

Name

ΤG

Year 8

Knowledge Organisers

Term 1 - 2023

Year 8 Term 5 Quizzing Homework - Question Bank

Computer Science	Design Technology
	Year 8 20 Questions – Design and Technology
 What is this symbol > ? What is this symbol < ? What is this symbol >= ? What is this symbol <= ? What is this symbol mean == ? What is this symbol != ? What is code Iteration? What is a variable? What is a string in code? What is a string in code? What is a sequence? What is a sequence? What is a ninteger? What is Selection? What is Selection? Write and example of a FOR loop in python? Write and example of selection in 	
Python using the IF statement? 19. What do we mean by the word syntax? 20. What is meant by Data Type?	 18. How would you describe an Output of an electrical circuit? 19. What is the function of a Resistor in an electrical circuit? 20. What does Resistor do in an electric circuit?

Food	Geography		
 /ear 8 20 Questions – Food Preparation & Nutrition 1. Name the 4 fat soluble vitamins. 2. Name the 2 water soluble vitamins. 3. Name 2 vegetable cuts. 4. When opening the oven door, where do you stand? 5. Where should the pan handles be pointed to when using the hob? 6. Which mineral is needed to absorb calcium from food? 7. True or false – you must provide your own apron and containers? 8. Bacteria reproduces via which method? 9. Name 3 food poisoning bacteria. 10. Explain the term 'Danger Zone'. 11. What is the difference between saturated and unsaturated fats? 12. What are the 3 macronutrients? 13. What are Micronutrients? 14. What is cross contamination? 15. Explain what the Eatwell Guide is. 16. Name 5 sections of the Eatwell Guide. 17. List 4 diet related diseases. 18. What does BMR stand for and explain what it means? 19. Explain the term 'Energy Balance'. 20. What does - 'Protein Complementation' mean? 	 What are the 4 layers of the Earth called? What is the difference between the inner core and the outer core? Name the two metals that make up the earth's core What is the difference between magma and lava? What is an earthquake? What is a volcano? What are primary effects? Give three examples of primary effects of a volcano Name the two types of crust Give an example of a volcanic eruption that you have studied. (case study name + country + continent) Give an example of an earthquake hazard that you have studied. (case study name + country + continent) Give three examples of secondary impacts What is the Richter scale? What do we call the point on the earth immediately above an earthquake's focus? What do we call the massive slabs that make up the earth's crust 		

Science	Spanish Year 8 Spanish Term 1 Quizzing	
8 Quiz questions		
 Where does most photosynthesis take place? Give a use of glucose in plants Write the equation for aerobic respiration Write the equation for anaerobic respiration Which part of the plant cell contains chlorophyll? When could humans need anaerobic respiration? 	 A] Learn the food and drink items from your KO and then write in Spanish from memory: 5 fruits; 4 vegetables; 3 drinks; 2 meat items; 2 fish items; 2 types of ice cream; 2 kinds of sandwich B] Translate into Spanish: from time to time sometimes every day 	
 8. What is cellulose used for in plants? 9. Where does the energy for photosynthesis come from? 10. What is the top layer of a leaf cell? 	 4. I am a vegetarian 5. for breakfast 6. for lunch 7. for dinner 8. I eat 9. I drink 10. we eat 	

Year 8 Art Knowledge Organiser- Term 1

Drawing

When drawing you need to consider these three main areas – tone, texture (using mark making) and proportions. https://www.bbc.co.uk/bitesize/guides/z 2thmsg/revision/1

<u>Tone</u> means how light or dark something is. The tones artists use can create very different moods and visual effects.

Artisits Similarities (Compare)

- All of the artists base their work around theme of the ocean.
- They are all inspired by coral.
- Courtney Matterson and Yellena James use intricate pattern.
- All of them draw attention to the fragility of the ocean.

Artists Differences (Contrast)

- All of the artists work in different media.
- All of them have different styles.
- Jason DeCaires work is situated underwater.
- Yellena James is the only one who works in 2D.

Topic: Healthy Oceans

Key Artists to Compare and Analyse:

Courtney Mattison-

Hand-crafts intricate and large-scale sculptural works that visualize climate change through the fragile beauty of coral reefs. Works in ceramic (clay)



Extra Vocab. Scale Intricate Texture Colourful

Vivid

Organic

Colourful

Imaginary

Patterned

Kaleidoscopic

Yellena James-

Paints imaginary eco systems bursting with colourful flora and fauna. James uses a combination of pens, inks, acrylic gouache paint.



Jason DeCaires-

A sculptor, photographer and environmentalist. He creates underwater sculptures that create a habitat for marine life.



Surprising Environmental Large scale Thoughtprovoking Habitat

Key Words- Definitions.

<u>Mixed-media</u>- Mixed media is when a variety (more than one) media is used in a work of art e.g. a sculpture made from wire, cardboard and paint.

Pattern (patterned) - A pattern is a repeated decorative design.

Intricate- Very complicated or detailed.

<u>Cast-</u> work made from a material that is pored into a mould and allowed to set.

<u>Glaze (glazed)</u>- A special surface which is applied to the surface of ceramics (clay). Glaze can colour, decorate and waterproof the clay.

Ceramic (ceramics)-

The art of making 3D objects out of clay.

<u>Organic-</u>Organic shapes are **irregular and imperfect**. They are often curved and flowing and can seem unpredictable. Using organic shapes can make a piece of art or design seem more natural and real.

 $\underline{\text{Scale-}} If$ you refer to the scale of something, you are referring to its size .

Artist's Comparison and Analysis

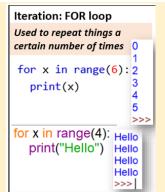
Describing and analysing artists work is an important skill. We try to analyse work by looking at the formal elements of <u>colour, line, tone, texture, scale,</u> perspective and shape.

When writing your opinion make sure you describe what you do or don't like about a piece of work and why e.g. 'I like Jason DeClaires sculptures because......

Computer Science

		Allows user to ente	
,		= input("What is your nar your name? Daniel	
		A	
1	Daniel	(name)	
		Iteration: FOR loop Used to repeat things a	
	1	certain number of times 0 for x in range(6):2 1 print(x) 3 4	
		5 s>> for x in range(4): Hello print("Hello") Hello Hello Hello S>>	
	 Equals: a == b Not Equals: a != b Less than: a < b 		
	• Les	s than or equal to: $a \le b$	
		eater than: $a > b$ eater than or equal to: $a >= b$	
	int() - integ float() –floa str() - string	variable types (casting): ger – whole number Iting point (real) – decimal point g – a series of characters (text) Ide turns variable into integer:	
))) ams	What is y >>> prim Daniel)))))))))))))))))))	

Allows us	er to enter data				
<pre>me = input("What is your name? ") s your name? Daniel</pre>					
int (name)					



- <= b
- a >= b

<u>Key Vocab</u>



Word	Definition			
Python	A high level programming language.			
Programming	The process of writing computer programs.			
Code	The instructions that a program uses.			
Sequence	Parts of the code that run in order and the pathway of the program reads and runs very line in order.			
Selection	Selects a pathways through the code based on whether a condition is true			
Iteration	Code is repeated (looped), either <i>while</i> something is true or <i>for</i> a number of times			
Algorithm	A set of rules/instructions to be followed by a computer system			
Variable	A value that will change whilst the program is executed.(e.g. temperature, speed)			
Comparative Operator	When comparing data, an operator is used to solve the equality such as <>, != or ==			
Syntax	The punctuation/way that code has to be written so that the computer can understand it. Each programming language has its own syntax.			
Data Type	This indicates how the data will be stored. The most common data types are integer, string, and float/real.			
String	A collection of letters, numbers or characters. (e.g., Hello, WR10 1XA)			
Integer	A whole number. (e.g. 1, 189)			
Float/Real	A decimal number, not a whole number. (e.g. 3.14, -26.9)			
Boolean	1 of 2 values. (e.g. True, False, Yes, No)			
More info can b found here:	Practise creating programs Google W3schools python			

DESIGN TECHNOLOGY YEAR 8 MODULE 1 Design, analysis and sustainability

KEY WORDS

Dimensions:- The use of measurements on a design to show sizes.

Isometric:- A 3D drawing technique which shows and image at 30°.

Orthographic:- A 2D drawing technique which allows you to draw flat views of an object (Front, Side, and Plan views)

Annotate:- To add notes to your designs that explain what you are aiming to achieve. (Size, Materials, joining techniques)

Mould:- A tool that is used to form a material over to create a shape.

Prototype:- A model of a product made to see if the design would work before making the final piece

Ergonomics:- The study of how humans interact with their surroundings and how the products are then designed to work well with different people.

Anthropometrics:- The study of human sizes and how they can be used to make different products.

CAM:- this stands for computer aided manufacture where a machine turns a drawing into a made product

DESIGN TECHNOLOGY

Th	e 6rs	REDUCE	REPAIR		RECYCLE	REFUSE	RETHINK
REUSE Use a product to make something else with all or parts of it.		Cut down the amount of material and energy you use as much as you can. When a prod breaks down doesn't work		luct Reprocess a material or or product and make		or buy a product it	Do we make too many products? Design in a way that considers people and the environment.
	Analysing p	products		Joining	Materials		
		e look at an existing produ s good and bad about the				joined Permanently or Te daptable or maintained o	
	A Aestheti	i cs :- what the prod	uct looks			ie most common joints y	ou will use are: -
É	C Cost:- Ho	ow much would it co	ost to	Perma	anent Joint		
	buy?						Re
	C Client:- \	Who would buy it?					
	E Environn last?	nent:- How long wo	ould it				
\wedge	_			Mitre	e Joint	Half Lap Joint	Comb (Finger)
U ×	Safety:- (anyone?	Could the product h	lurt	Temp	oorary Joint		
Strate and a strategy of the s	Size:- Ho	w big is it?			MIDDIN		
?	F Function	:- What will the pro	duct do?				
, ,		als:- What is it made	fue and D	Scre	wد ۱	Bolt	washer N

Extension task Look at products that you recycle everyday what symbols tell you that you can recycle them?

Drama

Shakespeare has inspired generations upon generations of theatre goers, playwrights, poets, actors and drama practitioners. Films inspired by his plays include: 'Gnomeo and Juliet', 'West Side Story'. 'The Lion King', 'She's the Man' and 'Ten Things I Hate About You.'

For more resources, type 'Shakespeare' into Oak National Academy

Key aspects of Shakespearean Theatre

Shakespearean Language	Language that Shakespeare wrote his plays and poetry in, including 'thee' and 'thou'.
Shakespearean Themes	Power, conflict, love and relationships, mis-identity, witchcraft and magic etc.
Shakespearean Staging	Shakespeare had a theatre built for him called 'The Globe'. The Globe was circular with no roof and three levels of seats.
Audience Expectations	If you were poor, you'd be known as a 'groundling' and be stood up for the play. If you were rich you were more comfortable and had a better view.
lambic Pentameter	A widely used rhythm of speech in English literature, made popular by Shakespeare

Key physical and vocal skillsWordDefinitionToneEmotionPaceFast or slowPitchHigh or lowProjectionMaking your voice loud so the audience can hear you

Putting more focus on a key word

How to give constructive feedback



Shakespeare

- I think your use of...[skill]...was good.
- It was good because...[how did they use the skill?]
- It gave the effect that...

Emphasis

- I thought you could add in more...[skill]
- You could add this in by...[how could they use that skill?]
- This would give the effect that...

9

ENGLISH

POWERFUL VOICES POETRY

Key Poets (QLA R1/ QLA R5):

<u>Grace Nichols</u>: She was born in Guyana in the Caribbean, before moving to the UK to live. She writes about what it was like growing up and how it feels to be far away from home. She explores racial tensions – using Creole and Standard English. She also focuses on the female voice in her poetry.

<u>Maya Angelou</u>: She was a celebrated American story teller, poet and activist. She stood up for justice in her poetry and is viewed as very inspirational. Her poems represent Black beauty, the strength of women, and the human spirit.

Dean Atta: He is one of the most influential LGBT people in the UK - he writes about the themes of gender, identity, sexuality, race and growing up. He is a British poet of Greek Cypriot and Caribbean descent.

Key Context (QLA R5):

- Poets work with the raw materials, and comment on what it is to be human in a way that only humans can.'
- Protest poetry has been used throughout history to support movements of social change.
- 3. It can be a way for people to speak about their experiences and try to convince people to change something in society that the poet is unhappy about.

Key Vocabulary, Spellings and Definitions (QLA R1 and R5):

- 1) <u>Culture</u> the ideas and customs (way of life) of a group of people or society
- 2) <u>Diversity -</u> variety and difference
- 3) <u>Empower -</u> make someone stronger and more confident
- <u>Immigration</u> coming to live permanently in a foreign country
- 5) <u>Multicultural</u> containing several cultural or ethnic groups in a society
- 6) <u>Refuge -</u> a safe place
- 7) <u>Identity</u> qualities, beliefs, personality that makes up you as an individual
- 8) <u>Community</u> a group of people that may live in the same area, they may have similar interests, religion, values.
- 9) <u>Justice -</u> fairness in the way people are treated
- 10) <u>Inclusive</u> not excluding any social groups

Key Quotations (QLA R2):

- 1. Island Man Grace Nichols = 'His small emerald island'
- <u>I Come From Dean Atta =</u> 'I come from my own pen but I see people torn apart like paper.'
- 3. Black Flamingo Dean Atta = 'I am the black flamingo,'
- <u>Still I Rise Maya Angelou =</u> 'You may write me down in history, with your bitter, twisted lies.'

More information/challenge activities can be found on your Unit Cover Sheets.

Food Preparation Yr. 8

Key content

Nutrition

The Eatwell Guide

The Eatwell Guide shows the proportions in which different groups of foods are needed in order to have a well-balanced and healthy diet.

The proportions shown are representative of food eaten over a day or more, not necessarily at each meal time.

Choose a variety of different foods from each food group to help get the wide range of nutrients the body needs to stay healthy.

over time.

Energy Balance

The relationship between the calories you take in through food and drinks, and the calories you burn through physical activity and basic functions (like breathing and digestion).

CALORE CALORED ATTIN WEIGHT GAIN		
6	ADRO ADRO ADRO ADRO ADRO ADRO ADRO ADRO	

Diagrams:

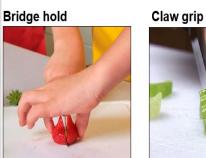


Julienne





Macedoine



Key vocab

	Word	Definition		
	Water Soluble	These are vitamins that dissolve in water, they are destroyed easily – B,C.		
ns in which different groups of foods are	Fat Soluble	These are Vitamins that dissolve in fat – A,D,E,K.		
and healthy diet.	Antioxidants	Vitamins A,C,E – these help to slow down cell damage, help protect against cancer and premature aging.		
ve of food eaten over a day or more, not	Micronutrients	These are nutrients which are needed in small amount – Vitamins and Minerals.		
each food group to help get the wide ay healthy.	Macronutrients	These are nutrients which are needed in larger amounts – Fats, Proteins and Carbohydrates.		
	Coagulate	Proteins setting through the application of heat – eggs in your chocolate brownies!		
ake in through through eathing and	Fermentation	A process in which micro-organisms are allowed to consume the sugar in a food in order to produce carbon dioxide gas, this changes the texture, flavour and aroma of bread dough.		
	Enzymic	A browning reaction in fruits - Browning is the process of food turning brown due to the chemical reactions – apples in your apple cake.		
Food skills are acquired, developed and secured Browning brown due to the chemical reactions – apples in your apple cake.				

More info can be found here:

https://www.foodafactoflife.org.uk/11-14-years/healthy-eating-11-14-years/

Tasks

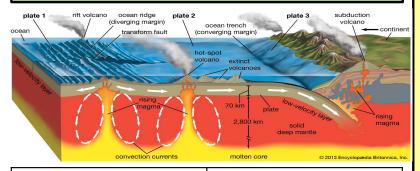
- 1. Create an infographic on either macronutrients or micronutrients. Focus on the definition of each nutrient, recommendations and sources.
- 2. Draw the digestive system and label each of the body parts and the stages of digestion that occur at each part.

3. Calculate the energy and nutrients provided by a food diary for one or two days using http://explorefood.foodafactoflife.org.uk - reflect on the results.

NUTRITION & SKILLS

The Theory of plate tectonics

- Plate tectonics is the theory that Earth's outer shell is divided into large slabs of solid rock, called "plates,"
- These plates glide over Earth's mantle, the rocky inner layer above Earth's core.
- Earth's solid outer layer, which includes the crust and the uppermost mantle, is called the lithosphere.
- The plates are driven by convection currents in the mantle



Water borne disease Riots
Riots
Job losses
Increased food prices
Fires
Landslides/lahars
Tsunami
I F

Challenge yourself to learn more about earthquakes and volcanoes here:

https://www.bbc.co.uk/bitesize/guides/zvhv4wx/revision/1

The Japan Tsunami

- Friday 11 March 2011 at 14:46:24,
- Magnitude 9.0 on the Richter scale earthquake.
- It was at the point where the Pacific tectonic plate slides beneath the North American plate.
- The epicentre 129 km off the east coast of Honshu, Japan.
- Four years after the quake, around 230,000 people who lost their homes were still living in temporary housing.
- The total damages from the earthquake and tsunami are estimated at \$300 billion dollars (about 25 trillion yen).
- The number of confirmed deaths as of 10 April 2015 is 15,891. More than 2,500 people are still reported missing.
- The country recently unveiled a newly-installed, upgraded tsunami warning system.
- Engineers examined the damage, looking for ways to construct buildings that are more resistant to quakes and tsunamis. Studies are ongoing.

The Icelandic eruption

- 20 March 2010
- Iceland is on a constructive plate margin where the Eurasian and North American plates are moving apart.
- Airlines lost a combined £130 million per day.
- Europe's biggest tourism businesses lost between £5 million and £6 million per day.
- The mass-grounding of European flights prevented the emission of some 2.8m tonnes of carbon dioxide into the atmosphere
- 500 local cattle farmers and their families had to be evacuated from the area around the volcano.

Geography: Tectonic Hazards: earthquakes and volcanoes

Key term	Definition	
Core	Made up of the inner and outer core. The inner core is solid iron and nickel, Whilst the out core is liquid . Temperatures are 5500 degrees C	
Mantle	A layer of molten rock or magma between the core and the earth's crust	
Crust	The thin outer layer of the earth. Continental crust is typically 30-50 km thick, whilst oceanic crust is only 5-10 km thick	
Epicentre	The point on the earth immediately above an earthquake's focus	
Focus	The point of origin of an earthquake. The point inside the crust where the pressure is released.	
Seismic waves	Shocks waves that radiate through the crust when an earthquake occurs	
Richter Scale	A scale used to measure the strength of an earthquake	
magma	Molten rock below the earth's surface	
Pyroclastic flow	A destructive mass of very hot ash, lava fragments, and gases ejected explosively from a volcano.	
Primary effects	The initial impact of a natural hazard and caused directly by the hazard	
Secondary effects	The after effects that occur as an indirect effects of natural hazards	

The Protestant Reformation (1517 - 1558)

<u>1517</u> - German monk Martin Luther nailed his <u>95 Theses</u> (95 complaints) onto the door of his church in Wittenberg. Followers of his ideas become known as <u>Protestants</u>

<u>1520</u> – Pope Leo X sent Martin Luther a Papal Bull requesting him to stop criticising the Catholic Church. Luther burns it in public.

<u>1521</u> – The Diet of Worms (a meeting at Worms – a place in Germany). Catholics meet Protestants. Luther's texts banned.

1522 - Luther translated New Testament in line with his own ideas

<u>1534</u> – Catholic Henry VIII broke from Rome (and makes himself Head of the Church) with 1534 Act of Supremacy.

<u>1547</u> – Edward VI became England's first **<u>Protestant</u>** king

CATHOLIC	PROTESTANT		
Pope Head of Church	Jesus is the Head of the Church		
Bible written in Latin	Bible in English		
The Clergy can forgive sins	Only God can forgive sins		
Decorated churches (+ altar)	Plain churches (+ table)		
Priests wear fancy vestments (robes) + can't marry	Priests wear simple clothes + can marry		
Purgatory before Heaven	No Purgatory		
Holy Relics + Pilgrimages important	Holy Relics + Pilgrimages NOT important		

Challenge yourself to learn more about Henry VIII here: https://www.bbc.co.uk/bitesize/topics/z3yfr82

Henry VIII (1509 - 1547)

1st WIFE: Catherine of Aragon

1. Spanish & strongly Catholic

- 2. 5 failed pregnancies (miscarriages / stillbirth)
- 3. 48 years old by 1534 and unlikely to bear children

4. Daughter: Mary

HENRY VIII WANTS A DIVORCE

6. Wants a MALE heir to be next king

7. Fallen in love with younger **ANNE BOLEYN**

Why did Henry VIII break with Rome?

 8. Pope refusing to annul Henry's marriage to Catherine – she's powerful and done nothing wrong
 9. Opportunity to collect Church taxes (tithes) – Henry struggling to pay for wars with France
 10. Pope / Church undermining Henry's authority – Church courts / decisions.

<u>ACT of Supremacy 1534</u> – Henry VIII becomes Head of Church NOT Pope in Rome.

Why dissolve the monasteries 1536-1539?
11. Profits from selling holy relics, land, bronze, slate tiles, stained glass and valuables. Church owned 33% of English land and earnt 3 times more than Henry.
12. Monks and nuns still loyal to Pope after 1534 Act of Supremacy.
13. Monks and nuns in many monasteries were breaking the rules.

How dissolve the monasteries 1536-1539? 14. Very brief inspections (+ bribery / threats / lies) 15. First Act of the Dissolution 1536 & Second Act 1539 16. ALL monasteries closed by 1541

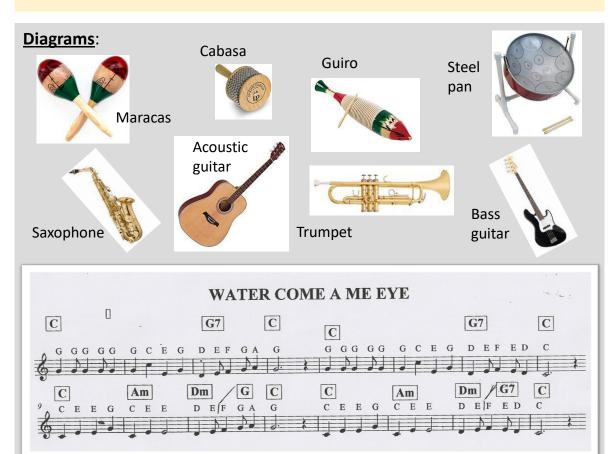
History – KPI 1: Henry VIII and the Reformation

Key term	Definition
Heir	The next person in line for the throne
Succession	Noun = something which comes after something else (next king / queen)
Annul a marriage	To have a marriage cancelled
Dissolution	Noun = destroy, close down or shut
The Clergy	People who work for and in the Church
Prior / Prioress Abbot / Abbess	A Prior or Abbot would be in charge of a monastery. Abbess / Prioress for nuns
Catholicism	Belief in Roman Catholic Church under guidance of the Pope in Rome
Reign	Length of time a king or queen rules
Act of Supremacy 1534	Act making Henry VIII the Head of the Church of England (not Pope)
Protestant Reformation	Spreading of Protestant ideas across Europe after 1517
Роре	Head of the Catholic Church
Papal Bull	Direct order from the Pope
Excommunicate	Remove from Catholic Church
Heresy	To go against religion of your country
Treason	To go against king and / or country

Music

Key content

Calypso is a style of Afro-Caribbean music that originated in Trinidad and Tobago during the early to mid 19th Century. It's rhythms and call and response melodies can be traced back to the songs sang by the slaves working in the fields.



<u>Key vocab</u>

Word	Definition	
Syncopation	Emphasising the off-beat	
Chords	2 or more notes played together	
Melody	The main tune	
Riff	A repeated pattern in the bass	
Call & Response	A leader sings out and everyone else responds either repeating the leaders call or a set response	
Work Song	A song sung in the fields as the slaves were working	
Soprano	High female voice	
Alto	Low female voice	
Tenor	High male voice	
Bass	Low male voice	

More info can be found here: Listening

Water Come a Me Eye Day O! Yellow Bird Old Time Calypso Jamaica Farewell



Calypso Music

Subject – Physical Education	Year 8	Key Vocab			Topic – Physical Me	
Key Content Netball Footwork – both feet grounded or jump to catch the ball and land on two feet simultaneously. Pivot – a swivel movement that allows the player to move on a fixed axis to either pass or shoot. Offside – player with or without the ball cannot move into an area of the court that isn't designated for their position. Replayed Ball - catch a rebound from a shot on goal if the ball has not touched the post or another player. Rugby Principles of Rugby: going forward, supporting, maintaining		Word		Definition		
		Tactics	An action or strategy carefully planned to achi specific end.		ully planned to achieve a	
		Technique	2	A skill or ability in a particular field.		
		Communi	nunication The imparting or exchanging of information by speaking, writing, or using some other medium.			
		Teamworl	k	The combined action of a group, especially when effective and efficient.		
		Regulation A regulation is a bit more formal that prescribes the required conduct or ac				
		Rules		Rules are in place for safet the game and to create as possible.	ty of the players, integrity of fair a competition as	
continuity and exerting pressure. Offside – prohibits players from p too far forward.	gaining an advantage from being	S SK		. ME (Term 1)		
Try – A try is scored by grounding ball in the opposition's in-goal	Fry – A try is scored by grounding the			REGULATIONS rules and regulations.		
area	\bigcirc	SKILLS AND	TECHNIQUES			

Knock On – a player, in tackling or attempting to tackle an opponent, makes contact with the ball and the ball goes forward **Scrum** - a method of restarting play in rugby

15

0

S S

GA

sport.

WA

Perform basic skills and techniques

Perform some tactics and strategies needed for the

TACTICS AND STRATEGIES

Key word	Definition
Prejudice	An opinion that is formed without knowing or considering all the facts.
Discrimination	The act of treating some people unfairly because of prejudice
Holocaust	The killing of millions of Jews and members of other groups by Nazis during the Second World War.
Racism	The opinion or belief that a particular race of people is better than another race or races.
Stereotype	Usually oversimplified and inaccurate conception held in common by many people
War	A state or time of armed fighting between countries, states, or other groups of people
Murder	The deliberate and unlawful killing of a person
Genocide	The intentional attempt to exterminate all members of a certain race, nationality, or ethnic group
Sacrifice	The act of giving up something of great value to show loyalty or deep affection
Religion	A set of beliefs about how the universe was made and what its purpose is. Religion usually involves worship of a god or gods, and the belief in certain ideas about right and wrong behaviour
Peace	A state of freedom from war or conflict
Evil	Anything very wrong or bad that hurts people without concern for the pain of others
Intolerance	Inability or unwillingness to accept the existence or validity of opinions, beliefs, customs, and practices different from one's own

Key Content: The Holocaust was the mass murder of six million Jews and millions of other people leading up to, and during, World War II.

The killings took place in Europe between 1933 and 1945. They were organised by the German Nazi party which was led by Adolf Hitler.

The largest group of victims were Jewish people. Nearly 7 out of every 10 Jews living in Europe were killed. Most of the victims were killed because they belonged to certain racial or religious groups which the Nazis wanted to wipe out. This kind of killing is called genocide.

The Nazis also murdered politicians, trade unionists, journalists, teachers and anyone else who spoke out against Hitler. We will never know exactly how many died but there were many millions of non-Jewish victims, including gypsies, homosexuals, disabled people, Polish Catholics etc.

Many Jewish people hid from the Nazis during World War II. They would hide with non-Jewish families. Sometimes they would pretend to be a part of the family and sometimes they would hide in hidden rooms or in a basement or attic. Some were able to eventually escape across the border into a free country, but many hid for years sometimes in the same room.

We look into, and evaluate, the question of hiding – and how for many non-Jews their religion played a part in their choice to help hide Jewish families who were at risk of being transported to the ghettos and concentration camps. For example, the story of the Good Samaritan.

Useful websites for extended reading: <u>https://www.hmd.org.uk/learn-about-the-holocaust-and-genocides/the-holocaust/</u> https://www.bbc.co.uk/programmes/p01zx5g7/clips

<u>nttps://www.bbc.co.uk/programmes/puizx5g//clips</u>

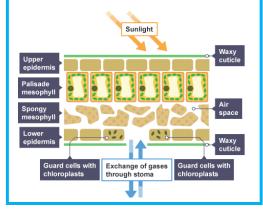
https://www.bbc.com/education/guides/zkfk7ty/revision/1



B4.1 Structure of the leaf

Most photosynthesis occurs in the leaves.

Leaves are specially adapted to photosynthesis.



4.2 Photosynthesis

Plants use the energy from sunlight, with carbon dioxide and water to make sugar.

Carbon dioxide + Water — Glucose + Oxygen

Plants use the glucose

- 1. As an energy source
- 2. To build new tissue
- 3. To store for later use

Photosynthesis happens in the **chloroplast** inside cells. This is full of the pigment **chlorophyll** which absorbs sunlight.

4.4 Aerobic Respiration

Aerobic respiration: breaking down glucose with oxygen to release energy and producing carbon dioxide and water.

Glucose + Oxygen

Carbon dioxide + Water

When we exercise we need more energy so the rate of aerobic respiration increases. This means our cells need more oxygen so our body responds by increasing

- 1. Breathing rate
- 2. Breath volume
- 3. Heart rate

4.5 Anaerobic Respiration

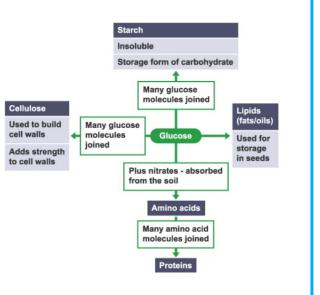
Anaerobic respiration: releasing energy from the breakdown of glucose without using oxygen.

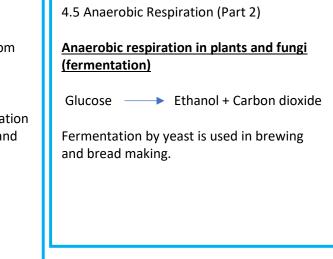
Most organisms usually use aerobic respiration but if they need large amounts of energy and cannot get enough oxygen they will use anaerobic respiration.

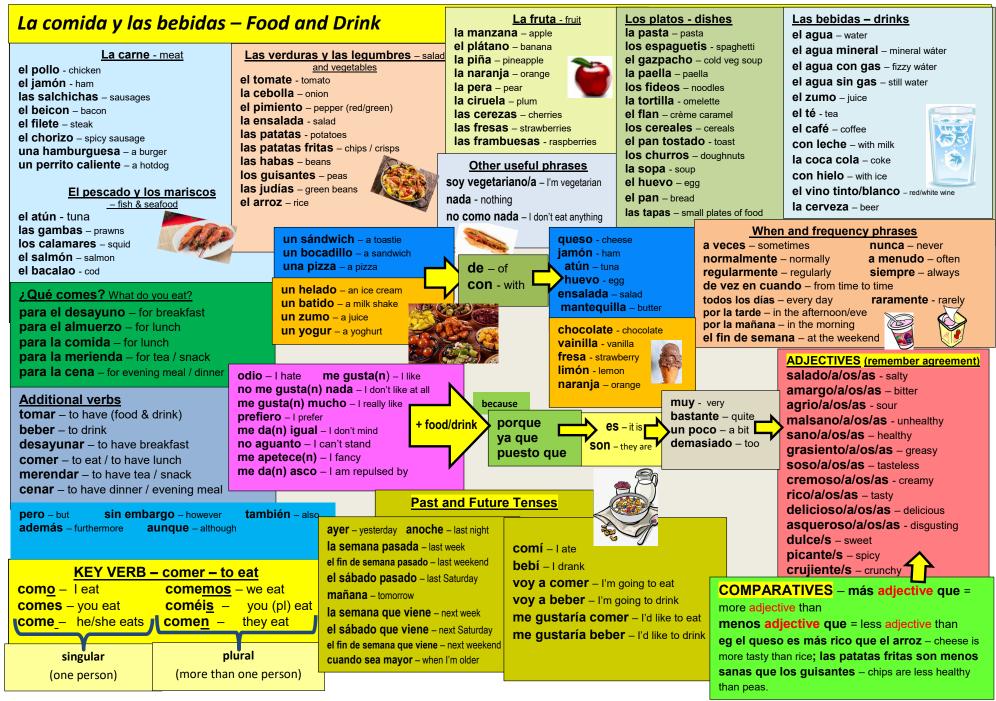
Anaerobic respiration in animals

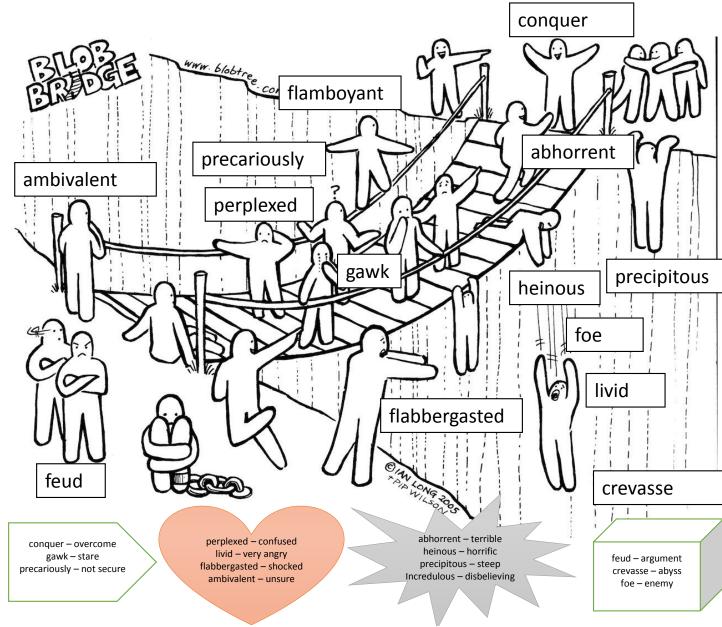
Glucose _____ Lactic acid

4.3 Uses of sugars in plants









As blob stood by the start of the bridge he felt completely **ambivalent**, could he possibly make it across in one piece? He could see that on the other side, arms wide with pride, blob had clearly managed to **conquer** his fears and crossed the bridge successfully. However, there were those who clung on with a **perplexed** expression and he wondered what they had to be so puzzled about.

Perhaps they (as to be honest, he was) were questioning the risky and **flamboyant** choice of blob balanced so **precariously** on the rope of the bridge. With such a steep **precipitous** edge and deep **crevasse** to fall into, it did seem a rather foolish idea. It was almost certainly this that had **exacerbated** his **trepidation** over setting foot on the bridge.

Blob was so focused on the left side of the bridge that he failed to notice the **abhorrent** act of another blob who had pushed his **foe** over the edge! With a **livid** cry, his enemy hurtled to the ground! This **heinous** act was witnessed by a **flabbergasted** blob who instinctively stretched out his arms in vain, but knew there was no hope of saving him.

It was quite **incredulous** to think that not more blob's had tried to help! Although for some, the **feud** they were having with their friend had taken their attention away from everything. For others, they ought to stop **gawking** at the lost blob and focus on saving the other clinging on to the bridge!

LAST PAGE