



KINGS'  
SCHOOL • WINCHESTER

KNOWLEDGE ORGANISER 2022-23  
YEAR 9 | AUTUMN TERM

NAME:

TUTOR:







# KINGS'

## SCHOOL • WINCHESTER

### HOW TO USE YOUR KNOWLEDGE ORGANISER

You are given a Knowledge Organiser at the beginning of the term. You are responsible for it and need to take care of it. Please do not lose it, or doodle on it. We will ask you to replace any lost/defaced Knowledge Organisers, as they are a tool that you and your teachers will use in lessons and for homework.

Your teachers have created Knowledge Organisers to support each unit of learning across Key Stage 3. These are then compiled into a booklet for you. Knowledge Organisers are a simple tool that provides the foundational knowledge required for each particular unit across each subject. These are called your **Knowledge Base**. They are not the whole curriculum – you will be taught much more than this, but they do outline the basic knowledge that every pupil should know.

Your teachers will tell you how often you will need to learn from your knowledge organiser when it is set as homework. Working with a knowledge organiser every day helps to establish routines in home learning, developing a confident use of vocabulary and independent study skills. You will be tested on the information that you have learned from the knowledge organisers in your lessons. There are many effective ways of learning from a Knowledge Organiser. One way that your teachers may use is called: Look, Cover, Write, Check. Please do not be tempted to just copy from the Knowledge Organiser – studies have shown that this is not effective.

Subjects have also added other information for you – this is indicated in a section called a **Knowledge Builder**. This may be extension tasks, or further study that may interest you.

Please see these videos for more information on what Knowledge Organisers are, and how to use them:



Full Video



Look, Cover, Write, Check

### CONTENTS

4	Art
6	Computing
9	Drama
10	English
13	Food Technology
16	French
19	Geography
21	German
23	History
26	Italian
29	Latin
32	Mathematics
34	Music
37	PSHEE
38	Religious Studies
41	Science
51	Spanish
54	Technology





### 1. Pen drawing

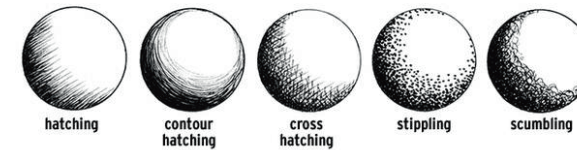
1.1	hatching	Closely spaced parallel lines used to create tone.
1.2	cross hatching	Layers of hatching at right-angles to create a mesh-like pattern to show tone.
1.3	stippling	A technique of using dots to describe tone.
1.4	scumbling/scribbling	Random lines or marks to create tone.
1.5	tone	How light or dark something is.
1.6	gradation	A visual technique of gradually transitioning from one shade to another.
1.7	contour hatching	Shading that follow the contour of the shape.

### 2. Lettering

2.1	typography	Arranging letters using different fonts, sizes, and spacing to make the words clear, and visually appealing.
2.2	guidelines	A series of lines to help with the scale, placing and accuracy when drawing.
2.3	spacing	Distance between parts of the drawing.
2.4	sketching	A rough drawing to help plan a piece of artwork.
2.5	accuracy	Being true and correct, free from mistakes and error.
2.6	scale	The relative size of one object compared to another.
2.7	detail	A small or individual element of a piece of work.

### 3. Colour pencil

3.1	blending	A gradual transition between a colour or tone.
3.2	layering	The process of building up layers of colour or tone.
3.3	burnishing	Repeated layers of colour or tone so no paper grain can be seen, often done in a circular movement to avoid pencil lines.
3.4	analogous colours	Colours that are next to each other on the colour wheel and that blend well together.

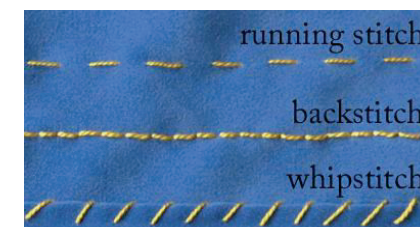


### 4. Felt food construction

4.1	design	The plan of what you intend to create.
4.2	template	A shape used to draw around, so pieces are cut correctly.
4.3	felt	A non-woven fabric with fibres that have been matted together.
4.4	wadding	A soft substance that is used for padding or stuffing.
4.5	aplique	A technique where pieces of material are joined on to another piece of material.

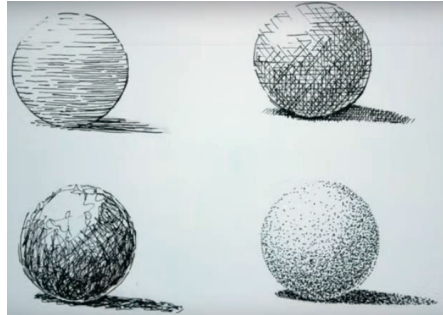
### 5. Stitching

5.1	thread	Used to sew fabric together.
5.2	needle	A small slender piece of metal with an eye that is used for sewing.
5.4	running stitch	The simplest stitch, even stitches which have a gap between that run across the cloth without overlapping.
5.5	back stitch	Stitches in a line with no gaps.
5.6	whip stitch	A stitch that goes over the edge of one piece of fabric to join it to another piece of fabric.
5.9	casting off	A neat way to seal off the stitches so that they do not unravel.

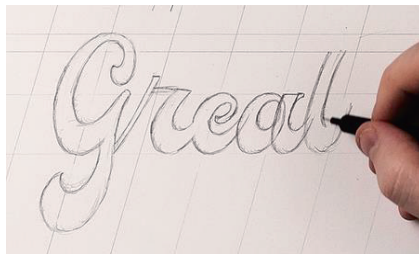




Watch how to create spheres with different pen drawing techniques.



Guidelines are used so the sizing, placing and angles of the letters are correct. Watch how they are used.



Watch to see how Marchello Barenghi creates this incredible hyper realistic drawing of a bag of M&M's.



Learn how to sew further embroidery stitches by watching these links.

Blanket stitch



French knot



Watch the amazing British artist Lucy Sparrow who created the whole contents of a newsagent out of felt.



Extension tasks



Keep a food diary for a day by drawing a section of each thing you eat.



Draw a selection of food items from a cupboard to create an image like this illustration.



### 1. Vector image file types

1.1	.EPS (vector)	Most common vector type standard for sharing in print publishing industry.
1.2	.SVG (vector)	Scalable without image quality reduction international standard for vector graphics.
1.3	.PDF (vector)	Widely supported by many devices. Free to view and small file size.
1.4	.DXF	Standard format used for Computer Aided Design (CAD).

### 2. bitmap (raster) image file types

2.1	.JPG (bitmap)	Compress well, so creates smaller files sizes. Reproduces millions of colours.
2.2	.TIFF (bitmap)	Lossless file format. Reproduces millions of colours.
2.3	.GIF (bitmap)	Lossless file format. Enables animations.
2.4	.PNG (bitmap)	Lossless file format. Excellent transparency in images.
2.5	.BMP (bitmap)	Works in many devices. Lossless file format.



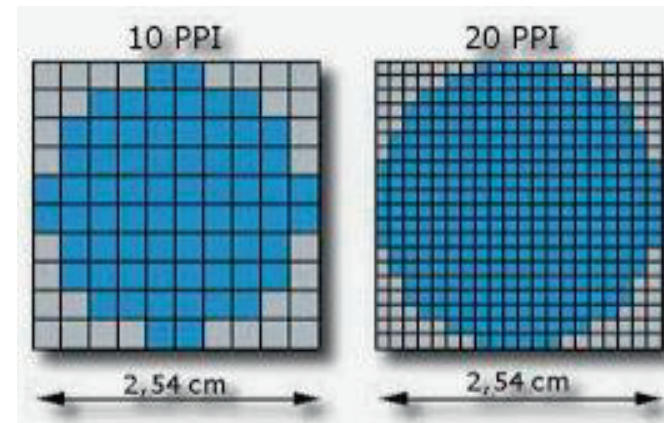
Images are represented pixels (Picture Elements).

TV's and monitors produce pixel colours using Red, Green and Blue light (RGB)

All screen colours can be produced just from RGB.

### 3. File size compression

3.1	lossy compression	<ul style="list-style-type: none"> <li>Data is removed from the file to reduce the size of the file.</li> <li>The process cannot be reversed.</li> <li>Increased compression introduces a greater reduction of image quality.</li> <li>Ideal for communication over the internet and viewing on small screens.</li> </ul>
3.2	lossless compression	<ul style="list-style-type: none"> <li>All original image quality is retained, hence no loss.</li> <li>Slight decrease in file size.</li> <li>Ideal for achieving images to retain original quality.</li> <li>Used for large images, such as posters and billboards.</li> </ul>



#### What is Pixel Density?

Pixel density is calculation that returns the number of physical pixels per inch on a screen.

### 4. Key Words

5.1	layers	Layers are used in digital image editing to separate different elements of an image. Layers can be moved above and below each other to aid image composition.
5.2	gradient	An image gradient is a directional change in the intensity or colour in an image.
5.3	pixelated	In computer graphics and digital photography, to cause (an image) to break up into pixels.



### 1. Key Words

1.1	Algorithm	An algorithm is a set of instructions or rules that need to be followed in order to perform calculations or to solve a problem.
1.2	syntax error	A syntax error is a mistake in your Python program that prevents it from running (executing). Syntax errors are like spelling and grammar errors.
1.3	variable	A variable is a name given to an item of data so that the data can be stored in memory while your Python program is running.
1.4	program	Code compiled together to perform a specific function.

### 2. Printing

2.1	<p>To print out a statement or a variable we use the code below:</p> <p><b>Printing a new message:</b>  <code>print("Hello World")</code></p> <p><b>Printing the value of a variable:</b>  <code>print(x)</code></p> <p><b>Printing a message with variables included:</b>  <code>print("Hello", name, "your are", age, "years old today")</code></p>	
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### 3. Variables

3.1	<p>Variables are simply a place on the computer's memory that is given a name in order for it to remember it.</p> <p>In Python you create a variable by writing the name of the variable followed by an =</p>	
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### 4. Data Types

4.1	String	A Variable data type that can store a combination of letters, characters and numbers.
4.2	integer	A Variable data type that can store whole numbers.
4.3	float	A Variable data type that can store decimal numbers.
4.4	boolean	A Variable data type that stores either TRUE or FALSE.

### 5. Selection

5.1	selection	Is used to allow the program to make a choice and take a different path.
5.2	if	Checks if the condition is true, if so the program runs the indented code below it.
5.3	elif	If the first if fails then this elif condition is checked, there can be multiple of these.
5.4	else	If all if and elif statements are not true the code indented below else will run.

### 6. Iteration

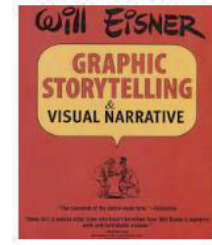
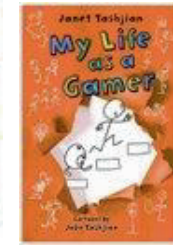
7.1	iteration	Is used to repeat a set of instructions or commands in a program. It saves having to write them all out over and over again.
7.2	while	Checks if a condition is true and while it is true will keep repeating it.
7.3	for	Runs for a specific amount of times and stops when it reaches the desired number.

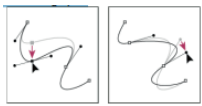


Careers in  
Graphic DesignArticle – The Ethics of  
Digital ManipulationBeginners guide to  
digital art.

Graphic Software	Cost
GIMP - Online	Free
Photoshop	£238 approx.
Procreate App	£10 approx.

Books in the library



Stretch your vocabulary - Graphics		
a.1	composition	The deliberate positioning of elements within an image.
a.2	balance & proportions	Consideration is given to the size and positioning of elements in relation to each other.
a.3	Colour balance	Adjustment of the intensities of the colours (typically red, green, and blue primary colours).
a.4	path	Vector graphics are comprised of paths, which are defined by a start and end point, along with other points, curves, and angles along the way.
a.5	filter (FX)	In Photoshop and other graphic applications, a filter is a particular effect that can be applied to an image or part of an image. Examples include: Glow, Emboss, Glass effect.
a.6	point	Moving the anchor point or the direction point, will change Creating Digital Images the shape of the vector graphic 

Stretch your vocabulary – Python		
a.1	logic error	Occurs when there is a fault in the logic or structure of the problem.
a.2	runtime error	Occurs when a program is syntactically correct but contains an issue that is only detected during program execution.
a.3	For loop	A Python 'for loop' is a special loop that will count from a starting number to an end number.
a.4	parameter	Refers to the data given to a function when we use it. We don't have to provide data to a function, but we often do this so that a function can perform some specific task of calculation with the data we have given it.

Careers in  
Programming

Tynker



Code Academy


BBC Bitesize  
Python



1. PERFORM VERY SUCCESSFULLY			
Physical	1.1	gesture	A defined movement which clearly communicates meaning.
	1.2	eye contact	When two people look directly into one another's eyes, or at a fixed position.
	1.3	body language	Communication by movement or position, expressions, gestures and proxemics.
Vocal	1.4	expression	Conveys an emotion that tells us about the character and the way they react to the situation.
	1.5	tone	How hard or soft an actor's voice is when delivering lines to convey meaning.
	1.6	pause	The use of silence to create dramatic effect.
Space	1.7	physical contact	To break through the personal space of another character to communicate meaning.
	1.8	proxemics	The use of space/distance between characters on stage used to represent the relationship between them.
	1.9	speed	the quality and pace of an actor's movement.

2. UNIT KEY VOCABULARY			
1.10	T2	non-naturalistic	A performance style that is not dependent on the life-like representation of everyday life.
1.11	T2	climax	A decisive moment or turning point in the structure of a performance.
1.12	T2	tension	A sense of anticipation or conflict.
1.13	T3	Brecht	A German theatre practitioner, playwright, and poet.
1.14	T3	Episodic structure	involves a large number of different characters and locations, covers a lengthy period of time.

3. DRAMA KEY VOCABULARY			
1.15	T2	narration	Providing the audience with background information or commentary on the action of the play.
1.16	T2	still image	a frozen picture which communicates meaning.
1.17	T2	slow motion	to reduce the speed at which a drama is enacted.
1.18	T3	vocal collage	Is the use of layered speech to create atmosphere.
1.19	T3	thought track	Is a character speaking aloud their inner thoughts through direct address.
1.20	T3	multi-role	When an actor plays more than one role on stage.

4. UNIT CONTEXT					
1.21	Bertolt Brecht  1898-1956		1.22	Epic theatre	Drama that avoids illusion and interrupts the story with direct address
			1.23	distancing	To prevent the audience from losing themselves completely in the narrative
			1.24	Breaking the 4th wall	To refer to, acknowledge or address the audience
			1.25	Political theatre	A style used to comment on the issues, trends, practices, and opinions of politics



Poets		Poems
1.1	Limbo	Edward Kamau Brathwaite: A Caribbean poet and scholar.
1.2	Nothing's Changed	Tatamkhulu Afrika: Ismail Joubert, commonly known as Tatamkhulu Afrika, which is Xhosa for Grandfather Africa, was a South African poet and writer
1.3	Island Man	Grace Nichols: A Guyanese poet who moved to Britain in 1977, before which she worked as a teacher and journalist
1.4	Blessing	Imtiaz Dharker: A Pakistan-born British poet, artist, and video film maker.
1.5	Two Scavengers in a Truck	Lawrence Ferlinghetti: An American poet, painter, social activist
1.6	Night of the Scorpion	Nissim Ezekiel: An Indian Jewish poet, actor, playwright, editor and art critic.
1.7	Vultures	Chinua Achebe: A Nigerian novelist, poet, and critic
1.8	Half-Caste	John Agard: An Afro-Guyanese playwright, poet and children's writer, now living in Britain

Vocabulary		
2.1	paraffin	A colourless, flammable, oily liquid similarly obtained and used as fuel
2.2	comparison	A consideration or estimate of the similarities or dissimilarities between two things or people
2.3	incantation	A series of words said as a magic spell or charm.
2.4	purify	To remove contamination/clean
2.5	gulf	A deep inlet of the sea almost surrounded by land, with a narrow mouth.
2.6	scavenger	An animal that feeds on carrion, dead plant material, or refuse.
2.7	incipient	New/beginning to develop
2.8	gargoyle	A grotesque carved human or animal face or figure projecting from the gutter of a building

Techniques		
3.3	caesura	a pause in a line that is formed by the rhythms of natural speech rather than meter.
3.4	metaphor	Describing/comparing something to something else
3.5	simile	Describing something as/like something else
3.6	assonance	Rhyme/Repetition of stressed vowel sounds
3.7	onomatopoeia	Words that sound as they are spelt
3.8	juxtaposition	The contrast of two or more ideas across a text.

Context		
4.1	slave ships	Ships used during Trans-Atlantic slave trade.
4.2	Apartheid	Policy or system of segregation or discrimination on grounds of race.
4.3	District Six	A former inner-city residential area in Cape Town, South Africa.
4.4	Caribbean	The Caribbean is a region of the Americas that consists of the Caribbean Sea, its islands and the surrounding coasts.
4.5	India	A country in South Asia. It is the seventh-largest country by area, the second-most populous country.
4.6	San Francisco	A city in the State of California in the United States of America.

Extra		
5.1	Picasso	Pablo Picasso was Spanish and known as the most dominant and influential artist of the 1st half of the 20th century.
5.2	Haute Cuisine	A French term that literally translates as "high cooking." It is characterised by the meticulous preparation and careful presentation of food at a high price
5.4	Quasimodo	A fictional character from the novel The Hunchback of Notre-Dame by Victor Hugo. He was born with a hunchback and feared by the townspeople as a sort of monster,
5.5	Port Jackson Trees	A common evergreen shrub or small tree.
5.7	bunny chow	A fast food dish consisting of a hollowed-out loaf of white bread filled with curry





Authors and texts studied:		
1.1	Charles Dickens	(1812-1870) Born in Portsmouth and lived in London. His father went to prison when he was 10 and had to work in a shoe blacking factory which inspired a lot of his work.
1.2	George Eliot	(1819-1880) Born in Warwickshire but moved to Coventry in later life. Wrote under a pseudonym as her real name was Mary Ann Evans.
1.3	Thomas Hardy	(1840-1928). Born and lived in Dorset. Many of his books are set along the south west coast under the fictional title 'Wessex'.
1.4	Jane Austen	(1775-1819) Born in Basingstoke and lived in Alton and Winchester. Wrote romantic fiction about the gentry (well born families) and incorporated realism into her work.
1.5	Charlotte Bronte	(1816-1855) Born and lived in Yorkshire. Wrote under the pseudonym Currer Bell.
1.6	Emily Bronte	(1818-1848) Born and lived in Yorkshire. Wrote under the pseudonym Ellis Bell.
1.7	Robert Louis Stephenson	(1850-1894) Born and lived in Edinburgh until later life when he moved to Samoa.

Techniques		
3.1	metaphor	A comparison between two unlike things e.g. the room is an oven.
3.2	simile	A comparison between two dissimilar things using like or as e.g. the room is like an oven.
3.3	sibilance	The repetition of soft consonants (s, sh, f,) in order to create hissing-like sounds e.g. sizzling sausages.
3.4	anaphora	The repetition of a word or words at the beginning of successive sentences. e.g. it was the best of times. It was the worst of times.
3.5	personification	Giving inanimate objects humanistic qualities e.g. the cake called my name.

Themes		
5.1	motherless children	Between 1 and 5 children died before their 5 <sup>th</sup> birthday. 50% of deaths were due to infection.
5.2	women	Until the 1882 Marriage Property Act, upon marriage, everything a woman owned would be passed to her husband, including their children.
5.3	education	Children of wealthy families tended to be educated at home by a governess.
5.4	The 1834 Poor Laws	The Poor Law ensured that the poor were housed in workhouses, clothed and fed.

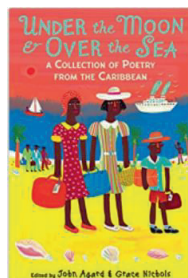
Context		
4.1	Industrial Revolution	A rapid major change in an economy marked by the general introduction of power-driven machinery or by an important change in the usual types and methods of use of such machines.
4.2	The Workhouses	Workhouses were where poor people who had no job or home lived. They earned their keep by doing jobs in the workhouse. Also in the workhouses were orphaned (children without parents) and abandoned children, the physically and mentally sick, the disabled, the elderly and unmarried mothers.
4.3	Darwin's Theory of Evolution	Charles Darwin was a British naturalist who proposed the theory of biological evolution by natural selection. Darwin defined evolution as "descent with modification," the idea that species change over time, give rise to new species, and share a common ancestor.
4.4	Penny Dreadful Shilling Shocker	a short novel that is characterised by sensational incidents and shocking writing a novel of crime or violence especially popular in late Victorian England and costing originally one shilling
4.5	Jack The Ripper	Jack the Ripper was an English serial killer. Between August and November 1888, he murdered at least five women—all prostitutes—in or near the Whitechapel district of London's East End. Jack the Ripper was never identified or arrested



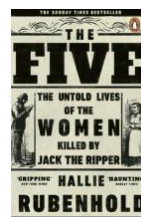
Learn about Nelson Mandela



Books to read:



Books to read:



Films need to watch



Victorian Workhouses



Learn about life on Slave Ships



Films to watch::



Further Research:

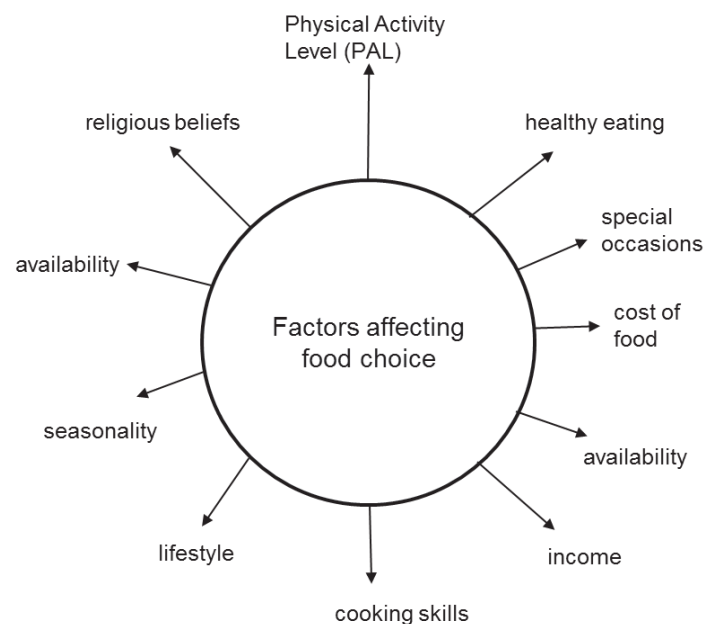
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[https://www.bbc.co.uk/history/historic\\_figures/eliot\\_george.shtml](https://www.bbc.co.uk/history/historic_figures/eliot_george.shtml)
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[https://kids.kiddle.co/Jane Austen](https://kids.kiddle.co/Jane_Austen)
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[https://kids.kiddle.co/Emily Brontë](https://kids.kiddle.co/Emily_Bront%C3%AB)
[https://kids.kiddle.co/Robert Louis Stevenson](https://kids.kiddle.co/Robert_Louis_Stevenson)

Vocabulary		
1	amiable	Having or displaying a friendly and pleasant manner.
2	brash	Self-assertive in a rude, noisy, or overbearing way.
3	coifed	To arrange (hair) by brushing
4	hybrid	The offspring of two plants or animals of different species or varieties
5	Municipal	Relating to a town or district or its governing body.
6	bounteous	Generously given or giving
7	encapsulated	Express the essential features of (something)
8	remnant	A part or quantity that is left after the greater part has been used, removed, or destroyed

Vocabulary		
9	pseudonym (noun.)	A fictitious name, often used by a writer
10	wretched (adj.)	very unfortunate in condition or circumstances; miserable; pitiable.
11	destitute (adj.)	without means of subsistence; to be deprived of food, clothing, and shelter.
12	countenance (noun)	appearance, especially the look or expression of the face.
13	benevolent (adj.)	Expressing goodwill or kindly feelings
14	degrade (verb)	To reduce someone to a lower rank, especially as a punishment.
15	gruel (noun)	A thin liquid food of oatmeal or other meal boiled in water.
16	sullen (adj.)	Bad tempered and sulky
17	lamentable (adj.)	Regrettable or unfortunate
18	remonstrate (verb)	Complaint or criticism



### 1. Factors affecting food choice



### 2. Religion and food choice

Religion	Pork	Beef	Lamb	Chicken	Fish
Islam	×	Halal only	Halal only	Halal only	✓
Hinduism	×	×	✓	✓	✓
Judaism	×	Kosher only	Kosher only	Kosher only	✓
Sikhism	×	×	✓	✓	✓
Buddhism (strict)	×	×	×	×	×
Seventh-day Adventist Church	×	×	×	×	×
Rastafari Movement	×	×	×	×	×

### 3. Where food comes from

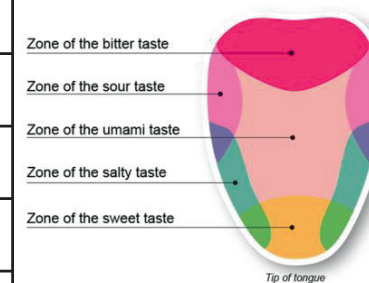
2.1	food provenance	Where foods have been grown, reared or caught.
2.2	intensive farming	Farming that produces a high yield.
2.3	organic farming	Natural farming method that uses natural pesticides and fertilisers. Chemicals are avoided.
2.4	free-range farming	A natural farming methods where animals have freedom to roam.

### 4. Sustainable diets

3.1	food seasonality	The season when foods are harvesting in.
3.2	food miles	The distance that foods have travelled from their origin to your plate.
3.3	vegetarian diet	A diet that excludes meat or fish.
3.4	vegan diet	A diet that excludes meat, fish and all animal products.
3.5	pescetarian diet	A diet that excludes meat, but includes fish.

### 5. Taste testing

5.1	sweet	sweets, honey, golden syrup
5.2	salty	crisps, anchovies, bacon
5.3	bitter	coffee, cocoa powder, green tea
5.4	sour	citrus fruit, rhubarb, gooseberries
5.5	umami	meat, gravy, mushrooms





### 6. Essential components of food packaging

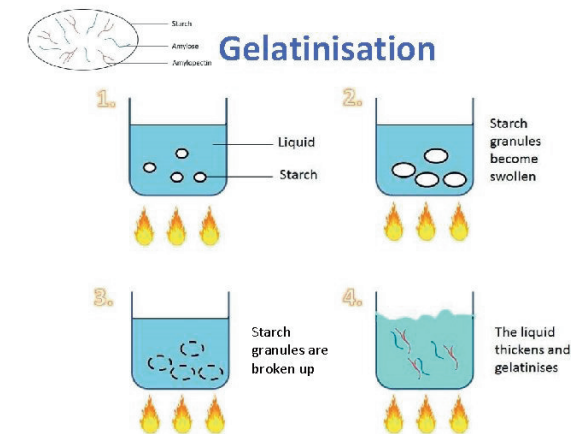
6.1	name of product	Must be accurate and clear on packaging.
6.2	manufacturer's contact details	For enquiries or complaints.
6.3	description of the product	Simple explanation of what the product is.
6.4	weight	Accurate weight in grams or kilograms.
6.5	ingredients list	Listed in descending order. Allergens in <b>bold</b> .
6.6	cooking instructions	How to cook the food.
6.7	shelf life	Use-by or best-before dates
6.8	storage instructions	How to store the food safely.
6.9	place or origin	Where the food was grown, reared or caught.
6.10	allergens and intolerances	Labelled clearly in <b>bold</b> in ingredients list.
6.11	back of pack nutrition label	Energy (kcal/kJ), fat (g), saturates (g), carbohydrates (g), sugars (g), protein (g) and salt (g) must be listed per 100g/ml.

### 7. Practical skills

7.1	bridge hold	Form a bridge over the ingredient with your hand and put the knife underneath.
7.2	claw grip	Curl fingers inwards and grip the food with your fingertips, keeping fingers away from the knife.
7.3	knead	To massage and push a dough to stretch and develop the gluten.
7.4	reduction sauce	A sauce that uses boiling and simmering to thicken it.
7.5	preserving	Using a method of cooking to extend the shelf life of a food e.g. making jam, curing and dehydrating.
7.6	making a roux sauce	A white sauce (Béchamel) made with flour, butter and milk. The starch thickens the sauce.

### 8. Food science

8.1	dextrinisation	The browning of starch in the presence of dry heat.
8.2	raising agent	Something that makes a mixture rise. They can be biological, chemical or mechanical.
8.3	gelatinisation	When starch molecules swell in the presence of heat. This thickens a liquid.
8.4	pectin	The natural setting agent in fruit.



### 9. Nutrition requirements of teenagers

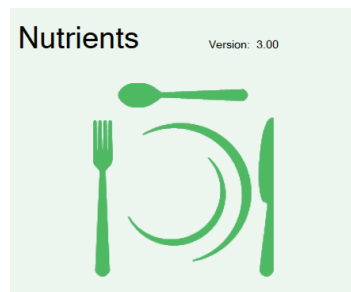
What are their special dietary and energy needs?	Which nutrients should they have more of?
Follow the Eatwell Guide	protein calcium and vitamin D Iron and vitamin C
Teenagers have growth spurts and are very active, so high energy needs.	
Increased appetite means increased portion sizes are needed.	



The Eduqas GCSE Food Preparation and Nutrition online textbook covers the syllabus and give a more in-depth overview of the subject. There are lots of videos and activities to view.

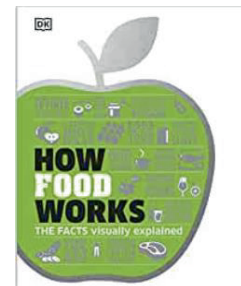
#### ONLINE TEXTBOOK LOGIN DETAILS:

Please write your login to the online textbook here:



Nutrients is a nutrition software available to use on school computers. You can design nutrition labels and cost out your dishes.

#### Books to read:



#### Videos to watch:



GCSE Food Preparation and Nutrition videos

#### Stretch your vocabulary

a1	commodity	A type of food group
a2	saturated fat	Usually from animal sources: can be harmful to health
a3	Non-starch Polysaccharide (NSP)	A complex sugar found in the cell walls of plants. Helps to aid digestion.
a4	convection	Heat travels through air or water
a5	Basal Metabolic Rate (BMR)	The rate at which a person uses energy when resting



1. Social media	Les réseaux sociaux
Je vais sur ma page perso	I go on my home page
Je lis mes messages	I read my messages
Je poste des messages	I post messages
Je modifie mes préférences	I update my likes
J'invite mes copains	I invite my friends
Je fais des quiz	I do games
Je joue à des jeux	I play games
Je regarde des photos	I look at photos
Je commente des photos	I leave comments on photos
Je passe des heures...	I spend hours...
On organise des sorties	We arrange to go out
On partage des photos	We share photos
On s'envoie des liens vers des vidéos	We send each other video links

3. When?	
ce matin/ce soir	this morning/evening
cet après-midi	this afternoon
demain matin	this morning
samedi après midi	Saturday afternoon
dimanche soir	Sunday evening
hier	yesterday
samedi dernier	last Saturday
le weekend dernier	last weekend
l'année dernière	last year

2. Invitations	
Je vais/On va ..	I'm going/we're going
aller au cinema	to the cinema
aller à la patinoire/à une fête	to the ice rink/to a party
faire des magasins	go shopping
faire un pique-nique	have a picnic
Tu viens avec moi/nous?	Are you coming with me /us?
Tu veux m'/nous accompagner?	Do you want to come with me/us?
Ça t'intéresse?	Are you interested?
On se retrouve où/à quelle heure?	Where/when shall we meet?
Chez moi/toi	At my/your house
Il y a une séance ...	There's a showing at
A plus	See you later
A demain/samedi	See you tomorrow/on Saturday

4. Going out	
Je suis sorti(e)	I went out
Je suis allé(e)	I went
J'ai bavardé	I chatted
J'ai bu	I drank
J'ai fait les magasins	I went shopping
J'ai mangé	I ate
J'ai regardé	I watched
J'ai bien rigolé	I had a real laugh
Je suis resté(e)	I stayed

## Knowledge Builder: French

Click on the following links  
to practise vocabulary



Languages Online:  
le corps



Languages Online:  
en ligne



Knowledge Base: French  
Ma vie sociale d'ado | Year 9 Autumn Term 1

5. How did it go?	
C'était...	It was...
cool/genial	cool
intéressant	great
marrant	interesting
romantique	funny
sympa	nice
affreux	terrible
bizarre	weird
ennuyeux	boring
horrible	horrible
nul	rubbish
un désastre	a disaster

6. High Frequency Words	
de temps en temps	from time to time
quelquefois	sometimes
souvent	often
tous les jours	everyday
tous les weekends	every weekend
tout le temps	all the time
une fois/deux fois	once/twice
par jour/semaine/mois	a day/week/month

6. High Frequency Words	
très	very
assez	quite
un peu	a little
trop	too
carrement	completely
vraiment	really
avec	with
normalement	normally
en general	in general
d'habitude	usually
tout/toute/tous/toutes	all/every

7. Parts of the body	
la bouche	the mouth
le bras	the arm
le corps	the body
le dos	the back
l'épaule	the shoulder
les fesses	the buttocks
le front	the forehead
le genou	the knee
la jambe	the leg
la main	the hand
le nez	the nose
les oreilles	the ears
le pied	the foot
la tête	the head
le visage	the face
les yeux	the eyes

Knowledge Base: French  
Bien dans sa peau | Year 9 Autumn Term 2

1. Le sport et le fitness	Sport and fitness
Pour arriver en forme, il faut...	In order to get fit, you must...
avoir un bon programme.	have a good schedule.
bien manger.	eat well.
bien dormir.	sleep well.
être motivé(e).	be motivated.
faire du sport tous les jours.	do sport every day.
jouer dans une équipe.	play in a team.
Tu aimes le sport?	Do you like sport?
Le sport...	Sport...
diminue le stress.	decreases stress.
est bon pour le moral.	is good for morale.
est important dans la vie.	is important in life.
ça me fatigue.	it makes me tired.
Il faut apprendre à suivre les règles.	You must learn to follow rules.
À mon avis...	In my opinion
Moi, je trouve ça très ennuyeux de... (+inf)	I find it very boring to...
Je crois fermement que...	I firmly believe that...

2. Manger sain	Healthy eating
les boissons gazeuses	fizzy drinks
les céréales (fpl)	cereals
les chips (fpl)	crisps
l'eau (f)	water
les fruits (mpl)	fruit
les gâteaux (mpl)	cakes
les légumes (mpl)	vegetables
les légumineuses (mpl)	pulses
la nourriture salée	salty food
les œufs (mpl)	eggs

2. Manger sain	Healthy eating
le pain	bread
le poisson	fish
les pommes de terre (fpl)	potatoes
les produits laitiers	dairy products
le repas	meal
le sel	salt
les sucreries (fpl)	sweets/confectionery
la viande	meat
manger équilibré	to have a balanced diet



3. Pour être en forme...	In order to keep fit...
Je ferai du sport.	I will do sport.
Je ferai trente minutes d'exercice par jour.	I will do 30 minutes' exercise a day.
J'irai au collège à vélo et pas en voiture.	I will go to school by bike and not by car.
Je jouerai au foot.	I will play football.
Je mangerai équilibré.	I will eat a balanced diet.
Je marcherai jusqu'au collège.	I will walk to school.
Je ne boirai jamais de boissons gazeuses.	I will never drink fizzy drinks.
Je ne jouerai plus à des jeux vidéo.	I won't play with video games any more.
Je ne mangerai plus de frites / hamburgers.	I will not eat chips / hamburgers any more.
Je ne prendrai pas le bus.	I will not take the bus.
Je prendrai les escaliers.	I will take the stairs.
Je prendrai des cours d'arts martiaux.	I will take martial-arts classes.

4. Les mots essentiels	High-frequency words
alors	so / then
au moins	at least
c'est-à-dire	that is to say
ce qui veut dire	which means
chaque	each
d'abord	first
de bonne heure	early
deux fois par semaine	twice a week
donc	so
ensuite	then
finalement	finally
où	where
peut-être	perhaps
pour le futur	for the future
quand	when
tous les jours	every day
Voilà!	That's that! / Here you are! / There you go!

5. The future tense	
To talk about the future tense, you can use the:	
- <b>near future tense</b> , <i>aller</i> + the infinitive (going to)	
- <b>future tense</b> (will...)	
À l'avenir, je prendrai les escaliers. In the future, I will take the stairs.	
The future tense is formed using the future stem and the appropriate endings.	
je mangerai	I will eat
tu mangeras	you will eat (singular)
il / elle / on mangera	he / she / we will eat
nous mangerons	we will eat
vous mangerez	you will eat (plural)
ils / elles mangeront	they will eat
<i>avoir, être, aller</i> and <i>faire</i> have irregular future stems, but take the same endings:	
j'aurai	I will have
je serai	I will be
j'irai	I will go
je ferai	I will do

### Knowledge Builder: French

Click on the following link to practise the Future Tense in French



Click on the following links to practise vocabulary



BBC Bitesize:  
Food and drink in French



Languages Online:  
le sport





1. Structure of the Earth and plate boundaries		
1.1	crust	The outermost layer of the Earth.
1.2	plate	A moving section of the earth's crust.
1.3	mantle	The dense, mostly solid layer of the earth between the outer core and the crust.
1.4	convection currents	The circular currents of heat in the mantle.
1.5	core of the Earth	A liquid outer and solid inner core at the centre of the Earth composed of iron.
1.6	destructive boundary	Where two plates are moving towards each other resulting in one plate sinking beneath the other.
1.7	constructive boundary	Where two plates are moving apart.
1.8	subduction	When oceanic crust sinks under continental crust at a destructive margin.
1.9	conservative boundary	Where two plates are sliding alongside each other. Neither creating nor destroying the crust.

2. Volcanoes and earthquakes		
2.1	composite	a steep-sided volcano that is made up of a variety of materials, such as lava and ash
2.2	shield	a gentle sloped volcano that is mostly made up of lava
2.3	super volcano	a massive volcano that erupts at least 1,000km <sup>3</sup> of material
2.4	magnitude	The energy released by an earthquake
2.5	focus	the point in the earth's crust where the earthquake begins
2.6	epicentre	the point at the earth's surface directly above the focus
2.7	Richter scale	a scale ranging from 0-10 used for measuring earthquakes, based on scientific recordings of the amount of movement
2.8	Mercalli scale	a means of measuring earthquakes by describing and comparing the damage done
2.9	tsunami	a special type of wave where an event, often an earthquake, displaces the entire depth of the water above it

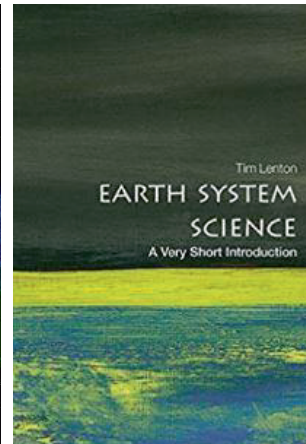
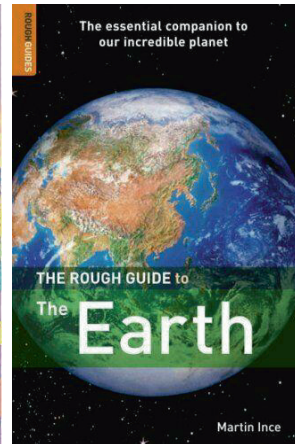
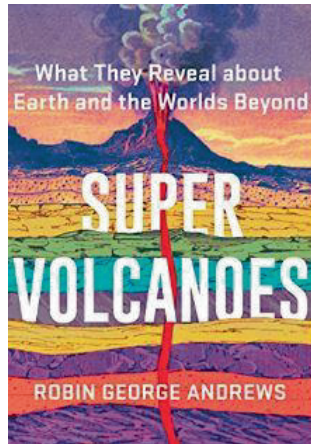
3. Effects (impacts)		
3.1	effect	What happens as a result of an event.
3.2	primary effect	The immediate effects of a hazard, caused directly by it. e.g. Nepal 2015 = 9,000 deaths
3.3	secondary effect	The after effects that occur as an indirect effect of a hazard on a longer timescale. e.g. Nepal 2015 = loss of tourism
3.4	social	Effects how people relate to each other.
3.5	economic	Effects how people make money.
3.6	environmental	Effects our physical surroundings.

4. Responses		
4.1	response	What people do either before, during or after an event to reduce the negative effects
4.2	immediate responses	How people react during a disaster and straight afterwards e.g. Nepal 2015 = ½ million tents from UNICEF
4.3	long term responses	Later reactions that happen in the weeks, months and years after the event. e.g. Stricter building codes after Nepal 2015

5. Managing the risk of living in a tectonic area		
5.1	preparing	How people organise themselves and their society in expectation of a hazard event.
5.2	protecting	How a people design building and infrastructure to be safer in the event of a hazard.
5.3	predicting	Using available evidence to try and say when and where a hazardous event will happen to reduce damage



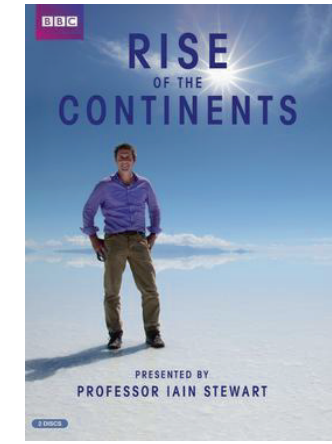
## Books to read:



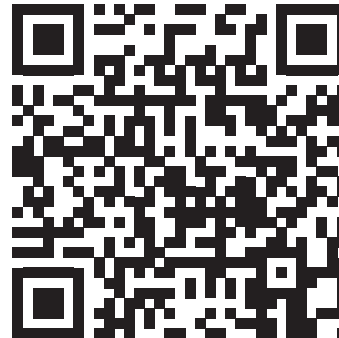
## Movies to watch:



## Series to watch:



The BBC made an excellent film in conjunction with the US Geological survey about the likely event that would happen if Yellowstone supervolcano erupted today.



Want to know more about plate tectonics and see what GCSE students need to understand.

## Stretch your vocabulary

a.1	basaltic lava	Basalt is a rock that is usually found on ocean floors and is formed by erupted runny lava from fissures or shield volcanoes at a constructive plate boundaries.
a.2	andesitic lava	Andersite is a rock that is usually found on high mountain ranges such as the Andes in South America and is formed by erupted sticky lava from explosive composite volcanoes at destructive plate boundaries
a.3	lithosphere	The rocky outer part of the Earth. It is made up of the brittle crust and the top part of the upper mantle.
a.4	asthenosphere	The mechanically weak and ductile region of the upper mantle of Earth. It lies below the lithosphere, between approximately 80 and 200 km deep.



1.0 Meine Routine	1.0 My routine
Ich wache auf	I wake up
Ich stehe (um ...) auf	I get up (at ...)
Ich dusche mich	I shower
Ich wasche mich	I wash myself
Ich frühstücke	I have breakfast
Ich putze mir die Zähne	I clean my teeth
Ich ziehe mich an	I get dressed
Ich entspanne mich	I relax
Ich ziehe mich aus	I get undressed
Ich schlafe ein	I fall asleep
Ich gehe ins Bett	I go to bed

1.1	1.1
Ich bin (um ...) aufgestanden	I got up (at ...)
Ich habe mich geduscht	I showered
Ich habe mich angezogen	I got dressed
Ich habe mich entspannt	I relaxed
Ich bin ins Bett gegangen	I went to bed
Ich bin eingeschlafen	I fell asleep

1.2 Meine Schulroutine	1.2 My school routine
Ich gehe zur Schule	I go to school
Die Schule beginnt um	School begins at
Nach dem Mittagessen	After lunch
Nach der Pause	After the break
Nach der Schule	After school
Ich gehe in die Informatik-AG	I go to computer club
Ich gehe in die Mensa	I go to the canteen
Ich mache meine Hausaufgaben	I do my homework
zuerst	first
dann	then
später	later
schließlich	finally

Knowledge Builder: [Logo!](#)



Logo provides access to a wide range of listening and reading resources. You can watch the last seven days of news bulletins and read about anything that takes your interest.

1.3 Wollen wir...?	1.3 Shall we...?
Willst du?	Do you want to?
Wollen wir?	Shall we?
... angeln gehen	go fishing
... Backgammon spielen	play backgammon
... ein Videospiel machen	play a video game
... einkaufen	go shopping
... in den Park gehen	go to the park
... in die Stadt gehen	go to town
... ins Café gehen	go to the café
... Skateboard fahren	go skateboarding
Es tut mir Leid	I am sorry
Leider kann ich nicht	Unfortunately I cannot
Ja! Gerne	Yes I'd love to
Das ist schade	That's a shame
Ich habe kein Geld	I have no money
Ich muss meine Hausaufgaben machen	I have to do my homework
Ich muss mit meinem Hund spazieren gehen.	I have to walk the dog

1.4 in + Akkusativ	1.4 in + accusative
Ich gehe in den Park (masculine)	I go to the park
Ich gehe in die Stadt (feminine)	I go to the town
Ich gehe ins Kino (neuter)	I go to the cinema



2.0 Familienbeziehungen	2.0 Family relationships
Ich komme gut mit meiner Familie aus	I get on well with my family
Ich verstehe mich gut mit meiner Mutter	I get on well with my mother
Ich habe ein gutes Verhältnis mit meinem Vater	I have a good relationship with my father
Ich streite mich oft mit meinem Bruder	I often argue with my brother
Ich streite mich nie mit meiner Schwester	I never argue with my sister

2.1 Gesund leben	2.1 Living healthily
Man muss...	You have to
Man soll...	You should
... aktiv sein	be active
... eine Pause machen	... take a break
... genug schlafen	... sleep enough
... gesund essen	... eat healthily
... nachts nicht auf das Handy gucken	... not look at your phone at night
... positiv denken	... think positively
... Sport treiben	... do sport
... Yoga machen	... do yoga
... viel Wasser trinken	... drink lots of water
... Zeit mit Freunden verbringen	... spend time with friends

2.2 Ich helfe zu Hause	2.2 I help at home
Ich arbeite im Garten	I work in the garden
Ich räume mein Zimmer auf	I tidy my room
Ich bügele	I iron
Ich decke den Tisch	I lay the table
Ich helfe zu Hause	I help at home
Ich mache das Bett	I make the bed
Ich putze das Badezimmer	I clean the bathroom
Ich sauge Staub	I vacuum
Ich bereite das Essen vor	I prepare food
Ich führe den Hund aus	I take the dog out
Ich füttere die Katze	I feed the cat
Ich wasche das Auto	I wash the car
Ich bringe den Müll raus	I take the rubbish out
Ich gehe für meine Familie einkaufen	I go shopping for my family
Ich koche	I cook

2.3 Warum hilfst du?	2.3 Why do you help?
Ich spare für ...	I am saving for ...
Ich kriege Geld dafür	I get money for it
Meine Eltern arbeiten	My parents work
Mein Vater hat sehr viel zu tun	My father has a lot to do
Meine Mutter kommt spät nach Hause	My mother gets home late
Ich finde das fair	I think that's fair
Ich finde das unfair	I think that's unfair

2.4 Wie wirst du in der Zukunft helfen?	2.4 How will you help in the future?
Ich werde mein Zimmer aufräumen	I will tidy my room
Ich werde einkaufen gehen	I will go shopping
Ich werde kochen	I will cook
jedes Wochenende	every weekend
öfter	more often

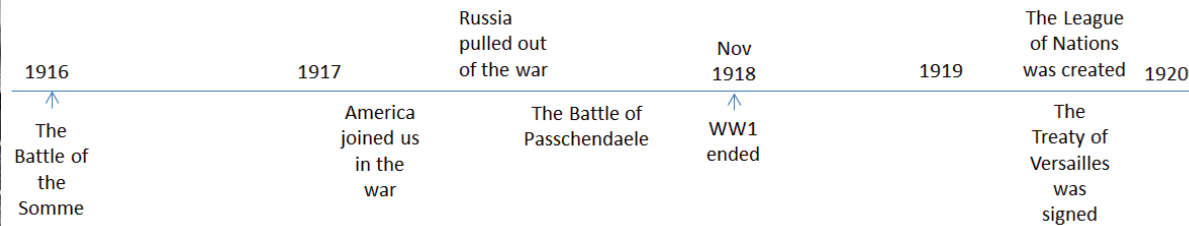
Knowledge Builder: [Logo!](#)



Logo provides access to a wide range of listening and reading resources. You can watch the last seven days of news bulletins and read about anything that takes your interest.







### 1. 'Lions led by donkeys' – Interpretations of General Haig at the Battle of the Somme

1.1	The Somme	A river in northern France along which the Battle of the Somme took place in 1916.
1.2	Verdun	A town in northern France.
1.3	artillery	Cannon fire.
1.4	attrition	Wearing down the morale of your enemy by constant warfare, e.g. bombing.
1.5	rout	A disorderly retreat of defeated troops.
1.6	hindsight	Understanding a situation or event only after it has happened or developed.

### 3. The Treaty of Versailles

3.1	G. Clemenceau	Prime Minister of France.
3.2	D. Lloyd George	Prime Minister of Britain.
3.3	W. Wilson	President of America.
3.4	The Fourteen Points	The American peace proposals.
3.5	demilitarised zone	An area of land where troops have been removed.
3.6	Rhineland	A controversial area of German land along its eastern border with France and Belgium.
3.7	reparations	The compensation for war damage paid by a defeated state.
3.8	War Guilt Clause	A part of the Treaty of Versailles that blamed Germany for causing WW1.

### 2. The End of the War

2.1	Armistice	An agreement made by both sides in WW1 to stop fighting at a specified time and date. This was 11 o'clock on the 11 <sup>th</sup> November 1918.
2.2	mutiny	An open rebellion against the proper authorities, especially by soldiers or sailors against their officers.
2.3	abdication	Renouncing (giving up) a throne as Kaiser Wilhelm did in November 1918.
2.4	futile	Pointless.

4.1	veto	The right to block a decision made by the Council.
4.2	sanction	A penalty for disobeying a law or rule. Often when a nation has done something seen as wrong, e.g. started a war.
4.3	unanimous	Everyone agrees to a decision.
4.4	mandates	Old colonies of Germany taken over by the League.
4.5	plebiscite	The direct vote of all the members of an electorate on an important public question. For example, the Treaty of Versailles allowed the people of Upper Silesia the right to have a referendum (vote) on whether they wanted to be part of Germany or part of Poland.
4.6	toothless	Lacking genuine force or effectiveness because the League of Nations did not have an army.



June 1913	WW1 1914 ----- 1918	Jan 1919	July 1928	Dec 1933
Emily Davison incident at the Derby	Women over 30 with property win right to vote	The 18 <sup>th</sup> Amendment to the US Constitution made alcohol illegal, known as Prohibition	All women can vote on the same terms as men (over 21)	Prohibition was repealed



## 1. Votes for women

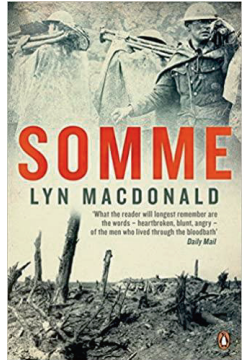
1.1	suffrage	The right to vote.
1.2	suffragist	Someone who campaigned for the vote using peaceful tactics.
1.3	suffragette	Someone who campaigned for the vote using 'direct action' which was sometimes violent.
1.4	franchise	Another word meaning the right to vote.
1.5	domestic	Meaning the home environment, e.g. a <i>domestic servant</i> was a paid worker in the home.
1.6	N.U.W.S.S.	National Union of Women's Suffrage Societies.
1.7	Mrs. M. Fawcett	Leader of the N.U.W.S.S.
1.8	W.S.P.U.	Women's Social and Political Union.
1.7	Mrs. E. Pankhurst	Leader of the W.S.P.U.
1.8	Emily Davison	A Suffragette who was knocked down by the King's horse at a horserace in 1913 and died from her injuries.
1.9	Epsom Derby	The horse race involving the King's horse which knocked over Emily Davison.
1.10	Cat and Mouse Act	This Act allowed for the early release of Suffragette prisoners who were so weakened by hunger striking that they were at risk of death. They were to be recalled to prison once their health was recovered, where the process would begin again.

## 2. The USA in the 1920s

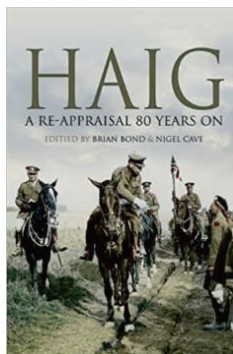
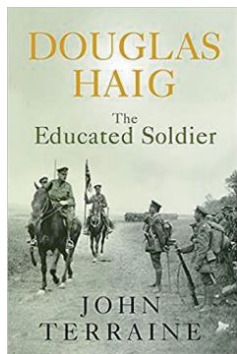
2.1	immigrant	Someone moving to another country to live.
2.2	tenement	A block of flats.
2.3	temperance movement	Groups who promoted <i>teetotalism</i> (no alcohol) and criticised <i>drunkenness</i> (too much alcohol).
2.4	Anti-Saloon League	One of the pressure groups who campaigned for a ban on alcohol because it threatened the wealth, health and stability of the nation.
2.5	prohibit	To ban something.
2.6	Prohibition	The ban on the manufacture, sale, transportation and drinking of alcohol in America from 1920-1933.
2.7	Volsstead Act	An Act which stated that any liquid containing more than ½ % of alcohol was banned.
2.8	intoxicating liquor	An alcoholic drink.
2.9	speakeasy	An illegal bar or club selling alcohol.
2.10	moonshine	Homemade alcohol (usually very strong and often poisonous).
2.11	a still	Short for <i>distillery</i> (the equipment to brew alcohol).
2.12	bootleggers	Illegal alcohol traders.
2.13	Al Capone	A famous Chicago gangster.
2.14	St. Valentine's Day massacre	When Al Capone's gang killed members of a rival gang on the 14 <sup>th</sup> February 1929.

Knowledge Builder: History  
The consequences of World War | Year 9 Autumn Term 1

Books to read:



Lyn MacDonald is a respected historian who has written several books on the First World War; this is one of them. Her books are based on the accounts of eyewitnesses and survivors, told in their own words.



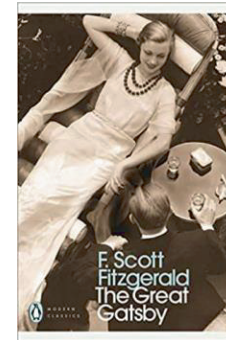
There are lot of books on Douglas Haig by military historians; these are just two of them. As you can see, historians often re-evaluate the past as time goes on – it's known as *historiography*.

Links to the end of the war,  
the Treaty of Versailles



Knowledge Builder: History  
Votes for Women and the USA in the 1920s | Year 9 Autumn Term 2

Books to read:



'The Great Gatsby' by  
F. Scott Fitzgerald

Films to watch:



The Untouchables (1987 classified 15)  
The Great Gatsby  
(2013 version classified PG)

There's lots more available so look online  
but make sure you get your parents'  
approval before you watch anything!

A link to the trailer for Suffragette (2015) – a film  
starring Carey Mulligan (YouTube)





Giornata tipica presente		Typical Day present
1.1	mi alzo	I get up
1.2	mi lavo	I have a wash
1.3	mi sveglio	I wake up
1.4	mi preparo	I get ready
1.5	mi cambio	I get changed
1.6	mi addormento	I fall asleep
1.7	mi spazzolo i denti	I brush my teeth
1.8	faccio colazione	I have breakfast
1.9	pranzo	I have lunch
2.0	ceno	I have supper
2.1	vado a scuola	I go to school
2.2	torno a casa	I return home

La Paghetta		Pocket money
2.3	la paghetta	pocket money
2.4	ricevo cinquesterline	I receive five pounds
2.5	da mia madre	from my Mum
2.6	da mio padre	from my Dad
2.7	ogni settimana	every week
2.8	ogni tanto	now and again
2.9	metto da parte	I put aside
3.0	risparmio	I save

Giornata tipica passato past		Daily Routine
3.1	mi sono vestito/a	I got dressed
3.2	mi sono cambiato/a	I got changed
3.3	ho fatto colazione	I had breakfast
3.4	ho pranzato	I had lunch
3.5	ho cenato	I had supper
3.6	mi sono fatto/a la doccia	I had a shower
3.7	mi sono preparato/a	I got ready
3.8	ho preso l'autobus	I took the bus
3.9	sono andato/a a piedi	I went on foot
4.0	sono tornato/a a casa	I returned home
4.1	ho finito i compiti	I finished my homework

Potere		To be able to
4.2	posso	I can
4.3	puoi	you can
4.4	può	he/she can
4.5	possiamo	we can
4.6	potete	you lot can
4.7	possono	they can
4.8	devo	I must
4.9	devi	you must
5.0	deve	he/she must
5.1	dobbiamo	we must
5.2	dovete	you lot must
5.3	devono	they must

Posso?		Can I?
5.4	posso svegliarmi alle 9	I can wake up at 9
5.5	devo lavarmi	I must have a wash
5.6	voglio cambiarmi	I want to get changed
5.7	puoi prepararti?	can you get ready
5.8	devi alzarti	you must get up
5.9	vuoi vestirti qui?	do you want to get dressed here?
6.0	non posso alzarmi presto	I can't get up early
6.1	non voglio svegliarmi alle 5 di mattina	I don't want to wake up at 5 in the morning
6.2	devi prepararti subito	you need to get dressed straight away
6.3	non puoi alzarti alle 10	you can't get up at 10
6.4	posso tornare a casa?	can I go home?
6.5	devi svegliarti presto?	do you need to get up soon?
6.6	vuoi prepararti a casa mia?	do you want to get ready at my house?







I Social Media		Social Media
1.1	condivido foto	I share photos
1.2	leggo articoli	I read articles
1.3	posto i commenti	I post comments
1.4	faccio ricerca	I do research
1.5	carico	I upload
1.6	scarico	I download
1.7	mando una mail	I send an email
1.8	scatto le foto	I take photos
1.9	faccio una telefonata	I make a telephone call
2.0	chiacchiero	I chat
2.1	navigo in internet	I go online
2.2	fare acquisti online	I do online shopping

In futuro		In the future
2.3	domani	tomorrow
2.4	domani mattina	tomorrow morning
2.5	domani sera	tomorrow evening
2.6	fra una settimana	in a week
2.7	fra due giorni	in two days
2.8	l'anno prossimo	next year
2.9	sabato prossimo	next Saturday
3.0	dove andremo?	where will we go?
3.1	cosa faremo	what will we do?
3.2	a che ora andremo	at what time will we go?

Giornata tipica passato past		Daily Routine
3.3	il mio migliore amico	my best friend - male
3.4	la mia migliore amica	my best friend - female
3.5	i miei migliori amici	my best friends - male
3.6	le mie migliori amiche	my best friends - female
3.7	è	he/she is
3.8	sono	I am/they are
3.9	ha	he/she has
4.0	hanno	they have
4.1	chiacchierone/a	chatty
4.2	estroverso/a	outgoing
4.3	proprio simpatico/a	really nice



Il future IRE		Future Tense IRE
4.4	dormirò	I will sleep
4.5	finirai	you will finish
4.6	aprirà	he/she will open
4.7	partiremo	we will leave
4.8	seguirete	you lot will follow
4.9	si vestiranno	they will get dressed

Futuro ERE		Future tense ERE
5.0	venderò	I will sell
5.1	prenderai	You will take
5.2	scriverà	He/she will write
5.3	risponderemo	We will reply
5.4	leggerete	You lot will read
5.5	chiuderanno	They will close

Frasi incredibili		Wow phrases
5.6	non vedo l'ora di	I can't wait to
5.7	che bello!	how lovely!
5.8	che incubo!	what a nightmare!
5.9	che giornata!	what a day!
6.0	costa un occhio della testa	you lot will read
6.1	è un pezzo di pane	he/she is a really good person
6.2	c'è una marea di gente	there are lots of people
6.3	piove a catinelle	it is pouring down
6.4	prima di andare	before going
6.5	dopo aver mangiato	after having eaten
6.6	invece di guidare	instead of driving
6.7	tutto fa brodo	every little helps
6.8	è tutto pepe	He/she is lively
6.9	in bocca al lupo	good luck

Would you like to go through topic one in more detail?  
If you go to Student Resources Italian look for yr 9/ Yr 9 podcasts and listen to Podcast one and two.



More on your daily routine  
Watch this video for more help with talking about your daily routine. Try to create more complex sentences.



This is a complex video but contains extra vocab for social media  
List the new vocab you have learnt and use in future work.



Reflexive verbs  
These are difficult! Watch this for help...



Help with the future...  
Watch this video for more help with the future tense.



The following verbs can be used but with caution as they need a tense called the subjunctive. Learn these set expressions to help:

Penso che **sia** difficile I think it is difficult

Direi che **abbia** ragione I would say you are right.



Key terms		
1.1	relative clause	An additional piece of information embedded in a sentence that is used to describe a noun.
1.2	imperfect tense	Past tense of a verb that expresses an action as 'was' or 'were' doing something e.g. he <b>was walking</b> through the street.
1.3	irregular verb	A verb that does not conjugate like a regular verb and therefore will not change its endings in a regular formation.
1.4	pluperfect	Past tense verb that expresses 'had' done something. e.g. she had put the wine jug on the table.
1.5	genitive	A noun case that expresses possession and is translated 'of' e.g. The house <b>of the master</b> was beautiful (or 'the master's house was beautiful').

Imperfect tense of possum		
2.1	poteram	1. I was able
2.2	poteras	1. You (s) were able
2.3	poterat	1. S/he was able
2.4	poteramus	1. We were able
2.5	poteratis	1. You (p) were able
2.6	poterant	1. They were able

Genitive case			
4.1	declension	singular	plural
4.2	1st	ae	arum
4.3	2nd	i	orum
4.4	3rd	is	um

Stage 15  
vocabulary



Stage 17  
vocabulary

Stage 16 vocabulary

Imperfect tense of volo			Imperfect tense of nolo	
3.1	volebam	I was wanting	nolebam	I was not wanting
3.2	volebas	You (s) were wanting	nolebas	You (s) were not wanting
3.3	volebat	S/he was wanting	nolebat	S/he was not wanting
3.4	volebamus	We were wanting	nolebamus	We were not wanting
3.5	volebatis	You (p) were wanting	nolebatis	You (p) were not wanting
3.6	volebant	They were wanting	nolebant	They were not wanting

Pluperfect tense - had		
5.1	1st person singular - I	-eram
5.2	2nd person singular - You	-eras
5.3	3rd person singular - s/he	-erat
5.4	1st person plural - we	-eramus
5.5	2nd person plural - you lot	-eratis
5.6	3rd person plural - they	-erant

**Key terms**

1.1	relative pronouns	A pronoun placed at the start of a relative clause that means 'who' or 'which'.
1.2	imperative	A form of verb that is used when ordering someone to do something.
1.3	present participle	A word formed from a verb and participle ending and used like an adjective.

**Present participles**

		Singular	Plural
5.1	nominative	ns	ntes
5.2	accusative	ntem	ntes

**Imperatives****Pronoun: hic**

		Singular			Plural	
		masculine	feminine	neuter	masculine	feminine
2.1	nominative	hic	haec	hoc	hi	hae
2.2	accusative	hunc	hanc	hoc	hos	has

**Stage 18 vocabulary****Stage 19 vocabulary****Stage 20 vocabulary****Pronoun: ille**

		Singular			Plural	
		masculine	feminine	neuter	masculine	feminine
3.1	nominative	ille	illa	illud	illi	illae
3.2	accusative	illum	illam	illud	illos	illas

**Relative pronouns**

		Singular			Plural	
		masculine	feminine	neuter	masculine	feminine
4.1	nominative	qui	quae	quod	qui	quae
4.2	accusative	quem	quam	quod	quos	quas



Medicine and Science  
in the ancient world



The worship  
of Isis



The importance of  
Alexandria in the  
Roman empire

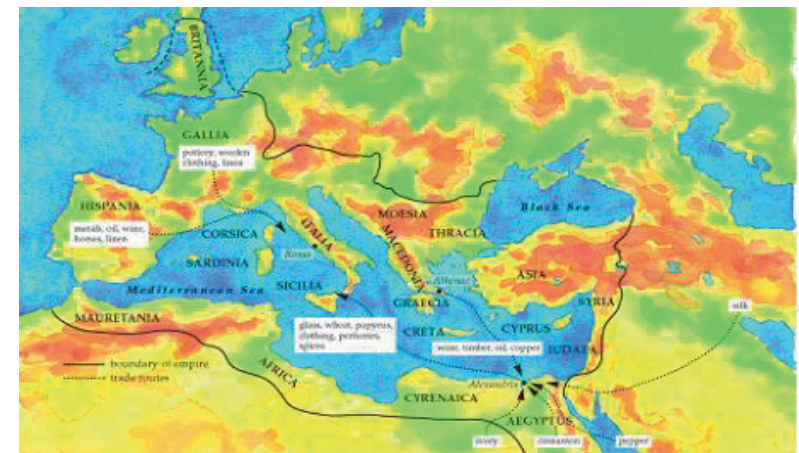
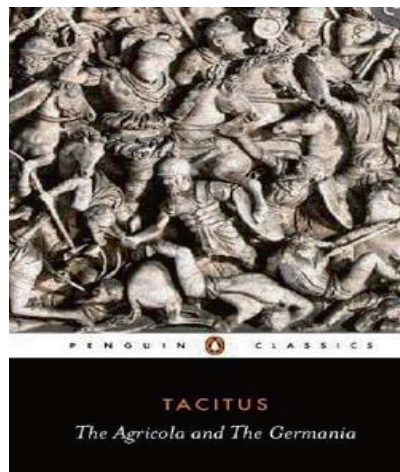


Glassmaking  
in Alexandria



*As the worship of Isis spread from Egypt into the Greek and Roman world, new ways were found of depicting the goddess, left. This Egyptian drawing shows her with her hieroglyph, a throne, above her head. She carries a sceptre in one hand and an ankh, the symbol for life, in the other. On the right is a Roman painting of Isis holding the sacred cobra of Egypt. It was found in her temple at Pompeii.*

Suggested reading



King Cogidubnus and the importance of  
Fishbourne Roman Palace in Roman Britain

**By the end of this module you should be able to:**

- ☐ Simplify and use ratios including dividing a quantity in a given ratio
- ☐ Solve problems involving direct proportion
- ☐ Understand and use the relationship between ratio and proportion
- ☐ Calculate a percentage of an amount
- ☐ Calculate a percentage increase or decrease

**Important things to remember:**

- 1) Draw diagrams accurately
- 2) Know your units of volume
- 3)  $1000000 \text{ cm}^3 = 1 \text{ m}^3$
- 4)  $1 \text{ cm}^3 = 1 \text{ millilitre}$  and  $1000 \text{ ml} = 1 \text{ litre}$
- 5) Volume of prism = cross section area x height
- 6) A cylinder is a circular prism

Language	Meaning	Example
Ratio	The relationship between two quantities	If there are twice as many green beads to red then Ratio green : red = 2 : 1
Proportion	The relationship between one of the quantities and whole total	(Usually written as a fraction) In the above example $\frac{2}{3}$ are green.
Unitary method	The method for dividing up a total amount into a given ratio	To share £20 in the ratio of 2:3 1 share = $\text{£}20 / 5 = \text{£}4$ One person gets $2 \times \text{£}4 = \text{£}8$ The other gets $3 \times \text{£}4 = \text{£}12$
Direct Proportion	If two quantities are in direct proportion, when one quantity goes up the other one goes up too.	The weight of the box compared to it's volume
Inverse Proportion	If two quantities are in inverse proportion, when one quantity goes up the other one goes down.	The length of time you leave your cup of tea standing compared to how hot your tea is.



Link to Kings'  
Maths Resources



Year 9 Mathematics  
Curriculum Overview  
and Revision Support



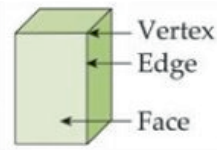
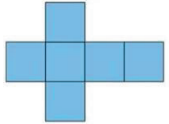
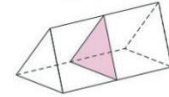
Practice questions  
for this topic





**By the end of this module you should be able to:-**

- ☐ Round
- ☐ Recognise and name 3D solids and recognise their nets
- ☐ Use isometric paper and draw plans and elevations of 3D shapes
- ☐ Calculate the surface area and volume of cuboids
- ☐ Calculate the volume of a prism

Language	Meaning	Example
Soild	A shape in 3 dimensions	A cube, cuboid and sphere Not a square or circle
Polyhedron	A solid with flat surfaces	A cuboid is a polyhedron A sphere is not
Face	The flat surface	
Edge	Where two surfaces meet	
Vertex	A corner	
Net	A 2D sheet that can be folded to make a 3D solid	 Here is a net of a cube.
Surface Area	Area of each surface of a solid Measured in squares	Area of each rectangle added together on a cuboid
Volume	The space a solid takes up Measured in cubes	Volume of cuboid = height x width x length
Prism	A solid with the same cross section throughout	 Here is a triangular prism.



Link to Kings'  
Maths Resources



Year 9 Mathematics  
Curriculum Overview  
and Revision Support



Practice questions  
for this topic

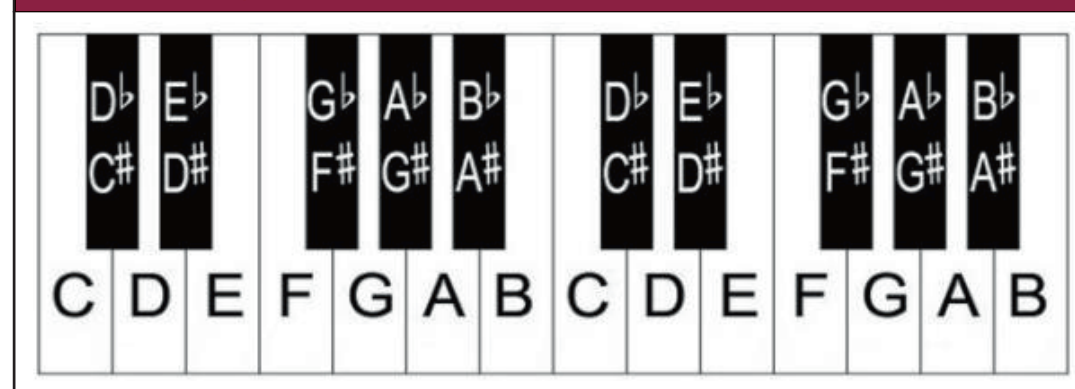


Year 9 focuses on *stylistic conventions*.

### 1. Elements of Music

1.1	<b>Pitch</b>	The position of a single sound in the complete range of sound. <i>High / low</i>
1.2	<b>Tempo</b>	The pace of the music. <i>Fast / Slow</i>
1.3	<b>Texture</b>	Describes how layers of sound within a piece of music interact. <i>Thick / thin</i>
1.4	<b>Timbre</b>	The quality of tone distinctive of a particular voice or instrument. <i>Example: bright, mellow</i>
1.5	<b>Dynamics</b>	The variation in loudness between notes or phrases. <i>Loud / Soft (piano, forte, crescendo, diminuendo)</i>
1.6	<b>Duration</b>	The length of a note or series of notes. <i>Long / Short</i>
1.7	<b>Silence</b>	No noise.
1.8	<b>Melody</b>	Melody is a succession of pitches in rhythm.
1.9	<b>Rhythm</b>	A rhythm is a pattern of sounds of different lengths.

### 2. Notes on the keyboard



### 3. Note lengths

ITEM	NOTE	REST	VALUE (number of beats)
Whole note/rest			4
Half note/rest			2
Quarter note/rest			1
Eighth note/rest			1/2
Sixteenth note/rest			1/4

### 4. Notes on the Stave

**Treble Clef**

**Line Notes**

**Space Notes**





Year 9 focuses on *stylistic conventions*.

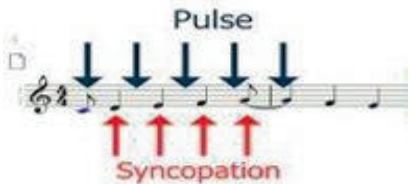
### 5. Caribbean music styles

5.1	<b>Reggae</b>	Developed from <b>mento</b> , <b>ska</b> and <b>rocksteady</b> .
5.2	<b>Mento</b>	Acoustic instruments, 1940s-1950s, folk dance style.
5.3	<b>Ska</b>	Fast tempo, dance style, 1950s, fusion of mento & R'n'B.
5.4	<b>Rocksteady</b>	Steady, straight rhythms, vocal dance style.

### 6. Reggae – musical features & stylistic conventions

6.1	Offbeat rhythm & chords - "skank" and "bubble" rhythms.
6.2	Sung lyrics, often accompanied with backing singers in harmony.
6.3	Slow, relaxed tempo, with rhythmic emphasis on beats 2 and 4.
6.4	4/4 Metre (4 beats in the bar).
6.5	Use of primary triads – chords I, IV & V ( <i>tonic, subdominant and dominant</i> ).
6.6	Heavy, prominent bass lines that play bass riffs.

### 7. Caribbean Music – key vocabulary

7.1	<b>Riff</b>	A repeated bass pattern.
7.2	<b>Metre</b>	Number of beats in the bar.
7.3	<b>Rim shot</b>	Hitting the edge of a snaredrum.
7.4	<b>Backbeat</b>	Emphasis of the 2nd and 4th beats of the bar
7.5	<b>Syncopation</b>	A rhythm in which strong notes are not on the main beat. 

### 8. Reggae

8.1	What religious movement is Reggae closely associated with?	Reggae is closely associated with <b>Rastafarianism</b> (a religious movement worshipping Haile Selassie as the Messiah and that black people are the chosen people and will eventually return to their African homeland).
8.2	What are Reggae lyrics often about?	The <b>lyrics</b> of Reggae songs are strongly influenced by Rastafarianism and are often political. They may include themes such as <b>love, brotherhood, peace, poverty, anti-racism, optimism and freedom</b> .
8.3	Which artist is considered one of the main pioneers of Reggae?	<b>Bob Marley</b> ; his musical career was marked by fusing elements of reggae, ska, and rocksteady, as well as his distinctive vocal and songwriting style.





Read



Read more about Caribbean Music from the BBC's GCSE Bitesize page

Listen



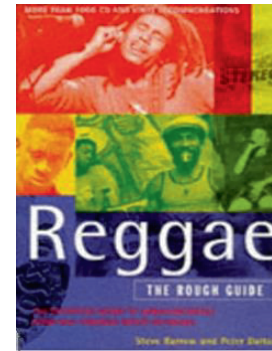
KS3 Reggae Music Playlist on YouTube

Watch



BBC Reggae Documentary

Read



"The Rough Guide to Reggae" book – there is a copy in the Music Department

Listen



Listen to Jamaican Ska with this playlist on YouTube

Read



Read more about Jamaican Ska and even learn the dance moves!



**TASK:** Draw a spider diagram showing which musical styles influenced other Caribbean styles such as Mento and Salsa. What are its close musical "relatives"? How are they similar and how do they differ? Create and upload to a new page under UNIT 1 on OneNote.



1. Crime and criminal responsibility		
1.1	anti-social behaviour	Behaviour that is not what is usually expected in society.
1.2	consequences	The resulting punishment from bad or anti-social behaviour.
1.3	punishments	The means of making someone suffer for anti-social or bad behaviour.
1.4	age of criminal responsibility	The age after which a child can be prosecuted in a court of law for committing a crime, 10. Before the age of 10, a child is known as "doli incapax", or unable to be prosecuted.
1.5	criminal record	A record of your criminal activity after you have been prosecuted in court, can last for years.

2. Youth crime`		
2.1	knife-crime	Crime committed with a knife.
2.2	shop-lifting	Stealing from a shop, leaving without paying.
2.3	petty crime	Minor or low-level crime usually prosecuted in Magistrates courts.

3. Youth justice and the Criminal Justice Service		
3.1	Criminal Justice Service	The Government service/department that looks after the police, courts and prisons.
3.2	Youth courts	Courts that specialise in prosecuting young people.
3.3	petty crime	Minor or low-level crime usually prosecuted in Magistrates courts.

4. County lines		
4.1	county lines	Drug-running operations managed by inner-city gangs coming out to rural and market towns using children or vulnerable adults as carriers.
4.2	grooming	Treating a child with gifts and money in order to make him/her take part in usually criminal activities such as county lines.
4.3	cuckooing	Taking over a vulnerable person's house/flat/ accommodation to run drugs or other criminal activities.
4.4	vulnerable	Weak or without protection within society, which can lead to exploitation by criminal gangs.
4.5	trafficking	Illegally moving vulnerable people from one place to another without their consent, often linked to modern slavery.

5. Issues/Questions	
5.1	Is shop-lifting a petty and victimless crime?
	Shop lifting is theft/stealing from a shop, it means the shopkeeper loses money and may have to raise prices on his other goods to make up for the loss of income. It is serious and not a victimless crime.
5.2	How can I resist peer pressure?
	Listen to your gut feelings, plan for possible situations where you suspect peer pressure is going to happen. Arrange a "bail-out" code with your parents or a trusted adult and learn to feel comfortable saying no. You can "blame" your parents for not letting you do something and if the situation is dangerous, contact a trusted adult.
5.3	Is it true I cannot go on overseas holidays if I have a criminal record~?
	Some countries will not allow you to enter them or give you a visa if you have a criminal record.
5.4	Will carrying a knife protect a young person from crime?
	Usually the opposite, carrying a knife can encourage the holder to use it and therefore commit a crime, or it can be taken off the carrier and used against them.
5.5	Can children be convicted of a crime?
	Yes, if they are over the age of 10 years.

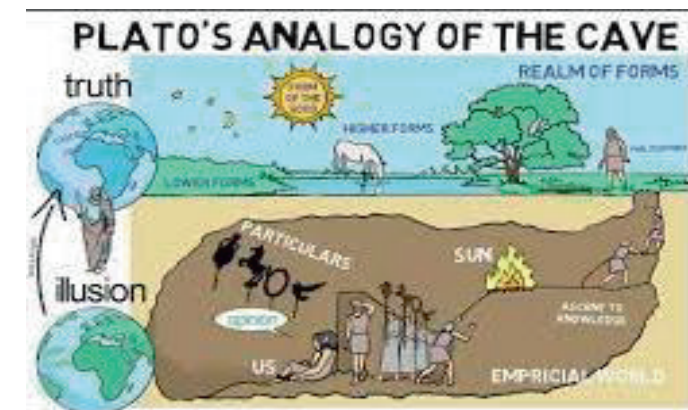


1. How do we know what is real?		
1.01	philosophy	The study of the fundamental nature of knowledge, reality, and existence, especially when considered as an academic discipline.
1.2	philosopher	A person engaged or learned in philosophy.
1.3	Heraclitus	An Ancient Greek Philosopher who inspired Plato. <i>'No man ever steps in the same river twice, for it is not the same river and he is not the same man.'</i> Heraclitus (500 BCE)
1.4	reality	What we perceive to be real.
1.5	senses	Our senses can deceive us. How can we trust them?


3. Aristotle		
3.1	Aristotle	A Greek Philosopher (384-322B.C) who was taught by Plato
3.2	empiricism	The theory that all knowledge is based on experience derived from the senses.
3.3	The Four Causes	Aristotle identified four causes which he believed explained the existence of all physical things...  Material- the physical stuff from which a thing is made Efficient- the agent that brings about the change Formal- the plan or specification to which something is made Final- the purpose for which an object is created
3.4	metaphysics	The branch of philosophy that studies the fundamental nature of reality.
3.5	a posteriori	Knowledge based from observation or appearance.

4. Additional Scholars		
4.1	Descartes	Descartes believed that we can not be sure that any thing is real - we might be in a dream or being deceived by an evil demon.
2.7	Freud	Freud believed that only in our dreams can we really be ourselves.

2. Plato		
2.1	Plato	The Athenian <i>philosopher</i> Plato (c.428-347 B.C.) is one of the most important figures of the Ancient Greek world and the entire history of Western thought.
2.2	analogy	A comparison between one thing and another, typically for the purpose of explanation or clarification.
2.3	rationalism	The theory that opinions and actions are based on reason and knowledge rather than on religious belief or emotional response.
2.4	The Cave	Realm of Appearances- the visible world
2.5	Outside the Cave	Realm of Forms- the truth
2.6	Forms	abstract, perfect, unchanging concepts or ideals that transcend time and space
2.7	Particulars	imperfect representations of The Forms
2.8	Shadows	opinions/illusions
2.9	Prisoners	human condition
2.10	freed prisoner	philosopher
2.11	a priori	Knowledge based through reason or knowledge, rather than from observation/senses





1. Arguments for the existence of God		
1.1	Thomas Aquinas	13 <sup>th</sup> Century philosopher who demonstrated that faith was reasonable through the First Cause Argument.  He later went on to argue that the apparent order and complexity in the world is proof of a designer and that this designer is God.
1.2	Fallacy of Composition- David Hume	The claim that it is wrong to assume that what is true of some things parts must also be true of the whole.
1.3	First Cause/ Cosmological argument	As everything in the universe needs a cause, so the universe must have a cause, that cause must be God.
1.4	infinite regress	An endless sequence of cause with no beginning.
1.5	logical fallacy	A statement or argument that is logically flawed.
1.6	Design/Teleological argument	The world around us looks as though it has been designed. Designed things need an intelligent designer. The intelligent designer of the world is God.
1.7	William Paley 	Used an analogy to demonstrate agreement with the design argument. If one came across a mechanical watch on the ground, they would assume that its many complex parts fitted together for a purpose and that it had not come into existence by chance. There must be a watchmaker.
1.8	evolution	The process by which different life forms are believed to have developed from other, earlier life forms over time- developed by Charles Darwin.
1.9	Anthropic Principle	The idea that the universe is just right for life to come into existence and the process of evolution supports the idea of a designer God.
1,10	New Atheists	The name for a group of modern philosophers who believe that religion is irrational and should be argued against.

2. The Nature of God		
2.1	attributes of God	God's characteristics. What he is like.
2.2	eternal	Without beginning or end.
2.3	free will	The ability to choose between right and wrong, some believe this ability is given by God.
2.4	immanent	The belief that God is close to humanity and involved in the world.
2.5	immutable	unchangeable
2.6	omnipotent	The belief that God is all-powerful.
2.7	omnibenevolent	The belief that God is all-loving and good.
2.8	omniscient	The belief that God is all-knowing.
2.9	omnipresent	The belief that God is present everywhere.
2.9	transcendent	beyond our understanding
2.10	The Trinity	The belief that God is one God existing as three entities: The Father, Son, Holy Spirit, as demonstrated in The Apostles Creed.
2,11	Apophatic Theology	Some philosophers argue that we cannot accurately describe the nature of God because our language is too limited to express the essence of God. Therefore, some Christians think that they should only talk about what God is <b>NOT</b> , rather than what he is.

3. The Problem of evil and suffering		
3.1	Theodicy	An argument to justify the existence of God, despite the existence of evil in the world
3.2	Augustinian theodicy	God is not responsible for evil, it is a lack of goodness introduced through human freewill due to the Original Sin in Genesis 3
3.3	Irenaean theodicy	Humans were created imperfect and therefore, God created evil so that humans can grow their souls into becoming children of God.
3.4	Inconsistent triad	The existence of suffering alongside an all-loving (omnibenevolent) and all-powerful (omnipotent) God are argued to be contradictory.





### Greek Philosophers

Oak National Academy



### Intro to Philosophy

Youtube



### Descartes- an overview

Youtube

For an extra challenge...

**Empiricism vs Rationalism**  
Stanford Encyclopedia of Philosophy



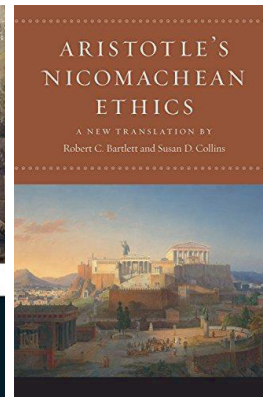
### Plato's Cave- an overview

Youtube



### Metaphysics- Plato v Aristotle

Youtube



### The Nature of God

Oak National Academy



### Arguments for the existence of God

Youtube



### The Augustinian theodicy

Youtube

### The Irenaean theodicy

Youtube



IMAGE	KEY TERM	DEFINITION
		All-powerful
	Omnibenevolent	
		Existing or operating within us
	Transcendent	

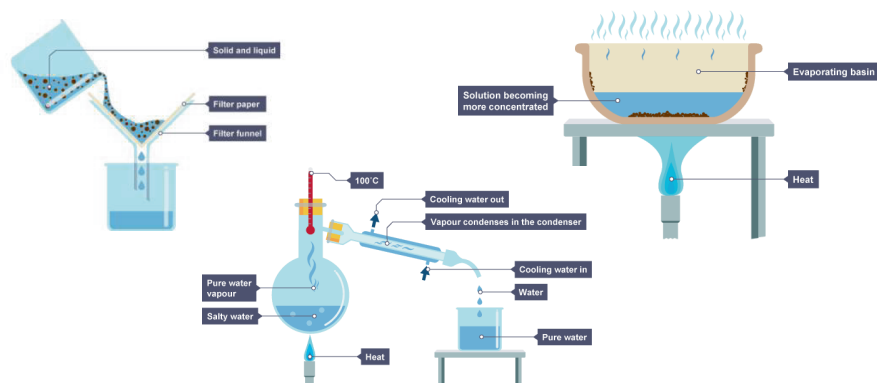
### Stretch your vocabulary

atemporal- outside of space and time

infallible- incapable of making mistakes



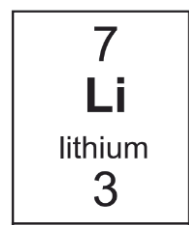
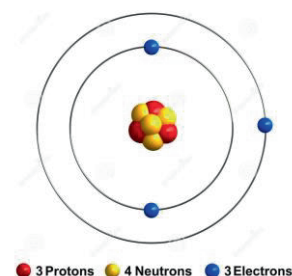
1. Atoms, Elements and Compounds		
1.1	What is an atom?	The smallest part of an element that can exist
1.2	What is an element?	A substance made of only one type of atom
1.3	How are atoms of each element represented?	Using a chemical symbol e.g. the chemical symbol for oxygen is O and the chemical symbol of sodium is Na
1.4	What is found in the Periodic Table?	A list of around 100 different elements which have been arranged
1.5	What is a compound?	A substance made of two or more different elements chemically combined in fixed proportions
1.6	How are compounds formed?	By the reaction of different elements
1.7	What is a chemical reaction?	A chemical change in which one or more new substances are formed. It often involved a detectable energy change (e.g. a change in temperature)
1.8	How are compounds separated back into their elements?	By chemical reactions
1.9	Name two ways of representing chemical reactions	Word equations and symbol/formula equations



2. Mixtures		
2.1	What is a mixture?	A substance consisting of two or more elements or compounds not chemically combined together
2.2	Name four ways of separating a mixture	Filtration, crystallisation, distillation and chromatography
2.3	How does distillation separate mixtures?	This separates substances according to their boiling points
2.4	How does filtration separate mixtures?	This separates insoluble substances in the mixture
2.5	How does crystallisation separate mixtures?	This separates soluble substances in the mixture
3. The Development of the Model of the Atom		
3.1	Name the four models of the atom	Dalton, plum pudding, nuclear, electron shell (Bohr model)
3.2	What was the Dalton model of the atom?	Atoms are tiny spheres that can not be divided
3.3	What was the plum pudding model of the atom?	The atom is a ball of positive charge with negative electrons embedded in it
3.4	What did the alpha particle scattering experiment prove?	<ul style="list-style-type: none"> <li>The mass of the atom is concentrated at the centre (the nucleus)</li> <li>The nucleus is charged</li> </ul>
3.5	What was the nuclear model of the atom?	Atoms have a positive nucleus which electrons orbit
3.6	How did Niels Bohr adapt the nuclear model?	He suggested that electrons orbit the nucleus at specific distances
3.7	What name was given to the particles with positive charges found in the nucleus of the atom?	Protons
3.7	What did James Chadwick discover?	The neutron



4. Atoms and Subatomic Particles		
4.1	Name the three particles that make up atoms (subatomic particles)	Protons, neutrons, electrons
4.2	Which particles are found in the nucleus?	Protons and neutrons
4.3	State the relative masses of the subatomic particles	Protons: 1, neutrons: 1, electrons: very small
4.4	State the relative charges of the subatomic particles	Protons: +1, neutrons: 0, electrons: -1
4.5	What is the atomic number of an atom?	The number of protons in an atom
4.6	What is the mass number of an atom?	The number of protons + the number of neutrons in an atom
4.7	Why is the number of electrons in an atom equal to the number of protons?	Atoms have no overall charge (the charge of protons cancel out the charge of the electrons)
4.8	How do you calculate the number of neutrons in an atom?	Mass number - atomic number
4.9	How small is an atom?	Atoms are very small, having a radius of about 0.1 nm ( $1 \times 10^{-10}$ m)
4.10	How large is the nucleus of an atom compared to the size of the atom?	The radius of a nucleus is less than 1/10 000 of that of the atom (about $1 \times 10^{-14}$ m)



relative atomic mass  
**atomic symbol**  
name  
atomic (proton) number

5. Relative Atomic Mass and Isotopes		
5.1	What are isotopes?	Atoms of the same element with a different number of neutrons
5.2	What is the relative atomic mass of an element?	An average value of mass that takes account of the abundance of the isotopes of the element
5.3	What formula is used to calculate the relative atomic mass of an element?	$\text{relative atomic mass} = \frac{\text{sum of (isotope abundance} \times \text{isotope mass number)}}{100}$

**EXAMPLE:**

Copper has two stable isotopes. Cu-63 has an abundance of 69.2% and Cu-65 has an abundance of 30.8%. Calculate the relative atomic mass of copper to 1 decimal place.

$$\text{Relative atomic mass} = \frac{(69.2 \times 63) + (30.8 \times 65)}{69.2 + 30.8} = \frac{4359.6 + 2002}{100} = \frac{6361.6}{100} = 63.616 = 63.6$$

6. Electronic Structure		
6.1	How are the electrons arranged in atoms?	Orbiting the nucleus in shells/energy levels
6.2	How many electrons can go in the first shell?	2
6.3	How many electrons can go in the second and third shells?	8
6.4	Write the electronic structure for this electron shell diagram	2,8,1
6.5	Draw the electron shell diagram using the following electronic structure: 2, 8, 2	



7. The Periodic Table			9. Ions and Metals and Non-Metals		
7.1	How are elements in the periodic table arranged?	In order of atomic (proton) number	9.1	What is an ion?	A charged atom resulting from the loss or gain of electrons
7.2	What is a group in the periodic table?	A column of elements which have <b>similar properties</b>	9.2	If an atom gains electrons, what charge will it have?	Negative
7.3	What is a period in the periodic table?	A row of elements	9.3	If an atom loses electrons, what charge will it have?	Positive
7.4	Why is the periodic table so called?	Because similar properties occur at regular intervals	9.4	What is the definition of a metal?	Elements that react to form positive ions
7.5	What can the group number tell you about the electrons in an atom?	How many electrons are in the outer shell of the atom <i>E.g. carbon is in group 4 so has 4 electrons in the outer shell</i>	9.5	What is the definition of a non-metal?	Elements that do not form positive ions
7.6	What can the period tell you about the electrons in an atom?	How many shells an atom has. <i>E.g. carbon is in the second period so has two shells</i>	9.6	Are most of the elements on the periodic table metals or non-metals?	Metals
			9.7	Where are metals found on the periodic table?	To the left and bottom of the table
			9.8	Where are non-metals found on the periodic table?	To the right and top of the table
8. Development of the Periodic Table			10. Group 0		
8.1	How were elements arranged in early versions of the periodic table?	In order of atomic weight	10.1	What is the name of elements in group 0?	The noble gases
8.2	Why were early versions of the periodic table not generally accepted?	They were incomplete and some elements were placed in inappropriate groups if the strict order of atomic weights was followed	10.2	Why are elements in group 0 unreactive?	Because their atoms have stable arrangements of electrons (they have full outer shells)
8.3	Name two ways Mendeleev improved the early version of the periodic table	<ul style="list-style-type: none"> <li>• He placed the elements in groups based on similar properties</li> <li>• He left gaps for undiscovered elements</li> <li>• In some places he changed the order based on atomic weights</li> </ul>	10.3	With the exception of helium, how many electrons do group 0 elements have in their outer shell?	8
8.4	What led to the acceptance of Mendeleev's periodic table?	<ul style="list-style-type: none"> <li>• Mendeleev correctly predicted the properties of undiscovered elements</li> <li>• Discovery of isotopes confirmed he was right not to strictly order elements using their atomic weights</li> </ul>	10.4	Describe the trend in boiling point as you go down group 0	The boiling point increases as you go down group 0

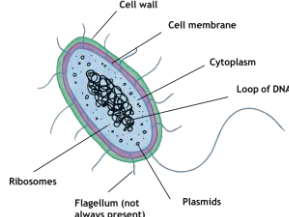


11. Group 1		
11.1	What is the name of elements in group 1?	The alkali metals
11.2	Why do elements in group 1 have very similar properties?	They all have one electron in their outer shell
11.3	Describe the trend in reactivity as you go down group 1	Reactivity increases
11.4	Why does reactivity change as you go down group 1?	As you go down the group: <ul style="list-style-type: none"> <li>the distance between the outer electron and the nucleus increases</li> <li>the attraction between the positive nucleus and the negative outer electron decreases</li> <li>the outer electron is more easily lost</li> </ul>
11.5	What is produced in a reaction between a group 1 metal and water?	Metal hydroxide and hydrogen (gas)
11.6	What is produced in a reaction between a group 1 metal and oxygen?	Metal oxide (white solid)
11.7	What is produced in a reaction between a group 1 metal and chlorine?	Metal chloride (white solid)
11.8	Describe the reaction of a group 1 element with water	A vigorous reaction in which the metal floats and moves around the surface of the water fizzing
11.9	Why do group 1 elements tarnish in the air?	Group 1 elements are very reactive with oxygen in the air and form a dull metal oxide layer on their surface
11.10	Describe the reaction of a group 1 element with chlorine	A very vigorous reaction

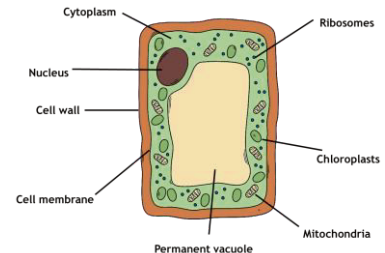
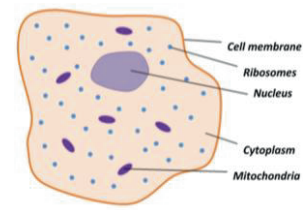
12. Group 7		
12.1	What is the name of elements in group 7?	The halogens
12.2	Why do elements in group 7 have very similar properties?	They all have seven electrons in their outer shell
12.3	Name two properties of group 7 elements	<ul style="list-style-type: none"> <li>Non-metals</li> <li>Consist of molecules made of pairs of atoms</li> </ul>
12.4	When group 7 elements react with non-metals, what is formed?	Molecular compounds
12.5	When group 7 elements react with metals, what is formed?	Salts
12.6	Describe the trend in reactivity as you go down group 7	Reactivity decreases
12.7	What type of reaction would be occurring if a more reactive halogen reacted with the salt of a less reactive halogen?	A displacement reaction
12.8	Describe the trend in melting and boiling point as you go down group 7	Melting and boiling point increases
12.9	Explain the trend in melting and boiling point as you go down group 7	As you go down group 7: <ul style="list-style-type: none"> <li>Molecular mass increases</li> <li>Strength of attraction between molecules increases</li> <li>More energy is required to overcome the forces of attraction</li> </ul>





1. Eukaryotes and Prokaryotes		
1.1	What is a cell?	The basic unit of a living thing
1.2	What are eukaryotic cells?	Cells with a nucleus
1.3	What are prokaryotic cells?	Cells without a nucleus
1.4	Give two examples of eukaryotic cells	Animal or plant cells
1.5	Give an example of a prokaryotic cell	Bacteria
1.6	What form does the genetic material in a prokaryotic cell take?	A single DNA loop (and rings of DNA called plasmids)
1.7	Give two differences between prokaryotic and eukaryotic cells	Eukaryotic cells have a nucleus and are much bigger
1.8	Draw a labelled diagram of a bacterial cell	

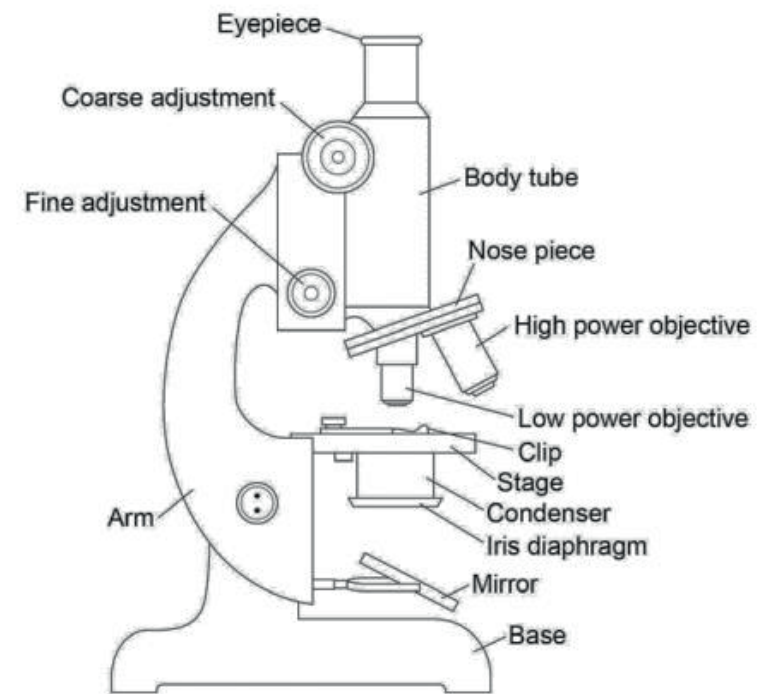
2. Animal and Plant Cells		
2.1	What are the five sub-cellular structures that are present in both animal and plant cells?	Nucleus, cell membrane, cytoplasm, mitochondria and ribosomes
2.2	What are the three sub-cellular structures that may be present only in plant cells?	Cell wall, permanent vacuole and chloroplasts
2.3	What is the function of the nucleus?	Controls the activities of the cell
2.4	What is the function of the cell membrane?	Controls what enters and leaves the cell

2.5	What is the function of the cytoplasm?	Where most of the chemical reactions take place
2.6	What is the function of the mitochondria?	Where respiration takes place
2.7	What is respiration?	A chemical reaction that releases energy from glucose
2.8	What is the function of the ribosomes?	Where protein synthesis takes place
2.9	What is the function of the cell wall?	It strengthens and supports the cell
2.10	What is the function of the permanent vacuole?	It contains cell sap (to keep the cell rigid)
2.11	What is the function of the chloroplasts?	Where photosynthesis takes place
2.12	What is photosynthesis?	How plants use light to make glucose
2.12	In plant cells, what is the cell wall made from?	Cellulose
2.13	Draw a labelled diagram of a plant cell	
2.14	Draw a labelled diagram of an animal cell	



3. Microscopy		
3.1	Name two types of microscope	Light and electron
3.2	What is magnification?	Making something small look bigger
3.3	What is resolution?	The ability of a microscope to distinguish detail
3.4	Name two advantages of electron microscopes (compared to light microscopes)	Higher magnification, higher resolving power (resolution)
3.5	Name two disadvantages of electron microscopes (compared to light microscopes)	Much larger, more expensive, cannot view living specimens
3.6	How have electron microscopes allowed biologists to see and understand many more sub-cellular structures?	High magnification and resolution allows scientists to study cells in much finer detail
3.7	What is the equation for calculating the size of an image produced by a microscope?	$\text{image size} = \text{actual size} \times \text{magnification}$
4. Using a Light Microscope		
4.1	Where should you place a prepared slide on a microscope?	On the stage
4.2	What is the function of the nose piece on a microscope?	To select the objective lens
4.3	Which objective lens should you begin with when using a microscope?	The lowest power objective lens
4.4	How can you adjust the position of the stage on a microscope?	By turning the coarse adjustment knob
4.5	When adjusting the position of the stage on a microscope, how can you avoid the lens coming into contact with the slide?	By looking from the side (not down the eyepiece)

4.6	How can you bring an image into focus on a microscope?	By looking down the eyepiece and turning the coarse adjustment knob and then the fine adjustment knob
4.7	How can you find the total magnification of an image produced by a microscope?	Objective lens magnification $\times$ eyepiece magnification



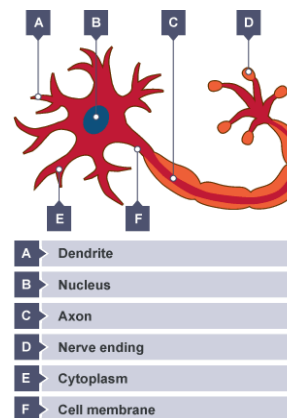


### 5. Cell Specialisation

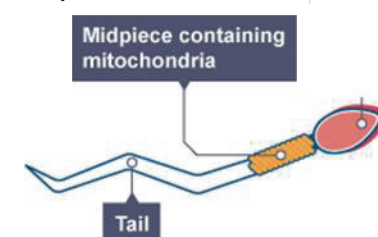
5.1	What is a specialised cell?	A cell with a specific function
5.2	Name three specialised animal cells	Sperm cell, nerve cell, muscle cell
5.3	What is the function of a sperm cell?	To swim to the egg and fertilise it
5.4	Give two ways sperm cells are specialised	<ul style="list-style-type: none"> <li>Tail – for swimming</li> <li>Lots of mitochondria – to release energy for swimming</li> </ul>
5.5	What is the function of a nerve cell?	To carry electrical messages around the body
5.6	Give two ways nerve cells are specialised	<ul style="list-style-type: none"> <li>Dendrites – to connect to other nerve cells</li> <li>Very long – to carry electrical messages over long distances</li> </ul>
5.7	What is the function of a muscle cell?	To contract and relax to allow movement of the body
5.8	Give two ways muscle cells are specialised	<ul style="list-style-type: none"> <li>Lots of mitochondria – to release energy for contraction</li> <li>Long – to allow space for contraction (getting shorter)</li> </ul>
5.9	Name four specialised plant cells	Root hair cells, xylem cells, phloem cells
5.10	What is the function of root hair cells	To absorb water and mineral ions from the soil
5.11	Give two ways root hair cells are specialised	<ul style="list-style-type: none"> <li>Large surface area – for maximum absorption</li> <li>No chloroplasts – as no photosynthesis can take place underground</li> </ul>
5.12	What is the function of xylem cells?	To transport water
5.13	Give two ways xylem cells are specialised	<ul style="list-style-type: none"> <li>Cells arranged to form a dead hollow tube – to create a column for water to move through</li> <li>Made from lignin – strengthens the xylem and prevents it from bursting</li> </ul>

5.14	What is the function of a phloem cell?	To transport sugars
5.15	Give two ways phloem cells are specialised	Composed of: <ul style="list-style-type: none"> <li>sieve tubes which are arranged end to end to form a tube - to create a column for sugar to move through</li> <li>companion cells – provide the sieve tubes with energy for the movement of the sugars</li> </ul>

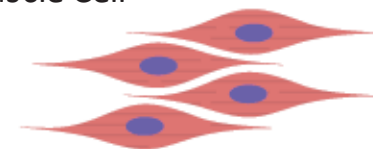
Nerve Cell



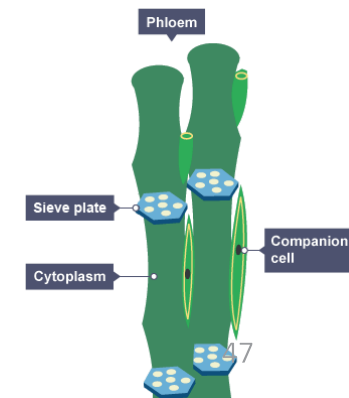
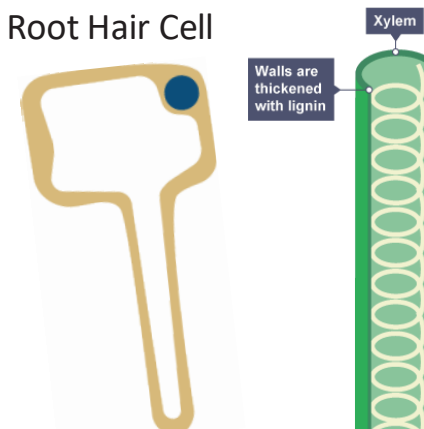
Sperm Cell



Muscle Cell



Root Hair Cell





### 6. Cell Differentiation

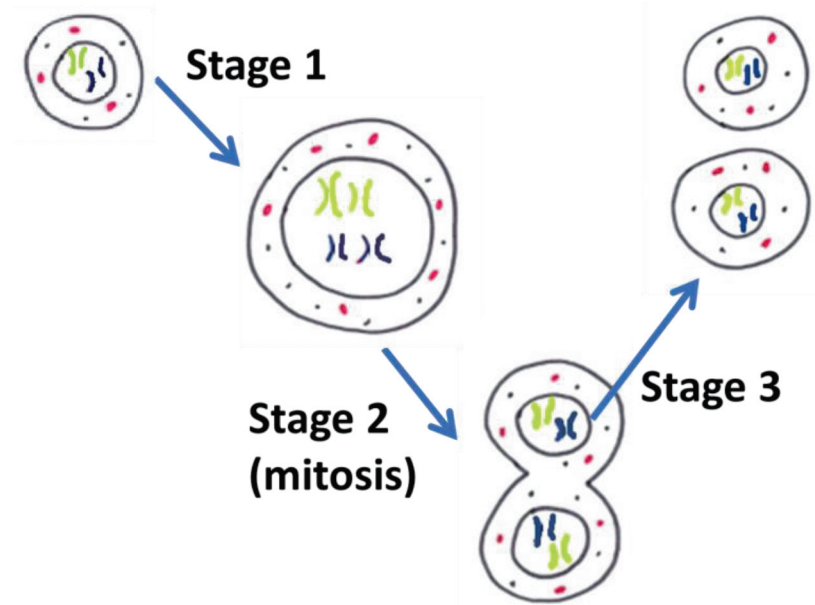
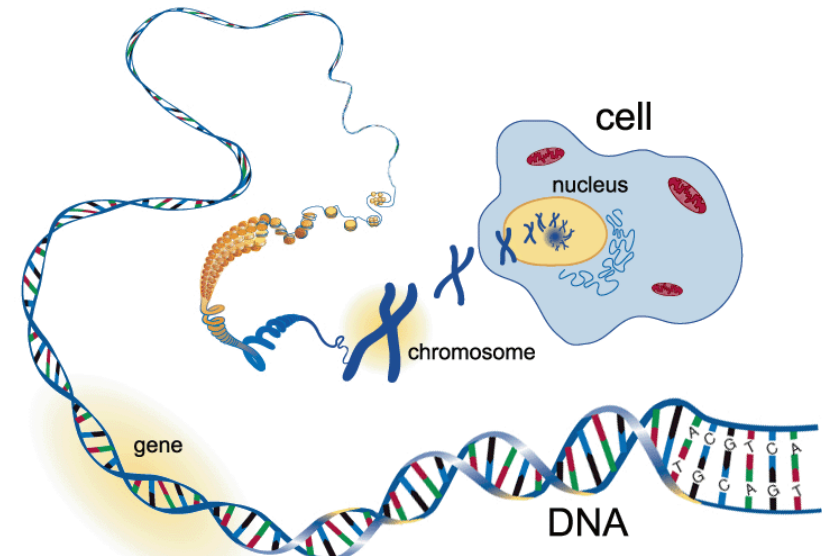
6.1	What is cell differentiation?	The process of a cell becoming specialised
6.2	What happens to a cell as it differentiates?	It acquires different sub-cellular structures to enable it to carry out certain functions
6.3	Which type of cells only differentiate at early stages?	Animal cells
6.4	Which type of cells retain the ability to differentiate throughout life?	Plant cells
6.5	In mature animals what is the purpose of cell division?	Repair and replacement

### 7. Chromosomes

7.1	What is found in the nucleus of a cell?	Chromosomes made of DNA molecules
7.2	What is a gene?	A section of DNA found on a chromosome
7.3	How are chromosomes arranged in the nuclei of body cells?	They are normally found in pairs

### 8. Mitosis and the Cell Cycle

8.1	What is the cell cycle?	A series of stages in which a cell divides to make new cells
8.2	What is mitosis?	The stage in the cell cycle in which the nucleus divides
8.3	What is the purpose of the cell cycle?	For growth and repair
8.4	What must happen to a cell before it can divide?	<ul style="list-style-type: none"> <li>The number of sub-cellular structures doubles (e.g. ribosomes and mitochondria)</li> <li>The DNA replicates to form two copies of each chromosome</li> </ul>
8.5	What happens to the chromosomes and the nucleus during mitosis?	One set of chromosomes is pulled to each end of the cell and the nucleus divides
8.6	What happens in the last stage of the cell cycle (following mitosis)?	The cytoplasm and cell membrane divide to form two identical cells





9. Stem Cells		
9.1	What is a stem cell?	An undifferentiated cell, capable of giving rise to many more cells of the same type which can differentiate into specialised cells
9.2	What is the function of embryonic stem cells?	To differentiate into all types of body cell
9.3	Why are embryonic stem cells important in medical research?	They can be cloned and made to differentiate into most different types of human cell
9.4	Where can stem cells be found in adults?	Bone marrow
9.5	What can adult stem cells differentiate to form?	Blood cells and some other cells
9.6	What plant tissue can differentiate into any type of plant cell?	Meristem tissue
9.7	Name two medical conditions that could be treated with stem cells	Diabetes and paralysis
9.8	What is therapeutic cloning?	When an embryo is produced with the same genes as the patient
9.9	What is the benefit of therapeutic cloning?	Stem cells from the embryo are not rejected by the patient's body
9.10	Name two potential problems with the use of stem cells in therapeutic cloning	Transfer of viral infection, ethical/religious objections
9.11	What can stem cells from meristems in plants be used to produce?	Clones of plants (quickly and economically)
9.12	What is the benefit of using meristems to produce clones of plants?	Rare species can be cloned to protect from extinction, cloning disease resistant plants

10. Diffusion		
10.1	What is diffusion?	The spreading out of particles of any substance in a gas or solution resulting in a net movement from an area of higher concentration to an area of lower concentration
10.2	What is meant by net movement?	The overall movement of particles
10.3	What is meant by concentration gradient?	The difference in concentration between two regions
10.4	Why is diffusion important to cells?	It allows substances to be transported in and out of cells
10.5	Name two substances transported by diffusion in gas exchange	Oxygen and carbon dioxide
10.6	What is the name of the substance transported by diffusion from cells into blood plasma (for excretion in the kidney)?	Urea
10.7	Name three factors which affect the rate of diffusion	Difference in concentration (concentration gradient), temperature, surface area of membrane
10.8	What effect will increasing the concentration gradient have on the rate of diffusion?	It will increase—due to the larger difference in concentration
10.9	What effect will increasing the temperature have on the rate of diffusion?	It will increase - the particles have more energy so move around faster
10.10	What effect will increasing the surface area of a membrane have on the rate of diffusion?	It will increase - more particles pass through at once





10.11	Does a single celled organism have a large or small SA:V (surface area: volume ratio)?	Large
10.12	What is the benefit of single celled organisms having a large SA:V?	Sufficient transport of molecules into and out of the cell by diffusion
10.13	Why do multicellular organisms require exchange surfaces and a transport system?	Small surface area to volume ratio, so cannot rely on diffusion alone
10.14	Name four ways the effectiveness of an exchange surface can be increased	<ul style="list-style-type: none"> <li>• Having a large surface area</li> <li>• Thin membrane – to provide a short diffusion path</li> <li>• Having an efficient blood supply (in animals only)</li> <li>• Being ventilated (in animals, for gaseous exchange only)</li> </ul>
10.15	Name four ways alveoli are specialised for diffusion	Large SA (surface area), moist lining, thin walls, efficient blood supply
10.16	Name two ways villi in the small intestine are specialised for diffusion	Increased SA for quick absorption, efficient blood supply
10.17	Name three ways leaves are specialised for diffusion	Stomata for gas exchange, flattened shape, air spaces to increase SA
10.18	Name four ways gills in fish are specialised for diffusion	Filaments (large SA), lamellae (large SA), thin surface layer, blood flow

### 11. Osmosis

11.1	What is osmosis?	The diffusion of water from a dilute solution to a concentrated solution through a partially permeable membrane
11.2	Osmosis may cause an increase or decrease in mass. How can you calculate the percentage change in mass?	$\frac{\text{change in mass}}{\text{starting mass}} \times 100$

### 12. Osmosis in Plant Tissues

12.1	When preparing plant tissue to investigate osmosis, why should you use a cork borer to cut the plant tissue (e.g. potato)?	So each piece of plant tissue has the same diameter (to act as a control variable)
12.2	What measurements should be taken to investigate osmosis in plant tissue?	Change in mass, change in length
12.3	Name two ways to reduce error when investigating osmosis in plant tissue	<ul style="list-style-type: none"> <li>• Blot the plant tissue dry so excess water/solution is removed before making measurements</li> <li>• Place a bung on the tube to prevent the evaporation of water (which would change the concentration of the solution)</li> </ul>
12.4	Why is it important to calculate the percentage change in mass of the plant tissue when investigating osmosis?	Difficult to control the starting mass of the plant tissue

### 13. Active Transport

13.1	What is active transport?	The movement of substances from a dilute solution to a more concentrated solution (against a concentration gradient)
13.2	What does active transport require? Why?	Energy from respiration - moving against the concentration gradient
13.3	Name an example of a substance that is moved by active transport in plants	Mineral ions moving from dilute solutions in the soil into the root hair cell
13.4	Name an example of a substance that is moved by active transport in animals	Sugar molecules moving from lower concentrations in the gut to higher concentrations in the blood



1. Opiniones - Opinions	
¿Qué cosas te gustan?	What things do you like?
¿Qué cosas te encantan/ te chiflan/ te flipan/ te molan?	What things do you love?
Me gusta(n)...	I like...
Me encanta(n)/ me chifla(n)/ me flipa(n)/ me mola(n)...	I love...
No me gusta(n) (nada)...	I don't like... (at all)
el baile	dance
el cine	cinema
el deporte	sport
el dibujo	drawing
el racismo	racism
el teatro	theatre
la moda	fashion
la música	music
la naturaleza	nature
la pesca	fishing
la violencia	violence
los cómics	comics
los insectos	insects
los lunes	Mondays
las artes marciales	martial arts
las injusticias	injustice
las tareas domésticas	household chores
los animales	animals

2. Expresiones de frecuencia (Expressions of frequency)	
a veces	sometimes
dos veces a la semana	twice a week
muy a menudo	very often
casi todos los días	almost every day
todo el tiempo	all the time
siempre	always

3. ¿Cómo organizas tu semana? (How do you organise your week?)	
Bailo Zumba	I dance Zumba
Cocino para mi familia	I cook for my family
Escribo canciones	I write songs
Juego en mi consola	I play on my games console
Leo revistas/libros	I read magazines/ books
Monto en bici	I ride a bike
Navego por Internet	I surf the internet
Preparo la cena	I prepare dinner
Saco fotos	I take photos
Toco el teclado	I play keyboard
Veo un partido de fútbol	I watch a football game

4. Cartelera de cine (What's on at the cinema?)	
Voy a ver...	I am going to see...
una comedia	a comedy
una película de acción	an action film
una película de animación	an animated film
una película de aventuras	an adventure film
una película de ciencia ficción	a science-fiction film
una película de fantasía	a fantasy film
una película de superhéroes	a superhero film
una película de terror	a horror film
¿Vas a venir?	Are you going to come?
¿Vamos a ver...?	Are we going to see...?/ Shall we see...?

5. ¿Qué tipo de películas te gustan? (What type of films do you like?)	
Me encantan las comedias	I love comedies
No me gustan las películas de terror	I don't like horror films
Mi película favorita es...	My favourite film is...
¿Qué tipo de película es?	What type of film is it?
Es una comedia	It is a comedy
En mi opinión...	In my opinion...
Creo/ Pienso que...	I think (that)...



## 1. Los trabajos en el hotel (Hotel jobs)

Soy...	I am...
camarero/a	a waiter
cocinero/a	a cook
dependiente/a	a shop assistant
esteticista	a beautician
jardinero/a	a gardener
limpiador(a)	a cleaner
peluquero/a	a hairdresser
repcionista	a receptionist

2. ¿En qué consiste tu trabajo?  
(What does your job involve?)

Tengo que...	I have to...
contestar al teléfono y ayudar a los clientes	answer the phone and help the customers
cortar el pelo a los clientes	cut customers' hair
cuidar las plantas	look after the plants
hacer manicuras	do manicures
limpiar habitaciones	clean rooms
preparar comida	prepare food
servir la comida en el restaurante	serve food in the restaurant
vender productos en la tienda	sell products in the shop

## 3. Opiniones (Options)

¿Te gusta tu trabajo?	Do you like your job?
(No) me gusta (nada) mi trabajo porque es...	I (don't) like my job (at all) because it is...
difícil	difficult
duro	hard
estimulante	stimulating
estresante	stressful
interesante	interesting
monótono	monotonous
repetitivo	repetitive
¿Cómo es tu jefe?	What is your boss like?
Mi jefe/a (no) es muy educado/a	My boss is (not) very polite
¿Cómo son los clientes?	What are the customers like?
Los clientes son exigentes/ maleducados	The customers are demanding/ rude

4. ¿Cómo eres?  
(What are you like?)

En mi opinión, soy...	In my opinion, I am...
Creo/ Pienso que soy...	I think I am...
Soy muy/ bastante...	I am very/ quite...
ambicioso/a	ambitious
creativo/a	creative
independiente	independent
inteligente	intelligent
organizado/a	organised
paciente	patient
práctico/a	practical
responsable	responsible
serio/a	serious
sociable	sociable
trabajador(a)	hard-working

5. ¿En qué te gustaría trabajar?  
(What job would you like to do?)

Me gustaría ser...	I would like to be...
Quiero ser...	I want to be...
abogado/a	a lawyer
cantante	a singer
diseñador(a)	a designer
enfermero/a	a nurse
mecánico/a	a mechanic
periodista	a journalist
policía	a police officer
taxista	a taxi driver
Me gustaría...	I would like...
No me gustaría (nada)...	I wouldn't like... (at all)
trabajar al aire libre	to work in the open air
trabajar con animales	to work with animals
trabajar con niños	to work with children
trabajar en equipo	to work in a team
trabajar en una oficina	to work in an office
trabajar solo/a	to work alone
hacer un trabajo creativo	to do a creative job
hacer un trabajo manual	to do a manual job

Youtube is a great source of learning for Spanish.  
Watch the documentary below and design a dress  
for a Mexican Quinceañera.



La Quinceañera documentary



Use Quizlet to practice learned and new  
more challenging vocabulary.

Watch the video below and create an information  
leaflet for English children going to Spain at Christmas.



Christmas in Spain narrated  
by a Spanish finger!



Writing a review for a movie



Going to a birthday party

Watch a Spanish movie  
with English subtitles.  
On any of the streaming  
platform it is very easy  
to change the language.



Jobs



House chores

Search for the song "Feliz Navidad"  
by Jose Feliciano and challenge your  
family to do a karaoke with it.



### 1. Metals & Alloys

1.1	Ferrous Metals	This group of metals all contain iron (ferrite) and are magnetic.
1.2	Mild Steel	Tough and ductile. Commonly used in construction.
1.3	High Carbon Steel	Less ductile than mild steel but harder. Commonly used to manufacture tools.
1.4	Cast Iron	Hard but brittle. Commonly used to manufacture machine bases, manhole covers and post boxes.
1.5	Non-ferrous metals	This group of metals do not contain iron and are not magnetic.
1.6	Aluminium	High strength to weight ratio. Used to manufacture aircraft, car body panels and many other items.
1.7	Copper	Ductile and malleable. Used to manufacture plumbing supplies and electrical cable.
1.8	Alloy	Alloys are a mixture of at least one pure metal and another element.

### 2. CAD CAM

2.1	Contour Tool	Draw a closed contour.
2.2	Radial Lock	Allows an object to be pivoted around a radius.
2.3	Tracing Tool	Draw an open bezier curve with the ends unrestricted.
2.4	Delete Tool	Delete part of an object between two intersections
2.5	Boundary Fill	Fill boundaries with colour.
2.6	ABC Tool	Draw linear text by variable.
2.7	3D Tool	Draw an isolated image of a selected object.
2.8	Measuring Tool	Draw parallel dimensioning.

### 3. Finishing

4.1	Primer	Used to seal bare wood surfaces before applying Top-Coat.
4.2	Top-Coat	Used for aesthetics after primer has been applied.
4.3	Sandpaper	Comes in various grades of abrasion and is used for sanding wood to a smooth finish.
4.4	Beeswax	Used for polishing wood to a natural shine. It is also absorbed into the wood fibres and seals it.
4.5	Oil Base Paints	Oil based paints are more robust than water-based paints and generally have a shinier finish. They are typically used to finish doors and skirting boards which are more susceptible to impact damage. Brushes must be cleaned with a white spirit.
4.6	Water Base Paints	Mostly used on walls and wood surfaces where impact damage is less likely. Not as robust as oil-based paints. Brushes are easier to clean in water only.

### Tools and Machinery

Plane



File



Wood Vice



Top Coat



Synthetic Brushes



Cordless Drill



Primer



Pin Hammer





This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.This image shows a full page of white paper with evenly spaced horizontal blue or grey lines, typical of notebook paper. The lines run from left to right across the entire width of the page. There are approximately 20-22 visible lines. No handwriting or other markings are present on the page.

INSPIRING FUTURES



EXCEPTIONAL CHARACTER



ACADEMIC EXCELLENCE



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