When revising aim for 20 - 30 minutes per session. Five hours spread out over two weeks is better than the same five hours all at once. This is **spaced practice** and it is regarded as one of the most effective revision strategies.



RETRIEVAL PRACTICE

Through the act of retrieval, or calling information to mind, our memory for that information is strengthened and forgetting is less likely to occur. Retrieval practice ideas include: Read, cover, write, check, flashcards and brain dumps.

ELABORATION

When talking about studying, elaboration involves explaining and describing ideas with many details. Elaboration also involves making connections among ideas you are trying to learn. Ask yourself questions about a topic to delve deeper. The more information you have about a specific topic the stronger your grasp and ability to recall.

INTERLEAVING

Interleaving is a process where you combine multiple subjects and topics while you study in order to improve learning. Switch between ideas and make links between them during a study session. Interleaving has been shown to lead to better long-term retention

<u>YEAR &— TRINITY TERM — ENGLISH- DYSTOPIA</u>



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Key Vocabulary	Definition		
1) Dystopia (n) Dystopian (adj)	Relating to an imagined place of state in which everything is unpleasant or bad	22) Despondency (n) Despondent (adj)	Feeling low, sad and dejected
2) Conform (v) Conformity (n)	Behaviour in accordance with socially accepted conventions	23) Anonymous (adj) Anonymity (n)	Having no name
3) Totalitarian (adj) Totalitarianism (n)	A system of government that is centralized and dictatorial	24) Intangible (adj) Intangibility (n)	Unable to be touched, not having a physical presence
4) Subservience (n) Subservient (adi)	Willingness to obey others without question	25) Nebulous (adj) Nebulousness (n)	Like a cloud, undefined or vague
5) Dehumanisation (n) Dehumanise (v)	To treat someone with a lack of compassion or humanity	26) Overburden (v) Overburdened (adi)	Give someone more pressure and work than they can deal with
6) Propaganda (n)	Misinformation and lies spread by governments to fool their people (fake news)	27) Archetype (n) Archetypal (adi)	A very typical example of something
7) Utopia (n) Utopian (adj)	An imagined place where everything is perfect and pleasant	28) Acquiesce (v) Acquiescent (adj) Acquiescence (n)	To accept something without protest; to do what someone wants
8) Autonomy (n) Autonomous (adj)	Freedom from control or influence; independence	29) Subjugate (v) Subjugation (n)	To bring under domination or control
9) Onerous (adj)	Something that involves a lot of effort	30) Suppress (v) Suppression (n) Suppressed (adj)	To prevent the development of something or to hide or ignore a feeling or desire
10) Collectivism (n) Collectivist (adj)	Giving the group priority over the individual	31) Insignificant (adj) Insignificance (n)	Too small to be worthy of consideration; unimportant
11) Individualism (n) Individualist (adj)	Giving individual people priority over a group	32) innate (adj)	Inborn, natural, within
12) Coerce (v) Coercion (n)	To force someone to do something, perhaps by using threats	33) Trait (n)	Characteristic or qualities
13) Isolate (v) Isolation (n) Isolated (adj)	To be separated from others	34) Nature vs Nurture	Whether people are shaped by their genetics (Nurture) or their environment (nurture) or both.
14) Bereft (adj)	To be sad and lonely	32) Thomas Hobbes	 a) Philosopher who wrote Leviathan in 1651 b) Believed that human life was 'solitary, nasty, brutish and short' c) Thought that a benign power was necessary to control people
15) Desolate (adj) Desolation (n)	Feeling or showing great unhappiness	33) John Locke	 a) Philosopher who lived from 1632-1704 b) Believed that people are born as a blank slate with no innate characteristics c) Believed that everyone began life equal and free d) Thought that societies should not be ruled by God or Kings
16) Forsake (v) Forsaken (adj)	Abandon or leave	34) 'The Noble Savage'	 a) The idea that humans are innately good b) Society corrupts humans and makes them evil and violent
17) Ostracise (v) 18) Ostracisation (n)	To be excluded or left out	35) Ray Bradbury	Acclaimed dystopian author
19) Melancholy (n) Melancholic (adj)	A feeling of pensive sadness	36) Metaphysical	a division of philosophy that is concerned with the fundamental nature of reality and being (who we are as individuals)
20) Poignant (adj) Poignancy (n)	Evoking a keen sense of sadness	37) Analogies	A comparison between one thing and another.
21) Profound (adj)	Having or showing a great knowledge or insight	38) Depersonalise	Without human characteristics or individuality

<u>YEAR &— TRINITY TERM — ENGLISH- DYSTOPIA</u>



					7	
CHAPTER	PLOT	MAIN CHARACTERS		VOCAB	CONTEXT	
1. WHERE ARE	Schoolboys have crash landed on a deserted Island. The reader meets Rainh and Piagy. Piagy has athma. They find a	13.	Largest and most physically powerful.	29. OMNISCIENT (F)	AUTHOR: William Golding, Born 1921 in	
WE?	conch and use it to summon any other survivors. Twins	RALPH	Symbolises: law, government and	30. 3 RD PERSON (F)	Cornwall England. Brought up to be a scientist by his parents.	
	SamnEric, Jack and Simon.		civil society	31. SCAR		
2. FIRE AND	The boys focus on short term pleasure and fun. Raiph suggests building a fire to be rescued. Jack just wants to	14.	Smartest boy but has asthma and is fat so bullied. Has a tendency to lecture and is	32. CONCH	FACTS: Allegorical novel. Protagonist =	
BEASTS	hunt. A boy with a birth mark tells of the beast.	PIGGT	ridiculed. Symbolises: science and	33. FLUNKED	Third Person Omniscient	
3. HUTS & PIGS	Ralph wants to build shelters but only Simon helps whilst the others play and Jack hunts. The fire has been allowed to go			34. CHORISTER	LITERARY CONTEXT: Post war fiction.	
	out. Simon slips away to meditate	15. JACK	kill gets angry when he doesn't get his	35. ENORMITY	Published 1954. Subverts traditional	
4. HUNTING &	A boat goes past but there is no fire to attract it. Piggy is laughed at for sundials, lack points his face and hunts and		way. Believes a leader should be obeyed. Symbolises: dominance and power	36. ALLEGORY (F)	Robinson Crusoe stories. Could be seen as Golding's version of WW111	
LOST CHANCES	kills a pig chanting "Kill the Pig. Cut her throat. Spill her		Dreamy dark baired boy prope to fits. He	37. IRONY (S)		
		16. SIMON	recognises that the beast is within them.	38. FORESHADOW	EVIDENCE	
GROUP SPLITS	ever. There is talk of the beast. Jack just wants to hunt and		He is unafraid and meditates. Symbolises: Religion and spirituality.		"Aren't there any grown ups at all?"	
	won't listen to the rules of the conch. Ralph wishes for adults.	17.	Quiet and intense at first then becomes		then the delight of a realised	
6.	A dead parachutist floats in to the Island. They think it is a	ROGER	more evil. He tortures SamnEric and likes	40. SAVAGE	ambition overcame him.	
BOULDERS	beast. Jack jinus a rock and some bounders.			41. BEAST		
7.	Jack and Ralph continue to clash as they search for the beast.		THEMES	42. CIVILIZATION	"But there isn't a beastie" Ralph pushed both hands through his hair and looked at the little boy in mixed	
BEASTS & BOARS	Ralph kills a boar and is flushed with excitement. Roger is almost killed in the reenactment.		18. HUMAN NATURE	43. ABYSS		
8.	Jack declares himself chief of his own group. Simon		19. CIVILIZATION		amusement and exasperation	
SAVAGES RULE	meditates alone and leans what the beast is. The savages dance around as they kill a sow.	20). SAVAGERY & THE "BEAST"	45. METAPHORS (L)		
9.	A storm comes and they have no shelter. Simon emerges	2	1. SPIRITUALITY & RELIGION	46. SADISTIC	Here, invisible yet strong was the	
DEATH OF	from the forest and is killed by the other boys who think he is	22	2. THE WEAK & THE STRONG	47. TORTURE	taboo of the old life. Round the	
10.	lack's gang have moved to castle rock Rainh Piggy and				of parents and school and	
ROCKS &	SamnEric remain but can't keep the fire going alone. Jack			49. HEROISM	policemen and the law	
11	The have go to castle rock to confront lack. Diaguis killed by			50, LUST	"Kill the pig! Cut her throat! Spill the	
PIGGY IS	a boulder pushed by Roger. Jack attempts to kill Ralph with a			51. BFAST	blood."	
	spear. He flees				What I mean isMaybe it's only us	
TEARS &	SamnEric are tortured into revealing Ralph's hiding place. Jack vows to burn down the forest to find him. The smoke					
RESCUE	attracts a boat. The officer finds the boys and asks if they are playing at war. All of the boys cry whilst the officer looks		27. THE OCEAN & ADULTS	53. PAKACHUTE	Taken away its life like a long	
back at his ship.			28. FIRE	54. AUTHORITY	sausiying utifik.	

YEAR &- TRINITY TERM - MATHEMATICS - GEOMETRY

LEARNING - LOVING - LIVING



YEAR & TRINITY TERM — MATHEMATICS — EQUATIONS AND PYTHAGORAS' THEOREM





Levers

Levers involve turning, or rotation. Levers allow forces applied to be **multiplied**.

- · Levers have a pivot: a fixed centre of rotation
- · The force applied to a lever is called the effort
- The output force of the lever is called the load (because levers can be used to lift large masses – loads!).
- Both the effort and load are forces that have a turning effect, meaning they make the lever rotate.
- The size of the forces' turning effects is called the moment of the force.
- · The moment of a force can be increased by:
 - 1. Increasing the size of the force
 - 2. Increasing the perpendicular distance from the pivot

Equilibrium in lever systems

- When a lever is at equilibrium, it is NOT rotating.
- Equilibrium happens when: <u>the clockwise moments = the anticlockwise moments</u>
- The forces in each direction are not necessarily equal, but the moments of the forces in each direction are equal at equilibrium.
- Where there are multiple forces in one direction (clockwise or anticlockwise), the TOTAL moment in one direction is found by <u>adding</u> <u>up</u> the moments of each force in a particular direction.

Key terms	Definitions				
lever	A simple machine that multiplies applied forces (efforts) through rotation around a pivot.				
rotation	Turning, with a fixed centre of rotation. Rotation can be clockwise or anticlockwise – see diagram.				
turning effect	The rotation of a lever caused by a force (effort OR load force).				
moment	Another, more formal, name for 'turning effect of a force'. See equation.				
perpendicular	At right angles to.				
equilibrium	Describes a lever that is NOT rotating because the clockwise and anticlockwise moments are equal.				

Equation to calculate the moment of a force

moment = force × perpendicular distance from pivot

Forces are usually measured in newtons (N)

Distances are usually measured in metres (m)

Moments are measured in a compound measure using the units for force and distance, usually newtonmetres, Nm.

YEAR &- TRINITY TERM - SCIENCE - REACTIVITY SERIES

The reactivity series

The reactivity series shows a list of metals in the order of how reactive they are. The metals towards the top of the list react readily with air and water and violently with acid.

The metals towards the bottom of the list do not even react with acid.

The order of the reactivity series can be remembered using a mnemonic.

"Pond slime can make a zoo interesting - the long crinkly sort goes purple."

Least reactive

Reactions of metals with acid

The general equation for the reaction of a metal with acid is:

Metal + acid → salt + hydrogen

The test for hydrogen is sometimes called the squeaky pop test. Hydrogen makes a small 'pop' when it is placed near a lit wooden splint.

Metal	Reaction with acid
Potassium Sodium	Explosive, very exothermic reaction – should not be carried out in the school laboratory
Calcium	Violent reaction, produces large amounts of hydrogen quickly
Magnesium	Rapid reaction, produces hydrogen gas readily
Aluminium Zinc	Fast reaction, noticeable amounts of gas evolved.
lron Tin	Slow reaction, gas evolved very slowly. Reaction more noticeable in concentrated acid.
Lead Copper Silver Gold Platinum	No observable reaction

Displacement reactions

Displacement reactions involve a reaction between a metal and a compound of a different metal.

A more reactive metal will displace a less reactive metal from its compounds.

For example the more reactive magnesium will displace the less reactive copper from the copper sulfate solution.

Magnesium + copper sulfate → magnesium sulfate + copper

YEAR 8— TRINITY TERM — SCIENCE — REACTIVITY SERIES

Dull

Low

Weak

The general equation for this reaction is:

metal oxide + carbon -> metal + carbon dioxide

Extraction of metals high in the reactivity series

Metals that are higher than carbon in the reactivity series have to be extracted by a process known as ELECTROLYSIS.

ELECTROLYSIS literally means pulling apart with electricity and can only be done on compounds that have been melted or dissolved in a substance called an electrolyte. Aluminium us the most common example of a metal extracted by this method.

brittle	breaking)	hammered)							
Conduction (heat/electricity)	Conduct both well	Poor (graphite only non-metal conductor)							
Magnetic	Only iron, cobalt and nickel	None							
Obtaining iron from iron oxide									
Iron can be ext	racted by the reaction with c	arbon in a container called a							

Iron can be extracted by the reaction with carbon in a container called a blast furnace. The blast furnace heats iron oxide with carbon in the form of coke (coal).

As the coke burns it forms carbon monoxide which is able to displace the oxygen from the iron oxide.

> carbon + oxygen \rightarrow carbon dioxide $2C + 0, \rightarrow CO,$

iron oxide + carbon monoxide \rightarrow iron + carbon dioxide $Fe_{2}O_{3} + 3CO \rightarrow 2Fe + 3CO_{7}$

YEAR 8— TRINITY TERM — SCIENCE — CLASSIFICATION AND EVOLUTION

Organisms compete for resources like food, water, mates, space, light, and minerals.

There are 2 types of competition. Interspecific competition is between individuals of different species and Intraspecific competition is between individuals of the same species

Key Terms	Definition
Interspecific competition	Competition between individuals of different species
Intraspecific competition	Competition between individuals of the same species
Camouflaged	When an organisms blends in to their environment
Variation	Differences between organisms caused by genetics, environment or both
Natural selection	The process whereby organisms better adapted to their environment tend to survive and produce more offspring

Organisms have special features known as adaptations to help them survive in their environment. For example polar bears are white so they are camouflaged in the snow.

Organisms have structural adaptations e.g. camels carry very little body fat to avoid overheating, but can also show behavioural adaptations e.g penguins huddle together to keep warm and brown bears hibernate

Natural selection

Natural selection states that there is variation within a species Some adaptations are better than others. Those with the best adaptations survive, and the others die.

The survivors can reproduce and have offspring.

Their offspring inherit the genes for the best adaptations, so the organism population changes over time. This is survival of the fittest. Charles Darwin came up with this theory in the 1800's

Natural Selection

1) Each species shows variation:

The "better adapted" members of these species are more likely to survive - "Survival of the Fittest"

2) There is competition within each species for food, living space, water, mates etc.

These survivors will pass on their better genes to their offspring who will also show this beneficial variation.

Classification

Organisms can be grouped (classified) based on similarities between them.

All animals can be divided into vertebrates ('have a backbone') or invertebrates ('have no backbone').

Vertebrates can be further divided into reptiles, birds, mammals and fish; invertebrates can be further divided into molluscs (snails, slugs, squid, etc.), arthropods (spiders, insects, millipedes, etc.). Classification can be based on characteristics such as number of limbs, body shape and outer coating (feathers, fur, scales or shell), or on DNA.

YEAR &- TRINITY TERM - SCIENCE - ROCK CYCLE

<u>The Rock Cycle</u>

This diagram shows the rock cycle – how physical processes change rocks form being one type to another.

Sedimentary rocks become metamorphic rocks by:

- Burial (high pressure) and high temperatures
 Metamorphic rocks become extrusive igneous rocks by:
- Melting to magma, eruption, rapid cooling above the surface **Metamorphic** rocks become **intrusive igneous** rocks by:
- Melting to magma, slow cooling beneath the surface, uplift

YEAR &- TRINITY TERM - SCIENCE - ROCK CYCLE

 Igneous rock Formed by co Rapid cooling igneous rock. Slow cooling igneous rock 	<u>k</u> poling of magma g (e.g. volcanic eru (under the earth's	ption) gives <u>extrus</u> surface) gives <u>intr</u>	<u>ive</u> usive	2. <u>Sedin</u> • Forme	nentary rock d by compression of layers of sediment in the ocean Transport Deposition Sodimentation	3. • e.g	Metamorphic rock Formed when imm chemical propertie Properties depend Metam	ense heat and pres s of the minerals in on which sediment	sure change the sedimentary rock ary rock was involved
	Extrusive	Intrusive				bed	omes 🏼 🦺		
Magma cools	On surface	Underground			Compaction	ma	rble	Press	ure
Speed of cooling	Rapid	Slow			Cementation	Sha	le		
Crystal size	Small	Large		Once f	ormed, sedimentary rock may be slowly moved to the	bed	omes slate		52
Example	Basalt (used in construction)	Granite (also used construction but c be polished e.g. kitchen counters)	in an	 Once formed, sedimentary rock may be slowly moved to the Earth's surface by uplift, or remain underground where immense pressure and heat will turn it into metamorphic rock Limestone is an example of a sedimentary rock, which is used to manufacture glass and cement Sedimentary rocks have: 1. Layers, because of the layers of sediment 2. Fossils, because the sediment includes animal remains 3. Rounded grains, because of weathering by the water 			Heat and pressure If melted, metamorphic rock becomes magma		and sure magma
Key Terms	Definitions						Resources a	nd Recycling	
Rock cycle Igneous, metamorphic and sedimentary rocks can turn into		Key	Key Terms Definitions			 The Earth's crust provides us with resources such as glass, paper, plastic and aluminium. However, these resources are finite 			
	eathering The breaking down of rock by natural processes: wind, ice, water and gravity		Sedi	Sedimentary A type of rock that is formed by the compression of many layers of sediment over time.					
Weathering			Met	Metamorphic A type of rock that is formed when immense heat and pressure change the chemical properties of the minerals in sedimentary rocks.		nd	(they are not unlimited), which is why we recycle them.		
			Tran	Transport Rocks are transported by rivers to the sea.			Resource	Made	Recyclable?
Erosion	Erosion The movement of that broken		en- Deposition		Rocks settle at the bottom of the sea.			from	
	down rock by nat wind, ice, water a	down rock by natural processes: wind, ice, water and gravity		Sedimentation Layers of sediment (rocks, dead sea life, etc.) begin		to	Glass	Sand	Yes, but
	(transportation is an example of		build up.		build up.		Plastic	Oil	needs sorting
	erosion)		Com	paction	As more layers build up, pressure is put on lower lay	/ers.	Paper	Wood	Yes, but only
Recycling	Treatment of resources so they		eatment of resources so they Cementation Salt crystals "glue" the layers together.					a few times	
Sustainable	may be used again Up An activity which you can carry on		Uplit	ft	Some rocks are pushed to the surface by the pressu of new rocks forming beneath them.	re	Aluminium	Aluminium ore	Yes, but not all metals
doing indefinitely		Mag	ma	Melted rock; cools to form igneous rock					

YEAR & TRINITY TERM - SCIENCE - ECOLOGY

LEARNING -	— LOVING — LIVING
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Key Terms	Function
Herbivore	Organism eats plant only, prey organisms
Carnivore	Organism eats other organisms, they hunt prey for their dinner
Omnivore	Organism eats both plant and animals
Primary consumer	The first eater in a food chain
Secondary consumer	The second eater in a food chain
Tertiary consumer	The 3 rd organism feeding in the food chain, usually the top carnivore
Trophic level	Stages in the food chain e.g producers, or primary consumers
Bioaccumulation	The build up of toxic substances in the food chain, affecting organisms at the top of food chains
Ecosystem	A community of interacting organisms and their physical environment

Food chains show a simplistic view of who's eating who in an **ecosystem**. Organisms eat more than 1 food so food chains link together to make **food webs**

Removing an organism or adding an organism to a food chain can have big implications on other organisms

All **food chains** start with a green plant, **producers**. Arrows point to the eater and show the flow of energy in a food chain. Each stage is called a trophic level.

 $\begin{array}{l} \mathsf{mahogany tree} \rightarrow \mathsf{caterpillar} \rightarrow \mathsf{song bird} \rightarrow \mathsf{hawk} \\ \mathsf{maize} \rightarrow \mathsf{locust} \rightarrow \mathsf{lizard} \rightarrow \mathsf{snake} \end{array}$

The first eater in a food chain is called the **primary consumer** and is a herbivore.

The next organism is the **secondary consumer** and the next is the **tertiary consumer** and is usually the **top carnivore**.

Food chains do not go on indefinitely as energy is lost at each stage of the food chain. Some of the available energy goes into growth and the production of offspring. This energy become available to the next stage, but most of the available energy is used up in other ways: in respiration, keeping warm, movement and waste materials such as faeces.

All of the energy used in these ways returns to the environment, and is not available for the next stage of the food chain.

YEAR &- TRINITY TERM - SCIENCE - ECOLOGY

Pyramids of numbers and biomass

Pyramids of numbers show how many organisms are at each **trophic level**. The width of each box represents the numbers of organisms.

Pyramids of numbers can look odd when 1 producer is large in size – e.g. one tree that supports lots of tiny organisms (e.g. aphids).

Pyramids of biomass show what is happening to the energy in a food chain more accurately than pyramids of number do. Pyramids of biomass are always pyramid shaped.

Bioaccumulation

Some toxic substances like pesticides can pass up food chains.

Organisms near the bottom of the food chain absorb them in small amounts. The concentration in these organisms is too low to cause significant harm. However, as these organisms cannot excrete these substances, when they are eaten by others higher in the food chain, the concentration becomes more toxic and eventually causes harm.

DDT is an example of a pesticide that was used and built up in the food chain.

Biodiversity

The number and type of organisms in an ecosystem is referred to as **biodiversity**. An ecosystem with a lot of species of organisms living in it has high biodiversity. A high biodiversity is usually required for an ecosystem to keep going: an ecosystem with only a few organisms living in it has low biodiversity, and will not last long.

YEAR &- TRINITY TERM - GEOGRAPHY - COASTS IN THE UK

No	Key Term	Definition
1	Erosion	The breaking down of material
2	Transport ation	The movement of material such as rock .
3	Hydraulic Action	The force of the water pushes air into a crack causing it to erode.
4	Abrasion	The scratching and scraping of cliffs causing them to erode.
5	Weatherin g	The physical, biological and chemical breaking down of rock
6	Swash	The forward movement of waves
7	Backwash	The backward movement of waves
8	Concordan t coastline	When the strata (layers of rock) are parallel to the coast.
9	Discordant coastline	When the strata (layers of rock) are at right angles to the coast.
10	Longshore Drift	The zigzag movement of material down the beach.
11	Hard engineerin g	Expensive, long lasting and solid constructions to slow coastal erosion.
12	Soft Engineerin g	Cheap natural solutions to slow erosion such as beach replenishment (putting sand on the beach).
13	Terminal groyne syndrome	When groynes prevent beaches forming further down the coast.

the cave forming an arch.

The heavy rock above the arch will be

eroded by weathering and the base by

marine processes. Eventually it will

stack and it will collapse to a stump

collapse leaving behind a stack. Abrasion will erode the foot of the

18

Stack

stump

and

No.	Case Study+ Barton-On-Sea		
19	Location	Christchurch Bay, Dorset, Southern England.	
20	Rate of erosion	2 meters a day without any management	
21	Geology	Limestone, sands and clay	
22	Hold the line	Using hard engineering techniques to prevent further erosion.	
23	Strategic Realignment	Gradually let the coast erode; allows people time to relocate.	
24	Do nothing	Take no action at all and let nature takes it's course	
25	Advance the line	Use sea defences to move the coast further into the sea. It is extremely expensive.	
26	Beach replenishme nt	Placing sand back onto the beach so the energy of waves is dissipated	

YEAR &- TRINITY TERM - GEOGRAPHY - DESERTS AND THE MIDDLE EAST

No.	Key Term	Definition		-					
			. тг	I ree adaptation Trees that produce their seeds in			Adaptations of a Cactus to		
1	Ecosystem	A localized biome made up of living things and their non living environment	co do • Th ro tal	 cones, such as pine or fir trees, dominate the Coniferous forest. These trees often have shallow roots that spread out widely to take advantage of the moisture in the upper levels of the ground 			1	desert env	Reduce water
2	Biome	A large scale ecosystem like a tropical rainforest	・ Th ・ Th co	nich only thaws occas ley are also shallow b e poor soil and rocky onditions.	sionally. because of		9	leaves	loss
3	Tundra	A cold region where the ground is deeply frozen; only the surface thaws in summer.	• Tr of im cli ve m • Be	ees have pine needle broad leaves. They a portant adaptation du mate. Pine needles c ry little sap, so freezi uch of a problem. eing dark in colour the	s instead re an ue to the ontain ng is not ey absorb		2 0	Small surface area	Reduce water loss
4	Desert	An area that receives less than 250mm of rain a year. There are hot and cold deserts.	su	Flora and Fauna ada	their uptations to Hot Desert environme	nts	2	Very thick stem	To store water in.
5	Net Primary productivity	NPP a measure of how much new plant and animal growth is added to a biome each year.	14	Drought Tolerant	Plants have mechanisms that h droughts such as shedding leav	elp them survive es to prevent	2	Spines	To stop animals eating them.
6	Decomposit ion	Decomposition is the breakdown of animals and plant structures by bacteria and the release of carbon compounds into the atmosphere, soil and to the ocean floor			water loss due to transpiration. even become dormant during v	Some may ery dry months.	2 3	Shallow but extensiv	To absorb as much moisture as possible.
			15	Drought avoiders	Most drought avoiders are ann	uals- they ranid life cycle		e roots	
7	Biodiversity	The number of different plant and animal species within an area.			and die after seeding.				
8	Biotic	Living matter i.e. plants and animals	16	Succulent species	Species of plants that store wat leaves , stems or roots	er in fleshy			
			18	Nocturnal	Animals that sleep in the day an night to avoid the heat of the d	nd are active at ay.			
9	Abiotic	Non-living matter i.e. precipitation, gasses etc.				Adaptations of	the Cameli	ids (Camels, Llamas,	Alpacas and Vicunas)
10	Biomass	The total amount of living things in one area.	Gain from precipitatio	ⁿ Fallout Biom	ASS Uptake Gain from weathering	Long eyelashes and thin, slit nostrils that can close to protect them from blowing sand.		Fat-filled humps will b the energy (and moist treks in the desert.	reak down to supply them with ne) they need to survive long
11	Flora	Trees, plants and flowers		LITTER	SOIL	An extremely long large intestine (colon) for reabsorbing water.	Aray .		and the second
12	Fauna	Animals	L	oss by	Loss by leaching				Long, muscular legs for walking.
13	Deforestati on	The removal of trees			V	S.	-	Ç,	Wide, padded feet allow walking ou rocks and hot sand.
L		<u> </u>	4			©Sheri Amsel			www.exploringnature.org

YEAR &- TRINITY TERM - HISTORY- WORLD WAR TWO

1	Fascism	a form of government that is a type of one-party dictatorship. Fascism puts nation and often race above the individual. It is usually headed by a dictator.
2	Dictator	A single strong leader who can do as they please and has complete power.
3	Nationalist	Believing strongly in your own country.
4	Militaristic	Prioritising the armed forces over other parts of your country.
5	Police State	A country where the government uses the police to spy on the people and eliminate opposition.
6	Lebensraum	'living space' in German. This is a reason Hitler wanted to expand for his German people
7	Hitler	Leader of the Nazi party in World War II
8	Conscription	Being forced to join the arm forces through law.
9	Appeaseme nt	giving in to someone's demands as far as is reasonably possible to avoid conflict.
10	USSR	Communist Russia led by Josef Stalin
11	Nazi- Soviet Pact	The deal made between the Soviet Union and Nazi Germany at the start of World War II.
12	Axis powers	Countries who fought on the side of Nazi Germany in WWII. The main allies were Italy and Japan.
13	Allied powers	The countries who joined forces to fight the Axis powers. The main countries were Britain, USA the USSR and China.
14	Foreign Policy	a government's strategy for dealing with other countries.
15	Blitzkrieg	"Lightning war," <i>blitzkrieg</i> is a military tactic designed to use fast, mobile units to break through the weak points in the enemy defence. It is all about power and speed.
16	Turning Point	a time at which a major change in a situation or event occurs, especially one with beneficial results
17	Rearmamen t	The process of rebuilding and expanding the armed forces.
18	Treaty	A formal agreement between states or countries.
19	Atomic Bomb	Weapon of Mass destruction. Used on Japan at the end of WWII.
20	Anschluss	Austrians vote to unite with Germany before WWII.

Caus	Causes of WWII- Hitler's foreign policy?			Causes of WWII- Appeasement	
1	Remilitarisation of The Rhineland	7 March 1936 the German military forces entered the Rhineland. The remilitarization <u>changed the balance of power in Europe</u> from France towards Germany, and made it possible for Germany to pursue a <u>policy of aggression</u> in	For appeasement	Against appeasement	
		Eastern Europe.	-Germany deserved	-It encouraged	
2	Anchluss with Austria	March 1938. Hitler wanted all German-speaking nations in Europe to be a part of Germany. To this end, he had designs on <u>re-uniting Germany</u> with his native homeland, Austria	a fair deal -Britain needed time -The British people had to want war - Fear of another war -Fear of	Hitler -Germany was growing stronger -Munich agreement was a disaster -Appeasement scared the USSR Hitler was	
3	Sudetenland/Czech oslovakia	Hitler caused unrest in the area, like Austria ,in September 1938. He finally invaded the area, heavily populated by Germans, in March 1939.			
4	Poland	Hitler and Stalin allied and signed the secret Nazi-Soviet pact which divided Poland between the two.	Communism	determined	

😂 LEARNING — LOVING — LIVING

Key turning points of WWII	
<u>1. Dunkirk</u>	
<u>'</u> Dunkirk was a success!!!'	'Dunkirk was a failure!!!'
-338,000 British (BEF) & French troops evacuated from Dunkirk (target 50,000) -860 Naval & privately owned vessels carried troops to Dover & south coast. -Churchill praised Dunkirk as a success and used it to rally the British public - Churchill 'we shall fight them on the beaches speech' was about Dunkirk.	 -68,000 BEF casualties. -1,200 field guns, 1,250 anti-aircraft guns, 11,000 machine guns, 75,000 vehicles abandoned (incl.475 tanks). -Germans fully expected GB to make peace -Hitler respected their Empire

2. The Battle of Britain- Aug- Sep 1940

In May 1940, Germany invaded France. The French and British armies were overpowered by the German blitzkrieg.

The German plan? - For Blitzkrieg to work, the Luftwaffe (The German air force) had to destroy the RAF, to prevent it shooting at German troops who were supposed to land in Britain.

The results of the Battle

Germans were unsuccessful and the plan of full scale landing on British Isles was called off in favour of heavy bombing of civilian and strategic targets to force British surrender. This change of tactics came in **September of 1940**. the bombing campaign is called **Blitz**.

<u> </u>	3. Pearl Harbour and United States joining WWII. On 7th of December 1941 Japan, one of German allies unexpectedly attacked an American naval base in Hawaii. As a consequence United States declared war on Japan and, bound by its alliance agreement, Germany declared war on United States.	 4. The A-bomb attack on Hiroshima and Nagasaki. 6th of August of 1945 the United States launched an atomic bomb on <u>Hiroshima</u>, a large Japanese city. Three days later an similar attack took place in another large city called <u>Nagasaki</u>. The first attack took 140,000 lives, the second another 40,000 with the additional 100,000 victims who died later because of radiation poisoning. Why the A-bomb? •The United States wanted to force Japan's surrender as quickly as possible to minimise American casualties and the American government needed to show their strength to scare Soviet Union from starting an open conflict. 	 5. Operation Barbarossa In June 1941, the German army seemed <u>unbeatable</u>. Invading the USSR seemed like a good gamble - the Soviet army appeared much weaker than the French. Hitler's ambition in life was to defeat communism, he also wanted the land of the USSR for '<u>lebensraum' Reasons for German Defeat</u> The operation continued through the autumn and into the winter. German soldiers- not prepared for Russian winter. Their vehicles were getting stuck, soldiers were starving and freezing. Joseph Stalin adopted strategy of scorched earth. Taking all the supplies with them when retreating. Russians were fighting to protect their homes and their homeland so were more committed to the fight.
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<u>YEAR 8— TRINITY TERM — HISTORY- HOLOCAUST</u>

Key te	Key terms			Kay Poople / Groups		
1	Shoah	Modern Hebrew word which means catastrophe, the preferred term for the	rey P	1 Adolf Liter London of the Next series		
		mass murder of Jews under the Nazi regime.	1	Adolf Hitler	Leader of the Nazi party	
2	Extermination Camps	Camps that were set up for the sole purpose of exterminating the inmates. The camps were designed to do this systematically with gas chambers to carry	2	SS or Schutzstaffel	Elite group of Aryan soldiers loyal to Hitler. Hitler's personal bodyguards. Nicknamed the 'Blackshirts'	
		out the mass murders and crematoria to destroy the bodies. Examples include Auschwitz, Treblinka, Sobibor, Chelmno and Belzec.	3	Heinrich Himmler:	Head of the SS -put in charge of leading the organisation the Final Solution	
3	Concentration Camps	A place where civilians, especially political prisoners or member of persecuted minorities, are deliberately imprisoned for crimes against the state.	4	Reinhard Heydrich	Led the Wannsee Conference, key figure in the implementation of the Final Solution.	
4	Anti-Semitism	Political, social and economic actions against Jews. In simple terms it means 'Hatred of Jews'.	5	NSDAP	The Nazi party	
5	Nuremberg Laws	Jews were stripped of their citizenship rights and marriage between Jews and non Jews was forbidden	6	Adolf Eichmann	labelled as the mastermind behind the specific detail of establishing the extermination camps. His work earn him the title of 'Chief Executioner of the Third	
6	Kristallnacht (Night	A Nazi sponsored event against the Jewish community			Reich	
	of the Broken Glass		7	Gestapo	State secret police. Did not wear uniforms. Had a huge network of informers. Telephones were tapped and mail was opened. The Gestapo would arrest people without trial torture them and cond them to concentration cames	
7	Ghettos	Enclosed areas in towns and cities where the Nazis forced the Jews to live in isolation after 1939. The largest was in Warsaw.				
			Case Study: POLAND			
8	Final Solution	The plan to do something about the 'Jewish problem' once and for all. This is	Case	Study: POLAND		
8	Final Solution	The plan to do something about the 'Jewish problem' once and for all. This is where the extermination camps were used.	Case	Study: POLAND Background-Polar	nd was created at the end of WW1.Before this it had been part of Germany. The Nazis	
8 9	Final Solution Holocaust	The plan to do something about the 'Jewish problem' once and for all. This is where the extermination camps were used. Term generally given to mass slaughter carried out by the Nazis during WW2. Comes from a Jewish term for a sacrificial offering which was burnt completely on an altar.	Case	Study: POLAND Background- Polar saw it as their righ and began to remo	nd was created at the end of WW1.Before this it had been part of Germany. The Nazis t to take their land back. After invading in October 1939 the Nazis divided the country ove all Polish control and culture, as they considered the Poles to be racially inferior.	
8 9 10	Final Solution Holocaust Persecute	The plan to do something about the 'Jewish problem' once and for all. This is where the extermination camps were used. Term generally given to mass slaughter carried out by the Nazis during WW2. Comes from a Jewish term for a sacrificial offering which was burnt completely on an altar. Treat someone cruelly because of race, religion etc.	Case	Study: POLAND Background- Polar saw it as their righ and began to remo	nd was created at the end of WW1.Before this it had been part of Germany. The Nazis t to take their land back. After invading in October 1939 the Nazis divided the country ove all Polish control and culture, as they considered the Poles to be racially inferior.	
8 9 10 11	Final Solution Holocaust Persecute Inferior	The plan to do something about the 'Jewish problem' once and for all. This is where the extermination camps were used. Term generally given to mass slaughter carried out by the Nazis during WW2. Comes from a Jewish term for a sacrificial offering which was burnt completely on an altar. Treat someone cruelly because of race, religion etc. Of lower quality, position or status	Case	Study: POLAND Background- Polar saw it as their righ and began to remo Eastern General Plan	nd was created at the end of WW1.Before this it had been part of Germany. The Nazis t to take their land back. After invading in October 1939 the Nazis divided the country ove all Polish control and culture, as they considered the Poles to be racially inferior . Drawn up by Himmler in 1940, this would be the template for all occupation in the East. 30,000 of the most talented people in Poland were arrested, many were	
8 9 10 11 12	Final Solution Holocaust Persecute Inferior Untermensch	The plan to do something about the 'Jewish problem' once and for all. This is where the extermination camps were used. Term generally given to mass slaughter carried out by the Nazis during WW2. Comes from a Jewish term for a sacrificial offering which was burnt completely on an altar. Treat someone cruelly because of race, religion etc. Of lower quality, position or status A person considered racially or socially inferior. Nazis included Jews, black people, gypsies, vagrants, homosexuals and those with mental illness as 'untermenschen'	Case	Study: POLAND Background- Polar saw it as their righ and began to remo Eastern General Plan	nd was created at the end of WW1.Before this it had been part of Germany. The Nazis t to take their land back. After invading in October 1939 the Nazis divided the country ove all Polish control and culture, as they considered the Poles to be racially inferior. Drawn up by Himmler in 1940, this would be the template for all occupation in the East. 30,000 of the most talented people in Poland were arrested, many were tortured and murdered. 1.9 million non-Jewish Poles were killed . 1.5million were deported to work in labour camps. Poles were forced to wear a P on their arm and sexual relationships with Germans were banned.	
8 9 10 11 12 13	Final Solution Holocaust Persecute Inferior Untermensch Aryan	 The plan to do something about the 'Jewish problem' once and for all. This is where the extermination camps were used. Term generally given to mass slaughter carried out by the Nazis during WW2. Comes from a Jewish term for a sacrificial offering which was burnt completely on an altar. Treat someone cruelly because of race, religion etc. Of lower quality, position or status A person considered racially or socially inferior. Nazis included Jews, black people, gypsies, vagrants, homosexuals and those with mental illness as 'untermenschen' A person of German or Scandinavian origin, preferably with fair hair and blue eyes. The Nazis believed that Aryans were superior to all other races. 	Case	Study: POLAND Background- Polar saw it as their righ and began to remo Eastern General Plan Warsaw Ghetto	nd was created at the end of WW1.Before this it had been part of Germany. The Nazis t to take their land back. After invading in October 1939 the Nazis divided the country ove all Polish control and culture, as they considered the Poles to be racially inferior . Drawn up by Himmler in 1940, this would be the template for all occupation in the East. 30,000 of the most talented people in Poland were arrested, many were tortured and murdered. 1.9 million non-Jewish Poles were killed . 1.5million were deported to work in labour camps. Poles were forced to wear a P on their arm and sexual relationships with Germans were banned. Ghettos were enclosed areas that isolated Jews. Hundreds were set up in Poland, the largest being the Warsaw Ghetto (completed Nov. 1940). By March 1941, the	
8 9 10 11 12 13 14	Final Solution Holocaust Persecute Inferior Untermensch Aryan Genocide	 The plan to do something about the 'Jewish problem' once and for all. This is where the extermination camps were used. Term generally given to mass slaughter carried out by the Nazis during WW2. Comes from a Jewish term for a sacrificial offering which was burnt completely on an altar. Treat someone cruelly because of race, religion etc. Of lower quality, position or status A person considered racially or socially inferior. Nazis included Jews, black people, gypsies, vagrants, homosexuals and those with mental illness as 'untermenschen' A person of German or Scandinavian origin, preferably with fair hair and blue eyes. The Nazis believed that Aryans were superior to all other races. Deliberate killing of a specific group of people from a specific nation or ethnic group. 	Case 1 1 2 3	Study: POLAND Background- Polar saw it as their righ and began to remo Eastern General Plan Warsaw Ghetto	nd was created at the end of WW1.Before this it had been part of Germany. The Nazis t to take their land back. After invading in October 1939 the Nazis divided the country ove all Polish control and culture, as they considered the Poles to be racially inferior . Drawn up by Himmler in 1940, this would be the template for all occupation in the East. 30,000 of the most talented people in Poland were arrested, many were tortured and murdered. 1.9 million non-Jewish Poles were killed . 1.5million were deported to work in labour camps. Poles were forced to wear a P on their arm and sexual relationships with Germans were banned. Ghettos were enclosed areas that isolated Jews. Hundreds were set up in Poland, the largest being the Warsaw Ghetto (completed Nov. 1940). By March 1941, the ghettos had 445,000 Jewish inhabitants. Over 140,000 died in the Ghetto's three year existence.	
8 9 10 11 12 13 14 15	Final Solution Holocaust Persecute Inferior Untermensch Aryan Genocide Einsatzgruppen	 The plan to do something about the 'Jewish problem' once and for all. This is where the extermination camps were used. Term generally given to mass slaughter carried out by the Nazis during WW2. Comes from a Jewish term for a sacrificial offering which was burnt completely on an altar. Treat someone cruelly because of race, religion etc. Of lower quality, position or status A person considered racially or socially inferior. Nazis included Jews, black people, gypsies, vagrants, homosexuals and those with mental illness as 'untermenschen' A person of German or Scandinavian origin, preferably with fair hair and blue eyes. The Nazis believed that Aryans were superior to all other races. Deliberate killing of a specific group of people from a specific nation or ethnic group. Mobile killing squads that carried out mass murders in the east after 1939. 	Case 1 1 2 3	Study: POLAND Background- Polar saw it as their righ and began to remo Eastern General Plan Warsaw Ghetto Liquidation of the Ghetto	nd was created at the end of WW1.Before this it had been part of Germany. The Nazis t to take their land back. After invading in October 1939 the Nazis divided the country ove all Polish control and culture, as they considered the Poles to be racially inferior . Drawn up by Himmler in 1940, this would be the template for all occupation in the East. 30,000 of the most talented people in Poland were arrested, many were tortured and murdered. 1.9 million non-Jewish Poles were killed . 1.5million were deported to work in labour camps. Poles were forced to wear a P on their arm and sexual relationships with Germans were banned. Ghettos were enclosed areas that isolated Jews. Hundreds were set up in Poland, the largest being the Warsaw Ghetto (completed Nov. 1940). By March 1941, the ghettos had 445,000 Jewish inhabitants. Over 140,000 died in the Ghetto's three year existence. July 21 st 1942 the Nazis began the mass-deportation of inhabitants to the Treblinka death camp. By Sept 21 st 300,000 had perished in the gas chambers. By October only 10% of the official ghetto ponulation registered in luly were still present	

EARNING - LOVING - LIVING

Feeding the multiple - Matthew 14:14-21

¹⁴ When Jesus landed and saw a large crowd, he had compassion on them and healed their sick. ¹⁵ As evening approached, the disciples came to him and said, "This is a remote place, and it's already getting late. Send the crowds away, so they can go to the villages and buy themselves some food." ¹⁶ Jesus replied, "They do not need to go away. You give them something to eat." ¹⁷ "We have here only five loaves of bread and two fish," they answered. ¹⁸ "Bring them here to me," he said. ¹⁹ And he directed the people to sit down on the grass. Taking the five loaves and the two fish and looking up to heaven, he gave thanks and broke the loaves. Then he gave them to the disciples, and the disciples gave them to the people. ²⁰ They all ate and were satisfied, and the disciples picked up twelve basketfuls of broken pieces that were left over. ²¹ The number of those who ate was about five thousand men, besides women and children.

The Widow's Offering (Luke 21:1-4) As Jesus looked up, he saw the rich putting their gifts into the temple treasury. ² He also saw a poor widow put in two very small copper coins. ³ "Truly I tell you," he said, "this poor widow has put in more than all the others. ⁴ All these people gave their gifts out of their wealth; but she out of her poverty put in all she had to live on."

The Parable of the Good Samaritan (Luke 10:25-37)

²⁵ On one occasion an expert in the law stood up to test Jesus. "Teacher," he asked, "what must I do to inherit eternal life?"

²⁶ "What is written in the Law?" he replied. "How do you read it?"

²⁷ He answered, "'Love the Lord your God with all your heart and with all your soul and with all your strength and with all your mind'[]]; and, 'Love your neighbor as yourself.'[]]"

²⁸ "You have answered correctly," Jesus replied. "Do this and you will live."

²⁹ But he wanted to justify himself, so he asked Jesus, "And who is my neighbor?"

³⁰ In reply Jesus said: "A man was going down from Jerusalem to Jericho, when he was attacked by robbers. They stripped him of his clothes, beat him and went away, leaving him half dead. ³¹ A priest happened to be going down the same road, and when he saw the man, he passed by on the other side. ³² So too, a Levite, when he came to the place and saw him, passed by on the other side. ³³ But a Samaritan, as he traveled, came where the man was; and when he saw him, he took pity on him. ³⁴ He went to him and bandaged his wounds, pouring on oil and wine. Then he put the man on his own donkey, brought him to an inn and took care of him. ³⁵ The next day he took out two denarii and gave them to the innkeeper. 'Look after him,' he said, 'and when I return, I will reimburse you for any extra expense you may have.'

³⁶ "Which of these three do you think was a neighbor to the man who fell into the hands of robbers?"

³⁷ The expert in the law replied, "The one who had mercy on him."

Jesus told him, "Go and do likewise."

YEAR &- TRINITY TERM - RELIGIOUS STUDIES- GLOBAL ISSUES

1. Morality and Ethics

Morality is the **main beliefs** that **guide** us when we distinct right from wrong or good and bad behaviour.

Conscience: We use our conscience as a guide on how to behave, our internal sense of what's right and wrong. Our conscience is developed by all our interactions, and we work out by trial and error what's right and wrong. Christians agree with this but also believe that our conscience is part of us because it helps us to work out what we should do according to **God's** will. The Bible can help us understand how to make decisions about right and wrong.

What does the Bible tell us about right and wrong?

- 1. You shall have no other Gods but me.
- 2. You shall not make for yourself any idol, nor bow down to it or worship it.
- 3. You shall not misuse the name of the Lord your God.
- 4. You shall remember and keep the Sabbath day holy.
- 5. Respect your father and mother.
- 6. You must not commit murder.
- 7. You must not commit adultery.
- 8. You must not steal.
- 9. You must not give false evidence against your neighbour.

2. Environment and stewardship

Environmental issues

The entire planet is facing serious environmental problems; global warming, acid rain, air pollution, waste disposal, ozone layer depletion, water pollution, climate change and many more that affect every human, animal and nation. We are increasingly exploiting our planet and the environment is degrading rapidly. With this comes more natural disasters such as flash floods, tsunamis and tropical storms.

Christians believe that the Bible helps them to understand how they should treat the environment and the kinds of things they should do to make the world a better place;

- The world is God's creation and it was created to be good. It reveals something of God's nature.
- God gave the world as a loving gift to all life, including human beings.
- **Stewardship**: Humans have a special responsibility of looking after the world as responsible stewards
- They are given certain abilities and talents to undertake this work.

The first line of the Bible read: *"In the beginning, God created the heavens and the earth."* **Genesis 1:1** 'Genesis' means 'beginnings' or 'origins', and it is the name of the first book of the Bible. It isn't called Genesis only for that reason, but also because it begins telling us how the world and everything in it came to exist.

Some actions to show responsible stewardship could include:

- Recycling
- Buying or consuming less
- Buying locally produced food where possible
- Buying from businesses that try to protect the environment
- Writing to their MP asking them to focus on environmental issues
- Buying greener washing machines and fridges
- Helping with clean up events, such as picking litter off the beach

3. War and peace

What does the Bible say about war?

God's and the Israelites' covenant: In the Old Testament stories, Israel is a nation often caught up in war, both as an instigator and as the victim of others attacking. God promised to be in a relationship with the Israelites and the Israelites promised to honour God in their lives and worship. In the Bible, this agreement is called a **covenant**.

God had promised the Israelites a land of their own, but **this often required them to fight the tribes who lived there originally, in order to conquer it**. The Israelites' victories in battles were seen by the writers of the Old Testament as proof that God was with them in their battles.

What does the Bible say about peace?

Elsewhere in the Old Testament we see a very different attitude to war. Some of the prophets talk about a forthcoming widespread peace in which people would live in harmony with each other.

Is war impossible? Some Christians say that Jesus' teachings about the importance of peace and love for your neighbours AND enemies make fighting in a war impossible. Others say that this teaching only affects **individual** Christians; fighting in war to defend yourself or others may be unavoidable.

The Just War Theory

To answer questions about the wrongness of violence, but the need to sometimes fight for justice, Christians might use the Just War theory. Conditions for a just or moral war:

- It must be for a good cause.
- It must be declared by a lawful authority such as the government, not by an individual or a small group.
- It must be the case that when the war is over, the outcome will be better than if the war hadn't been fought.
- Fighting the war must have been the last resort all other ways to stop fighting have been tried.
- Only the minimum amount of force which is necessary should be used.
- There must be a reasonable chance of winning the war, so that it doesn't cause destruction for no purpose.

Forgiveness and reconciliation

Christians also think about the aftermath of war. They might think about how to bring about forgiveness and reconciliation and to help those who have suffered during the war.

YEAR &- TRINITY TERM — PHYSICAL EDUCATION- ATHLETICS

Sprinting: 100m, 200, 4x100m relay	Hold up body straight and vertical. Hold head still, face and neck relaxed.	A false start is called when the feet of a runner leave the starting blocks before the starter's gun.	Shot put: Shot placed close to the neck	Use a standing throw, Rest the shot into your palm and push into your neck,		
	Bend elbows at 90 degrees and pump and drive arms forward. Shoulders steady. With each stride lift front knee high. ALL THE ENERGY YOU PUT IN	The sprint start is an important element of a sprint event.	Keeping it in that position until release. Shot must be released above the height of the shoulder with one handed push.	Ensure chin, knee and toe are inline, Punch shot away from the neck, Keep elbow high.		
	FORWARD.		Javelin:	Use a standing throw, Place javelin in the crease		
Middle and long distance running:The most important thing is to pace yourself DO NOT go off and sprinting and have to walk at the end! Cardiovascular fitness is very important.		For the 800m the athletes run the first curve in separate lanes and can then 'break' into the middle lane. This is avoid crowding.	For a valid throw the javelin must land within the specified zone and its tip should hit the ground first.	of your hand, Straighten your arm, keeping javelin close to your head and parallel to your arm, Ensure chin, knee and toe are in line,	AXXXX	
Head – facing forward and not the ground	Arms – opposite arm to leg and			Transfer weight back to front leg as release.		
(tunnel vision)	Sprint st	art technique:	Discus:	Use a standing throw, spread your fingers on	XXXX	
Heel – flicks back and extends	Maintain rtythm ond stay related On your	marks, Get set, Go	Discus is thrown from a circular cage. Must not touch ground after throw (i.e to balance self).	top, chin, knee and toe in line, weight forward pivoting at hips, arm at 35 degree and release discus, disk should leave at shoulder height. Arm follows through.		
High jump: Take off must be wit If the competitor fail in the three consecu disqualified.	h one foot only. Is to jump the required height tive attempts then they will be	Athletes run on a curve to lean pressure against the ground. M steps on the approach (usually taken with the non jumping foc pointing to the far corner of the The fosbury flop lands with the back.	away from the bar by creating lost athletes use between 6 and 12 an even number so the first step is ot). On take off the foot should be e landing area. athlete landing on their upper			

YEAR &- TRINITY TERM — PHYSICAL EDUCATION- STRIKING AND FIELDING

EARNING - LOVING - LIVING

- Striking and fielding includes; tennis, cricket, rounders, softball (games where you are hitting (striking) the ball).
- Fielding is the role of the team out in the field trying to stop the striker / runner scoring points by getting them out.
- This varies among different sports but essentially they are 'stumped out'.

Tennis 1:

- A game played on a rectangular court either singles or doubles.
- Players stand on opposite sides of a net and use a racket to hit a ball back and forth to each other.
- Maximum of one bounce after it has been hit by their opponent to return the ball over the net and within the boundaries of the court – if a player fails to do any of these three things, the opponent wins a point.
- Game set match.

<u>Tennis 2</u>: A **forehand** in tennis is a simple way to return the ball. It is played on your **strong side**, standing side on to the ball and the racket swings back to front **transferring your weight** at the same time. forehand

<u>Tennis 3</u>: A **backhand** in tennis is more technical than a forehand and is played on your weaker side. You should swing the racket to your weak side, make connection with the ball and the racket comes back across the body.

Cricket:

- The aim of cricket is simple score more than the opposition.
- Two teams, both with 11 players, take it in turns to bat and bowl.
- When one team is batting, they try and score as many runs as they can by hitting the ball around an oval field.
- The other team must get them out by bowling the ball overarm at the stumps, which are at either end of a 22yard area called a wicket.
- The bowling team can get the batsmen out by hitting the stumps or catching the ball.
- Once the batting team is all out, the teams swap over and they then become the bowling side.

Rounders:

- Two teams with a maximum of 15 players and a minimum of 6 with no more than 9 on the field at one time.
- The ball must be bowled below the shoulder but above the knee.
- A rounder is scored if 4th post is reached and half a rounder is scored if 2nd base is reached.
- You can get the batter out by catching them out or stumping the post they're running to.
- <u>Softball</u> consists of a **pitcher**, **catcher**, four **infielders**, and three **outfielders**.
- A strike is called when the batter swings at a pitch whether it is deemed to be in the strike zone or not.

Catching skills:

- Hands should be ready at chest height in a *bucket*.
- Eye on the ball.
- Step back as you receive and keep the body balanced.

Fielding is an important part of all striking and **fielding** games. Effective fielding is going to prevent the batting / striking team from scoring points by getting players *out*.

Good fielders need to be able to throw and catch well and also stop the ball not always with their hands (long and short barrier).

The Long Barrier

The **long barrier** is used in all fielding games if the ball is coming to you along the ground i.e rolling. You kneel down, making a barrier from your leg and foot, cup your hands together, keeping your eye on the ball.

Throwing technique:

- Stand side on, weight on back foot, pull strong arm back, above shoulder height, other arm pointing to target.
- Transfer weight from back foot, push arm forward, pivot hips to face direction of throw, rotate shoulder / arm towards target.
- Flick wrist at point of release (at ear) and follow through.

Questions:

- 1. Name four sports that are striking and fielding?
- 2. Explain the long barrier technique in your own words.
- 3. Explain the throwing technique above in your own words.
- 4. How do you get people out in striking and fielding games?
- 5. How do you score points in rounders and cricket?
- 6. Name 2 movements in tennis.

1	Subprograms	Use 2 or more programming languages, at lea			
		one of which is textual, to solve a variety of			
		computational problems; make appropriate use			
4	Input/Output	of data structures [for example, lists, tables or			
		arrays]; design and develop modular programs			
		that use procedures or functions			

#PDE 7: Use/need for Files - the permanent

storage placea are text and csv (tell pupils

Analyse the given problem and identify the requirements of the program that will be designed, implemented and tested

Decompose the problem into manageable sub-problems, with an explanation of each. The decomposed list of requirements can be presented in prose or as a bulleted list, with each requirement clearly identified. Decomposition requires choices to be made, in this case by breaking the given problem down into sub-problems that will be designed and implemented later.

Common pseudocode notation

There is no strict set of standard notations for pseudocode, but some of the most widely recognised are:

INPUT - indicates a user will be inputting something OUTPUT - indicates that an output will appear on the screen WHILE – a loop (iteration that has a condition at the beginning) FOR - a counting loop (iteration)

REPEAT - UNTIL - a loop (iteration) that has a condition at the end IF - THEN - ELSE - a decision (selection) in which a choice is made

#Write overwrite #Append adds to the end file1=open("append.csv","a") name=input("Enter name:") name=input("Enter age:")

Using pseudocode

Pseudocode can be used to plan out programs. Planning a program that asks people what the best subject they take is, would look like this in pseudocode:

REPEAT

OUTPUT 'What is the best subject you take?' INPUT user inputs the best subject they take STORE the user's input in the answer variable IF answer = 'Computer Science' THEN OUTPUT 'Of course it is!' ELSE

OUTPUT 'Try again!' UNTIL answer = 'Computer Science'

```
thi is comma seperate values) r means read (we
are reading from the file)
file1=open("Test.txt","r")
#File Handle=file1
for line in file1:
print(line.strip())
#Getting values out of the filefile1=open("write.csv","w")
for line in file1:
```

```
data=line.strip().split(",")
print(data[0])
file1.close()
```

YEAR 8- TRINITY TERM — COMPUTER SCIENCE- DATABASES

Foreign key	A foreign key is a primary key from
another table t	hat has been used to create a
relationship.	

Form A form is a data entry tool, used to enter data into a table in a simple, clear way.

Number field Numeric data stored as an integer or decimal which calculations can be performed on, e.g. 200, 49.53.

Primary key A field that uniquely identifies each record in a table.

Record A set of related fields about a person or thing. Validation rules Ensure input data is sensible.

First Name	Last Name	Address	City	Age	
Mickey	Mouse	123 Fantasy Way	Anaheim	73	
Bat	Man	321 Cavern Ave	Gotham	54	
Wonder	Woman	987 Truth Way	Paradise	39	
Donald	Duck	555 Quack Street	Mallard	65	2
Bugs	Bunny	567 Carrot Street	Rascal	58 🤜	
Wiley	Coyote	999 Acme Way	Canyon	61 🖌	Record
Cat	Woman	234 Purrfect Street	Hairball	32	/
Tweety	Bird	543	Itotltaw	28	

YEAR &- TRINITY TERM — DRAMA- THEATRE IN EDUCATION

Theatre in Education Skills

Target Audience	Narration
It is important that the creators and performers in a T.I.E. play know exactly who their audience are so that the	Narration is used in T.I.E. to guide the audience through the plot. There are two types of narration as follows:
materials they produce are appropriate and beneficial for the specific audience.	1. In role
	The character narrates in first person For example "My name is Little Red Riding Hood. I live in the forest".
Specific Message	2. Third Person/Out of role/All Knowing
T.I.E. plays must have a specific message that they are teaching the audience.	Commenting upon a character as an actor is a clear way of reminding the audience of theatricality. The narrator speaks in third person. For example "This is Little Red Riding Hood, She lives in the forest".
Facts	
T.I.E. plays are designed to educate the audience about a specific topic. It is therefore essential that the	Stereotypical characters
information given out is accurate. Facts can be used to help devise the play and they should also be included	These are easily recognisable stock characters. They are often exaggerated and represent a type of character
within the performance	rather than a specific individual. For example, the mum, the teenager, the teacher.
Communal Voice/Chorus	Multi-roling
Chorus is when the performer use the same movement and say the same lines. Communal voice is a variation of	Multi-roling is when an actor plays more than one character onstage. The differences in character are marked by
Chorus used in T.I.E. The performers speak with 'one voice' and usually reinforce the message of the play.	changing voice, movement, gesture and body language but the audience can clearly see that the same actor has
	taken on more than one role.
Where to get help.	
At the end of watching a T.I.E. play, the audience should know what to do if they face a similar situation to the	Speaking Stage Directions
characters in the play. Where do they go for help/support?	This is when the actors narrate the stage directions prior to acting them out. For example the actor will say
Directly Francisco the Audion of	"Daniel sat down angrily" and then ne will sit angrily.
Directly Engaging the Audience:	Calia vala
1. Direct Address – The audionee are given tooly to de which involve them within the performance.	Split-role
2. Forum ineatre – The audience are given tasks to do which involve them within the performance.	This is where more than one actor plays the same character. For instance, the actor playing the main character
Enisodes	and attachment on the part of the audience
A series of scenes which can be related or unrelated	
A series of seeles which can be related of an elated.	Basic Set Prons, Lighting and sound
Placards/PowerPoints	T LE has to travel to a variety of performance venues. Therefore actors use minimal set and props. They usually
A placard is a sign presented onstage. Using placards might he as simple as holding up a card or happer	carry their own sound equipment with them and rarely use stage lighting
Multimedia or a PowerPoint slideshow can also be used for this effect. For example Scene One – The Bad News	
	Song /Dance/Movement
	Song, dance and movement are often used in T.I.E. plays to engage the audience and make the performances
	more visually/orally interesting.

Physical Theatre: Explanation	Physical Theatre Key Words	Physical Theatre: Performance Skills
The Nature of Physical Theatre At its simplest, you could define Physical Theatre as a form of theatre that puts emphasis on movement rather than dialogue. But remember there are a huge number of variations as the genre covers a broad range of work. But essentially Physical theatre is anything that puts the human body at the centre of the storytelling process. As a result it's often abstract in style, using movement in a stylised and representational way. With the expression of ideas choreographed through movement, such performers use very little or no dialogue at all.	 Abstract: To perform in a way that is not like real life. Stylised: Non-realistic performance Representational: Symbolic Exaggerate: To perform in a larger than life way. Over emphasize movement and speech. Narrated Action: To perform the actions whilst a narrator orates (speaks) Combined Art Forms: Physical theatre includes elements of dance, music, visual arts, spoken word and mime 	 Physicalisation of Set: Using the body to create objects on the stage Physicalisation of Emotions: Using the body to symbolise emotions Mask: Concealed facial expression so meaning created through movement and body language Power of the Hand: Symbolic fight in which person A extends hand into face of
		person B and controls their movement
 Rehearsal Techniques Bigger Bigger Bigger. Rehearse one scene several times increasing the energy in gesture/movement, exaggeration of facial expression and volume Non-Verbal Body Language Perform a scene without speaking. Create meaning through mime. Hot-Seating An actor sits in the hot-seat and is questioned in role. They spontaneously answer questions. Role on the Wall Draw an outline of your character. Annotate it to reflect the character's thoughts, feelings, fears, circumstances etc. Inner Thoughts Whilst rehearsing a scene, one person will shout "Freeze, inner thoughts". The actor should freeze and spontaneously say out loud what the character is thinking. Conscience Corridor Performers make two lines facing each other. The protagonist poses a question. Actors on each side of the 	Body Language Key WordThis is what your character's movements and way of using their body says about them. A character who is very nervous and stressed may fidget a lot or have their shoulders hunched up tight to indicate tension.Key Words Movement: e.g. rushing in or stamping their foot excitedly.Image: Constraint of the stands of the sta	Mirroring: Copying the movement of a partner in complete unison Unison: Moving together in time Formations: Shapes line, triangle, square etc. Proxemics: Distance between characters suggests meaning Character: Physicality and actions to create person Contact work: Holding or making physical contact with others Dynamics: Speed and energy of the movement Focus: Where your eyes should be focused during play.

YEAR &- TRINITY TERM — MUSIC- BAND SKILLS

	Guitar Tab
What is Guitar Tab?	
 Tab or tablature is a way of notating or writing down 	music.
· It shows a graphic representation of the strings and	frets on the guitar fretboard.
Each note is indicated by placing a number, which in	ndicates the fret to play, on the appropriate string.
The Lines	
 When reading guitar tab you will see six lines. 	
The thickest string on the guitar or bass is the one	nearest your chin, with the thinnest string being the closest to the
floor.	
The Numbers	
· The numbers show which fret to play - where the n	umber is written will show which string is to be played.
Frets are the metal strips that run across the fretboa	ırd.
	Drum Tab
What is Drum Tab?	
When reading drum tab you will see five lines (like the	he normal stave).
Instead of having different notes on the stave, each	place is a different part of the drum kit.
The note heads	
• The numbers show which fret to play – where the n	umber is written will show which string is to be played.
Frets are the metal strips that run across the fretboard.	
······	
KEYM	/ORDS
1- Melody – The main tune of a song, often sung.	6- Arrangement – the order/structure you choose to play a
	piece of music
2- Chord – 2 or more notes played simultaneously.	7- Balance – ensuing each part and instrument can be heard,
	with the main parts playing out.
3- Bassline – the bottom part of a song, played in the	8- Rhythm – a) the combination of different note durations in a
bass.	nices
	piece.
	b) The instruments that keep the pulse of a song.
4- Riff – a repeated pattern	 b) The instruments that keep the pulse of a song. 9- Verse – the parts of a song that change lyrics. telling the
4- Riff – a repeated pattern	b) The instruments that keep the pulse of a song. 9- Verse – the parts of a song that change lyrics, telling the story, that precedes a chorus.
 4- Riff – a repeated pattern 5- Hook – a musical idea, often a short riff, passage, or 	 b) The instruments that keep the pulse of a song. 9- Verse – the parts of a song that change lyrics, telling the story, that precedes a chorus. 10- Chorus – the repeating section of a song, usually following a
 4- Riff – a repeated pattern 5- Hook – a musical idea, often a short riff, passage, or phrase, that is used in popular music to make a song 	 b) The instruments that keep the pulse of a song. b) The story, that precedes a chorus. 10- Chorus – the repeating section of a song, usually following a verse, which sums up the theme of the song.

Year 8 Music – T1: Band Skills

READING TAB

READING CHORD BOXES

<u>YEAR &- TRINITY TERM — ART — POP ART</u>

A. Key Terms

Keyword	Description
7. Saturation	Refers to the brightness of colour
2. Negative Space	The space around the actual form of art
3. Focal Point	The area /spot that stands out in the artwork
4. Analogous	A colour scheme where the colours are next to each other on the colour wheel.
5. Bold	(of a colour, design, or shape) having a strong, vivid, or clear appearance.
6. Contemporary	living or occurring at the same time.
7. Collage	a piece of art made by sticking various different materials such as photographs and pieces of paper or fabric on to a backing.

<u>B. Andy Warhol</u>

8. August 6, 1928 – February 22, 1987

9. Andy Warhol is famous for doing work about iconic people and objects

10. Notable for using bright bold designs and the process of printmaking.

D. Colour Theory

330

5

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11. Marilyn Diptych

12. Campbell soup

Acrylic paint on canvas

1962

1962 Silkscreen Print

D1. Analogous colour scheme A colour scheme where the colours are next to each other on the colour wheel. This will give calm mood to your work.

D2. Triadic A colour scheme where three colours are equidistant to each other on the colour wheel.

C. Roy Lichtenstein

11. October 27, 1923 – September 29, 1997

large scale.

12. Famous American Pop artist

14. Drowning Girl.13. Known for using1963a comic book styleAcrylic on Canvasand working on aAcrylic on Canvas

D3.Complementary colour scheme Colours that are opposite each other on the colour wheel. These colours will look bright and bold next to

Primary	Secondary
red + yellow	=orange
red + blue	=purple
blue + yellow	=green

each other.

YEAR &- TRINITY TERM - FOOD AND NUTRITION - DIET AND NUTRITION

YEAR 8- TRINITY TERM — FOOD AND NUTRITION - DIET & NUTRITION

	Keyword	Definition
1	Gluten	A protein found in wheat flours, that makes the dough elastic
2	Coeliac disease	An intolerance to Gluten which causes the inflamation of the intestine walls and damage them making nutrient absorbtion more difficult for the body
3	Amylase	Releases when starch is heated and enables sauces to thicken
4	Viscosity	The thicknes of a liquid
5	Gelatinisation	When starch particles swell and burst, thickening a liquid
6	Durum wheat	A yellowy, high-protein wheat that is grown especially for making pasta
7	Milling	The process which separates the different parts of the grain
8	Semolina	A coarse-ground flour which comes from wheat
9	Whole grain	The whole seed in its natural state, none of the layers have been removed
10	Gluten -free	Products which does not have any wheat, rye, barley and sometimes oats
11	Al dente	'Firm to the bite' describes the texture of pasta
12	Extraction Rate	The keyword for how much of the original wheat grain is in the flour and used in products
13	Fermentation	A chemical breakdown of sugar to acid, gas or alcohol by bacteria, yeasts or other microorganisms
14	Proving	When bread is left to rest in a warm, damp environment to enable fermentation
15	Germ	Part of the grain which provides fat and B vitamins, it is also used to grow new plants
16	Glutenin and Gliadin	The two names of the proteins which are kneaded and stretched in the production of bread.
17	Harvesting	The process of gathering or reaping crops
18	Knocks back	To re-knead the dough which knocks out some of the carbon dioxide allowing the yeast to produce more carbon dioxide
19	Starch	A polysaccharide and a complex carbohydrate
20	Strong flour	A type of flour with the highest gluten content
22	Unleavened	Refers to bread, cake and biscuits made without raising agents
23	White flour	Contains just the endosperm, the bran and the germ have been removed
24	Yeast	A microorganism belonging to the fungi family, made up of single oval cells that reproduce by budding this means they multiply and the one cell divides into two
25	Weevils	Tiny black bugs that can live and breed in flour

Key questions:

- Name 2 properties of gluten that give bread its unique texture What needs to be added to glutenin and gliadin to make gluten?
- .
- Describe the energy balance in one sentence.
- Name three enzymes that are involved in human digestion; ٠
- Draw a flowchart to show how food passes through the digestive system, ensuring that each organ and stage is properly labelled. .
- . Where is pasta thought to have its origins?
- When making a white sauce, the starch grains in the flour swell and thicken the sauce. Name the process and describe how it happens ٠ with the aid of diagrams.
- Can you explain why sauces are used in the production of recipes/meals? •

The digestion process

The gastrointestinal (GI) tract comprises:

- Mouth and salivary glands; ٠
- oesophagus; ٠
- ٠ stomach;
- small intestine duodenum, jejunum and ٠ ileum;
- liver and gall bladder; ٠
- ٠ pancreas;
- Large intestine (or colon) ٠
- rectum ٠
- anus.

YEAR 8- TRINITY TERM — TRINITY TERM- ENGINEERING

Tools And Equipment

Coping saw – cutting curves	Tenon Saw – cutting straight	Bench hook – holding wood	Glass paper – file filing
	INVER-17		
Hand file – rapid filing	Pillar drill – making holes	Steel rule – accurate measure	Disc sander – rapid sanding
		And And And	

Hydraulics

Hydraulics is a technology and applied science using engineering, chemistry, and other sciences involving the mechanical properties and use of liquids. At a very basic level, hydraulics is the liquid counterpart of pneumatics, which concerns gases.

Fluid mechanics provides the theoretical foundation for hydraulics, which focuses on the applied engineering using the properties of fluids. In its fluid power applications, hydraulics is used for the generation, control, and transmission of power by the use of pressurized liquids

Levers

Levers are used to lift heavy weights with the least amount of effort. In the example opposite, the heavy weight on the left hand side is been lifted by the person because of the lever. The longer the 'rod' the easier it is to lift the weight. Under normal circumstances the person would not be able to lift the weight at all. The *fulcrum* is the place where the rod pivots (or rotates).

The *load* is the scientific name for the weight. The *effort* is quite simply the amount of effort used to push down on the rod in order to move the weight.

Properties and characteristics of materials

EARNING — LOVING — LIVING

*	Absorbency	To be able to soak up liquid easily.
	Strength	The capacity of an object or substance to withstand great force or pressure.
2	Elasticity	The ability of an object or material to resume its normal shape after being stretched or compressed; stretchiness.
and the second s	Plasticity	The quality of being easily shaped or moulded.
Y	Malleability	To be able to be hammered or pressed into shape without breaking or cracking.
	Density	The quantity of mass per unit volume of a substance
	Effectiveness	The degree to which something is successful in producing a desired result; success.
A.	Durability	The ability to withstand wear, pressure, or damage.

Understand the making Process 1 Preparation Drawing, CAD, sketches, plans. 2 Marking Out Pencil, scribe, steel rule, tri square, marking gauge, calipers, centre punch. Modification 3 Saw, jigsaw, scroll saw, laser cutter, pliers, hammer, drill, file, glass paper. 4 Joining Riveting gun, spanner, screwdriver, hot glue, gun, soldering iron, nail gun. 5 Finishing Hand sander, glass paper, disc sander, buffing wheel, polish, spray paint, varnish.

Health & Safety L	egislation			
Health and Safety at work Act	Personal Protective Equipment	Manual Handling Operations	Control of Substances Hazardous to Health	Reporting of Injuries RIDDOR

Time words	P	resente	Pasa	ado (Impei	rfecto)
ahora – now antes – before después – after	soy/ es	l am/ s/he/it is	era	۱ /s ۱ /s	ras∕ ıe∕it was
hoy – today hoy en día – nowadays hace años - vears ano	estoy/ está	l am/ s/he/it is	estaba	4/s M I	'as∕ ìe∕it was
ayer – yesterday mañana – tomorrow	hay	there is/ there are	había	the	ere was/ ere were
el año que viene – next year	tengo/ tiene	l have/ s/he/it has	tenía	4/s יע ו	ad/ ìe/it had
Referring to places Co	omparing	Asking ques	tions	Saying w	hat you di
aquí – here más…c	ue – more tha	an ¿Por qué? – v	s vhy?	hablé	l spoke
allí - there menos	que – less th	an ¿Qué? – wha	ť,	habl aste	

Referring to plac	es Comparing	Asking questions
aquí – here	másque – more than	¿Por qué? – why?
allí - there	menosque – less than	¿Qué? – what?
	tan + adj + como – as.as	¿Cuándo? – when?
Making links	tanto(a,os,as) + noun +	?Dónde? – where
también – also	como – as manyas	;Quién? – who?
notampoco-		¿Cuánto(s)? – how
neither		much/many?
sin - without	Sentence building	¿Cómo? – how?
(no) puedo / pu	lede l can(not)	′ s/he can (not)
	l (don't) wa	ant to / s/he (doesn't)

Sentence bu	inding 200000 50000
(no) puedo / puede	I can(not) / s/he can (not)
(no) quiero / quiere	I (don't) want to / s/he (doesn't) want(s)to
(no) quería	I (didn't) want to / s/he (didn't) want to
(no)tengo que/ (no)tiene que	I (don't)have to / s/he has to/ (s/he doesn't have to)
(no) tenía)	I (didn't) have to/ s/he (didn't) have to
voy a/va a + verb	I'm going to / s/he is going to
iba a	I was going to / s/he was going to
(no) me (le) gusta	l (don't) like to / s/he doesn't like to
me (le) encanta	I love to / s/he loves to
me (le) gustaría	l/he/she would like to

habl asteis	habl amos	habl ó	habl aste	hablé	Saying wh
you spoke (fam.pl.)	we spoke	he/she is/you spoke (pol.sing)	you spoke	l spoke	at you did

<i>fui</i> − l \ <i>hice</i> − ví − l s; comí −	jugué	viajé	lo pasé bien	pasé	nadé	me alojé	compré	visité	habl araon
went I did aw I ate	I played	I travelled	I had a good time	I spent	Iswam	I stayed	I bought	I visited	they/you spoke (pol.pl.)

bebí – I drank

LEARNING	— LOVING	— LIVING

yo - I tú - you él/ella - he/she Usted - you (polite, sing.) nosotros - we vosotros - you (fam.pl.) ellos/ellas - they Ustedes - you (polite, pl.)
--

Time	
word	
s	

ayer – yesterday la semana que viene la semana pasada – nunca – never a veces – sometimes a menudo – often siempre – always otra vez mañana – tomorrow hoy – today después – after antes – before ahora – now last week - again

> algo (más) eso - that esto - this

tienen	tenéis	tenemos	tiene	tienes	tengo	rellet -
they/you have (pol.pl.)	you have (fam.pl.)	we have	he/she/y ou have (pol.sing)	you have	l have	- IO NAVE

son	sois	somos	ß	eres	soy	ser -
they/you are (pol.pl.)	you are (fam.pl.)	we are	he/she is/you are (pol.sing)	you are	l am	- to be
están	estáis	estamos	está	estás	estoy	estar –
they/you are (pol.pl.)	you are (fam.pl.)	we are	he/she is/you are (pol.sing)	you are	l am	to be

Referring
to things
Referrii

allí - there	aquí – here	Referring to
		places

una cosa –

a

thing

Asking questions

¿Cómo? – how? much/many? ¿Por qué? – why? ¿Cuánto(s)? – how ¿Quién? – who? ¿Dónde? – where? ¿Cuándo? – when? ¿Qué? – what?

Making links

Opinions

porque – because

sin - without con – with

that.. Me parece que – it seems Creo que – I believe that Pienso que – I think that

next week

todo –

muy – very

(un) poco – (a) little

también – also

pero – but

otro – (an)other something (else)

y – and

0 – 0ľ

mucho – a lot

all/everything

puedo/puede		I can/he,she can	A
quiero/quiere		I want to/he,she wants to	Saying what you did
			fui – I went
tengo que/tiene que		I have to/he has to…	hice – I did
voy a/va a	+ verb	I'm going to/he is going to…	vı −ı saw jugué −l played
(no) me (le) gusta		I (don't) like to/he doesn't like to	comi – i ate bebí – l drank

ð

Ę

q

р

Sentence building

me (le) gustaría

l/he/she would like to..

love to/he loves to...

me (le) encanta

YEAR &- TRINITY TERM — TRINITY TERM- FRENCH- CORE LANGAUAGE

YEAR &- TRINITY TERM - TRINITY TERM- FRENCH- CORE LANGAVAGE

LEARNING — LOVING — LIVING

YEAR &- TRINITY TERM - PSHE- MENTAL HEALTH AND WELLBEING

Define: Mental Wellbeing	Signs of good mental wellbeing	Signs of poor mental wellbeing	The Importance of Self Care		
Mental wellbeing describes your mental state - how you are feeling and how well you can cope with day-to-day life. Our mental wellbeing is dynamic. It can change from moment to moment, day to day, month to month or year to year.	 Feeling relatively confident in yourself and have positive self-esteem Feeling and express a range of emotions Building and maintaining good relationships with others Feel engaged with the world around you 	 Erratic changes in mood and behavior Distancing from friends and family. Loss of interest in things that they used to be interested in. Excessive sleeping or not sleeping. 	At times people may feel guilty for spending time on themselves. But it's essential for mental wellbeing and can help people to be more resilient. Some self care techniques include Mindfulness Doing something you enjoy Relaxation techniques		
Define: Emotional Literacy	Live and work productively	 Increased alconol consumption. Poor concentration and being easily distracted 	 Get outdoors and fresh air Exercise If someone is living with a mental health problem, taking steps to look after their mental health can help you improve your wellbeing. Strategies can include: Talking to someone Knowing triggers and warning signs Keeping a mood diary Building your self esteem. 		
The ability to understand and express feelings. Emotional Literacy involves having self-awareness and recognition of one's own	 Cope with the stresses of daily life Adapt and manage in times of change and uncertainty 	 Finding it hard to make decisions Feeling overwhelmed by things & tearfulness 			
feelings and knowing how to manage them. Define: Primary Emotions	Things that can affect our mental wellbeing Everyone is different and what affects someone's mental wellbeing won't necessarily affect others in the same way.	 Finding it difficult to control your emotions Irritability and short temper or 			
There are 5 primary emotions but over 600 words in the English language for different emotions. The primary emotion groups are: 1. Joy 2. Anger 3. Sadness 4. Disgust 5. Fear	Everyone will have times when they have low mental wellbeing, where they feel stressed, upset or find it difficult to cope. Common life events that can affect your mental wellbeing include: loss or bereavement loneliness relationship problems issues at work worry about money However there are times when there is no discernable reason for the way a person feels which can be extremely	aggression The Importance of Positive Relationship Connecting with others can help us to feel a g sense of belonging and can help to challenge of loneliness. • Make time for the people you love. Keeping contact with friends and family, whether it's f face, on the phone or by text, can strengther	Where to get more help and support greater e feelings • Parents and trusted family. • Parents and trusted family. • School Staff and Wellbeing Team face-to- en your • Your Doctor or Practice Nurse		
Define: Mental Illness Mental illnesses comprise of a broad range of problems, with different symptoms. However, they are generally characterized by some combination of abnormal thoughts, emotions, behaviour and relationships with others. They can only be diagnosed by a Doctor or Mental Health Professional	frustrating. There are some factors that may make people more vulnerable to experiencing a period of poor mental wellbeing. These may have happened in the past or might still be happening now: • Childhood abuse, trauma, violence or neglect • Social isolation or discrimination • Homelessness or poor housing • A long-term physical health condition • Social disadvantage, poverty or debt • Unemployment • Caring for a family member or friend • Significant trauma as an adult, such as military combat, being involved in a serious accident or violent crime	 Join a group. Think of the things you like to da as drawing, gardening or sport and look for ligroups. Meeting others with a shared interest increase your confidence and build your supnetwork. Talk about the way you feel. Opening up to a friend or family member can help you to fee to and supported. Just acknowledging your by saying them out loud can help. Use peer support. If you're finding things difficitating to people who have similar feelings o experiences can help you to feel accepted. 	 MIND - <u>https://www.mind.org.uk</u> Help line - 0300 123 3393 open 9 am to 7pm, Monday to Friday or Text: 86463 Young Minds - <u>https://youngminds.org.uk</u> Text: 85258 or Parents Helpline: 0808 802 5544 Stem4 - <u>https://stem4.org.uk/</u> 		

<u>YEAR &— TRINITY TERM — PSHE— BULLYING AND PREJUDICE</u>

Define:	Types of Bullying			Dealing with Bullying		
Bullying Bullying is the repeated and intentional behaviours which cause harm to another person, either physically, emotionally or psychologically.	Physical	The victim is physically and violently assaulted by the bully. This can including being beaten up, pushed and shoved or the physical taking of items from the victim. This sort of bullying is against the law and should be reported to the police.		Remember that it is the behaviour is bullying n • Tell someone adult who you • Don't retaliate	 victim that determines if they believe the ot the bully. don't keep it to yourself, find a trusted or can talk to. e, try and ignore them if you can. 	
Define:		This can include name calling, snide comments and the spreading of rumours; it can also constitute harassment in some cases which is illegal and should be reported to the police.		 Stay with trusted friends who will support you. 		
Banter is the playful exchange of teasing remarks and jokes between friends where all are in on the jokes and enjoy the exchange. Define: By-Stander A person who doesn't actively engage in the bullying but watches and doesn't do anything to prevent it.				Dealing with Cyber Bullying		
	verbai			Cyber Bullying can be harder to handle as it anonymous and can		
	Psychological and emotional bullying s difficult to see, but can include the ostracization of the victim from a particular group, tormenting and humiliating the victim.			 Tell someone – don't keep it to yourself, find a trusted adult who you can talk to. Report the bullying to the website and block the user. 		
		Cyberbullying is the use of electronic communication to bully a person, typically by sending messages of an intimidating or threatening nature, but can also include setting up of malicious websites or posting personal and embarrassing images and videos without the persons permission.		 Do not Retaliate Screenshot evidence of the bullying. 		
				Who Can you turn to for help and Support		
	Cyber		$ \downarrow$	Parents or trusted family members		Teachers or school Staff
				The Police		Friends
Bully A person who engages in bullying type behaviour towards one or more people.	BORN	This the term used to describe bullying based on an specific aspect of the victims identity such as homophobic, transphobic, Bi-phobic bullying but can also include racist bullying and		NSPCC Helpline: 08 nspcc.org.t		308 800 5000 (24 hours, every day) <u>uk</u>
	THIS			Childline Helpline: 08		300 1111(24 hours, every day) w.childline.org.uk
	Specific	bullying based on religion. All of these types of bullying are illegal.		National Bullying Helpline <u>https://www.nationalbullyinghelpline.co.</u>		w.nationalbullyinghelpline.co.uk/