Year 8 Cycle 3 Knowledge Organisers



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LO: How do I use a knowledge organiser so that I don't forget what I've learnt?

SUBHEADINGS

- Look at the subheading.
- Write down everything you know about that topic without looking at the KO.
- Check what you've missed; add this to your notes in a different colour.
- Do something else
 (e.g. revise something else).
- Return to this and repeat from the beginning.

'Remains' – Knowledge Organiser

What happens in the poem? The speaker and two other soldiers are sent to tackle some looters who are robbing a bank. They open fire on a looter who is running away. The looter is seriously wounded He is carried away in the back of a lorry. The soldier has to walk past the blood stain left on the ground week after week. He returns home and is haunted by the memory of what he has done, reliving it again and again. He drinks and takes drugs in an attempt to forget what happened. However, he is unable to forget the looter and what he did. The memory remains stuck in his mind.

What is the context of the poem?

- Simon Armitage wrote 'Remains' (and other poems) for a Channel 4 programme called 'The Not Dead'.
- He has never been to war himself and has never been a soldier.
- To write the poems, he interviewed a number of soldiers who have survived war (in Iraq, Afghanistan, the Falklands etc.) i.e. the 'not dead'.
- The poems show the suffering soldiers experience long after wars have finished.
- 'Remains' is heavily based on the experience of Guardsman Tromans who fought in the Iraq war.
- Tromans shot a looter in Iraq and suffers from PTSD.

What is the significance of the title? The poem is about PTSD – in other words, how the traumatic experience of war REMAINS with the soldier. It could also refer to the human REMAINS – the image of the looter – that the soldier obsesses over so much as part of his PTSD.

What is a central idea in this poem? As is implied by the title, the poem explores the trauma experienced by soldiers and the terrible impact of PTSD on survivors long after the battle has ended.

What other ideas are explored in the poem?

- War can cause suffering beyond the battlefield.
- War is damaging.
- Guilt is powerful and can overwhelm us.
- War can result in us dehumanising the enemy.
- War can cause us to act in ways we later regret.
- Memory can have a powerful effect on us.

Key Vocabulary	Definition Example	
Traumatic	Causing severe and lasting emotional shock or pain.	Being involved in war is deeply disturbing and a highly experience.
PTSD (post-traumatic stress disorder)	fidelitanian or distraction counts. Company	
Guilt	A feeling of worry or unhappiness that you have because you have done something wrong.	The soldier struggles to come to terms with thehe feels over shooting the looter.
Haunt	To revisit again and again.	The memory of the shooting the soldier.
Dehumanisation	To treat people as less than human.	It can be argued that the soldiers in 'Remains' the looter by treating him with so little respect.
Dramatic monologue	A poem made up of a single character speaking (i.e. the poet is very clearly writing as someone else).	'Remains' is a because Armitage is writing as someone else and there is only one speaker in the poem.

	Writer's Craft:	Example
	Why is the poem written as a dramatic monologue?	To explore a traumatised soldier's thoughts and feelings; because the poem was produced following an interview with a soldier.
	Why does Armitage use colloquial language?	To create a convincing voice – an ordinary person/soldier, to contribute to the almost matter-of-fact tone in the first half of the poem.
1	What does the first/second half focus on? What is the turning point?	First half: the shooting; second half: the emotional impact on the soldier. Turning point = 'End of story, except not really.'
l	Why is the shooting described with graphic imagery?	To convey the brutality, to show what has traumatised the soldier; because it's so vivid in the soldier's mind.
]	Why is the blood on the street described as a 'blood shadow'?	Shadow = dark imagery – connotations of death and misery; the shooting has cast a shadow over his life; a shadow follows you around
	What does the imagery 'dug in behind enemy lines' suggest?	To the looter, the soldier is the enemy; the soldier's mind is enemy territory. The looter is in the soldier's mind, so this is 'behind enemy lines'. 'Dug in' means well defended and prepared for attack – this suggests that the memory of the looter is difficult to remove; 'dug in' is a military term, suggesting that the war/conflict is still going on for the soldier.
l	What impression does the final stanza	It leaves us with the impression that the pain will be ongoing – there seems little hope of an end as the looter is still there and now. "Bloody can suspect frustration (swearing) but the have blood on your bands, also means to

be responsible for an act of violence against someone i.e. to be guilty of something.



'bloody hands'?





For more revision of 'Remains', search for 'Remains BBC Revision'.

BIG IDEAS

- Look at the list of big ideas.
- 2. For each idea, make notes.

MINDMAP

- 1. Create a mindmap of what you know about the topic *from memory*.
- 2. Check your mindmap against the KO.
- Add 5 things that you've missed using a different colour pen.
- 4. Do something else (e.g. revise something else).
- 5. Repeat.

PICTURES

- 1. Look at just the pictures.
- 2. Explain how each of these pictures is relevant to the topic.

VOCABULARY

- 1. Cover the vocabulary and definition columns. Try to work out what the missing word is in the example. Check. Move to the next word. Repeat until you can do this with all the words you've studied so far.
- Try the same as above, but this time by looking at just the definition column.
- Try the same as above, but this time just look at the vocabulary and try to explain what the definition is.

OTHER QUESTIONS

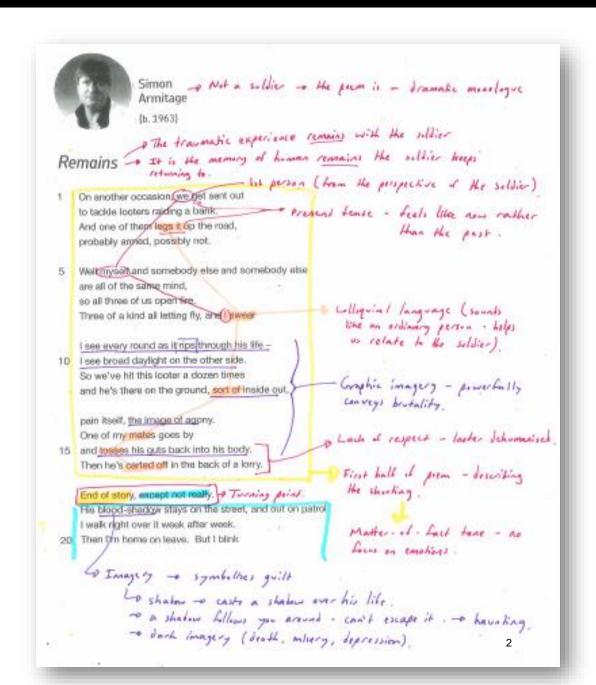
- 1. Cover the explanation.
- Answer the questions.
- Check your answers; add anything you missed; correct anything you got wrong.
- 4. Do something else (e.g. revise something else).
- 5. Return to this and repeat from the beginning.

1

LO: How do I revise (poetry) so that I don't forget what I've learnt?

You also have access to an annotated copy of the poem. This can help us to revise too:

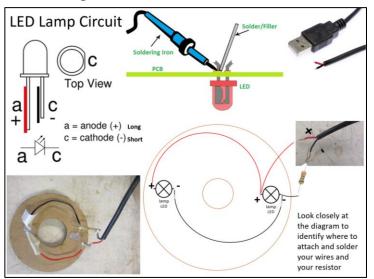
- Take a blank copy of the poem.
- 2. Annotate it with everything you can remember about the poem.
- 3. When you've finished, check it against the annotated version.
- 4. Add anything you missed using a different colour pen.
- Do something else.
- 6. Repeat with another blank copy of the poem.

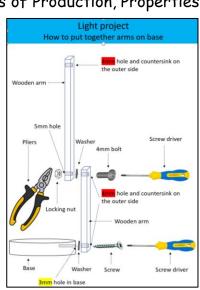


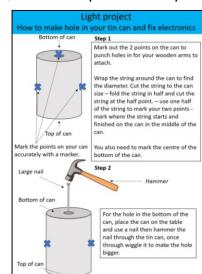
Design & Technology knowledge organiser Year 8

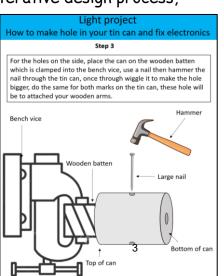
Year	Curriculum Overview	KS3 Curriculum covered	Assessment
Year YEAR 8 8-10 week rotation	You will make a USB lamp using an upcycled metal can and a range of electrical and joining components. You will work with MDF and a range of softwood/hardwoods. You will be taught how to accurately measure and mark out, to drill, sand and hand finish. You will learn about types of surface decoration,	Design: • develop and communicate design ideas using annotated mind-maps and annotated sketches, 3-D modelling, oral and digital presentations Make: • select from and use specialist tools, techniques, processes, equipment and machinery, including computer-aided design and manufacture • select from and use a range of electronic and joining components, taking into account their properties Evaluate: • test, evaluate and refine their ideas taking into account the intended users and other interested groups	Design: You will be assessed on the originality of your design idea and how effectively you are able to apply it to your lamp Make: You will be assessed on your ability to measure and mark out accurately, to cut materials and finish them skilfully Evaluate: You will complete a detailed evaluation of your final product, identifying what went well and even better if Technical Knowledge:
	materials, processes, tools & equipment. You will develop your idea following the iterative design process	Technical knowledge: • understand how more advanced electrical and electronic systems can be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs]	You will be able to assemble your circuit following step by step instructions. You will understand renewable and non-renewable energy sources

Use www.technologystudent.com to research the meaning of core Key terms: Renewable and non-renewable energy sources, sustainable design, AI, Automation and Robotics, Scales of Production, Properties of materials, CAD/CAM, the iterative design process,









Drama Knowledge 10



The Theatre Royal, Plymouth

The Theatre Royal, Plymouth, is a theatre venue in Devon. It consists of **3** different performance spaces in the same complex.

The main theatre is called the <u>Lyric</u> and has 1,315 seats. It has a <u>proscenium arch stage</u> and has a unique ability to lower the ceiling of the <u>auditorium</u> to create a more <u>intimate</u> performance space of 787 seats. The Lyric regularly hosts large-scale musicals, opera and ballet and of course the annual <u>pantomime</u>.

The <u>Drum</u> Theatre is a flexible performance space with up to 175 seats and several different layouts including <u>end on</u>, <u>traverse</u>, <u>thrust</u> and <u>in</u> the round.



The smallest performance space is the <u>Lab</u>. It is a 50 seat studio theatre used by <u>amateurs</u> and <u>professionals</u> to meet, experiment and share their creative ideas.

The theatre Royal complex is guarded by a 7 metre bronze statue called <u>'The Messenger'</u>.

The Templer Theatre

Our theatre used to be a sports hall and was converted in 2012. It has



an end on stage with 239 <u>raked</u> seats.

The seating can retract to create a large open space to use for examinations.

<u>Front of House</u> — is the part of the theatre that is open to the public. It consists of the <u>auditorium</u> (<u>seating area</u>), <u>box-office</u> (<u>ticket sales</u>), <u>foyer</u> (<u>Waiting area</u>), <u>refreshments</u>, <u>merchandise shop</u> and toilets.

<u>Theatre Programme</u> - A booklet or leaflet available to buy at a live theatre performance. It is a souvenir containing photos and information about the show.

<u>Matinee</u> — A matinee is an afternoon performance usually starting around 2pm.

<u>Green Room</u>— is the backstage waiting room for actors in a theatre. This is the room where actors and other performers wait when they are not needed onstage or in their dressing rooms. Strangely they are often **NOT** green.

<u>Interval</u> — Most plays and musicals over 90 minutes long would have an interval. Intervals are a 20 minute break to allow the audience time to go the toilet, buy food and drink and stretch their legs.

Colour Symbolism

Colour can be used in costumes, set,
props and lighting to
communicate a deeper meaning to
the audience.

Example:

LUXURY



AMBITION

DIGNITY

TRUTH

KO Year 8 Cycle 2 - Shakespeare's 'Romeo and Juliet' (Reading): Knowledge Organiser

Key Vocabulary				
	Word	Example:		
people being ranked by		In Elizabethan England all people lived within a strict social hierarchy		
character function — the purpose of a character		Juliet's character function is to challenge expectations of a patriarchal society		
character development – how a character develops (changes)		Juliet's character develops in Act 1 from innocent to conflicted		
EE ST	tragedy – a genre where things go horribly wrong for the main character(s), and there is lots of death	Shakespeare's play Romeo and Juliet is a tragedy involving two star-crossed lovers.		
Prologue - an opening to a story that establishes the context and gives background details.		Shakespeare's prologue foreshadows the tragic end for Romeo and Juliet		

Other key terms		
innocent – not having much experience of life	obedient – willing to do what you are told to do	
conflicted – confused because you have two or more feelings about something that are opposite	independent – not controlled or ruled by anyone else	

	Writer's Craft		
dramatic irony	when the audience is aware of things that the characters don't know		
imagery	the use of words to describe ideas or situations and build a picture in the mind		
simile	describing one thing as being another, using <i>like</i> or <i>as</i> : 'It's like an oven'		
metaphor	describing one thing by saying it is something else: 'This room is an oven'		
oxymoron	Where two words with opposing meanings are used next to each other.		
sonnet	a poem (typically a love poem) with 14 lines		
soliloquy A character speaking their thoughts aloud, regardless of any hearers			
foreshadowing to warn or indicate about a future event			

	Academic Writing				
hedging language – words and phrases that are used to present ideas as possible rather than certain.		Shakespeare could be presenting Juliet in this way to teach us that Other words: may, might, perhaps			
	Introduction – the first paragraph of an essay where you introduce the topic and outline your ideas to answer the essay question.	In 'Romeo and Juliet', Shakespeare explores the topic of through			

What ideas is the writer exploring?
E.g. Shakespeare presents
Romeo as conflicted.



How is the writer exploring those ideas?
E.g. Through the use of oxymorons such as ...



Why are they exploring these ideas in this way?
E.g. Links to Elizabethan era

KO Year 8 Cycle 2 - Shakespeare's 'Romeo and Juliet' (Reading): Knowledge Organiser

	Key	Context		Characters		
	Elizabethan society	England under Queen Elizabeth I (1533-1603) with very strict social rules		Romeo - son and heir of Montague and Lady Montague. A young man aged 16 years old.	Act 1	A fight breaks ou Prince Escalus de she does not fee
	Fate	The development of events outside a person's control,		Juliet - daughter of Capulet and Lady Capulet. 13 years old.	Act 2	Romeo stands at Romeo asks Fria
		usually predetermined by a supernatural power.		Friar Lawrence - a member of a		the family feud.
	Great Chain of Being	A Christian hierarchy of all things on: God at the top; kings lower, commoners		religious group within the Catholic church. Friend to both Romeo and Juliet.	Act 3	Tybalt kills Merc
		then animals lower still	The Nurse - Juliet's nurse who has cared for her since she was born.			Juliet is to marry
	patriarchal society	A type of society that is mostly ruled and controlled		carea for her since she was born.	Act 4	Juliet visits Friar escape with Ron
O		by men, in which men hold most of the power.		Lord and Lady Capulet – Juliet's mother and father. Enemy of		audience know t
9	role of women	In Shakespeare's time, women were expected to be wives, mothers and caregivers.	E Constitution	Montagues. Lord and Lady Montague – Romeo's mother and father. Enemy of Capulets.	Act 5	Romeo does not plans to fake her in the graveyard and stabs hersel
				Key Quotat	ions	

Plot Overview		
Act 1	A fight breaks out between members of the Capulet and Montague houses. Prince Escalus demands all fighting stops. Romeo is in love with Rosaline but she does not feel the same. Capulet talks with Paris about his plans to marry Juliet. By the end of the Act, Romeo and Juliet fall in love and kiss.	
Act 2	Romeo stands at Juliet's balcony and they profess their love for each other. Romeo asks Friar Lawrence to complete the marriage in an attempt to end the family feud. Romeo and Juliet are married.	
Act 3	Tybalt kills Mercutio (Romeo's friend) and Romeo kills Tybalt (Juliet's cousin' in revenge. Prince Escalus exiles Romeo from Verona. The Capulets order that Juliet is to marry Paris.	
Act 4	Act 4 Juliet visits Friar Lawrence and they plan to fake her death so that she can escape with Romeo. The Capulets discover Juliet's 'death', although the audience know this to be fake. Friar Lawrence sends a message to Romeo to tell him about their plan to fake her death.	
Act 5	Romeo does not receive the message from Friar Lawrence about Juliet's plans to fake her death. Romeo finds Juliet apparently dead, and he kills Paris in the graveyard, drinks poison and dies. Juliet awakes to find he has died, and stabs herself. The Capulets and Montagues agree to end their feud.	

Key Quotations				
"star-crossed lovers" (Prologue)	"my child is yet a stranger in the world" (Act 1, Scene 2)	"ripe to be a bride" (Act 1, Scene 2)		
"my only love sprung from my only hate" (Act 1, Scene 5)	"thy name is my enemy" (Act 2, Scene 2)	"These violent delights have violent ends" (Act 2, Scene 6)		
'O serpent heart hid with a flowering face!" (Act 3, Scene 2)	"I will not marry yet. And when I do, I swear it shall be Romeo" (Act 3, Scene 5)	"Well, Juliet, I will lie with thee tonight" (Act 5, Scene 1)		



Homework 1 https://forms.office.com/r/jgEuY4gW8R

What are macronutrients and why do we eat food?

Balanced diet definition:

This means eating a wide variety of foods in the right proportions, and consuming the right amount of food and drink to achieve and maintain a healthy body weight.

The Eatwell guide shows how eating different foods can make a healthy and balanced diet. It divides food into groups and shows how much of each food group is needed for a healthy diet.

The groups of the Eatwell Guide are:

- 1. Fruit and vegetables -
- 2. Starchy carbohydrates -
- 3. Protein -
- 4. Dairy and alternatives -
- 5. Oils and spreads -

8 tips for a healthy diet

- 1. Base your meals on higher fibre starchy carbohydrates.
- 2. Eat lots of fruit and veg.
- 3. Eat more fish, including a portion of oily fish.
- 4. Cut down on saturated fat and sugar.
- 5. Eat less salt: no more than 6g a day for adults.
- 6. Get active and be a healthy weight.
- 7. Do not get thirsty.
- 8. Do not skip breakfast.

The 3 main macronutrients needed by the body are:

- Carbohydrate = Energy
- Protein = GERM
- Fat = PIE

Questions:

- 1. What colour is each section of the Eatwell guide?
- 2. What should we cut down on eating too much of?
- 3. What do the letters GERM stand for in proteins function in the body?
- 4. What do the letter PIE stand for in fats functions in the body?



Homework 2 https://forms.office.com/r/RrceUqrV8J

Micronutrients- Vitamins

Macro vs micronutrient:

- Macronutrients are nutrients needed in large amounts in the body
- Micronutrients are nutrients that we need in the diet in smaller amounts

We need macronutrients and micronutrients in the diet. They are equally important the only thing that is different is the amount of each that we need.

VITAMINS AND THEIR FUNCTIONS

		Function (what does it do?)	Source (foods found in)
Α	•	Healthy skin Helps us see in the dark	 Animals – liver and milk Plants – carrots and red peppers
В	•	Releases energy from food	• Bread, fish, broccoli, liver, milk, peas, rice
С	•	Keeps connective tissue healthy Helps absorb iron	 Oranges, blackcurrants, broccoli, red and green peppers
D	•	Helps the body absorb calcium	Butter, eggs, milk, oily fish



Homework 3 https://forms.office.com/r/BKFV6zuUtJ

Micronutrients- Minerals

MINERALS AND THEIR FUNCTIONS

	Function (what does it do?)	Source (foods found in)
Calcium	Build strong bones and teeth	Yoghurt, cheese, milk, tofu
Sodium (salt)	 Keeps the correct water balance in the body 	 Cheese, ready meals, salted nuts, bacon
Iron	Keeps red blood cells healthy	 Dark green vegetables, beans, fish, egg yolk, red meat

Questions:

- 1. Explain the difference between a macronutrient and micronutrient?
- 2. Are macronutrients more important than micronutrients in the body?
- 3. Which vitamin helps the body absorb calcium?
- 4. Which vitamin helps the body absorb iron?



Homework 4 https://forms.office.com/r/iieHYqQhrm

Nutritional needs of different groups

Nutritional needs depend on: Gender, Age, Lifestyle, Activity level, Health condition(s),

Weight

People can be classified into:

BABIES

Special diet needs: milk for the 1st 6 months. High energy needs. No added salt or

sugar.

Need more: Food high in iron & vitamin C 6 months+

CHILDREN

Special diet needs: regular, smaller meals and snacks. High energy needs. Reduced salt

and sugar. Eatwell Guide between 2-5 years

Need more: Calcium and Vitamin D. Iron and Vitamin C

TEENAGERS

Special diet needs: Eatwell Guide. Teenagers have growth spurts and high energy

needs. Increased appetites mean larger portions.

Need more: Protein, Calcium & Vitamin D, C & Iron

ADULTS

Special diet needs: Lower energy needs. Eatwell guide. Avoid foods high in sugar and

tat.

Need more: Calcium and Vitamin D, Iron and Vitamin C

PREGNANT AND LACTATING WOMEN

Special diet needs: Healthy balanced diet. Plenty of watery drinks. Higher energy needs

for last 3 months of pregnancy

Need more: Folic acid, Protein, Calcium and Vitamin D, C & Iron

THE ELDERLY

Special diet needs: Bodies typically slow down, so less energy is needed. Don't absorb

nutrients as easily. Plenty of watery drinks **Need more:** Fibre, Calcium, Vitamin D & C, Iron

Questions:

1. Why do teenagers need extra protein in their diets?

2. Which foods should adults avoid to prevent weight gain?

3. What type of drinks are suitable for pregnant women?

4. Why do the elderly need less energy than younger adults?



Homework 5 https://forms.office.com/e/kV8DAFWxAY Allergies

Definitions:

Allergen – a substance or food that may cause an allergic reaction.

Allergic reaction – Where the body reacts suddenly and often seriously to certain foods.



In the worst cases of food allergies, some people suffer severe reactions which can stop them breathing. They will need an injection of adrenaline from an EpiPen to help them recover.

Allergy information should be clearly shown on any ingredients list by highlighting the ingredient in bold.

The 2 main types of intolerance are lactose intolerance (dairy) and coeliac disease (gluten).

- Lactose intolerance = one of the most common. People who cannot digest lactose (natural sugar found in milk and other dairy foods).
- Intolerance to gluten is known as coeliac disease. Symptoms include Diarrhoea, Bloating and Weight loss

Questions:

- 1. What is the difference between a food allergy and intolerance?
- 2. Name 5 foods that could cause a food allergy?
- 3. What can happen to somebody who accidentally eats a food that they are severely allergic to e.g., nuts?
- 4. Plan a meal for a teenager who is a Coeliac. Explain what you would substitute and for what?

Y8 French LC3 : Sentence Builder 1 : Future plans - jobs - Qu'est-ce que tu veux faire comme travail?

Opinion	Noun	Connec	Time marker	Verb phrase	Noun	Connec	Future tense	Adjective
J'aime (I like) J'adore (I love) Je n'aime pas (I don't like) Je déteste (I hate)	les sciences les langues (MFL) les maths le dessin (art) le théâtre l'anglais (English) l'EPS (PE) l'histoire (History) l'informatique (ICT) la technologie la géo	donc (so) alors (so)	à l'avenir (in the future) un jour (one day) dans le futur (in the future)	je vais devenir (I'm going to become) je vais être (I'm going to be)	militaire (soldier) journaliste (journalist) vétérinaire (vet) médecin (doctor) architecte (architect) dentiste (dentist) secrétaire (secretary) scientifique (scientist) professeur/professeure (teacher) avocat/avocate (lawyer) écrivain/écrivaine (writer) employé/employée de bureau (office worker) directeur/directrice (manager) acteur/actrice (actor/actress) animateur/animatrice (activity leader) coiffeur/coiffeuse (hairdresser) policier/policière (police officer) mécanicien/mécanicienne (mechanic) informaticien/informaticienne (IT technician)	parce que (because)	ce sera (It will be)	intéressant (interesting) fascinant (fascinating) génial (great) éducatif (educational) chouette (great)

Y8 French LC3 : Sentence Builder 2 : My ambitions - Quelles sont tes ambitions ?

Future marker	verb	infinitive phrase	noun	connective	adjective
AA a a a a a a la tata a a			les arts et la culture (arts and culture)		stimulant (stimulating)
Mon ambition (My ambition)		de travailler dans	les médias (the media)		bien payé (well paid)
Mon rêve (My dream)	est (is)	(to work in)	les sciences (science)		enrichissant
Mon but		de faire carrière dans (to have a career in)	l'hôtellerie (hotels)		(enriching)
(my goal)			l'informatique (computing)	car c'est un	créatif
			le commerce (business)	métier (because as a	intéressant
		1	le sport et les loisirs (sports and leisure)	job it's)	fatigant (tiring)
			la technologie (technology)		stressant
		iller dans ork in)	la restauration (catering)		mal payé
Je ne veux pas (I don't want)	faire	carrière dans	la médecine et la santé (medecine and health)		(badly paid)
	(to do	o a career in)			monotone (dull)
					affreux (awful)

Y8 French LC3 : Sentence Builder 3 : Next steps - Qu'est-ce que tu vas faire après avoir fini le collège?

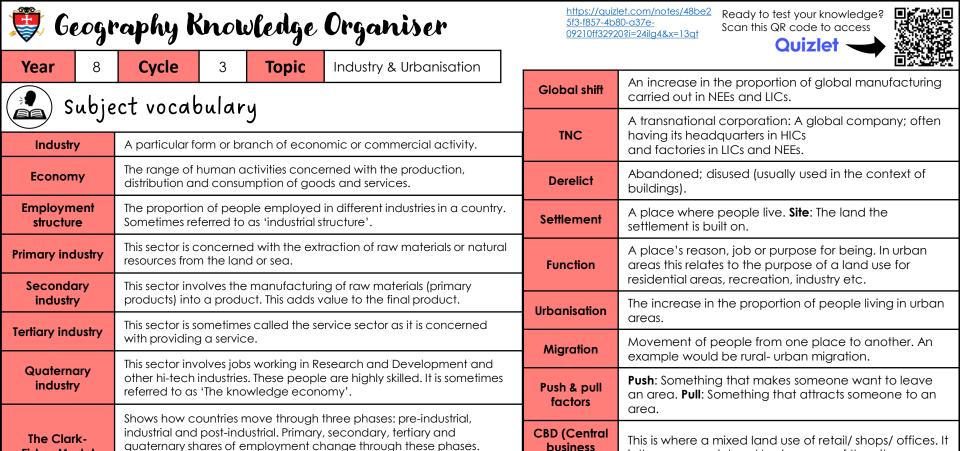
Time phrase	future tense	noun	connective	reason	extra clause
	je vais étudier	au lycée		ce sera fascinant	
	(I'm going to	(at sixth form		(it will be fascinating)	
	study)	college)			
				ce sera important pour	
		à l'université		ma carrière	
		(at university)		(it will be important for my career)	
Après avoir fini mes examens		l'anglais/les maths			
(after having finished my		(English/maths)		ce sera essentiel pour moi	
exams)				(it will be essential for me)	j' ai hâte de le faire
A l'avenir				je veux aider les gens	(I can't wait to do
(in the future)	je vais faire	un apprentissage		(I want to help people)	it)
	(I'm going to	(an	car		
Avant d 'aller à l' université	do)	apprenticeship)		je veux découvrir le	je suis très
(before going to university)				monde	impatient(e)
		du bénévolat		I want to discover the	(I'm very excited)
		(some		world)	
		volunteering)			
				je veux travailler à	
		une année		l'étranger	
Success	REMINDER:	sabbatique		(I want to work abroad)	
CUCCOS	je vais	(a gap year)			
	tu vas			je veux voyager	
	il/elle/on va	un stage en		(I want to travel)	
	nous allons	entreprise			
	vous allez	(work experience)		c'est ma passion	
				(it's my passion)	
	ils vont				
	elles vont			ça m'intéresse	
				(it interests me)	

Y8 French LC3 : Sentence Builder 4 : Celebrations : Qu'est-ce que tu fais pour célébrer ton anniversaire ?

Time marker	infinitive	present tense	verb		subordinate clause
		je reçois des cadeaux		avec	mes parents
		(I receive presents)		(with)	(my parents)
		je mange au restaurant			ma famille
		(I eat in a restaurant)			(my family)
	pour fêter	je danse			mes grandparents
	noël	(I dance)			(my grandparents)
Normalement	\ -				
(Normally)	celebrate	je mange trop de chocolat			mes amis
	Christmas)	(I eat too much chocolate)			(my friends)
D 'habitude			je fais la-fête		
(usually)	r ^ 1	je regarde un film au ciné	(I celebrate)		mon meilleur ami
Ta	pour fêter	(I watch a film at the cinema)			(my best friend - m)
Tous les ans	mon	in fair also be available.			
(every year)	anniversaire	je fais du bowling			ma meilleure amie
	(to celebrate	(I do bowling)			(my best friend - f)
	my	on va en vacances			
	birthday)	(we go on holiday)			
		on mange un grand repas			
		(we eat a big meal)	TOX IN THE STATE OF		
		on célèbre en famille			
		(we celebrate with the family)			
		on fait la fête	~777		
		(we have a party)			

Y8 French LC3 : Sentence builder 5 : Last year or next year ? Que fais-tu pour les fêtes ?

Time marker	infinitive	past tense	connective	future tense	future	superlative
L'année dernière (last year)	pour fêter noël (to celebrate Christmas) pour fêter mon anniversaire (to celebrate my birthday)	j'ai reçu des cadeaux (I received presents) j'ai mangé au restaurant (I ate in a restaurant) j'ai mangé trop de chocolat (I ate too much chocolate) j'ai regardé un film au ciné (I watched a film at the cinema) j'ai fait du bowling (I did bowling) on est allés en vacances (we went on holiday) on a mangé un grand repas (we ate a big meal) on a célébré en famille (we celebrated with the family) on a fait la fête (we had a party)	mais l'année prochaine (but next year)	je vais recevoir des cadeaux (I'm going to receive presents) je vais manger au restaurant (I'm going to eat in a restaurant) je vais manger trop de chocolat (I'm going to eat too much chocolate) je vais regarder un film au ciné (I'm going to watch a film at the cinema) je vais faire du bowling (I'm going to do bowling) on va aller en vacances (we are going to go on holiday) on va manger un grand repas (we're going to eat a big meal) on va célébrer en famille (we're going to celebrate as a family) on va faire la fête (we're going to have a party)	ce sera (it will be)	mieux (better) pire (worse)



Technology and wealth are major components causing industrial

The introduction of machines or automatic devices into a process,

The industry based on people visiting places of interest for relaxation

A collection of scientific and technical knowledge-based businesses

The preoccupation of society with the acquisition of consumer goods.

The lengthening and deepening of links between countries.

including cultivation of the soil for the growing of crops

(arable) and the rearing of animals to provide food, wool,

Fisher Model

Mechanisation

Globalisation

Agriculture

Tourism

Science park

Consumerism

change.

activity, or place.

and enjoyment.

located on one site.

The science or practice of farming.

and other products (pastoral).

business

district)

Suburbs

Rural- urban

fringe

Megacity

Informal jobs

Sauatter

settlement

is the commercial and business use of the city.

up of private, semi-detached housing.

such as golf courses and farming.

A city with over 10 million residents.

pay or pension contributions.

The suburbs are an area where people live, which is away from the centre of a town or city, typically made

The rural-urban fringe contains a mixture of land use.

Jobs that are not secure, well paid or pay any tax, sick

A run-down area of a city with substandard housing.

world. They can also be called informal settlements.

They are found in cities in LICs and NEEs all around the

shanty towns/ slums. In Brazil they are called 'Favelas'.

this includes residential areas, recreational facilities

Lesson content

1. Employment

structures and

industrial

change in the

UK

2. Primary

industries in

the UK

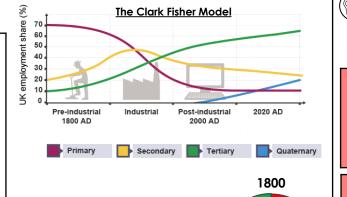
3. Modern

Industries in

the UK

economy means, followed by employment structure. We identify and give examples of employment in primary, secondary, tertiary and quaternary sectors. The Clark Fisher Model identifies increases and decreases in these sectors in line with a country's level of development. The UK is in a 'post-industrial' phase, whereby primary and secondary industries have declined and tertiary ans auaternary industries are increasing.

We start this unit by identifying what the term



part of British heritage and employment; Farmland accounts for over 70% of the UK's land area, but less than 1% of jobs in the UK, due to mechanisation. The type of farming is often dictated by the physical environment (soil, slopes, drainage, climate). We identify landscape features from OS maps that dictate the most effective type farming. Farms are also important economic systems; their inputs, outputs, processes and feedback must be delicately balances in order to make a profit, and not a loss. Manufacturing is declining in the UK, shifting to other areas in the world where

The UK hasn't got huge amounts of primary industry left, due to it often being

cheaper to import resources from other countries. Agriculture is still an important

production is cheaper. Manufacturing still exists in the UK, such as the car industry. Nissan's manufacturing plant in Sunderland helped fill a void left over from steel, textile, iron and shipbuilding industries moving abroad. With UK governmental support, a skilled workforce, good transport links and room to expand, Sunderland was a good location for Nissan's investment. Location is extremely important for any successful business; using business consultation advice, students complete a decision-making exercise to identify the perfect site for a manufacturing business.

The tertiary economy is the largest sector in the UK currently. However, considering universal access to internet, urban areas are witnessing a decline in retail (shopping) in town/city centres. This will result in job losses, but other jobs opening in other sectors. Disused primary and secondary settings are now being utilised in the 'experience economy' through tourism. This is restoring 'function' to abandoned places. The Eden Project is a good example of how a disused clay

guarry has been re-used to attract tourists and promote conservation. Due to investment in technology, medical research and IT, the quaternary sector is growing in the UK. Evidence from this growth can be seen with the increasing number of science parks developing on growth corridors. The features and benefits of the location of science parks is that they are often located near transport infrastructure, on the edges of cities (so they have room to expand) and are near colleges and universities to access the best graduates for employment. Cambridge Science Park is a good example of these features.

Key concepts

These are 'bia ideas' in Geography. They help us link different areas of the subject together through a common thread.

A sequence of actions, natural and/or cultural, that shape and change environments, places and societies. Processes are the driving forces (cogs) behind natural and human change.

The probability of an event causing harmful consequences (loss of life, injuries damage) to humans and the environment. Humans can become resilient towards risk.

1900

30%

15%

55%

74%

2022

1%

10%

2000

The process of change. This can be how humans alter their behaviour in order to become more resilient, or can refer to organisms adapting in order to suit their environment better.

Sustainability

Meeting our needs today without compromising future generations to meet their own needs. It is all about being caring and considerate of the Present and the future.

When two or more components rely on each other. Often referred to as a web of connections.

The relationship between cause and effect. Think of Causality the domino effect; how toppling one domino leads to a chain reaction of them all falling over.

4. The tertiary economy in the UK

5. The

the UK

quaternary economy in



China was stricken with poverty until China's government created an 'open door policy', which enabled foreign companies to move their production to China.

Industry shifted from primary to secondary because of global shift. This

10.

11.

12.

China: 1950 – Present day

History Knowledge organiser - Cycle 3 - Transatlantic Trade in Enslaved People Key terms Timeline of key events

1787 Thomas Clarkson launches campaign against slavery Successful fight for independence by enslaved 1804

Event

Date

1807

1833

1861-65

Thomas

Clarkson

Olaudah

Equiano

Toussaint

Louverture

Mary Prince

Key people

1560s onward

1700-1800

people in Haiti. Haiti becomes an independent country. The trade in **enslaved people** in the British empire is

banned. Slavery Abolition Act - A law that banned slavery in the British empire.

Start of British involvement in the **Transatlantic trade** in

enslaved people. Remember that slavery has existed

6 million Africans **enslaved** and taken to Americas

in many cultures throughout history.

American Civil War - The Union (Northern states) win and slavery is abolished in USA

English abolitionist who helped campaign against the slave trade in the British Empire.

Ex-slave turned abolitionist, worked closely with other anti-slavery campaigners who had





successful revolution in and free the enslaved people in Haiti, the former French colony. **Campaigner**. First woman to present an anti

Key Question: Why did slavery end?

freedom Freedom fighter who helped lead the fighters

slavery petition to parliament. She wrote a book which detailed her experiences.

1. You will come across language in sources that was commonly used at the time that is highly offensive and must not be used today. 2. The words and terms used to describe this topic often come from the people

Key Word slavery

use language that is specific and emphasises that terrible nature of slavery. **Definition** The state of being **enslaved** (not free) A person that has no freedom, is forced to work without pay and

Note: Language is **very important** in this unit for two reasons.

who enslaved people and are therefore offensive. We need to make sure we

treated with no respect. We use this term rather than 'slave' to enslaved show that they were people who had been forced into this way of person life, it was not, and is not, normal for anyone to be enslaved.

Transatlantic = across the Atlantic, i.e. between the west coast of Transatlantic slavery

Africa and the Americas. This phrase is used to describe the trade in **enslaved people** 1500s-1900. It was at its height in the 1700s America.

triangular The three part trading journey between Europe, Africa and trade The journey from Africa to the Americas on which enslaved middle people were transported in terrible conditions. passage

Huge farms, growing a single crop, that used enslaved people to plantations complete the work. Main crops = cotton, sugar, tobacco Fighting back - refusing to accept or obey. Enslaved people used resistance many forms of resistance, from actually fighting to purposely working slowly, or running away.

Enslaved people that fought for their freedom. They are often referred to as rebels, but shouldn't be as this makes what they did sound like a bad thing. Enslaved people who became freedom fighters e.g. in the British

abolished

colony Jamaica where they successfully fought for their freedom. Organised course of action to achieve a goal To formally bring something to an end. This is known as being

escaped.

Economy

Maroons

campaian

abolition

Moral Due to the campaigning of abolitionists like Equiano

away, working slowly and breaking tools

Resistance Freedom fighters fought back. There were

revolutions in places like Haiti. Individual people Equiano and Prince campaigned and wrote books. There were every day acts of resistance like running

Enslavement is used because it is a way to make money. As crops that used to be only grown in the Americas became available from Europe it was cheaper to get them from there. Freedom fighters' resistance also cost a lot of money to try and deal with

Prince and **Clarkson**, people were forced to acknowledge the terrible living and working conditions that **enslaved people** had and began to realise it was wrona.

Key terms **Key Word**

morale

patriotism

Definition

(patriotism)

a country

response to

Italy

Agreements that if one country in the alliance was attacked, the

The belief that you need to have or grow an Empire to succeed as

Alliance formed in 1882 between Germany, Austria-Hungary and

Alliance made in 1907 between Britain, France and Russia in

Propaganda is exaggerated or even false information that is

name given to the series of ditches soldiers fought and lived in on

All men aged 18-41 required to register for Military service

1960s: Britain was in the

18

How good or bad a person feels about a situation

others in the alliance would help them.

published in order to influence people.

the front line during WW1.

Love of your country and

Start of WW1, Britain joins 4th August nationalism On Christmas Day 1914, troops put down their December 1914 weapons and met in No Man's Land.

History Knowledge organiser - Cycle 3 - WW1

Britain introduces conscription alliances

Battle of Somme-over half a million casualties

January 1916 July-September

imperialism

Triple Alliance

1916 11 Nov 1918

The armistice is signed (ceasefire). The Triple Entente

propaganda

conscription Commander of British Army during WW1 trenches

Commander of the German Army during WW1

Freedom fighter who helped lead the

Toussaint successful revolution in and free the enslaved people in Haiti, the former French colony.

Key people

Field Marshal **Douglas Haig**

General Ludendorff

Timeline of key events

Event

Date

Louverture **Mary Prince** Campaigner. First woman to present an anti slavery petition to parliament. She wrote a

book which detailed her experiences.

Key Question: Why have historians changed their views about General Haig?

1920s: Britain had just won the war and people felt very patriotic. People looked on

Haig as a hero who had helped that happen. His leadership helping to win major battles like the Somme and the Hundred Days Offensive. Historians writing at this time tended to focus on the lives of 'great leaders' - the people in charge. This

meant that less importance was placed on the lives of the ordinary people whose lives were lost or affected by the tactics that Haig used to help win the war so were more likely to see him as a hero.



Y8C3 Maths Key knowledge

Item	Description
Average	The mean , median or mode . They represent the centre of
	a group of data.
Range	Represents how spread out a group of data is.
Mode	Most common value
Median	The middle value of an ordered list
Mean	sum of values ÷ number of values
Polygon	A closed flat shape with straight sides. Triangles,
	rectangles, pentagons etc. are all polygons.
Regular	The angles and side lengths of a regular polygon are equal.
Interior angle	An angle inside a polygon
Exterior angle	An angle formed outside a polygon by extending a side.
The Paragraph	
The interior	The interior angle sum for a polygon depends on the
angle sum of a	number of sides. They form the following pattern:
polygon	180° 360° 540° 720° 900°)
	180°\ 360° \ 340 \ 720 \ 900
	+180° +180° +180° +180°
The exterior	Exterior angles always add up to 360°
angle sum of a	Exterior angles always add up to 300
polygon	
Certain	Represented by a probability of 100% or 1
	Top. 333.763 by a probability of 10070 of 1
Impossible	Represented by a probability of 0% or 0

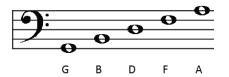
Y8 C1 - C3 End of Year KO C1 Variations & Ground Bass, C2 - Film Music, C3 - All About the Bass

BASS CLEF & BASS CLEF NOTATION

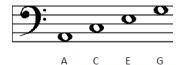
BASS CLEF is a symbol used to show **low**-pitched notes on the stave. It is used by low instruments that play the **BASS LINE**



Notes on the LINES of the BASS CLEF: G, B, D, F, A
Green Buses Drive Fast Always



Notes in the **SPACES** of the **BASS CLEF: A, C, E, G All Cows Eat Grass**



Bass Clef STAFF NOTATION:



COMMON INSTRUMENTS USED IN BLUES/JAZZ/REGGAE (BC = USES BASS CLEF)















Voice

Guitar

Drum Kit

Trumpet

Trombone (BC)

Piano (LH uses BC) Double Bass/Bass Guitar (BC)

Reggae Features & Key Words

REGGAE BASS RIFFS

Bass lines play an important role in Reggae. They help to underpin the **OFF BEAT** rhythms of the riffs used in the RH keyboard, lead guitar or vocal parts.

OFFBEAT RHYTHMS – Rhythms that emphasise or stress the WEAK BEATS OF A BAR(2 & 4)

SLOW, RELAXED ('chilled!') TEMPO

4/4 METRE/TIME SIGNATURE

Most Reggae songs are structured in **VERSE AND CHORUS/POPULAR SONG FORM**.

SIMPLE HARMONIES (2 or 3 chords)

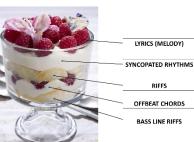
CALL AND RESPONSE – Similar to a "Question and Answer" often the call sung by the lead singer and answered by the backing singers or instruments (the response) – musical dialogue.

BRASS INSTRUMENTS and SAXOPHONES, ELECTRIC GUITARS, BASS GUITAR, KEYBOARDS, DRUMS AND PERCUSSION INSTRUMENTS.

Bob Marley – famous Reggae singer from Jamaica







MORE COMMON KEY WORDS

RIFF/OSTINATO – Short, repeated musical patterns IMPROVISATION – music created 'on the spot'

CHORD – 3 or more notes played together

TRIAD- 3 note chord (root(1), third and fifth). C = C, E, G (triad) play one, miss one, play on

REGGAE – a genre of music from Jamaica. Key features are prominent bassline, off beat chords (on beats 2 & 4). Like Blues iit has its roots in African music.

How to build a chord

ALWAYS START AT THE BOTTOM (root) & BUILD UP

The **root** of the chord is shown by the **chord name**. e.g. the **Chord C** has the root note **C** and the **chord G** has the root note G etc.

Once you know the root you can build your chord like this - Use this phrase to build from the root

Play 1, Miss 1, Play 1, Miss 1, Play1

C2 - FILM MUSIC

The Role of Music in Film

Film Music is a type of **DESCRIPTIVE MUSIC** that represents a **MOOD**, **STORY**, **SCENE** or **CHARACTER** through music, it is designed to **SUPPORT THE ACTION AND EMOTIONS OF THE FILM ON SCREEN**. Film Music can be used to:

- Create or enhance a mood (though the **ELEMENTS OF MUSIC**) ->
- Function as a **LEITMOTIF** (see below)
- To emphasise a gesture (MICKEY-MOUSING when the music mimics actions on screen e.g. cartoons Roadrunner falling off a cliff)
- Provide unexpected juxtaposition/irony (<u>using music the listener</u> <u>wouldn't expect to hear giving a sense of uneasiness or humour!</u>)
- Linking scenes providing continuity
- Influence the pace of a scene making it appear faster/slower
- Make extra income/money (released as a SOUNDTRACK) sometimes a song, usually a pop song is used as a THEME SONG for a film.
- To set the geographic location (using instruments associated with a particular country) or historical era (using music 'of the time').

Film Composer



John Williams Star Wars, Jaws Harry Potter Indiana Jones Superman, E.T.



How the Elements of Music are used in Film Music

PITCH AND MELODY – RISING MELODIES are often used for increasing tension,
FALLING MELODIES for defeat. Q&A PHRASES can represent good versus evil.

DYNAMICS – FORTE (LOUD) dynamics to represent power; PIANO (SOFT)

dynamics to represent weakness/calm/resolve. CRESCENDOS used for increasing threat, triumph or proximity and DECRESCENDOS or DIMINUENDOS used for things going away into the distance. Horro Film soundtracks often use EXTREME

DYNAMICS or SUDDEN DYNAMIC CHANGES to 'shock the listener'.

<u>HARMONY</u> – MAJOR – happy; MINOR – sad. **CONSONANT CHORDS** for "good" and **DISSONANT CHORDS** for "evil".

<u>DURATION</u> – LONG notes often used in Westerns to describe vast open spaces and in Sci-Fi soundtracks to depict outer space; **SHORT** notes often used to depict busy, chaotic or hectic scenes.

<u>PEDAL NOTES</u> – long held notes in the **BASS LINE** used to create tension and suspense.

<u>TEXTURE</u> – THIN/SPARSE textures used for bleak or lonely scenes; THICK/FULL textures used for active scenes or battles.

ARTICULATION – **LEGATO** for flowing or happy scenes, **STACCATO** for 'frozen' or 'icy' wintery scenes.

 $\underline{\text{OSTINATO}}$ - rhythms for repeated sounds e.g. horses. Repetative motifs to hold suspense.

Film Music Key Words

<u>LEITMOTIF</u> – short motif used to identify a character/object or mood.

MICKEY MOUSING – Where music mimics an action on screen

<u>DIEGETIC MUSIC</u> — Music that appears to originate from something on screen. It can be heard by the characters *e.g.* a car radio, a band in a nightclub or sound effects.

NON-DIEGETIC FILM MUSIC – Music which has been composed to accompany events on screen but which visibly is not part of the action. It can NOT be heard by the characters only by the audience – also known as UNDERSCORE.

SOUNDTRACK – The music and sound recorded on a motion-picture film. The word can also mean a commercial recording of a collection of music and songs from a film sold individually as a CD or collection for digital download.

<u>STORYBOARD</u> – A graphic organiser in the form of illustrations and images displayed in sequence to help the composer plan their soundtrack.

<u>CUESHEET</u> – A detailed listing of **MUSICAL** <u>CUES</u> matching the visual action of a film so that composers can time their music accurately.

C1 - Variations & Ground Bass

MELODY – A tune or succession of notes, varying in pitch, that have an organised and recognizable shape. Often called the main **TUNE** or **THEME** of a piece of music or song and easily remembered. **VARIATION** – Where a **THEME** is altered or changed musically, while retaining some of the primary elements, notes and structure of the original. **VARIATION FORM**

A (Theme) A1 (Variation) A2 (Variation) A3 (Variation) A4 (Variation)

Ground Bass – A sequence of bass notes played throughout a piece

Ostinato - A short repeated musical phrase

Major Tonality – sounds light and happy

Minor Tonality – sounds dark and sad

Variation – different versions of the same melody

Retrograde - played backwards

Drone - 2 notes played in the bass 5 notes apart (C & G)

Inequality

Inequality – lack of equality. The unfair situation in society when some people have more opportunities, money, etc. than others.

Rich - having a great deal of money.

Poor - lacking sufficient money to live at a standard considered comfortable in a society.

The Lotto

 Lotto - a game of chance where you or a machine select numbers and you win a prize if the numbers are picked in a random draw.

RPE Inequality Knowledge Organiser

Poverty

Poverty - the state of being extremely poor.

Absolute - the complete lack of basic personal needs, such as food, clothing, and shelter.

Relative - poverty defined in comparison to other people's standing in the economy.

Religious Quotes

Islam - "Charities shall go to the poor, the needy, to free the slaves, to those burdened by sudden expenses, in the cause of Allah."

Christianity - "It is easier for a camel to go through the eye of a needle than for a rich person to enter the Kingdom of God!"

Charity

Charity - an organization set up to provide help and raise money for those in need.

Examples of charities:

- Save the Children They run world-class programmes to save children's lives and challenge world leaders to keep to their promises to give children a brighter future.
- Comic Relief They try to tackle the root causes of poverty and social injustice through the power of entertainment.
- Oxfam They understand what people need to tackle poverty head on - seeds, tools, business training - whatever it takes.

Examples of religious charities:

- Christian Aid helps people, regardless of their religion, to improve their lives & tackle poverty & injustice.
- Muslim Aid tackles the root causes of poverty by funding long term development projects.

"Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith"

Fair Trade

Fair Trade – an organisation whose aim is to put a stop to the unfairness in the world and ensure the grower of crops receives what they rightly deserve!

Benefits of Fair Trade include:

- Regular income
- Fair pay and working conditions
- Cleaner environment
- New housing
- Improved health and sanitation
- Increased efficiency



Lesson 1 Inheritance	Lesson 2 Discovering DNA	Lesson 3 Extracting DNA
Inheritance The genetic information of all organisms is contained in the nucleus of cells, in chromosomes, made of DNA. Keywords in order of size (biggest to smallest): Cell, nucleus, chromosome, DNA, gene Chromosome One Chromosome Chromosome Gene: A section of DNA which codes for a particular		
characteristic.	together A (adenine), T (Thymine), C (cytosine) and G (guanine). A always pairs with T, C always pairs with G.	of the top layer. This is the banana DNA.

Lesson 4 The Human Genome	Lessons 5, 6 & 7 Variation				
Chromosomes:	Variation: The differences which occur between	Environmental variation:			
Chromosomes are arranged in pairs; in humans we have 46 chromosomes arranged in 23 pairs.	different species and within species. The differences are inherited through genes.	Characteristics of animal and plant species can be affected by factors such as climate, diet, accidents, culture and lifestyle.			
The Genome: The complete set of genes in an organism. The Human Genome Project	Half an organism's DNA comes from the father, half from the mother.	If you eat too much food then you will become heavier. Variation caused by the surroundings is called environmental variation. Examples include			
Scientists have sequenced the order of bases in all of the 30,000 genes of human DNA.	Each chromosome may have a different version of a gene. E.g. a gene for blue eyes, a gene for brown	your language and religion.			
The project started in 1990 and was completed in 2001.	eyes.	Continuous variation: Human height is an			
 Advantages of the project: People's genes can be analysed for any mutations which may cause disease. The gene that causes breast cancer was found. Improves understanding of how medicines work in the body. Helps us to understand evolution of organisms. Disadvantages of the project: 	Alleles: Different versions of a gene, that code for different versions of a characteristic. Identical twins are the only organisms which have identical DNA so no variation. Inherited variation: Variation in characteristics that is a result of genetic information from parents. Examples	example. It ranges from the smallest person on Earth to the tallest. Continuous variation shows characteristics that change gradually over time. Data is plotted on a line graph.			
 May lead to 'designer babies. People may be under pressure not to have children or terminate pregnancies. Could affect insurance (life, car, medical etc.) Personal information is stored on databases. 	include: •Eye colour •Hair colour •Lobed or lobe less ears •Ability to roll your tongue.	Discontinuous variation: A characteristic of any species with only a limited number of possible values. Eye colour and blood group are examples. Data is plotted on a bar graph.			

Lesson 1 Rates of Reaction - Surface Area

Surface Area: The total area of an object.

For a given mass of a solid:

large lumps have smaller surface area to volume ratios than smaller lumps or powders.

If a large lump is divided or ground into a powder:

- its total volume stays the same
- the area of exposed surface increases
- the surface area to volume ratio increases



- The area of one face of the cube will be: $2 \times 2 = 4 \text{ cm}^2$.
- The cube has six faces, so the total surface area is: $4 \text{ cm}^2 \times 6 = 24 \text{ cm}^2$.



- Each of the small cubes has a face area of: $1 \text{ cm x } 1 \text{ cm} = 1 \text{ cm}^2$.
- The six faces give a total surface area for each smaller cube of: 6cm².

There are eight cubes so the total surface area is: $6 \text{ cm}^2 \times 8 = 48 \text{cm}^2$.

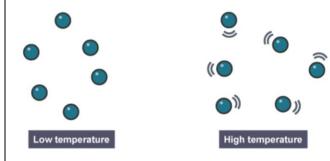
The larger the surface area the faster the rate of reaction.

Lesson 2 Rates of Reaction - Temperature

The temperature of an object can be measured using a thermometer.

At higher temperatures, particles have more energy and move more.

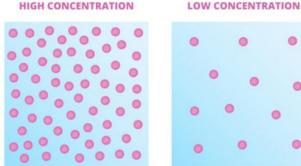
At lower temperatures, particles have less energy and move less.



The higher the temperature the faster the rate of reaction.

Lesson 3 Rates of Reaction - Concentration

The higher the concentration, the more particles of the substance are present.



A higher concentration solution can be created by dissolving more solute in a certain volume of solvent.

Or

A higher concentration solution can be created by dissolving a certain amount of solute in a smaller volume of solvent.

The higher the concentration the faster the rate of reaction.

Lesson 6 & Lesson 4 Lesson 5 **Extracting Iron with Carbon Ceramics & Polymers** Catalyst A catalyst: Iron is found as a compound within rocks. Iron is Ceramics: generally found bonded to oxygen as a called iron Materials formed from a soft substance which are increases the rate of a reaction heated to become hard and durable. oxide. does not alter the products of the reaction is not chemically changed or used up at the end of Iron is extracted using carbon in a displacement Ceramics are baked in a very hot oven called a kiln. the reaction reaction. This is because carbon is cheap and readily The temperature of kilns can reach temperatures of available. over 1300 °C. Catalysts are useful because they can allow reactions to happen at lower temperatures. The starting materials are soft and malleable, iron oxide + carbon \rightarrow iron + carbon dioxide Tailpipe meaning they can be shaped. emissions This is a type of displacement reaction. Engine The more reactive element (carbon) is displacing the These new hard ceramic materials have a fixed shape H20 emissions less reactive element (in this iron) from its compound. and cannot be bent. HC ► CO₂ Potassium CO Sodium Lithium Calcium Magnesium The exhaust systems of cars are fitted with catalytic Aluminium converters. A polymer is a very long molecule. Polymers are made Increasing Carbon These help reduce the release of toxic gases from the up of many repeating units. reactivity Zinc exhaust pipe. They contain platinum and rhodium, Iron which act as catalysts. Synthetic polymers are manufactured using chemical Hydrogen reactions that join lots of small molecules together to Copper make long molecules. Silver Enzymes are biological catalysts. Gold They occur naturally in the body and help with digestion. A chemical reaction where oxygen is removed from a compound is called reduction.

This method is called reduction with carbon.

Lesson 7 Polymers investigation

Independent Variable:

The one thing you **change** in an experiment.

Dependent Variable:

The thing you **measure** in an experiment.

Control Variable:

All of the things you **keep the same** in an experiment.

Mass is measured with a top pan balance and its units are grams (g) or kilograms (kg)



Length is measured with a ruler and its units are centimetres (cm) or meters (m)



Lesson 8 Recycling

Lots of the resources that humans use are finite.

This means their supply is limited and they will eventually run out.

Recycling is one way that we can reduce the amount of finite resources being extracted from the Earth.



Recycling an aluminium can into usable aluminium is **much simpler** and uses **less energy** (in the form of electricity) than extracting more aluminium.

Recycling is even more important for materials that are scarce.

Scarce: Not enough to go around.

Composites: Making Concrete

Composite

A material that is made from two or more different types of material

Lesson 9

The materials for a composite material are chosen because they have different properties that combine to make a more useful material.

The properties of each material in the composite are described as complementing each other.

Reinforced concrete

Reinforced concrete is a composite material. It is made by pouring concrete around a mesh of steel cables.

- strong when stretched (because of the steel)
- strong when squashed (because of the concrete)

Fibreglass

Fibreglass is made from a mesh of glass fibres set in a tough polymer.

Strong (glass fibres) Lightweight (polymer)



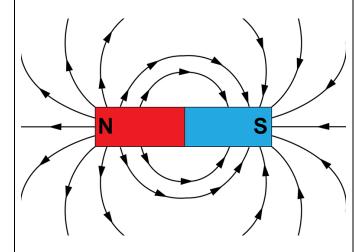
Many kayaks are made from fibreglass.

Lesson 1 Magnetic Fields

Magnetism is a non-contact force that can act at a distance

A magnetic field is the region around a magnet where a force may be felt

Every magnet has a North and South pole

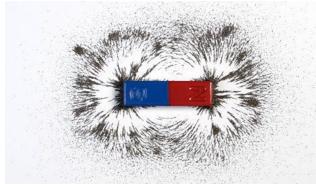


A magnetic field is shown by drawing lines showing the direction the magnetic force would act in

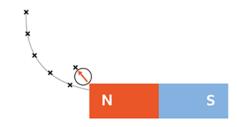
Magnetic field lines are drawn going from North to South

Lesson 2 Experimenting with Magnets

Iron filings can be used to show the shape of a magnetic field



We can also use small compasses called plotting compasses to find the direction of the magnetic field at different points around a magnet



Lesson 3 Interacting Magnets

Magnetic materials like Iron, Nickel and Cobalt are always attracted towards a magnet

A magnet may be either attracted or repelled by another magnet



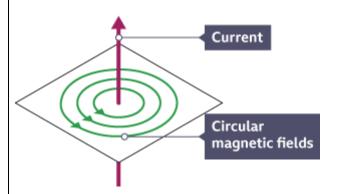
Poles of the same type (North-North or South-South) will repel

Poles of the opposite type (North-South or South-North) will attract



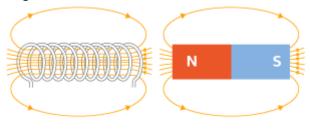
Lesson 4 Electromagnets

An electric current flowing in a wire creates a magnetic field:



The magnetic field gets weaker as you get further from the wire.

If we coil the wire up into a solenoid, the shape of the magnetic field around it is very similar to a bar magnet:



Lesson 5 & 6 Investigating the Strength of an Electromagnet

Hypothesis:

An idea that can be tested by experiment

Independent Variable:

The one thing you **change** in an experiment.

Dependent Variable:

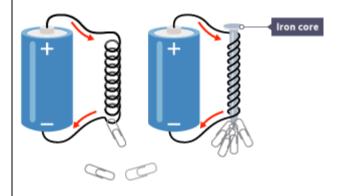
The thing you **measure** in an experiment.

Control Variable:

All of the things you **keep the same** in an experiment.

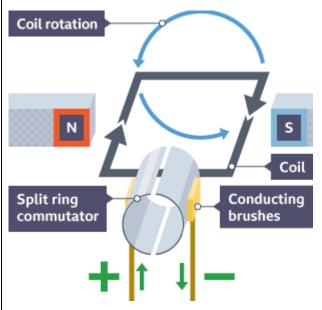
3 main factors affect the strength of an electromagnet:

- The number of turns of wire
- The size of the current
- Adding an iron core



Lesson 7 The Motor Effect

If a current carrying wire is in a magnetic field, it experiences a force. This is called the **motor effect**.



We can use this effect to make an electric motor:

- The current flows in the coil giving it a magnetic field
- The magnetic field of the coil interacts with the magnetic field of the permanent magnet
- This causes the coil to feel a force and rotate
- The rotation is the output of the electric motor

Lesson 8 Lesson 9 Lesson 10 **Uses of Electromagnets** The Earth's Magnetic Field **Making a Magnetic Compass** The motor effect is used in speakers and headphones A magnetised needle that is free to move will follow The Earth has a magnetic field caused by the to generate movement and sound waves from movement of liquid iron in its core the lines of the Earth's magnetic field electrical current We can make a compass by floating a magnetised Paper cone needle on a piece of cork so it is free to move The compass will align along a line from North to Coil of wire South magnet Even with GPS, magnetic compasses are still used today for navigation by ships and planes Leads to In a microphone, the soundwaves move a magnet in a coil of wire inducing a current The Earth's magnetic field causes the aurorae and protects us from the charged particles from the Sun that cause them Without the Earth's magnetic field, we wouldn't have an atmosphere

Year 8 Spanish Learning Cycle 3 Sentence Builder 1: ordering food in a café ¿Cuánto cuesta una pizza por favor? – How much does a pizza cost please?

Verb	Article	Noun	Manners	Question	Answer	Manners
quisiera = I	un = a	bocadillo de queso = cheese sandwich	por favor =	¿Cuánto	Cuestaeuros	gracias =
would like	el = the	bocadillo de jamón = ham sandwich	please	cuesta?	=	thank you
tomo= I take		refresco = fizzy drink		=	it costs euros	
		zumo de naranja = orange juice		How much		
		zumo de manzana = apple juice		is it?		
		plátano = banana				
		pastel = cake				
		helado de chocolate = chocolate icecream				
		helado de fresa = strawberry icecream				
	una = a	hamburguesa = hamburger				
	la = the	pizza = pizza				
		ensalada = salad				
		sopa de tomate = tomato soup				
		paella = paella				
	unos =	caramelos = sweets		¿Cuánto	Cuestan euros	
	some			cuestan?	=	
	los =			=	they cost euros	
	the			How much		
	unas =	patatas fritas = chips		are they?		
	some	tapas = tapas				
	las =	cafe				
	the	(Calle)				
		~-				
I						
I						

Year 8 Spanish Learning Cycle 3 Sentence Builder 2: Describing Healthy and Unhealthy Diets ¿Por qué comes este? – Why do you eat this?

Time Phrase	Verb	Demonstrative	Noun	Con	Verb	Adjective
Normalmente = normally	como = I eat bebo = I drink evito = I avoid		fruta = fruit verdura = veg pescado = fish			
Ayer = yesterday	comí = I ate bebí = I drank evité = I avoided		carne = meat hidratos de carbono = carbs			san@ = healthy malsan@ =
En el futuro =	voy a comer = I am going to eat voy a beber =	este/esta/estos/estas = this (thing/stuff) ese/esa/esos/esas = that (thing/stuff)	carne roja = red meat comida basura = junk food comida rápida = fast food postres = puddings patatas fritas = chips	porque = because	(no) es= it is(n't) (n) son = they are(n't)	unhealthy delicio@ = delicious sabros@ =
In the future	I am going to drink voy a evitar = I am going to avoid		refrescos = fizzy drinks caramelos = sweets grasa = fat azúcar =sugar sal = salt vitaminas = vitamins			tasty



Year 8 Spanish Learning Cycle 3 Sentence Builder 3:

¿Con qué frecuencia lo comes? – How often do you eat it?

Direct Object Pronoun	Verb	Time Phrase	Connective	Indirect Object Pronoun	Verb
lo = it (masc sing) la = it (fem sing) los = them (masc pl) las = them (fem pl)	como = I eat bebo = I drink tomo = I take evito = I avoid comí = I ate bebí = I drank tomé = I took evité = I avoided voy a comer = I am going to eat voy a beber = I am going to drink voy a tomar = I am going to take voy a evitar = I am going to avoid	todos los días = every day cada día = each day dos veces a la semana = two times a week tres veces al mes = three times a month a menudo = often a veces = sometimes de vez en cuando = now and again casi nunca = almost never nunca = never normalmente = normally ayer = yesterday en el futuro = in the future	porque = because	me = (to/for) me te = (to/for) you (s) le = (to/for) him nos = (to/for) us os= (to/for) you (pl) les = (to/for) them	ayuda = he/she/it helps daña = he/she/it damages



Year 8 Spanish Learning Cycle 3 Sentence Builder 4:

¿Cómo es tu rutina diaria? – What is your daily routine like?

Time Phrase	Verb	Time Phrase	Verb	Time Phrase
Todos los días = every day Normalmente = normally	me despierto = I wake myself up me levanto = I get myself up me ducho = I shower myself me visto = I dress myself me lavo = I wash myself me acuesto = I put myself to bed desayuno = I breakfast ceno = I dine		Despertarse = to wake self Levantarse = to get self up Ducharse = to shower self Vestirse = to dress self Lavarse = to wash self	luego = then más tarde = later a la una = at one o'clock a las dos = a two o'clock a las tres = at three o'clock
Ayer = Yesterday	me desperté = I woke myself up me levanté = I got myself up me duché = I showered myself me vestí = I got myself dressed me lavé = I washed myself me acosté = I put myself to bed desayuné = I had breakfast cené = I had dinner	Antes de = Before Después de = After	Acostarse = to put self to bed Desayunar = to breakfast Cenar = to dine	a las cuatro = at four o'clock a las cinco = at five o'clock a las seis = at six o'clock a las siete = at seven o'clock a las ocho = at eight o'clock a las nueve = at nine o'clock a las diez = at ten o'clock a las once = at eleven o'clock a mediodía = at midday a medianoche = at midnight
Mañana = Tomorrow En el futuro = In the future	voy a despertarme = I am going to wake myself up voy a levantarme = I am going to get myself up voy a ducharme = I am going to shower myself voy a vestirme = I am going to dress myself voy a lavarme = I am going to wash myself voy a acostarme = I am going to put myself to bed voy a desayunar = I am going to breakfast voy a cenar = I am going to dine			

Year 8 Spanish Learning Cycle 3 Sentence Builder 5: ¿Cuáles deportes haces? – What sports do you do?

Time Phrase	Verb	Noun	Location	People
todos los días =	juego = I play	al fútbol = at football	en el instituto =	con mis amigos =
every day		al tenis = at tennis	in the school	with my friends
cada día = each day	jugué = I played	al golf = at golf		
dos veces a la semana =		al béisbol = at baseball	en el parque =	con mi equipo =
two times a week	voy a jugar =	al b al oncesto = at basketball	in the park	with my team
tres veces al mes =	I am going to play	al rugby = at rugby		
three times a month		al críquet = at cricket	en la playa =	con mi escuela =
a menudo = often		al voleibol = at volleyball	on the beach	with my school
a veces = sometimes	hago = I do	deporte = sport		
de vez en cuando =		natación = swimming	en la piscina =	con mi familia =
now and again	hice = I did	equitación = horse-riding	in the swimming pool	with my family
casi nunca = almost never		surf = surfing		
nunca = never	voy a hacer =	ciclismo = cycling	en la pista de patinaje =	
	I am going to do	esquí = skiing	in the skatepark	
normalmente = normally		escalada = climbing	^	
		senderismo = hiking	en el polideportivo =	
ayer = yesterday		atletismo = athletics	in the sports centre	
		boxeo = boxing	·	
mañana = tomorrow		buceo = diving		
en el futuro =		remo = rowing		
in the future		skate = skateboarding		
		patinaje (sobre hielo)	The state of the s	<u> </u>
		= (ice) skating	1)	
		artes marciales =		
		martial arts		

			and the same of th	ment of the same
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