BOURNEMOUTH SCHOOL

Year 8

Knowledge Organiser 1

Autumn Term: 2023-24

Name:_____

✓Hard Work ✓Discipline ✓Smart Appearance ✓Respect

Bournemouth School

Knowledge Organiser: Year 8 Autumn Term 1

'Knowledge is power' by Francis Bacon

A knowledge organiser provides you with all the most important knowledge you need for each unit of study this half term. Your aim is to transfer all of this information into your long-term memory so you can use it in your lessons and further expand your understanding of this work.

How to use your knowledge organiser (KO):

1. Ensure you have your KO with you at all times in school and when you need to do your homework at home.
2. Ensure you have your Homework Learning Journal with you at all times in school and when you need to do your homework at home.
3. In lessons when you have covered information that appears on your KO, your teacher will ask you to put a tick next to that section. This means that is now added to what you must learn for homework.
4. Initially, follow your homework timetable to decide what to revise each evening.
5. There are 4 strategies that you can use to revise. They are progressively more challenging so always start with the first in the list.
    a. **Look Cover Write Check**
        i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
        ii. LOOK carefully at the subject and section of your KO you want to revise and try to remember as much as you can. Remember this should be a ticked section.
        iii. Now COVER this information so you can't read it.
        iv. WRITE out what you can remember word for word in your Homework Learning Journal.
        v. CHECK what you have written by comparing it to your KO. Tick each correct word in green pen and correct any errors you have made.
        vi. Repeat this process until you are confident you can remember everything you need.

        AIM:

        You should be able to repeat the information by rote
    b. **Self or peer quizzing**
        i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
        ii. Write out a list of questions you could ask either yourself or a friend about this section of the KO. Write these in your Homework Learning Journal.
        iii. If you are working on your own, cover the KO and write a full answer to each question.
        iv. If you are working with a partner swap books and copy down their questions and have a go at answering them.
        v. Now uncover the KO and with a green pen correct your work.

        AIM:

        You should be able to repeat the information by rote but with a good understanding

    c. **Playing with words and sentences**

i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
ii. You now want to check how well you have learnt the information in your KO.
iii. Definitions – look at words that are used in this section. Can you write a definition in your own words?
iv. Rephrasing – can you rewrite the sentences or explanations in your own words?
v. Summary – can you summarise the main points of this section of the KO?
vi. Synonyms – can you write synonyms for key words and ideas?
vii. New Sentences – can you write a sentence that includes the key vocabulary or definitions that you have learnt?

AIM

You should be able to use the information in your KO in a flexible and confident way in your writing.

d. Think it, Link it

i. This is a technique to use towards the end of the half term when you are revising all of the KO.
ii. Think of the links or connections between different sections of your KO.
iii. Write these out in your own words in your Homework Learning Journal.
iv. Think about the links between a particular section of your KO and what you have learnt in your lessons. Can you expand on this section by linking it to your wider knowledge?
v. Write this out in your Homework Learning Journal.

AIM

You should be able to link your homework and your lessons to show a confident understand of the work covered.

Homework Learning Journal

1. Always write the subject and the date when you start your homework.
2. Always write the strategy that you are going to use for your homework.
3. Use a blue or black pen to complete your homework or a pencil if you need to draw.
4. Always use a ruler to underline titles and dates.
5. Use a green pen to complete corrections of your work.

Checking:

Your tutor will check your Homework Learning Journal at least once a week. If they are concerned that you aren't doing your homework properly they will offer support and guidance. If you don't respond to this guidance you will be added to the afterschool 'Success club' where a member of staff will help you complete your homework.

DO NOW tasks:

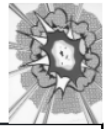
At the start of every lesson you should expect a Do Now task. This is a low stakes retrieval quiz on what you have learnt so far. If you have completed your homework this should be easy. The aim is to get 100% in each of these. If you miss this target occasionally, don't worry. If it happens regularly your teacher will ask your tutor to have a chat and offer you support.

Tick	Keyword	Read, cover, write, review
	Primary colours	Red Blue and Yellow. These colours can be used to mix all other colours.
	Secondary colours	Orange, Green and Violet. These are mixed from the primary colours.
	Tertiary Colours	These are mixed by combining a primary colour with a secondary colour and mix tints. Subtle variations on the other colours.
	Complementary colours	These are colours opposite each other on the colour wheel and stand out against each other.
	Blending	This is when we mix colours together with pastels to make another colour. There is a smooth transition between the colours.
	Pastel Colours	These are softer shades or paler tones, created by adding white.
	Tone	Tone is used to show the way light falls on an object. This can make an object look solid and 3 dimensional.
	Cool colours	These are blues, greens and purples. These colours recede in a picture.
	Warm colours	These are red, yellow and orange. These colours come forward in a picture.

Sketching Out:
When starting a drawing proportioning is very important.
To gain accurate **proportioning** you can:

- ❑ •**Use a grid** to help you break objects down into simple shapes
- ❑ •**Break complex objects down into simple shapes**

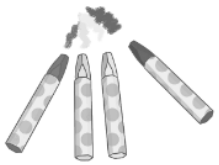
Pop Art

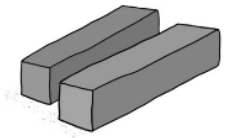


- ❑ ***Pop art*** is an art movement that emerged in the United Kingdom and the United States during the mid- to late-1950s.

Why is it called pop art?

- ❑ In reference to its intended popular appeal and its engagement with popular culture.





Tick	Keywords	Read, cover, write, review
	Oil pastel	An oil pastel is a painting and drawing medium formed into a stick which consists of pigment mixed with a binder mixture of non-drying oil and wax.
	Chalk (soft) Pastel	**T**hese are composed of pigment, water and a smaller amount of chalk or artificial binder. The soft texture of these pastels can create smooth, smudgy lines and intense colour
	Pastel	*Pastel* used as a verb means to produce an artwork with pastels; as an adjective it means pale in color.
	Dry wash	Dry wash: coverage of a large area using the broad side of the pastel stick. A cotton ball, paper towel, or brush may be used to spread the pigment more thinly and evenly.
	Mark making	Mark making describes the different lines, dots, marks and patterns we create, these can be spaced to appear light or dark.
	Texture	Texture is the way the surface looks or feels, we can use different mark making to create the look of texture.
	Composition	Composition is the way in which different elements of an artwork are combined or arranged.

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Small Basic

Keyword	Definition / Example	Tick
Programming language	A language people use when developing software to tell a computer what to do.	
Variable	A value held in a location in the memory of the computer. It is temporary and can be changed.	
Concatenation	Joining text together.	
Algorithm	A set of step-by-step instructions to solve a problem.	
Decomposition	Breaking a big problem down into smaller more simple problems.	
Abstraction	Ignoring unnecessary details of a problem to think about those details that are important.	
Pattern recognition	Recognising the similarities in how to solve different problems.	
Sequence	Represents a set of steps carried out in order line-by-line.	
Arithmetic operators	Mathematical functions that take two values and performs a calculation on them. *Add* `7 + 2 = 9` *Subtract* `7 - 2 = 5` *Multiply* `7 * 2 = 14` *Divide* `4 / 2 = 2`	
Relational operators	Allow the comparison of values. *Less than* `<` `7 < 2` `False` *Greater than* `>` `7 > 2` `True` *Equal to* `=` `7 = 2` `False` *Not equal to* `<>` `7 <> 2` `True` *Less than or equal to* `<=` `7 <= 2` `False` *Greater than or equal to* `>=` `7 >= 2` `True`	

Small Basic

Keyword	Definition / Example	Tick

Output	Output text to the screen and then take a new line:
	`TextWindow.WriteLine("Hello world!")`
	Output text to the screen without taking a new line:
	`TextWindow.Write("Hello world!")`	

Input	Allow the user to type something in the TextWindow and store it in a variable to use later: `name = TextWindow.Read()`	

Formatting	`TextWindow.Top = 300`
	`TextWindow.Left = 300`
	`TextWindow.Title = "Fun with Small Basic Programming"`
	`TextWindow.BackgroundColor = "Gray"`
	`TextWindow.ForegroundColor = "Red"`
	`TextWindow.CursorTop = 20`
	`TextWindow.CursorLeft = 30`	

Selection	Used to make decisions in a program based on the result of a Boolean condition.
	`number = 5`
	`If number < 5 Then`
	`  TextWindow.WriteLine("Less than 5.")`
	`ElseIf number > 5 Then`
	`  TextWindow.WriteLine("More than 5.")`
	`Else`
	`  TextWindow.WriteLine("Exactly 5.")`
	`EndIf`	

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Tick this box once this has been covered in lesson ☐

Year 8 Design Technology

Thermosetting polymers

What is the different between a thermoforming and a thermosetting polymer?
A thermoforming polymer can be reheated and reshaped lots of times whereas once a thermosetting polymer is set, it cannot be heated and change its' shape. This is due to the molecule structures: thermosetting polymers have cross links which prevents the reshaping whereas thermoforming polymers do not have these.

Thermosetting polymer	Properties	Uses
Polyester resin	Rigid, brittle, good electrical and heat insulator, corrosion resistant	• Boat hulls • Sports car bodies • Cast for decorative objects
Urea formaldehyde	Rigid, hard, brittle, heat resistant, excellent electrical insulation	• Plugs, sockets, light switches (electrical fittings) • Used as an adhesive in manmade boards

Tick this box once this has been covered in lesson ☐

Year 8 Design Technology

Hardwoods

Hardwood	Uses	Advantages	Disadvantages
Oak	• High quality furniture • Whisky barrels • Boat building	Aesthetically pleasing, durable, strength	It is becoming rarer, expensive, fairly difficult to work with
Mahogany	• Window frames • Jewellery boxes • Older furniture	Fairly easy to work with, aesthetically pleasing due to the reddish colour	Issues sourcing due to being grown in tropical forests, expensive
Beech	• Toys • Tools • Cooking implements	Tough, hard, does not splinter easily	Very difficult to work with, not resistant to moisture
Balsa	• Modelling • Raft building • Surf boards	Extremely easy to work with, soft, lightweight, buoyant	Soft and weak

Tick this box once this has been covered in lesson ☐

Year 8 Design Technology

Material properties

What is a mechanical property?
Elements of a material that resist deformation from external forces in a particular way.

Property	Definition
Strength	Ability to withstand forces by squashing (compressive strength) or stretching (tensile strength).
Elasticity	Ability to return to its original shape once the deforming force has been removed.
Plasticity	Ability to permanently deform without breaking when subjected to a force.
Malleability	Ability to deform in all directions without fracture.
Ductility	Ability to be drawn out, bent or twisted without fracture.
Hardness	Ability to resist deformation, indentation or penetration.
Toughness	Ability to withstand sudden shock or stress.
Brittleness	Inability to withstand sudden shock or stress.
Durability	Ability to withstand deterioration over a long period of time.
Stability	Ability to resist changes in shape over time.
Stiffness	Ability to resist bending.

Tick this box once this has been covered in lesson ☐

Year 8 Design Technology

Metals

What is a ferrous metal?
A metal which contains iron.

Ferrous metal	Properties	Uses
Mild steel	Tough, ductile, malleable, high tensile strength, poor corrosion resistance	• Screws, nails, bolts • Girders • Car body panels, • General engineering purposes
Stainless steel	Corrosion resistant, hard, tough, sometimes magnetic, resists wear, difficult to cut	• Kitchenware • Sinks • Cutlery • Medical equipment
Cast iron	Hard 'skin', brittle, soft core, magnetic. Good in compression Self-lubricating	• Machine Parts • Vices • Break discs • Manhole covers

What is a non-ferrous metal?
A metal which does not contain iron.

Non-ferrous metal	Properties	Uses
Aluminium	Corrosion resistant, easily machined, good heat/electrical conductor, excellent strength-to-weight ratio, polishes well	• Aircraft parts • Foil • Window frames • Engine parts • Drinks cans
Copper	Reddish brown; corrosion resistant, ductile, tough, good heat/electrical conductor, polishes well	• Electrical components • Gas and water pipes • Printed circuits
Brass	Corrosion resistant, easily machined, good heat/electrical conductivity	• Plumbing fittings • Door fittings • Musical instruments

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Year 8 'The Gothic' Knowledge organiser

Emerging in Europe in the 18th century, Gothic literature is a genre that places strong emphasis on intense emotion, pairing terror with pleasure, death with romance. The Gothic is characterized by its darkly picturesque scenery and its eerie stories.

Key Features of the gothic:			
	✓		✓
Pathetic fallacy Writers often use the weather to create a gloomy or ominous tone.		**Setting** Typical gothic story - set in and around a castle, graveyard, cave, convent, monastery, church, cathedral, chapel or dungeon. The setting, like the weather, is used to create a specific tone.	
The Supernatural Unexplainable phenomena such as ghosts, vampires etc…		**An outsider** Often the main protagonist is an outsider, unaware of the dangers.	
Revenge Inflicting harm for an injury or wrong suffered from another.		**The Uncanny** An everyday familiar object or relationship is presented in an alien or grotesque way e.g. a child's toy juxtaposed in a gloomy environment.	
A woman in distress Classic Gothic trope - essentially represents the weak female that needs to be rescued from the impending doom of the outside world.		**Past/Present** The past coming back to haunt the present.	

Key Terminology	✓
Ballad: poem that often tells a story. It has a regular rhyme scheme.	
Rhyming couplet: a pair of successive lines that rhyme .	
Internal rhyme: a rhyme involving a word in the middle of a line and another at the end of the line or in the middle of the next.	
Catalyst: when a condition, event, or person that is the cause of an important change.	
Epistolary Novels. Novels constructed out of fictional letters, diaries, news clippings, etc. ..	
Semantic field: set of words (or lexemes) related in meaning	
Foreshadowing: a warning or indication of a future event.	

Context – The Victorian Era & The scientific fears of Victorian Society			
	✓		✓
This was a period in history from 1837 to 1901 when Queen Victoria was on the throne. It was very different to now, as there was no electricity, no TV, no internet, and cars were only just invented at the end of her reign.		Charles Darwin's theory of evolution - the human race was changeable and could evolve or even degenerate or devolve ("if something can evolve, it can also devolve".)	
The Victorians were fascinated by ghosts. Charles Dickens, belonged to a ghost hunting club! It became a tradition at Christmas to sit round the fire as a family and tell spooky ghost stories.		Victorians because of this idea of the human species being in an 'unfixed' state assumed that the human race was in a state of decay.	
There was a strict class system: working class, middle class and upper class. The upper class people had servants who did all their cooking, cleaning and child care.		Many people were shaken by the Darwin's key idea: that instead of God, the idea that human beings were descended from apes, although Darwin only hinted at it.	
One of the most interesting aspects of Victorian Gothic literature was the fascination with science. At this time, science was still an emerging field, and one that many people regarded with distrust.		Late in the 18th century, scientist Luigi Galvani, who was experimenting on dissected frogs, mistakenly touched a brass rod to a steel scalpel making a clear contraction of muscle in an otherwise dead frog.	
The Victorian Gothic also explored the idea that human nature is weak and easily swayed to evil		Galvani believed that this form of electricity, which he called "animal electricity", was a form of energy that was still being held in the animal's tissue and that perhaps, bringing people back from the dead was possible!	

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Year 8 'The Gothic' Knowledge organiser

Glossary	✓		✓
Quaint – Attractively unusual or old-fashioned		Torrent – Strong or fast moving stream of water	
Pallas – A name (unknown meaning) of Athena		Galleon – Sailing ship used (Spanish) 15th to 17th Century	
Lore – Traditions/knowledge held on a subject; typically passed from person to person		Breeches – Short trousers fastened below the knee	
Pallid – (Person's face) Pale; because of poor health		Bonny – Attractive or beautiful	
Chamber – Private room e.g. bedroom		Tawny – Orange-brown or yellowish colour	
Placid – Not easily upset or excited		Priming – A substance that prepares something for use or action	
Implore – beg someone desperately		Spur (spurred) – Spiked device on the heels for urging a horse forward	
Scarce – Insufficient for the demand		Rapier – Thin, light sharp-pointed sword	
Ascribe – Cause of something		Brandished – Wave as a threat or in anger or excitement	
Importunate – Persistent; especially to the point of annoyance		Convulse (convulsive) – Sudden, violent, irregular movement of a limb or body	
Unhasp - Unfasten		Lustrous – Shining	
Discerned – Perceived or recognized something		Ardour – Enthusiasm or passion	
Staple – A thin wire		Inarticulate – Unable to speak distinctly or express clearly	
Obscure – Not discovered or known about – uncertain		Wretchedly (wretched) – Very unhappy or unfortunate state	
Tenacious – Keep a firm hold		Aquiline – Hooked or curved like an eagle's beak	
Lamentable – Bad or unsatisfactory		Ruddy (ruddiness) – (Person's face) having a healthy red colour	
Doleful – Sorrow or mournful		Hitherto – Until now or until the point in time under discussion	
Agitation – Anxiety or nervous excitement		Veneration – Great respect	
Indignation – Anger/annoyance provoked by what is perceived unfair treatment		Exordium – Beginning or introductory part, especially of a discourse or treatise	
Tumult - Loud confused noise – usually caused by a mass of people		Earnest – results from or showing sincere and intense conviction	
Cessation – Process of ending/being brought to an end		Profound – A state, quality or emotion (very great intense)	

Name: Date:

Year 8 Knowledge Organiser Food hygiene

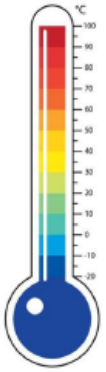
- Good food safety and hygiene practices are essential to reduce the risk of food poisoning.

Food poisoning
Food poisoning can be caused by:
- bacteria, e.g. through cross-contamination from pests, unclean hands and dirty equipment, or bacteria already present in the food, such as salmonella;
- physical contaminants, e.g. hair, plasters, egg shells, packaging;
- chemicals, e.g. cleaning chemicals.

Bacterial contamination is the most common cause.
Microorganisms occur naturally in the environment, on cereals, vegetables, fruit, animals, people, water, soil and in the air. Most bacteria are harmless but a small number can cause illness.
Harmful bacteria are called pathogenic bacteria.
The process of food becoming unfit to eat through oxidation, contamination or growth of micro-organisms is known as food spoilage.

Bacterial growth and multiplication
Most bacteria, including those that are harmful, have four requirements to survive and grow:
- food;
- moisture;
- warmth;
- Oxygen

Temperatures to remember
To reduce the risk of food poisoning, good temperature control is vital:
- 5-63°C – the danger zone where bacteria grow most readily.
- 37°C – body temperature, optimum temperature for bacterial growth.
- 8°C – maximum legal temperature for cold food, i.e. your fridge.
- 5°C (or below) – the ideal temperature your fridge should be.
- 75°C – if cooking food, the core temperature, middle or thickest part should reach at least this temperature.
- 75°C – if reheating food, it should reach at least this temperature. In Scotland food should reach at least 82°C.



Allergen and food intolerance awareness
There are 14 ingredients (allergens) that are the main reason for adverse reactions to food. Cross-contamination of food containing these allergens must be prevented to reduce the risk of harm. They must also be labelled on pre-packaged food and menus so that consumers can make safe choices. The 14 allergens are:

Celery (and celeriac)	Milk
Cereals containing gluten	Molluscs
Crustaceans	Mustard
Eggs	Nuts
Fish	Peanuts
Lupin	Sesame
	Soybeans
	Sulphur dioxide

0-5 Degrees C correct operating temperature range for a fridge.
- 18 Degrees C correct temperature for a freezer.

Key terms
Allergens: Substances that can cause an adverse reaction to food. Cross-contamination must be prevented to reduce the risk of harm.
Bacteria: Small living organisms that can reproduce to form colonies. Some bacteria can be harmful (pathogenic) and others are necessary for food production, e.g. to make cheese and yogurt.
Cross-contamination: The transfer of bacteria from one source to another. Usually raw food to ready-to-eat food but can also be the transfer of bacteria from unclean hands, equipment, cloths or pests. Can also relate to allergens.
Food poisoning: Illness resulting from eating food which contains food poisoning micro-organisms or toxins produced by micro-organisms.
High risk ingredients: Food which is ready to eat, e.g. cooked meat and fish, cooked eggs, dairy products, sandwiches and ready meals. These are usually moist high protein foods but can include those kept warm on hotplates like Gravies, soups and stews.

Task
Create a poster highlighting the top tips for ensuring food is safe to eat. Include personal hygiene, safe storage, preparation and cooking of food.

High risk food
Bacteria easily multiply on foods known as 'high-risk food'. These are often high in protein or fat, such as cooked meat and fish, dairy foods and eggs. Cooked pasta and rice are also regarded as high risk foods if they are not cooled quickly after cooking and stored below 5°C.

Moisture
Bacteria need moisture to survive. Dried foods, such as powdered milk, cereals or dried egg do not support bacterial growth, if properly stored. However, if moisture is added, any bacteria still alive can quickly begin to multiply.

Time
When bacteria spend enough time on the right types of food, at warm temperatures, they can multiply to levels that cause illness.

Reheat food only once and eat leftovers within 48 hours.

Use-by-date
You've got until the end of this date to use or freeze the food before it becomes too risky to eat. These are usually high risk foods.

USE BY:
25/08/20
KEEP REFRIGERATED

Getting ready to cook
- Remove blazers/jumpers and roll up long sleeves.
- Tie up long hair and tuck in ties or head coverings.
- Thoroughly wash and dry hands.
- Put on a clean apron.

Best-before-date
You can eat food past this date but it might not be at its best quality.

BEST BEFORE:
25/08/21
STORE IN A COOL DRY PLACE

Where should food be stored in the fridge?

Cheese, dairy and egg-based products
The temperature is usually coolest and most constant at the top of the fridge, allowing these foods to keep best here.

Cooked meats
Cooked meats should always be stored above raw meats to prevent contamination from raw meat.

Raw meats and fish
Raw meats and fish should be below cooked meats and sealed in containers to prevent contamination of salad and vegetables.

Salad and vegetables
These should be stored in the drawer(s) at the bottom of the fridge. The lidded drawers hold more moisture, preventing the leaves from drying out.

Food poisoning Bacteria e.g.
Salmonella
Listeria
E-Coli
Campylobacter
Bacillus Cereus
Staphylococcus aureus
Clostridium perfringens
These are all Pathogenic bacteria.

People at risk
Elderly people, babies and anyone who is ill or pregnant needs to be extra careful about the food they eat.

Why clean?
To remove grease, dirt and grime, and prevent food poisoning and pests. Dirty surfaces and equipment encourage flies etc

Symptoms of food poisoning
The symptoms of food poisoning include:
- nausea;
- vomiting;
- stomach pains;
- diarrhoea.

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Opinions

J'aime bien	I really like	
J'adore	I love	
Je suis fan de…	I am a fan of…	
J'ai une passion pour…	I have a passion for…	
À mon avis	In my opinion	
Je pense que	I think that	
Je trouve ça	I find it/that	

Reasons

amusant	fun	
assez bien	quite good	
barbant	boring	
ennuyeux	boring	
émouvant	moving	
palpitant	gripping	
affreux	awful	
pratique	practical	
formidable	amazing	
intéressant	interesting	
informatif	informational	
idiot	silly/idiotic	
chouette	great	
effrayant	scary	

Tenses

c'est	it is	
c'était	it was	
ça va être	it is going to be	

Photo description

Sur la photo	On the photo	
Je peux voir	I can see	
On peut voir	We/you can see	
Il y a	There is/are	
À gauche	On the left	
À droite	On the right	

Essential verbs

Je regarde	I watch	
Il/Elle regarde	He/She watches	
Nous regardons	We watch	
Je fais	I do	
Il/Elle fait	He/She does	
Nous faisons	We do	
Je vais	I go/I'm going	
Il/Elle va	He/She goes/is going	
Nous allons	We go/We are going	
Je lis	I read	
Il/Elle lit	He/She reads	
Nous lisons	We read	

High Frequency words

surtout	especially	
aussi	also	
mais	but	
comme	as/like	
par exemple	for example	
très	very	
assez	quite	
un peu	a bit	
parce que/car	because	
d'habitude	usually	

Time phrases

tous les jours	Everyday	
le week-end	At the weekend	
le soir	In the evening	
souvent	often	
parfois	sometimes	

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Qu'est-ce que tu regardes à la télé?
What do you watch on TV?

À la télé	On TV	
Je regarde…/ J'aime	I watch/ I like	
les dessins animés	cartoons	
les documentaires	documentaries	
les émissions de sport	sports programmes	
les émissions de télé-réalité	tv reality programmes	
les émissions musicales	music programmes	
les infos	the news	
les jeux télévisés	game shows	
la météo	the weather	
les series	series	
les séries policières	crime series	
les séries américaines	American series	

les comédies	comedies	
les films d'action	action films	
les films d'amour	romantic films	
les films d'aventure	adventure films	
les films d'arts martiaux	martial arts films	

In French, to say a film genre we say 'a film of …'
e.g. Un film d'horreur – would translate as:
'a film of horror'

Qu'est-ce que tu lis?
What do you read?

Je lis…	I read	
des BD	comic books	
des livres sur les animaux	A book about animals	
des livres d'épouvante	A horror book	
des magazines sur les célébrités	A celebrity magazine	
des mangas	A Japanese comic book	
des romans fantastique	A fantasy novel	
des romans policiers	A thriller	
des romans d'amour	A romantic novel	

Qu'est-ce que tu fais en ligne?
What do you do online?

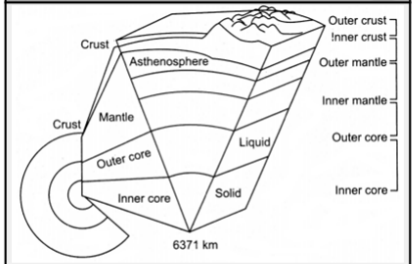
J'envoie des e-mails.	I send emails.	
Je fais beaucoup de choses.	I do lots of things.	
Je fais des recherches.	I do research.	
Je fais des achats.	I do shopping/I buy things.	
Je fais des quiz.	I do quizzes.	
Je joue en ligne.	I play online.	
Je mets à jour ma page perso.	I update my homepage.	
Je vais sur…	I go on…	
Je télécharge	I download	
Je fais du codage	I do coding	

YEAR 8 GEOGRAPHY — Topic 1: Restless Earth

Section 1: Definitions

Natural hazard	A natural event (e.g. volcanic eruption) that has the **potential** to threaten both life and property
Disaster	When a natural hazard (e.g. earthquake) has a **significant** impact on peoples lives and property.
Tectonic Hazards	Hazards formed by the movement of the earth's plates.
Climatic Hazards	Hazards formed by the weather.
Geomorphic Hazards	Hazards formed on the land surface or linked to rocks.

Section 2: The Structure of the Earth



- The crust moves slowly around on the mantle because of **convection currents.**

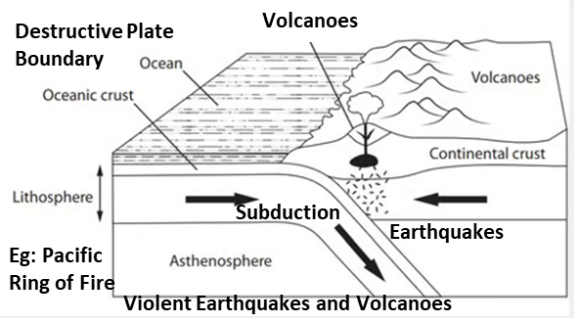
Section 3+4: Where do Volcanoes and Earthquakes occur?

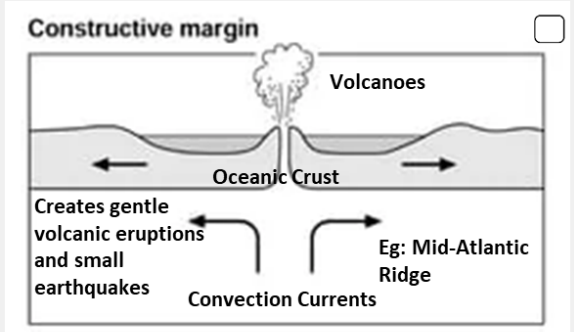
- Most volcanoes and earthquakes occur along **plate boundaries**.
- The pattern of earthquakes and volcanoes is **uneven**.
- A large number of volcanoes and Earthquakes are found around the edge of the Pacific Ocean **(The Ring of Fire).**
- **Continental plates** are thicker, less dense and made of rocks like Granite.
- **Oceanic Plates** are thinner, more dense and made of rocks like Basalt.

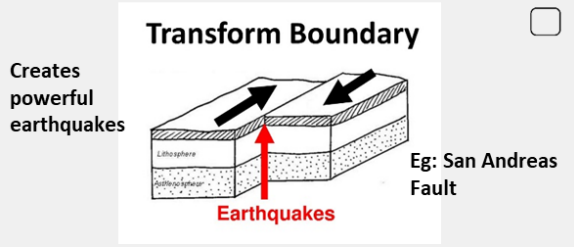
Section 7: Earthquakes

- An earthquake is a **sudden** shaking of the earth's **crust**.
- They are caused by the sudden release of **energy** and lead to the crust snapping.
- The stored energy is released in waves called **seismic** or **shock** waves.
- Earthquakes are measured using the **Richter Scale** and **Mercalli Scale**.

Section 5+6: Plate Boundaries



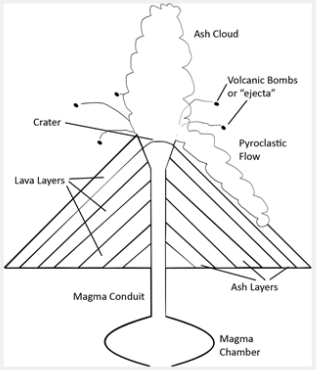




Section 9+10: How can we mange Earthquakes?

Prediction	Attempts to forecast an event - where and when it will happen - based on current knowledge.
Planning/ Preparation	Organising activities and drills so that people know what to do during an earthquake.
Protection	Constructing buildings so that they are safe to live in and will not collapse.
Tsunami	Large Ocean waves triggered often by Earthquakes.

Section 11,12+13: Volcanoes



- Classed by activity; **Active, Dormant or Extinct.**
- They can be classed by **shape Shield, Composite.**

Section 14: Super Volcanoes

- Yellowstone is an example of a **Supervolcano.**
- They are hundreds of times **more powerful** than normal volcanoes.
- The last Supervolcano to erupt was **Toba 74,000 years ago.**
- An eruption would **change the climate.**

Bournemouth School – Knowledge Organiser – Year 8

GEOGRAPHY

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Stell dich vor – introducing youself

Wie heißt du?	What's your name?	
Ich heiße…	My name is…	
Hallo!	Hello!	
Guten Tag!	Good morning!	
Guten Abend!	Good evening	
Wie geht's?	How are you?	
Gut, danke und dir?	Good, thanks and you?	
Nicht schlecht	Not bad	
Tschüs(s)	Bye	
Auf Wiedersehen	Goodbye	
Wie alt bist du?	How old are you?	
Ich bin … Jahre alt.	I am…years old.	
Wie alt ist …?	How old is …?	
… ist …. Jahre alt.	… is … years old.	
Wo wohnst du?	Where do you live?	
Ich wohne in…	I live in…	
Er/Sie/Es wohnt in…	He/She/It lives in…	
Ich komme aus …	I come from …	
Er/Sie/Es kommt aus …	He/She/It comes from	

Essential verbs

sein - to be		
ich bin	I am	
du bist	You are	
er/sie/es ist	He/She/It is	

haben - to have		
ich habe	I have	
du hast	You have	
er/sie/es hat	He/She/It has	

wohnen - to have		
ich wohne	I live	
du wohnst	You live	
er/sie/es wohnt	He/She/It lives	

After haben and most other verbs, the masculine word for "a" and "the" changes its spelling. Feminine and neuter articles stay the same.

Verb	article	noun
Ich habe	einen den	Computer
	eine die	Gitarre
	ein das	Handy

High frequency words

und	and	
auch	also	
aber	but	
sehr	very	
ziemlich	quite	
nicht	not	

Nouns gender

In German, there are three definite articles (words for 'the') and three indefinite articles (words for 'a').

	M	F	NT
the	der	die	das
a	ein	eine	ein

A noun is a word that names a person, animal, place or thing. In German, all nouns start with a capital letter and have a gender: masculine, feminine or neuter.

When you learn a new word, always learn it with its article –
das Auto, not just Auto.

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Länder - Countries		
England	England	
Irland	Ireland	
Nordirland	Northern Ireland	
Schottland	Scotland	
Wales	Wales	
Deutschland	Germany	
Österreich	Austria	
die Schweiz	Switzerland	

Adjektive - Adjectives		
Wie bist du?	What are you like?	
Ich bin…	I am…	
Er/Sie ist…	He/She is…	
faul	lazy	
freundlich	friendly	
intelligent	clever	
kreativ	creative	
launisch	moody	
laut	loud	
lustig	funny	
musikalisch	musical	
sportlich	sporty	

Was denkst du? What do you think?		
Was denkst du?	What do you think?	
Ich denke	I think	
Ich auch!	Me too!	
Ich nicht!	Me neither!	

Fragewörter - Question words		
Was?	What?	
Wie?	How?	
Wo?	Where?	
Woher?	Where from?	
Was? Du spinnst!	What? You're joking!	

Was hast du? What do you have?		
Ich habe…	I have…	
einen Computer	A computer	
einen iPod	An iPod	
einen Fußball	A football	
eine Gitarre	A guitar	
eine Wii	A Wii	
eine Schlange	A snake	
ein Handy	A mobile phone	
ein Keyboard	A keyboard	
ein Skateboard	A skateboard	

Meine Lieblingssachen - My favourite things		
mein Lieblingssport	my favourite sport	
meine Lieblingsmusik	my favourite music	
meine Lieblingsfuß-ballmannschaft	my favourite football team	
mein Lieblingsland	my favourite country	

Zahlen - Numbers		
eins	1	
zwei	2	
drei	3	
vier	4	
fünf	5	
sechs	6	
sieben	7	
acht	8	
neun	9	
zehn	10	
elf	11	
zwölf	12	
dreizehn	13	
vierzehn	14	
fünfzehn	15	
sechzehn	16	
siebzehn	17	
achtzehn	18	
neunzehn	19	
zwanzig	20	

Keywords/terms	Definition – read, cover, write, check, redo	Tick
Typography	**Typography** is the art and design of text, it is the visual component of the written word,". All visually displayed text, whether on paper, screen or billboard, involves typography	
Design brief	A **design brief** is a document that outlines the core details and expectations of a design project for a client.	
Design specification	A **design specification** is a list of criteria a product needs to address. Using the brief as a starting point for research, a specification can be written when more facts are known.	
Branding	A brand is a name, design or symbol, or some other feature which identifies a particular company or product.	
Kerning	**Kerning** refers to the space between two specific letters (or other characters: numbers, punctuation, etc.) and the process of adjusting that space improves legibility.	
Tracking	**Tracking** is similar to kerning in that it refers to the spacing between letters or characters. However, instead of focusing on the spacing between individual letters (kerning), tracking measures space between groups of letters	

Why do businesses need branding?

Brand identity allows businesses to have a visual presence in the market place. Branding design encompasses all your graphic design decisions that define a brand. It includes a company's visual identity, such as the logo, color palette, and graphic elements, as well as marketing materials such as business cards and product packaging.

The rebranding process begins when a company or organisation needs to evolve and shift – often seeking to drive growth. These efforts could begin because they want to reposition themselves within their current market, they want to broaden their appeal, or they may be looking to expand into a new space.

7-Step Logo Design Process

3 Logo Design Principles

Keyword	Definition - Layout in Graphic Design	Tick
Layout in design	**Layout** design is a fundamental branch of graphic design that concerns the arrangement of text and visuals.	
Hierarchy	Typographic **hierarchy** is an essential part of any design or layout. Hierarchy is a way to visually rank your design elements.	
Proportion	Adjusting size. Larger items appear more important. Spacing of text is important to make text legible.	
Repetition	Using repeating patterns or shapes can add interest - for instance, using a certain shape or line type as the basis for a lettering design.	
Negative space	Negative space refers to the empty spaces on your artboard. The right amount of negative space in your design will separate objects, cushion text to make it more readable and encourage your audience to look at certain elements of your design, helping you to direct their visual flow	

Keyword	Colour theory in Graphic Design	Tick
Monochrome	Monochrome is used to describe design or photographs in one colour or different shades of the single colour. An image created in black and white or in varying tones of only one colour.	
Analogous	Colours are called analogous colours when they are very similar to each other, especially when they are next to each other on a colour wheel. For example, red, red-orange, and orange are analogous colours.	
Complementary	Colours that are opposite each other on the colour wheel are considered to be complementary colours (example: red and green, example Christmas).	
Gradient	A gradient is a gradual change of colours (such as green turning gradually into blue) or a colour fading into transparency. There are two common types of gradients: radial and linear.	
Opacity	Opacity enables us to make an element of a design transparent. The lower the opacity, the more transparent an element is. For example, 100% opacity means an object is solid.	

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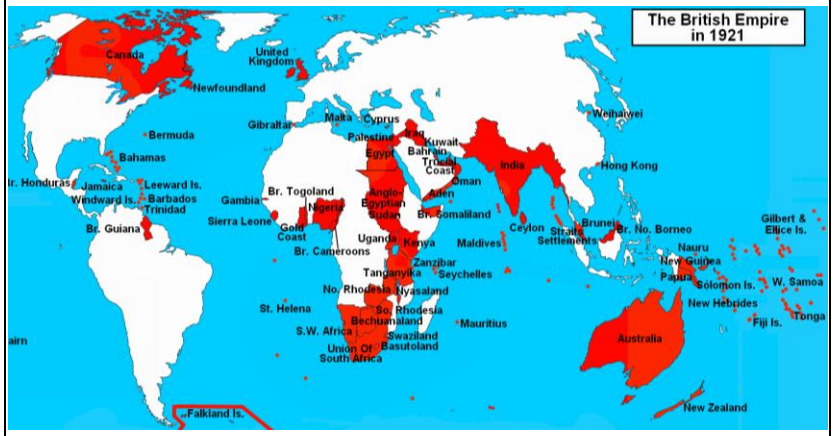
Bournemouth School: History Department: Knowledge Organiser: Year 8: Autumn 1: Slavery and Empire

History skills: Key terms/definitions		
Term	**Definition**	✓
Source	A 'primary source' taken from the time we are studying	
Interpretation	A 'secondary source' taken from after the time we are studying	
Nature	Type of source we are looking at e.g. cartoon, speech, diary	
Origin	Who the source was written by and when	
Purpose	Why the source was produced	
Intended audience	Who the source was written for	
Imperialism	A policy of extending a country's power through diplomacy/force	
Empire	A group of states/countries under a single supreme authority	
Plantation	A field which grows just one type of crop e.g. tobacco, sugar	
Middle Passage	The journey which captured Africans took from Africa to America	

Empire: Timeline of key events:	✓
1562-9: John Hawkins becomes the first Englishman definitely known to have traded in Africans. 1765: Granville Sharp begins legal challenges to the British slave trade. 1791: First abolition bill from Wilberforce defeated. 1833: Slavery Abolition Act is passed in Parliament. All enslaved people in the Caribbean given freedom although some other British territories have to wait longer. 1914-1918: Countries in the British Empire support Britain during WW1. 1947: Declaration of Indian Independence.	



This is a map of the British Empire in 1921. Britain ruled a population of 470-570 million people (around one quarter of the world's population) including Canada, Australia, Hong Kong, India and parts of Africa and the West Indies. The British Empire brought many economic benefits to the people of Britain: however many of those living in the colonies suffered considerably.

Key people					
		✓			✓
	**Queen Victoria:** Queen of England 1819-1901			**Olaudah Equiano** Writer and anti slavery campaigner	
	**Duleep Singh** Ruler of the Punjab 1843-1849			**William Wilberforce:** MP and campaigner for the abolition of slavery	

Individuals Experiences in the British Empire	✓
Dadabhai Naoroji	First Asian to become a British MP
Dr Bhimrao Ambedkar	An 'untouchable' who tried to improve the lives of those treated as outcasts in Indian society.
Kumar Shri Ranjitsinhji	The son of a nobleman in the Indian province of Kathiawar
Lascar sailors	Many Indians from very poor agricultural areas were taken on as sailors of British merchant ships

Did You Know?

On the Middle Passage, slaves were subject to horrific treatment. They would be stacked 50cm apart, temperatures would be over 35C and the journey could last 40-70 days. Illness was common and up until the 1750s, around one in five of the slaves transported died owing to the awful conditions.

The Plantations

The main crop grown was sugar (sometimes cotton/tobacco). On the plantations were field slaves who worked outside under the direction of the overseers and house slaves who would cook, clean and bring up the children. Conditions were terrible and punishments were harsh.

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Keyword	Definition	Example
Polygon	A 2D shape with a number of straight edges	Polygons: Triangles, Rectangles, Trapeziums, Octagons… Not Polygons: Circles, V shape…
Convex polygon	All diagonals are inside the polygon	
Concave polygon	At least one diagonal is outside the polygon, and at least one reflex angle	
Interior angle	An angle inside a polygon	The interior angle of an equilateral triangle is $60°$
Exterior angle	The angle outside a polygon, formed when one of the sides of a polygon is extended Interior angle + Exterior angle = $180°$	The exterior angle of an equilateral triangle is $120°$
Regular polygon	All side lengths are equal and angles are equal	A square is a regular quadrilateral
Irregular polygon	A polygon that is not regular	A parallelogram is an irregular quadrilateral
Interior angles sum	The interior angles of an n-sided polygon sum to $180(n-2)$	Interior angles of an octagon sum to $180(8-2) = 180 \times 6$ $= 1080°$
Exterior angles sum	The exterior angles of an n-sided polygon sum to $360°$	For an equilateral triangle: $120 \times 3 = 360°$
Interior angle of a regular polygon	In an n-sided regular shape, the size of one interior angle is: $\frac{180(n-2)}{n}$	Interior angle of a regular decagon is $\frac{180(10-2)}{10} = \frac{180 \times 8}{10}$ $\frac{1440}{10} = 144°$
Exterior angle of a regular polygon	In an n-sided regular shape, the size of one exterior angle is: $\frac{360}{n}$	Exterior angle of a regular hexagon is $\frac{360}{6} = 60°$
Tessellation	The covering of a flat surface using a polygon, called tiles, with no overlaps and no gaps. The interior angles around any point must add up to $360°$	
Semi-tessellation	A tessellation which uses more than one polygon	

Keyword	Definition	Example
Sequence	A list of numbers that follow a pattern or rule	2, 4, 6, 8, 10, …
Terms	A number in a sequence	The 3rd term of the sequence above is 6
First term	The first term in a sequence	The first term of the sequence above is 2
Term-to-term rule	The rule a sequence follows	The rule for the sequence above is "add 2"
Linear (arithmetic) sequence	A sequence where the term-to-term rule is adding/subtracting a constant amount	5, 7, 9, 11, 13, …
Geometric sequence	A sequence where the term-to-term rule is multiplying/dividing by a constant amount	$5, 10, 20, 40, 80, \ldots$
Find missing terms in a sequence	Use the term-to-term rule	Find the 100th term of 6, 10, 14, 18, … The rule is add 4 $18 + 96 \times 4 = 402$
n	n represents the position of a term in a sequence	6, 10, 14, 18, … When $n = 2$, that is the 2nd term which is 10
nth term	An algebraic rule to find any term	$n + 3$ gives the sequence 4, 5, 6, 7, …
nth term of a linear sequence	$an + b$ • where a is the term-to-term rule • and b is the **0th term** (the term that would come before the first term)	Find the nth term of 7, 10, 13, 16, … The term-to-term rule is add 3 The 0th term is 4 $3x + 4$
Find if a term is in a given sequence	Put the number equal to the nth term. Solve the equation formed - if n is a positive whole number, then it is a term in that sequence	Is 85 in the sequence 7, 10, 13, 16, … $3x + 4 = 85$ $3x = 81$ $x = 27$ Yes, it's the 27th term
Square numbers	The nth term is n^2	1, 4, 9, 16, 25, 36, 49…
Triangular numbers	Starting with 1, the next term is found by adding 2. The following term by adding 3 etc.. The nth term is found by calculating $1 + 2 + 3 + 4 + \cdots + n$	1, 3, 6, 10, 15, 21, 28…
Fibonacci sequence	Starting with two 1's, the next term is found by adding the previous two terms	1, 1, 2, 3, 5, 8, 13, 21…
nth term of a geometric sequence	If the term-to-term rule is multiplying by r, then the nth term is r^n	4, 16, 64, 256, … nth term is 4^n

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Keyword		Definition	Example
Solve		Find the value of the variable in an equation	Solve $5x = 20$ $x = 4$
Equation involving brackets		If an equation has bracket(s), there are two methods to solve it: 1. Expand the bracket to get rid of it, then solve as before 2. Divide both sides of the equation by the coefficient of the bracket	Solve $6(x + 4) = 18$ Method 1: $6x + 24 = 18$ $6x = -6$ $x = -1$ Method 2 $x + 4 = 3$ $x = -1$
Add algebraic fractions		• Find a common denominator • Find equivalent fractions • Add the numerators • Cancel if possible	$\frac{4x}{5} + \frac{x}{6}$ $= \frac{24x}{30} + \frac{5x}{30}$ $= \frac{29x}{30}$
Subtract algebraic fractions		• Find a common denominator • Find equivalent fractions • Subtract the numerators • Cancel if possible	$\frac{5}{6} - \frac{2}{x}$ $= \frac{5x}{6x} - \frac{12}{6x}$ $= \frac{5x - 12}{6x}$
Simplify algebraic fractions		• Divide both the numerator and denominator by a common factor	Simplify $\frac{15x}{20x^2} = \frac{3}{4x}$
Multiply algebraic fractions		• Check to see if the fractions cross-cancel • Multiply the numerators together • Multiply the denominators together	$\frac{3x^3}{10} \times \frac{5}{9x} = \frac{x^2}{2} \times \frac{1}{3} = \frac{x^2}{6}$
Divide algebraic fractions		• To divide by a fraction, multiply by its reciprocal • Then multiply as before	$\frac{5x}{7} \div \frac{2}{x} = \frac{5x}{7} \times \frac{x}{2} = \frac{5x^2}{14}$
Equation involving fractions		If one side of an equation is a fraction, multiply both sides by the denominator If both sides of the equation is a fraction, cross multiply	Solve $\frac{x+1}{5} = 2$ $x + 1 = 10$ $x = 9$ Solve $\frac{4}{x} = \frac{2}{3}$ $12 = 2x$ $6 = x$

Keyword		Definition	Example
Equation with the variable on both sides		To solve an equation with the variable on both sides, remove the smaller variable from one side by adding/subtracting it	Solve $15 - 5x = 2x + 1$ $15 = 7x + 1$ $14 = 7x$ $2 = x$
Equation with fractional coefficients		If a term has a fractional coefficient, multiply all terms by the denominator	Solve $\frac{1}{3}x + 2 = 10$ $x + 6 = 30$ $x = 24$
Subject		The variable which is isolated on one side of the equation, and does not appear anywhere else	The subject is c: $c = 6y - 9x$
Change the subject		Use inverse operations to rearrange it so a different letter is the subject	Make y the subject of $c = 6y - 9x$ $c + 9x = 6y$ $\frac{c + 9x}{6} = y$
Change the subject where the variable occurs more than once		Collect that variable onto one side of the equation, ensuring it only occurs once	Make x the subject of $5s - 4x = 2x + t$ $5s = 6x + t$ $5s - t = 6x$ $\frac{5s - t}{6} = x$

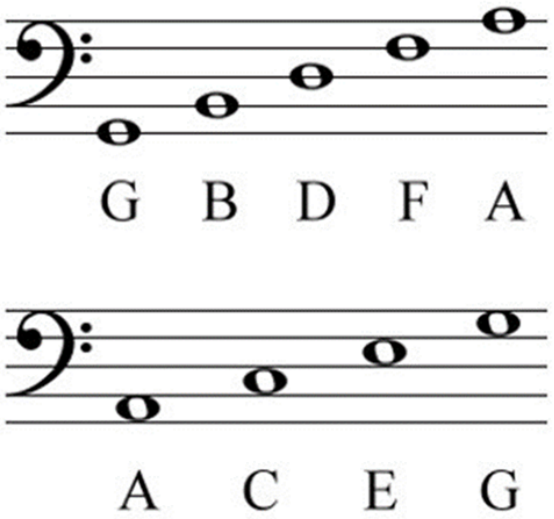
Bournemouth School music department

Year **8**

Unit **1**

Chords and Song

Bass Clef Notation



Remember the notes on the lines with:

Green **B**uses **D**rive **F**ast **A**lways

Remember the notes in the spaces with:

All **C**ows **E**at **G**rass

Harmony

Harmony is all about the use of chords in a piece of music—the types of chords and the way in which they are played.

Chord Sequence. The order of chords used in a particular section of a piece of music

Triad. A chord built up of three notes which are a 3rd apart e.g. C, E, G

Root. The note which a chord is built up on e.g. C in C, E, G

Major Chord. A chord with a higher middle note which gives the chord a brighter, happier sound. Major chords are notated using just the root note e.g. C

Minor Chord. A chord with a lower middle note which gives the chord darker, sadder sound. Minor chords are notated with the root note followed by a lower case m e.g. Cm

Root position. A chord which has the root note in the bass

Inversion. A chord which has a note which is not the root in the bass

Texture

Texture is all about the number of parts in a piece of music, the number of instruments/ voices playing a particular part, and the way the parts fit together and relate to each other.

2-part Texture. Music which has only two parts playing or singing

3-part Texture. Music which has three parts playing or singing

4-part Texture. Music which has four parts playing or singing

Unison. A texture where two or more parts are playing or singing the same music

Solo. A texture where only one player or singer has the most important melodic line.

Homophonic. Music in which all the parts move at the same time.

This QR code will take you to a Spotify playlist with audio examples of many of the concepts covered on this sheet and in lessons. You will find it helpful to listen to these as you learn.

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Key Words	
Aum	a sacred sound in Hinduism, repeated as a mantra and believed to be the essence of Brahman.
Murti	Image or representation of Brahman.
Varna	a Sanskrit word, which means 'order' or 'class' often referred to as 'the caste system.'
Karma	Good and bad actions, which can affect rebirth; actions have consequences.
Moksha	To be freed from the Samsara Cycle and to become one with Brahman (pure atman).
Introduction to Hinduism	
Sanatan Dharma	Meaning 'Eternal Truths of Life' as Hinduism is not a defined set of beliefs but is rather a way of life.
How old is Hinduism?	Hinduism is one of the world's oldest religions, dating back 5000 years
Origins of Hinduism	Hinduism is based on the teachings of two tribes: Dravidians and Aryans.
Dravidians	The Dravidians were indigenous to India and were invaded by the Aryans.
Aryans	The Aryans migrated to India around 1500 BCE and integrated their own beliefs and practices into Indian culture.
Brahman	The ONE supreme spirit who exists within every living organism.
Pantheism	The belief that God lives within every living organism, humans, animals and plant life.

Atman	The real person inside an individual, and a part of the spirit of Brahman; Atman is not something that can be seen or touched, but it is eternal and everlasting.
Why Hindus have murtis.	As Brahman has no form, its attributes are known through murtis. There are three main murtis, each of whom has a consort (companion).
Brahma	Creator of the universe and all its creatures. He has four heads and recites the Vedas continuously.
Vishnu	Preserver and protector of creation. In order to protect he returns to earth as an avatar. He has had nine avatars, and is expected to return a tenth time.
Shiva	Shiva is responsible for the end of life and creation. His cosmic dance of death dissolves the universe. He is worshipped for his role in the renewal of the universe.
Saraswati	The consort of Brahma, and the goddess of knowledge and learning. She is a popular murti who is worshipped by students when they have important exams.
Lakshmi	The consort of Vishnu, and the goddess of good luck and fortune. She accompanied Vishnu as Sita when he visited earth to destroy Ravana, the ten-headed demon.
Parvati	The consort of Shiva, and the goddess of love and devotion. She is the mother of the elephant god, Ganesh. Hindus pray to her when they are seeking a partner in marriage.

Karma and the Samsara Cycle	
Samsara Cycle	The principle of cause and effect, which is that all actions have consequences., not only in this life, but our actions determine how the atman will be reborn in the next life.
Moksha	Freedom from the Samsara Cycle, which means to become fully absorbed into Brahman who is pure atman.
The Hindu Caste System	
Origin of the Caste System	Originated about 4,000 years ago, when introduced by the Aryans. Details can be found in the Hindu Vedas, which tell the myth of Purusha.
Purusha	This myth tells the story of how Brahma made the first man, Purusha, who was later sacrificed and from his body four different groups or castes were taken.
The Four Castes	Brahmins (Holy Men), Kshatriyas (Rulers), Vaishyas (Skilled workers), Shudras (unskilled workers).
Harijans	Meaning 'children of God'. These are a group of people who do not belong to any Caste, sometimes referred to as 'untouchables'.
Purpose of the Caste System	The caste system divides Indian society in to social groups based on skills and employment, which brings structure and order to everyday life.
Can you change castes?	Hindus are born into Castes based on karma earned in previous lives; they cannot change their caste in this life, but must earn good karma in the hope of a better rebirth in the next life.
Disadvantages of Castes	They may be divisive and discriminatory as mixing of castes is forbidden, and upper castes act superior to lower castes.

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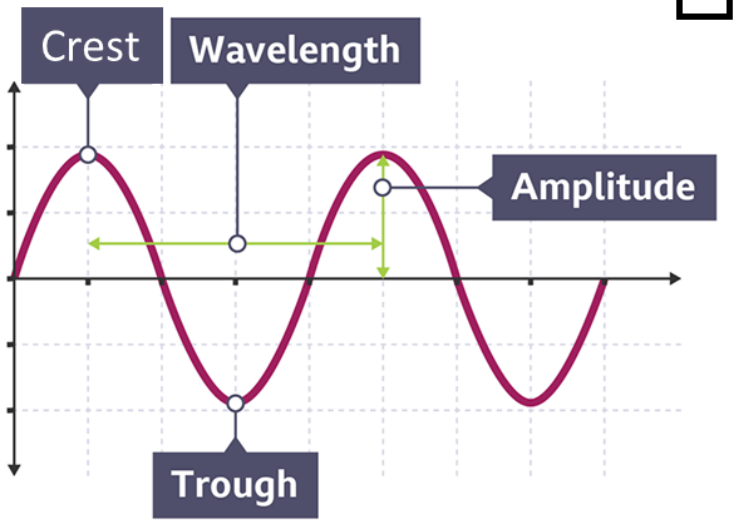
Keyword	Learn	✓
amplitude	The maximum amount of vibration, as measured from the middle position of the wave. Usually measured in metres.	
angle of incidence	Between the normal and incident ray.	
angle of reflection	Between the normal and reflected ray.	
decibel	A commonly used unit of sound intensity or loudness (dB).	
frequency	The number of waves produced in one second, in hertz.	
hertz	The unit of frequency (Hz).	
incident ray	The incoming ray from a source of light.	
law of reflection	The angle of incidence is equal to the angle of reflection.	
longitudinal wave	Where the direction of vibration is the same as that of the wave.	
reflected ray	The outgoing ray that has been reflected from a surface.	
refraction	Change in the direction of light going from one material into another.	
wavelength	Distance between two corresponding points on a wave, in metres.	
transverse wave	A wave in which the direction of vibration is perpendicular to that of the wave.	

Learn the features of a wave.



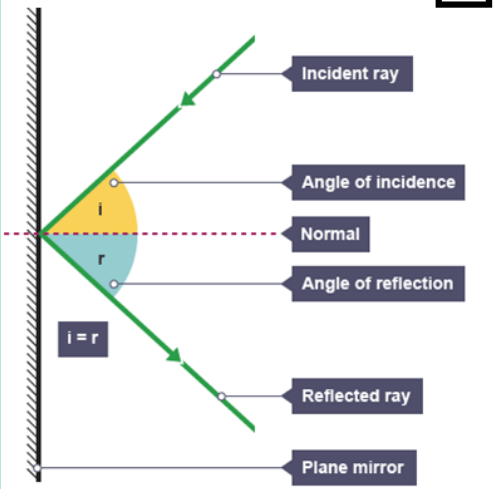
Remember the order of the waves in the EM spectrum.

The electromagnetic spectrum

There are seven types of electromagnetic (EM) waves,

Radiowaves
Microwaves
Infrared
Visible light
Ultraviolet
X-ray
Gamma rays

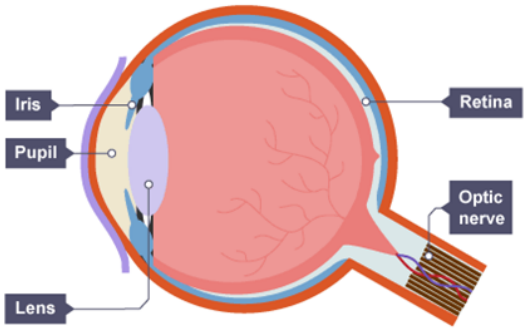
Learn this diagram on reflection



Learn about dispersion.

Dispersion
Spreading out of the different wavelengths of light, caused by refraction of light as it passes through a prism. This forms the colours of the visible lights spectrum:
red, orange, yellow, green, blue, indigo, violet.

Learn the diagram of the eye.



Speed of Light 300,000km/s

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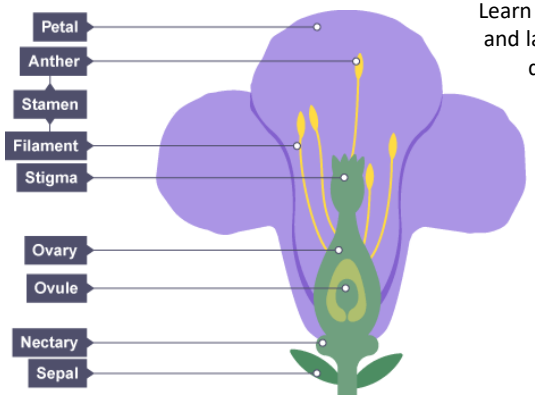
Year 8 - Science – Biology – Plant reproduction

Keyword	Learn	✓
anther	The male part of a flower that produces pollen.	
fertilisation	Joining of a nucleus from a male and female sex cell.	
filament	The part of a flower that holds up the anther.	
germination	The period of time when a seed starts to grow.	
ovule	Female sex cells in plants found in the ovary.	
petal	A brightly coloured part of a flower that attracts insects.	
pollen	Contains the plant male sex cells found on the stamens.	
pollination	Transfer of pollen from the male part of the flower to the female part of the flower on the same or another plant.	
seed	Structure that contains the embryo of a new plant.	
seed dispersal	The movement of seeds away from the parent plant.	
stamen	The male reproductive parts of the flower.	
stigma	The female part of a flower that is sticky to catch grains of pollen.	
photosynthesis	The process plants and algae use to make their own food, glucose. In photosynthesis, carbon dioxide and water react together to make glucose and oxygen.	
stomata	Pores in the bottom of a leaf which open and close to let gases in and out.	

Learn to draw and label this diagram. ☐



Learn how seed dispersal works. ☐

Seed dispersal

After fertilisation plants have to spread their seeds so they can grow in a new place. There are many ways that plants do this.

By the wind.
By animals eating them.
By making them stick to animal fur.
By explosion or quick release.

Learn this equation ☐

The word equation for photosynthesis in the presence of light and chlorophyll is:

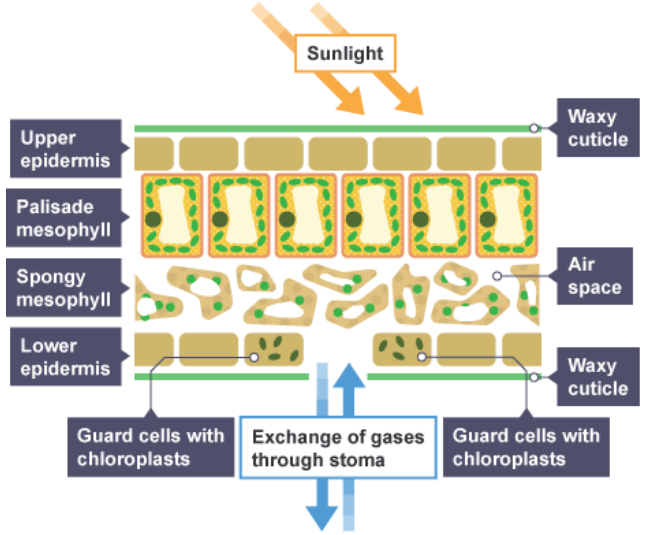
Carbon dioxide + water → glucose + oxygen

Learn how we investigate photosynthesis ☐

Investigating photosynthesis

Iodine solution is used to test leaves for the presence of starch. After a few minutes of adding starch to a prepared leaf, the parts of the leaf that contain starch turn the iodine from brown to blue/black. This shows the plant has been using photosynthesis.

Learn to draw and label this diagram of a leaf. ☐



Learn how pollination works. ☐

Pollination

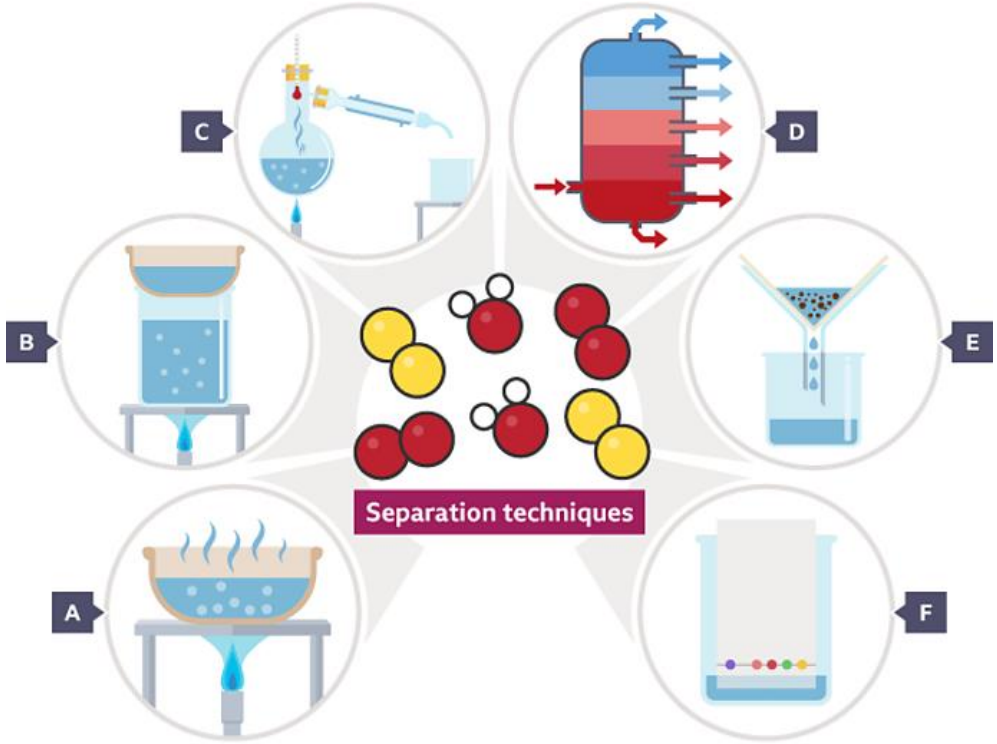
This occurs when the pollen grain lands on the stigma and the nucleus fuses with the ovule to form a seed. It can be carried out by insects, animals or the wind.

Insect pollinated flowers have bright colours, scents and nectar to attract insects.

Wind pollinated flowers have long anthers, produce lots of pollen and have feathery stigmas to catch the pollen.

Purity and separating mixtures

Keywords	Definition	Taught
Substance	Matter made of a fixed ratio of atoms with characteristic properties.	
Pure substance	A substance made up of only one type of element or compound	
Mixture	A substance made up of 2 or more elements or compounds that aren't chemically bonded to each other	
Solute	The substance that dissolves in a liquid to form a solution	
Solvent	The liquid in which a solute dissolves	
Solution	Is the mixture formed when a solute has dissolved in a solvent	
Soluble	Describes a substance that will dissolve	
Dissolve	Cause a solute to become part of a solution	
Insoluble	Describes a substance that will not dissolve	
Solubility	A measure of how much solute will dissolve	
Saturated	A solution in which the maximum amount of solute has been dissolved	
Evaporation	Separates soluble solids from liquids – e.g. a salt and water solution	
Filtration	Separates insoluble solids from liquids – e.g. sand and water	
Chromatography	Separates dyes in inks	
Distillation	Separates either 1) liquid and a solid (simple) or 2) mixture of liquids (Fractional)	
Dissolving	Is the process that occurs when a solute is added to a solvent to form a solution	
Filtrate	The liquid part that is collected after filtration	
Residue	The solid that remains after filtration	



Technique	What it separates?
A – Evaporation	To separate a soluble solid from a solution
B – Crystallisation	The process of producing crystals from a solution by evaporating the solvent
C – Simple distillation	To separate the solvent from a solution, or to separate a mixture of 2 liquids
D – Fractional distillation	To separate 2 or more liquids which have different boiling points
E – Filtration	To separate an insoluble solid from a liquid
F – Chromatography	To separate different soluble substances, usually coloured pigments, which are mixed in a solution

Los meses	The months	
enero	January	
febrero	February	
marzo	March	
abril	April	
mayo	May	
junio	June	
julio	July	
agosto	August	
septiembre	September	
octubre	October	
noviembre	November	
diciembre	December	

Los días	The days	
lunes	Monday	
martes	Tuesday	
miércoles	Wednesday	
jueves	Thursday	
viernes	Friday	
sábado	Saturday	
domingo	Sunday	

Los colores	Colours	
amarillo/a	yellow	
blanco/a	blue	
rojo/a	red	
negro/a	black	
verde	green	
gris	grey	
azul	blue	
marrón	brown	
naranja	orange	
rosa	pink	
violeta	purple	

Los animales	Animals	
un caballo	a horse	
un conejo	a rabbit	
un gato	a cat	
un perro	a dog	
un pez	a fish	
un ratón	a mouse	
una cobaya	a guinea pig	
una serpiente	a snake	
una rata	a rat	

Los adjetivos	Adjectives	
divertido/a	amusing	
estupendo/a	brilliant	
generoso/a	generous	
genial	great	
guay	cool	
listo/a	clever	
serio/a	serious	
simpático/a	nice/kind	
tímido/a	shy	
tonto/a	silly	
tranquilo	quiet/calm	

Mi familia	My family	
mi padre	my father	
mi madre	my mother	
mis padres	my parents	
un / mi hermano	a / my brother	
una / mi hermana	a / my sister	
un / mi hermanastro	a / my stepbrother	
una / mi hermanastra	a / my stepsister	
soy hijo único	I am an only child	
soy hija única	I am an only child (f)	
no tengo hermanos	I don't have siblings	
Se llama/se llaman	Is/are called	

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Half-term 1

Mi vida – My life

Introducing yourself

¡Hola!	Hello	
¿Qué tal?	How are you?	
¿Cómo estás?	How are you?	
bien	well	
fenomenal	amazing	
regular	not bad	
fatal	awful	
¿Cómo te llamas?	What's your name?	
Me llamo…	My name is…	
¿Dónde vives?	Where do you live?	
Vivo en…	I live in…	
Gracias	Thanks	
¿Cuántos años tienes?	How old are you?	
Tengo…años	I am…years old	
¿Cuándo es tu cumpleaños?	When is your birthday?	
Mi cumpleaños es el… de…	My birthday is on the… of…	
¡Hasta luego!	See you later!	
¡Adiós!	Goodbye!	

Essential verbs

Ser	To be	
soy	I am	
eres	you are	
es	he/she/it is	
somos	we are	
sois	you all are	
son	they are	

Tener	To have	
tengo	I have	
tienes	you have	
tiene	he/she/it has	
tenemos	we have	
tenéis	you all have	
tienen	they have	

High Frequency words

bastante	quite	
muy	very	
un poco	a bit	
no	no/not	
pero	but	
y	and	
también	also	
mi/mis	my	
tu/tus	your	

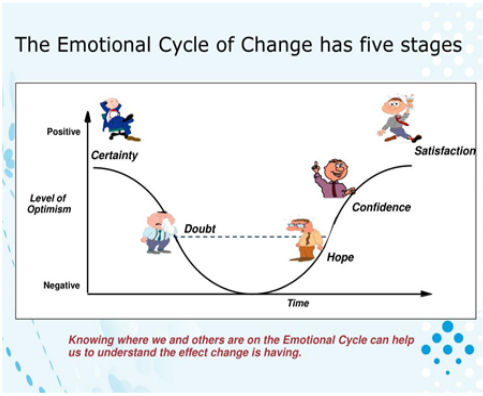
Los números

uno	1		**dieciséis**	16	
dos	2		**diecisiete**	17	
tres	3		**dieciocho**	18	
cuatro	4		**diecinueve**	19	
cinco	5		**veinte**	20	
seis	6		**veintiuno**	21	
siete	7		**veintidós**	22	
ocho	8		**veintitrés**	23	
nueve	9		**veinticuatro**	24	
diez	10		**veinticinco**	25	
once	11		**veintiséis**	26	
doce	12		**veintisiete**	27	
trece	13		**veintiocho**	28	
catorce	14		**treinta**	30	
quince	15		**treinta y uno**	31	

Keyword	Learn	✓
Well-prepared	Equipped with the skills and knowledge to be successful in life	
Well-adjusted	Mentally and emotional equipped for a successful life	
Teamwork	A collaborative effort to achieve a common goal or to complete a task in the most effective and efficient way.	
Employability skills	General skills that most employers believe are needed for most jobs.	
Body image	How we think and feel about ourselves physically, and how we believe others see us.	
Body confidence	The ability to feel good and happy about the way your body looks	
Social Media	Internet communication tools that enable people to interact with each other.	
Stress	A reaction to mental or emotional pressure.	
Anxiety	A feeling of stress, panic or fear that can affect your everyday life.	
Strategy	Plan of action designed to achieve an aim or outcome.	
Healthy diet	Eating a variety of foods and drinks in the right proportions to achieve and maintain a healthy body.	

Useful websites:
https://www.childline.org.uk/info-advice/ (Or call 0800 1111)
https://www.youngminds.org.uk/young-person/coping-with-life/body-image/
https://www.childrenssociety.org.uk/information/young-people/well-being/resources/body-image

Personal Development is
Personal – to do with ourselves
Relationships – how we relate to others and how they relate to us
Sex – how we interact and relate to others in a sexual sense
Health – about looking after our bodies, mentally and physically
Careers – how we plan and develop our careers
Economics – all about managing our money (the E also stands for education too)



Strategies for coping with change:
Talk about it | Plan a new routine | Maintain a healthy diet
Set realistic goals | Give yourself time to adjust
Do something you enjoy | Be positive | Remember change is normal

PD Classroom Rules

Openness: Be open and honest. However, do not discuss others' personal/private lives - try to use examples.
Keep the conversation in the room: You should feel safe discussing issues and be confident that your contributions will not be shared outside this room. If your teacher has concerns that someone is at risk of harm they have a duty to refer.
Non-judgmental approach: It is okay for us to disagree with another person's point of view but do not judge, make fun of, or put anybody down. - 'challenge the opinion, not the person'.
Right to pass: Taking part is important. However, you have the right to pass on answering a question and you will not put anyone 'on the spot'.
Make no assumptions: Do not make assumptions about people's values, attitudes, behaviours, identity, life experiences or feelings. Listen to other people's views respectfully and expect to be listened to.
Use appropriate language: Use the correct terms rather than slang terms - they can be offensive.
Ask questions: You are encouraged to ask questions. However, do not ask personal questions or say anything to embarrass someone.

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How long should I spend on my homework?

Monday		Tuesday		Wednesday		Thursday		Friday	
Maths	15	Maths	15	Maths	15	Maths	15	Free Choice	15
English	15	English	15	English	15	English	15	Free Choice	15
Free Choice	10	Free Choice	10	Free Choice	10	Free Choice	10	Free Choice	10
Free Choice	10	Free Choice	10	Free Choice	10	Free Choice	10	Free Choice	10
Free Choice	10	Free Choice	10	Free Choice	10	Free Choice	10	Free Choice	10
Reading	30	Reading	30	Reading	30	Reading	30	Reading	30

You should spend a maximum of 1.5 Hours revising each day.

You can decide what you revise in each slot that is called Free Choice. You can do this at the start of the year and have a fixed plan or you can decide on each day based on how well you feel you know your Knowledge Organisers.

Timetable

	1Mon	1Tue	1Wed	1Thu	1Fri	2Mon	2Tue	2Wed	2Thu	2Fri
Reg										
1										
2										
Break										
3										
4										
Reg										
Lunch										
5										
6										