BRISTOL METROPOLITAN ACADEMY

Knowledge Organisers 2021-22

Year 8 – Term 1

6th September 2021	Week A
13th September 2021	Week B
20th September 2021	Week A
27th September 2021	Week B
4th October 2021	Week A
11th October 2021	Week B
18th October 2021	Week A

Complete your homework on the night stated e.g. if it is a Monday Week A you will complete DT and English homework.

	Week A	**Week B**
Monday	English/DT	Science/MFL
Tuesday	Maths/Drama	ICT/PE
Wednesday	Science	English
Thursday	RS/Music	Geography/Art
Friday	History	Maths

How to use your knowledge organiser

Top tips:
1. Focus on the information you are most unsure of first
2. Follow the timetable in your homework book to make sure you are revisiting subjects equally
3. Don't panic if you don't remember all the information first time, keep revisiting it
4. You can ask your parents/carers to test you/check your work

Look

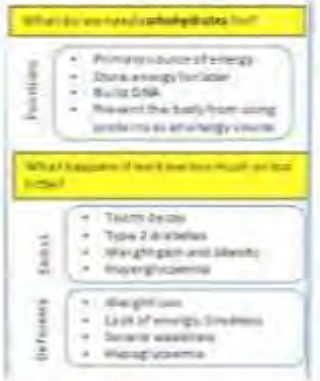
What topic/subject are you focusing on?

What task have you been set?

Self quizzing

You need to create 5 questions (with their answers) about the content on the knowledge organisers.

Top tip! Use subject specific language e.g. function. If you aren't sure what they mean, look it up, ask an adult or ask your teacher.



Questions you might consider:

1. What is a key function of carbohydrates?

It is our primary source of energy.

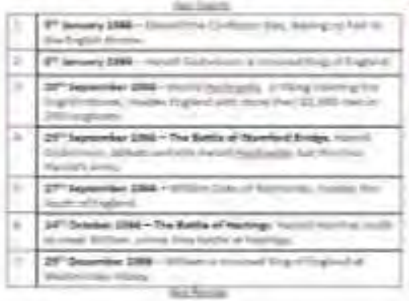
Write

Complete the task in your homework book.

Make sure to write the date, subject and topic you are focusing on (and underline them).

Revision

Here you are recording key facts/concepts to help you remember them.



You might write these key events out like a timeline.

Key events

5th January 1066 Edward the Confessor dies, leaving no heir to the English throne.

6th January 1066 Harold Godwinson is crowned King of England

Keyword/theme development

Here you are focusing on keywords/ themes and practising memorising them.

Key Terms	Definitions
State of matter	Matter is divided into three states: solid, liquid and gas
Melting	Change of state from solid to liquid
Freezing	Change of state from liquid to solid
Evaporation	Change of state from liquid to gas
Condensation	Change of state from gas to liquid

Copying these words into your book can help you to remember them.

Check

Once you have finished go back and check your work against the knowledge organiser. Make any corrections crossing out mistakes with a single line.

Why not ask someone at home to check your work with you?

MORE HELP AND IDEAS AT THE BACK OF THIS BOOKLET!

Contents:

Yr 8 BMA Drama Knowledge Organiser Term 1 & 2

Theatre Roles

- **Playwright** – a person who writes plays *i.e Shakespeare*
- **Performer** – entertains the audience
- **Understudy** – a person who learns another's role in order to be able to act at short notice in their absence
- **Director** - oversees and orchestrates the production (a play, an opera, a musical, or a devised piece of work) by combining all aspects of the production
- **Stage manager** - the person responsible for the lighting and other technical arrangements for a stage play.
- **Theatre manager** – has the responsibility for the smooth operational running of the theatre, ensuring it functions effectively and within budget. Manages staff, resources and systems and may also be responsible for leading on marketing and publicity activities.
- **Sound Designer** – designs and creates the sound *i.e. music, sound effects*
- **Set designer** – designs and creates the set
- **Costume Designer** – designs and creates costumes for a production
- **Puppet Designer** – designs and creates puppets for a production
- **Technician -** A theatrical technician is a person who operates technical equipment and systems in the performing arts and entertainment industry.

Techniques

- **Freeze – frame** - a frozen scene on stage
- **Role play** - pretending to be someone else, playing a character
- **Step – out** - a character to 'step out' of a scene and reveal something to the audience, while the rest of the action freezes.
- **Narration** – the process of telling a story
- **Split stage** - two or more scenes which are performed on stage at the same time
- **Stage configurations** - proscenium arch, thrust stage, In the round, traverse stage, promenade, end-on
- **Breaking the fourth wall** – characters speak to the audience by breaking the imaginary wall between them
- **Characterisation** – how your character appears, speaks, thinks, feels & moves, motivation & context
- **Positions** – *i.e centre stage, upstage left, upstage right*
- **Blocking** – the movements of an actor
- **Devising** – to plan and create something from an idea or stimulus, target audience
- **Improvise** – create without preparation

Elements of play texts

Language, plot, themes, atmosphere, characters, context, conflict, climax, tension, pace, sound, symbol, interpretation, status

Terminology (Physical Skills)

- **Gesture** – an action of the body *i.e. pointing a finger or tilting the head*
- **Mannerism** – a habitual movement *i.e. twitching the nose, licking the lips*
- **Body language** – non verbal communication of the body to show emotion
- **Facial expressions** – how the face conveys emotion *i.e. an angry face shows furrowed eyebrows, pursed lips, squinted eyes, scrunched nose and forehead*
- **Proxemics** – how the stage space is used effectively to show something (i.e. relationships between characters)
- **Gait** – how a character moves *i.e. the Villain took big strides across the stage on tip toes lunging with his knees*
- **Energy** – low level or high level
- **Posture** – how a person carries themselves sitting or standing *i.e. – shoulder back, chest out, chin up, feet together*
- ***Eye contact & focus*** - the state in which two people are aware of looking directly into one another's eyes. Or where the eyes are focused
- **Relationship** – *how the character interacts with others on stage*

Terminology (Vocal Skills)

- **Accent** – shows where the character is from
- **Volume** – How loudly or softly you speak
- **Diction** – informal / slang the way in which you pronounce words clearly
- **Tone** – how the voice conveys emotion
- **Pitch** – High or low voice
- **Pace** – Speed of delivering dialogue
- **Pause** – used for effect
- **Intonation** – where the pitch goes up at the end of a sentence i.e. a question
- **Timing** – considered carefully for effect
- **Emphasis** – where a word or sound is exaggerated for effect

Year 8 D&T – Night Light Project

A is for **Aesthetics**

C is for **Cost**

C is for **Customer**

E is for **Environment**

S is for **Size**

S is for **Safety**

F is for **Function**

M is for **Material**

Analyse the Dinosaur Night Light by using ACCESS FM

You can use ACCESS FM to analyse existing products, write a specification, annotate designs and to evaluate the final outcome!

Remember to consider the sustainability of your design – try using the 6 R's!

Pillar Drill

File

Line Bender

Fret Saw

Soldering Iron

Practice your tonal drawing skill here

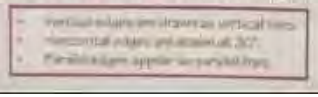
Develop Ideas with Sketches

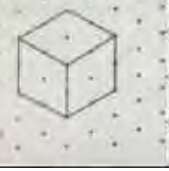
1) 'Freehand' means drawing without using any equipment (except a pencil or pen).
2) You can annotate 2D and 3D sketches to explain details.
3) And you can annotate your sketches (add notes) to explain details further, e.g. describing the materials and processes you'd use.

Practice your isometric drawing here

Isometric Drawing Shows Objects at 30°

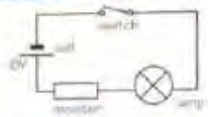
1) Isometric drawing can be used to show a 3D picture of an object.
2) It doesn't show perspective (things don't get smaller in the distance), but it's easy to get dimensions right.
3) There are three main rules when drawing in isometric:





Electrical Systems Involve Circuits

1) All electrical systems need to have a complete circuit to make them work. Here's a simple circuit:

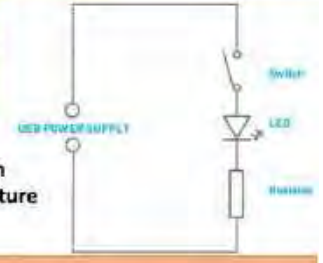


2) The materials you use in a circuit have to be conductors — they need to let electricity flow through. E.g. copper is used for the wire that joins the components because it's a good conductor and is ductile.
3) Insulators (e.g. PVC) don't let electricity through, so they're used to coat the outside of wires.
4) Voltage from a power cell (a battery) or the mains pushes the electric current around a circuit.
   - Mains power is used for non-portable products like fridges and telephones.
   - Batteries are used in portable products. There are disposable batteries and rechargeable ones.
   - Rechargeable batteries are more expensive than disposable batteries, but can be cheaper in the long run as you don't need to keep replacing them. They're built in to some products, e.g. mobile phones.
5) Resistors are used to reduce the current in a circuit so you don't damage delicate components (e.g. the lamp in the circuit above). Resistance is measured in ohms (Ω). A larger resistance means less

Acrylic

polymethyl methacrylate (PMMA) is available in a variety of colours. It is a hard, rigid material that weathers well.

Night Light Circuit Diagram



CAD = Computer Aided Design
CAM = Computer Aided Manufacture

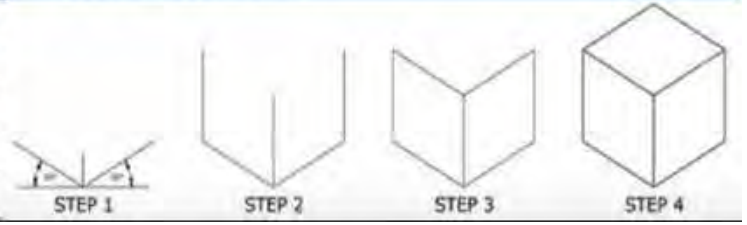
Use modelling to improve your design

Modelling is a good way to solve problems with your design. You can make models using card as it's cheap and easy to work with.
When modelling, try out different aspects of your design. For example, you could model just one part of the product separately, to check it works, before going on to the rest.

Test and evaluate each model

After you've made each model, do some tests to check that it's how it should be. Get some potential customers to try it out and give you feedback too.

1. You'll probably find there are some things that don't work out quite how you'd hoped. Write down what he problem is, suggest how to fix it and try out another model.
2. Record how the design develops – take photos of your models.
3. You should evaluate each model, against the design by considering the strengths and weaknesses.



Animal Farm – Knowledge Organiser

Plot summary:

1 Old Major's speech- Mr Jones, the owner of Manor Farm falls asleep in a drunken stupor. All the animals of Manor Farm meet in the big barn where Old Major delivers a speech arguing for a rebellion against the men. The Animals sing 'Beasts of England', a song from Old Major's dream.

2 The rebellion- Old Major dies and the pigs adapt his speech, forming the principles of Animalism. The pigs plan the rebellion even though some animals (like Mollie) are concerned. The rebellion happens faster than expected after Mr. Jones forgets to feed the animals. The animals of Mr. Jones house and leave it as a museum. Napoleon steals milk.

3 The pigs emerge as leaders- The animals complete the harvest faster than ever. Snowball sets up the Sunday assemblies where Napoleon and Snowball often argue. Snowball's committees fail, yet he is able to bring literacy to the animals with minor success. Napoleon teaches the sheep 'four legs good two legs bad' and takes the dogs for 'education'. Cow's milk and windfall apples are given to pigs, Squealer convinces the animals that this is a good idea.

4 Battle of the Cowshed- News of the rebellion spreads, Frederick, Jones and Pilkington complain about Animal Farm's success. In October, a group of men try to seize the farm. Led by Snowball's brilliance, the animals repel the attack, which is names 'The Battle of the Cowshed'.

5 Snowball's expulsion- Mollie deserts the farm. The pigs grow in influence, suggesting ideas on which the animals must vote. Snowball and Napoleon continue to disagree, especially over the construction of a windmill. When the Windmill is put to vote, Snowball is expelled from animal farm. Later, Napoleon announces that the Windmill will be built.

6 Building the windmill- The animals work harder than ever, Boxer proves himself to be an inspiration. Napoleon begins trading with humans and hires Mr Whymper. Jones gives up trying to reclaim the farm. The animals begin sleeping with beds, and Muriel and Clover notice a change in the commandments 'with sheets'. Squealer persuades the animals that this is acceptable. In November, a storm topples the half complete windmill. Napoleon blames this on Snowball. **7 Rebuilding the windmill and the executions**- The animals struggle against starvation. After learning that they must sacrifice their eggs, the hens stage a demonstration. Napoleon denies their rations and 9 hens starve as a result. The animals are led to believe Snowball has been returning to the farm – his role at the battle of the Cowshed is adapted by Squealer. In spring, Napoleon calls a meeting and several 'traitors', who confess to being in league with Snowball, are executed, including protesting hens and pigs. Beasts of England is outlawed.

8 Trading with humans and the destruction of the windmill- Clover and Benjamin notice a change in the commandments: 'killing without cause'. The next year brings more work and less food, despite Squealer's figures and statistics to the contrary. More executions occur. Napoleon's is seen in public less often. Napoleon trades Frederick and Pilkington off against each other, and sells a pile of timber to Frederick, who tricks Napoleon with forged banknotes. Napoleon pronounces the death sentence on him. Frederick, with 14 other men, attack the farm and blow up the windmill, which rallies the animals to fight back. Several animals die, Boxer is injured but Squealer convinces the animals of their victory. The pigs find a crate of whiskey, Napoleon fears he is dying and proclaims that drinking alcohol is punishable by death. He then recovers and orders the retirement paddock to be planted with barley.

9 Boxer's fate- Once again, the animals are faced with rebuilding the windmill. 31 pigs are born, and Napoleon orders for a schoolhouse to be built for their education. Rations are yet again reduced. Animal Farm is proclaimed a republic with Napoleon as president. Boxer is injured working and Napoleon sends for a vet. A van arrives, Boxer is taken away but Benjamin reads the its side and learns that Boxer is being slaughtered. Squealer manages to convince the animals otherwise. Boxer is never seen again.

10 Pigs and humans come together- ears pass. Muriel, Jessie, Pincher are dead. Clover is 14. No animal has ever retired. The farm has grown in size and population. Two windmills are complete. Clover notices the pigs walk on two legs. The commandments are delated and replaced with "All animals are equal but some are more equal than others." The pigs start carrying whips and wearing Mr Jones' clothes. In the final scene, human farmers visit the farm and meet the other
pigs. Toasts are exchanged and Napoleon changes the farm's name back to Manor farm. The pigs and humans play cards. A quarrel brakes out. On looking animals cannot discriminate between pigs and humans.

Key characters		Key themes	Context and Literary Tradition	Stylistic features & relevant terms
Mr Jones	*Drunken owner of Animal Farm. Embodies the tyranny of man.*	Leadership and Corruption Control over the intellectually inferior Lies and deceit Foolishness and naivety Violence Pride and Ceremony Dreams, hopes and future plans	An allegorical tale with direct links to the history of the Soviet Union in the early 20th century.	Dystopia Propaganda Scapegoat Tyrant Allegory Moral Symbolism Omniscient Narrator Fairy Tale Tragedy
Old Major	*Wise, old pig. Inspires the rebellion with his rhetoric.*		The book charts the corruptions of **Communist** ideals of equality, where workers are promised equality and freedom and are eventually repressed and treated as bad, if not worse, as under the previous rule of the **capitalist 'Tsar'.**	
Boxer	Devoted citizen and immensely strong. Innocent and naïve.		**Old Major** represents **Karl Marx**, putting forward the communist ideals which will free them from the **tyranny of capitalism** (represented by **Jones**).	
Napoleon	*Expels Snowball. Executes animals. Establishes himself as dictator. Controls with fear. Becomes Jones.*		**Snowball** represents **Trotsky**, a passionate component of **Animalism (Communism)** who is expelled by **Napoleon (Stalin).**	
Snowball	*Devoted to animalism and the education of lesser animals. Hero at the battle of the cowshed.*		**Napoleon** follows a similar rise to power as **Stalin**, using fear and propaganda to control the masses, including show trials and executions.	
Squealer	*Mouthpiece of Napoleon. Uses propaganda to control the animals.*		By the end of the novel, the **ideals of communism** have been so far abused and forgotten, that Napoleon meets and forms agreements with former oppressors.	
Clover	*Maternal, caring and loyal. Senses hypocrisy but cannot articulate it.*		Orwell was a British journalist and author, who wrote two of the most famous political novels of the 20th century 'Animal Farm' and 'Nineteen Eighty-Four'. When Orwell saw a kid whipping a horse, he had an idea: "It struck me that if only such animals became aware of their strength we should have no power over them, and that men exploit animals in much the same way as the rich exploit the working class". This inspired him to write the novel.	
Dogs and Sheep	*Instruments of fear and control, educated by Napoleon.*			

Why do we cook food?

The application of heat in the preparation of a food or mixture may:
improve digestibility;
improve appearance, flavour, odour and texture;
increase the availability of nutrients;
prevent spoilage;
increase keeping qualities.

Heat Exchange
As a food is heated, its molecules absorb energy and vibrate more vigorously. The faster they move, the more the temperature of the food rises. If heat is removed, the molecules become less active, reducing the foods temperature.

Heat can be exchanged in three ways:
- conduction;
- convection;
- radiation

Factors that affect food choice

Coeliac – cannot eat products containing gluten.
Lactose intolerance – the body can't digest the sugar lactose in dairy products.
Vegetarian: No meat in the diet
Vegan: No products from animals in the diet e.g. meat, milk or honey.
Religion :
Islam: Requires Halal meat, no alcohol, no pork
Judaism: Requires Kosher food, no meat and dairy together, no pork
Hinduism: No beef

Micro-nutrients

Vitamins and minerals are essential nutrients that your body needs in small amounts to work properly.

Fat-soluble vitamins
Fat-soluble vitamins (vitamin A, D, E and K) are mainly found in:
animal fats, vegetable oils, dairy foods, liver and oily fish
While your body needs these vitamins to work properly, you don't need to eat foods containing them every day.

Water-soluble vitamins
Water-soluble vitamins (vitamin C, the B vitamins and folic acid) are mainly found in:
fruit and vegetables, grains, milk and dairy foods
These vitamins aren't stored in the body, so you need to have them more frequently
If you have more than you need, your body gets rid of the extra vitamins when you urinate.

Minerals
Minerals include calcium and iron amongst many others and are found in:
Meat, cereals, nuts, fish, milk and dairy foods, fruit and vegetables

Minerals are necessary for 3 main reasons:
Building strong bones and teeth
Controlling body fluids inside and outside cells
Turning the food you eat into energy

Micros

Macros

Alternative protein

Proteins are known as the building blocks of life: In the body, they break down into amino acids that promote cell growth and repair. (They also take longer to digest than carbohydrates, helping you feel fuller for longer and on fewer calories—a plus for anyone trying to lose weight.) You probably know that animal products—meat, eggs, and dairy—are a good source of protein.

Food Poisoning

Food poisoning is a disease caused by eating a spoiled or contaminated food. Such food may contain certain microorganisms, toxins or enzymes.
Symptoms of food poisoning:
- Stomach pains and cramps
- Nausea and vomiting
- Diarrhoea
- Fever
- Shivers

Vegetarians and **vegans** don't consume meat so instead they use protein alternative products which are manufactured in order to provide protein in a diet and protein rich foods.

Protein complementation is when two LBV **proteins** are eaten together.
Examples of protein complementation's are: hummus with pitta bread; nut roast made from a variety of nuts and seeds; vegetable curry and rice; lentil soup and wholemeal bread; baked beans on toast.

LBV proteins-. Foods that are deficient in one or more of the essential amino acids are said to have a **low biological value (LBV).** Foods originating from plants (cereals, nuts, seeds, lentils, beans, pulses)

Functions of Eggs

Setting and thickening (coagulation): Eggs will set when cooked. This is shown when you make a quiche or an egg custard.
Enriching: Eggs add nutritional value to a dish. This is shown when you make egg fried rice.
Raising agent: When whisked, eggs can hold air and become a raising agent. They can make a mixture light in texture, e.g. Chocolate éclairs.
As a glaze and to add colour: Beaten egg can be used as a glaze which turns golden brown on heating. An example is glazing sausage rolls with egg before cooking to give a golden brown finish.
Aeration: Eggs can be whisked to hold air and form a foam. The protein in the egg white becomes stretched and holds the air bubbles. This is shown in making meringues or a whisked sponge. When the meringues or whisked sponge are cooked the protein sets and hardens.

Food Spoilage

Cross- contamination
Cross-contamination means that bacteria, toxins or food particles were transferred to a food product.
Cross-contamination can cause food poisoning and allergic reactions.
Anaphylactic shock is a life-threatening reaction of the immune system to an allergen.

Food can become contaminated from:
- ❑ Waste food and rubbish
- ❑ Pest and rodents
- ❑ The cook's hand
- ❑ Work surfaces and equipment
- ❑ Other contaminated foods, including high-risk foods.

Most common allergens:
- ❑ Nuts
- ❑ Fish and seafood
- ❑ Milk
- ❑ Eggs

Signs of Food Spoilage-Many species of microorganism and some enzymes can cause food spoilage.

	Bacteria	Yeast	Mould	Enzymes
Food Spoilage	The bacteria Clostridium botulinum produces a toxin which causes meat preserves to bulge. Bacteria can also make meat products look slimy and green in colour.	Ferments sugar in juices and beverages, making them sour, fizzy and foamy. 	Create green, white or black coat on food products such as bread, grapes, tomatoes and jams. 	Turns bananas, apples, potatoes and other foods brown. 

Key words
Microorganism- a very small living bacteria.
Toxins- poison of plant or animal origin, especially one produced by or derived from microorganisms
Preserves – something in its original state
Ferments – The process in which yeast produces the gas carbon dioxide and alcohol.

Cabot Learning Federation

Food and Drink Year 8 French 8.5 vocab list

Qu'est-ce que tu manges?	What do you eat?
Le pain	Bread
Le poisson	Fish
Le fromage	Cheese
Le beurre	Butter
Le lait	Milk
Le café	Coffee
Le thé	Tea
Le coca	Coke
Le sucre	Sugar
Le jambon	Ham
Le chocolat chaud	Hot chocolate
La pomme	Apple
La viande	Meat
La confiture	Jam
La glace	Ice cream
Les haricots verts	Green beans
Les légumes	Vegetables
Les frites	Chips
Les chips	Crisps
Les epinards	Spinach
L'oeuf	Egg
L'eau	water

Quand est-ce que tu manges?	When do you eat?
Le petit déjeuner	Breakfast
Le déjeuner	Lunch
Le goûter	Snack
Le dîner	Evening meal/tea

Tu aimes....?	Do you like...?
Oui	Yes
Non	No
parce que c'est...	Because it is...
très	Very
assez	Quite
un peu	A bit
trop	too
agréable	pleasant
fantastique	fantastic
délicieux/euse	delicious
savoureux/euse	tasty
sain/e	healthy
horrible	horrible
terrible	Awful
doux/douce	Sweet
aigre	sour
dégoûtant/e	disgusting
épicé/e	spicy
salé	salty
gras/se	fatty
bon/ne pour la santé	good for your health
mauvais/e pour la santé	Bad for your health

Remember to think about making your adjectives agree!

€

Qu'est-ce que vous voulez manger? / Est-ce que je peux vous aider?	What would you like to eat? / Can I help you?
Je voudrais ...	I would like...
manger/boire	to eat/to drink
Comme	As
entrée/plat principal/dessert/boisson	starter/main meal /dessert/drink
L'addition s'il vous plaît	The bill please
Un serveur/une serveuse	A waiter/waitress
Je prends...	I'll take (have)
Le pourboire	The tip
C'est tout	That's all
Merci	Thank you

Tu voudrais...?	Would you like...?
Un paquet de	A packet of
Un litre de	A litre of
Un kilo de	A kilo of
Un demi kilo de	Half a kilo of
Une bouteille de	A bottle of

Est-ce que tu aimes...?	Do you like...?
Je préfère	I prefer
J'adore	I love
J'aime	I like
Je n'aime pas	I don't like
Je déteste	I hate
À mon avis	In my opinion
Je pense que	I think that

C'est combien?	How much?
dix	10
vingt	20
trente	30
quarante	40
cinquante	50
soixante	60
soixante-et-un	61
soixante-dix	70
soixante-onze	71
quatre-vingts	80
quatre-vingt-deux	82
quatre-vingt-dix	90
quatre-vingt-douze	92
cent	100
deux cents	200

8.5 Food and Drink

Food, prices and quantities. Ordering food in a restaurant.

Verbs and the present tense in French

The infinitive

When you look up a verb in the dictionary, you find its original, unchanged form which is called the ***infinitive*** (regarder, manger, boire, finir, jouer, avoir, être, etc.). The infinitive ends in **–er**, **-ir** or **–re.**

Forming the present tense in French

Take off the last 2 letters of the infinitive (**–er**, **-ir** or **–re)** and add the following endings depending on the pronoun:

	ER verb	IR verb	RE verb
je	-e	-is	-s
tu	-es	-is	-s
il / elle/ on	-e	-it	/
nous	-ons	-issons	-ons
vous	-ez	-issez	-ez
ils/elles	-ent	-issent	-ent

Adjective agreement.

Remember adjectives have to agree with the noun they are describing. Normally we add an –e to make it feminine unless there is already an e and we add an –s to make it plural.

*But be careful! :

- Adjectives which end in –f change to –ve feminine
- Adjectives which end in –ux or -ur change to –se in feminine.
- Adjectives which end in –il change to –ille in the feminine.

Check out the examples below:

Il est délicieux – elle est délicieuse
Il est sain – elle est saine
Il est savoureux – elle est savoureuse
Il est gras – elle est grasse

Comparisons

Plus - more — Jean est plus intéressant que Paul
Moins - less — Paul est moins intéressant que Jean

Superlative

Le /la plus – the most — Jean est le plus intelligent
Le /la moins – the least — Marie est la moins sympa

Opinion phrases help to make your work more interesting – have a look at the list on your vocabulary list. Try to use a range of different ones in your work e.g. J'aime (I like)/je pense que (I think that)/ à mon avis (in my opinion).

In French there are different ways of saying '**some**'. See the box to the right.

Words come before the noun	masculine (sing.)	feminine (sing.)	feminine singular (vowel)	masculine plural	feminine plural
some	du	de la	de l'	des	des

Is everything we know about Africa wrong?

Prepare to question everything you think you know about this huge and diverse continent - this theme is all about questioning misconceptions and learning how to find the true stories of people and places

Key Geographical Words

Continent	A large landmass surrounded or mainly surrounded by sea. Divided up into countries
Diverse	Showing a great deal of variation or differences
Biome	A large ecosystem sharing characteristics such as climate, vegetation and animals
Misconception	An idea that is wrong because it is based on a misunderstanding
Development	The process of change or improvement over time
Indicators	A measure of something, or something that shows a situation
Sustainable	Able to continue into the future with little or no change to the original state
Disease	Illness of a plant, animal or human caused by infection or ill health not accident

Location

Africa is the world's second largest continent by both land area and population. It is home to 54 countries covering a total area of over 30 million Km².

The equator runs through Africa in the middle of the continent..

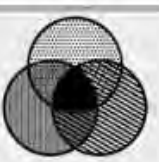
Around one third of Africa is located in the Southern Hemisphere.

Africa makes up about 20% of the world's total land area. The Indian Ocean, the Atlantic Ocean, the Mediterranean Sea and the Red Sea all surround Africa,

Development

A key misconception of Africa is considering the whole continent to be the same, in particular to have the same issues with poverty, poor health and lack of education. In fact, Africa is a **continent of contrasts.**

Development indicators help show the development of a place:

Life Expectancy	Infant Mortality	Birth/Death Rate	Literacy Rate	Gross National Income	Human Development Index
					

Sustainable Development

Sustainable Development is about making a better life for everyone now and for generations to come.

There are **17 Global Goals** (officially known as the Sustainable Development Goals or SDGs).

These goals have the power to create a better world by 2030, by **ending poverty, fighting inequality** and addressing the urgency of **climate change.**

Cabot Learning Federation

Food and Drink Year 8 German Term 1 vocab list

Was isst du?	What do you eat?
das Brot	Bread
der Fisch	Fish
der Käse	Cheese
die Butter	Butter
die Milch	Milk
der Kaffee	Coffee
der Tee	Tea
die Cola	Coke
der Zucker	Sugar
der Schinken	Ham
heiße Schokolade	Hot chocolate
der Apfel	Apple
die Fleisch	Meat
die Marmelade	Jam
das Eis	Ice cream
grüne Bohnen	Green beans
das Gemüse	Vegetables
die Pommes	Chips
die Chips	Crisps
der Spinat	Spinach
das Ei	Egg
das Wasser	water

Magst du....?	Do you like...?
Ja	Yes
Nein	No
denn es ist...	Because it is...
gut	good
fantastisch	fantastic
köstlich	delicious
lecker/schmackhaft	tasty
gesund	healthy
schrecklich	horrible
furchtbar	awful
widerlich	disgusting
würzig	spicy
salzig	salty
fettig	fatty
Gut für deine Gesundheit	good for your health
enspannend	relaxing
gesellig	sociable
Eine Hersusforderung	a challenge
Es macht Spaß	fun
toll/spitze	great
ermüdend	tiring
Nicht gut für deine Gesundheit	Bad for your health
ungesund	umhealthy

Was möchten Sie essen?	What would you like to eat?
Kann ich Ihnen helfen?	**Can I help you?**
Ich möchte ...	I would like...
essen/trinken	to eat/to drink
Vorspeise/Hauptgericht/Nachtisch/Getränk	starter/main meal /dessert/drink
Die Rechnung, bitte	The bill please
Kellner/Kellnerin	A waiter/waitress
Ich nehme/ich hätte gern	I'll take (have)
das Trinkgeld	The tip
Das ist alles	That's all
Danke	Thank you

Wann isst du?	When do you eat?
das Frühstück	Breakfast
das Mittagessen	Lunch
der Imbiss	Snack
das Abendessen	Evening meal/tea

Möchtest du...?	Would you like...?
eine Packung	A packet of
ein Liter	A litre of
ein Kilo	A kilo of
ein halbes Kilo	Half a kilo of
eine Flasche	A bottle of
Was magst du?	**What do you like?**
Ich mag	I like
Ich mag...nicht	I don't like
Ich liebe	I love
Ich hasse	I hate
Ich esse lieber	I prefer eating
Ich denke, dass	I think, that
Meiner Meinung nach	In my opinion

Zahlen	Numbers
zehn	10
zwanzig	20
dreißig	30
vierzig	40
fünfzig	50
sechzig	60
einundsechzig	61
siebzig	70
einundsiebzig	71
achtzig	80
zweiundachtzig	82
neunzig	90
zweiundneunzig	92
hundert	100
zweihundert	200

Term 1 Food and Drink
Year 8 German Knowledge Organiser

Food, prices and quantities. Ordering food in a restaurant.

Verbs and the present tense in German

When you look up a verb in the dictionary, you find its original, unchanged form which is called the ***infinitive*** (machen, essen, trinken, spielen, haben, sein, etc.). The infinitive ends in **–en or just -n**

Forming the present tense in German

For regular verbs follow the pattern opposite

However, the irregular verbs don't follow the pattern exactly. Your teacher will help you with these. (haben/sein/lesen/fahren)

Opinion phrases help make your work more interesting- have a look at the list on your vocabulary list. Try to use a range of opinions in your work e.g., ich mag (I like), ich denke, dass (I think that)

	machen	spielen	gehen
ich	**mache**	**spiele**	**gehe**
du	**machst**	**spielst**	**gehst**
er / sie/ man	**macht**	**spielt**	**geht**
wir	**machen**	**spielen**	**gehen**
ihr	**macht**	**spielt**	**geht**
Sie (you)	machen	spielen	gehen
sie (they)	**machen**	**spielen**	**gehen**

Useful verbs	
Ich möchte	I would like
Ich hätte gern	I would like to have
Es ist	It is
Wir haben	We have
Wir sind	We are
Gibt es...?	Is there...?

Comparisons

Add 'er' to the adjective. You can't add the word 'mehr' = more.

Er ist klein**er** = he is small**er** es ist billig**er** = it is cheap**er**

Exceptions are besser (better)/größer(bigger)/älter(older)

Superlative

You add an '-ste' to the adjective, sometimes '-este' to make it easier to say. Fred ist der Klein**ste** = Fred is the small**est.** Ellie ist die Laut**este**

Comparing Things

Joe ist älter **als** Fred = Joe is older **than** Fred

Joe ist **weniger** alt **als** Fred = Joe is **less** old **than** Fred

Joe ist **so** alt **wie** Fred = Joe is **as** old **as** Fred

Joe ist **genauso** alt **wie** Fred = Joe is **just as** old **as** Fred

ESSEN	**key verbs**	**TRINKEN**
essen		**trinken**
Ich esse		**Ich trinke**
Du isst		**Du trinkt**
Er/sie isst		**Er/sie trinkt**
Wir essen		**Wir trinken**
Ihr esst		**Ihr trinkt**
Sie/sie essen		**Sie/sie trinken**

HISTORY

Enquiry

Migration Through Time – Romans to Present Day
What factors have caused people to come to Britain?
What have attitudes towards migrants been in Britain?

History – Year 8 Knowledge Organiser Term 1

Key Causes of Migration

1	Employment	Work/job.
2	Persecution	Hostility and ill-treatment, especially because of race or political or religious beliefs; oppression.
3	Empire	When one country rules over other countries , e.g. British Empire

Key Skills

4	change	make or become different than before.
5	similarities	Factors that are similar to each other within a defined period of time.
6	differences	Factors that are different across defined period of time.

Further Your Learning

Learn more about the often untold stories of migrants who came to and shaped the Britain we live in today.
https://www.ourmigrationstory.org.uk/

Key Terms

7	migration	Migration is the movement of people from one place to another. This can be internal or international.
8	refugee	A person who has been forced to leave their country in order to escape war, persecution, or natural disaster.
9	Conquer	To overcome and take control of (a place or people) by military force
10	Factors	Common reasons that cause change.
11	Commonwealth	An international association consisting of the UK together with some states that were previously part of the British Empire.
12	emigration	leaving one's own country to settle permanently in another; moving abroad.
13	racism	Prejudice or discrimination directed against someone of a different race based on the belief that one's own race is superior.
14	Huguenot	French Protestants.
15	Windrush	The people who emigrated from the Caribbean to Britain on the British ship the Empire Windrush in 1948.

Timeline of Migration

Prehistoric – First People
Wandered across the land bridge which linked Britain to Europe, 20,000BC.

Middle Ages – Normans - c1066
William of Normandy invaded declaring he had a claim to the English throne.

19th century
Eastern European Jews 1880's
Persecuted and fled to England. Many moved to the East End of London.

Present Day

20,000BC

Romans – 43AD-410AD
Conquer new land, extend the Empire to obtain more goods and power. They also wanted revenge for British support of Gaul.

Early Modern – French Huguenots – 1670-1710
Persecuted in Catholic France. Many were skilled craftsmen who set up businesses in England.

Modern – 1940s-1960s Windrush Generation
After WWII, Britain encouraged immigration from Commonwealth countries. This was to mainly help rebuild the country as there was a shortage of labour at the time.

Key ideas

- Know how to calculate the three different average. Understand why we have three different types of averages and when it is appropriate to use each. Know that the range is a measure of spread, not an average.
- Be able to construct and interpret bar/pie/pictographs. Always check the context of your data and be careful of misleading statistics!
- Be able to plot scatter graphs and understand correlation does not imply causation

Averages

Frequency: How often something happens, occurs.

Mean: Is a calculated central value .To find it we add together all the values and divide by the number of values.

Median: the middle of a list of an ordered set of numbers.

Mode: the most frequent value in a set of numbers

Range: the difference between the largest value and smallest value in a set of numbers

Ascending: Numbers in order from smallest to largest, increasing.

Descending: Numbers in order from largest to smallest, decreasing.

Grouped data: Data sorted into groups

Modal class: The mode of a set of grouped data

Here is a list of numbers:

9, 3, 3, 5, 2, 6, 6, 4, 6, 2

Mode = the most common number is 6

Mean = $\frac{9+3+3+5+2+6+6+4+6+2}{10} = \frac{46}{10} = 4.6$

Median = 2, 2, 3, 3, 4, 5, 6, 6, 6, 9

Median = 4.5

Range = 9 – 2 = 7

Here is an example of grouped data. The modal class here is $60 < w \leq 70$ as it has the highest frequency.

Weight, w, Kg	Frequency
$40 < w \leq 50$	2
$50 < w \leq 60$	15
$60 < w \leq 70$	18
$70 < w \leq 80$	10
$80 < w \leq 90$	2

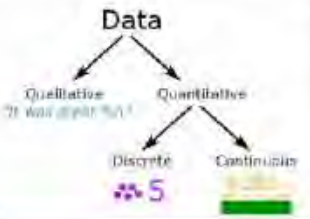
Types of data

Quantitative: Data which can be counted or measured e.g. shoe sizes, heights.

Qualitative: Data which is descriptive e.g. favourite colours, most popular name.

Discrete: Data that is counted and can only take a set value, e.g. shoe size

Continuous: Data that is measured and can take any numerical value in a range, e.g. distance

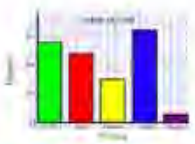


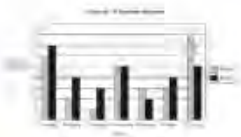
Types of charts

- Label the axis
- Use correct scales
- Charts must have title
- Bars do not touch for discrete data.
- Bars touch for continues data.
- Dual bar charts need a key

Bar Chart: A graphical display of data using bars of different heights.

Pictogram: Uses pictures to represent the frequency of the data





Football Team	Frequency	Degrees
Liverpool	8	8 x 15 = 120°
Birmingham City	7	7 x 15 = 105°
Manchester United	4	4 x 15 = 60°
Arsenal	3	3 x 15 = 45°
Newcastle	8	8 x 15 = 120°
	30	

Degrees per person = $\frac{360°}{\text{Total Number of people}}$

Pie Chart: A chart divided into sectors that shows the relative size of each value. They allow you to quickly compare the size of each category. Generally, pie charts are used to show qualitative data.

Scatter Graphs

Scatter Graph: A graphs of plotted points that shows the relationship between 2 variables.

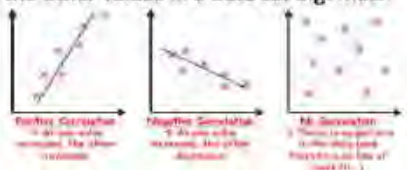
Line of best fit: is a straight line that best represents the data on a scatter plot

Correlation: When there is a strong link between two variables, they have strong correlation

Interpolation: Estimating a value inside the set of data points.

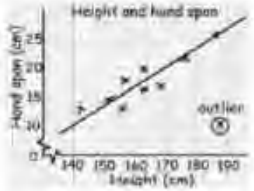
Extrapolate: Estimating a value outside the set of data points.

Outlier: A value which lies outside of most of the other values in a data set e.g. much smaller or larger



Scatter graphs

- Plots two sets of variables.
- Axes do not need to start at zero.
- A line of best fit should go through the centre of the data.
- Sloping upwards is a **positive correlation**, downwards is a **negative correlation**
- Outliers do not follow the trend of the rest



Useful Links: https://vle.mathswatch.co.uk/vle/ https://www.bbc.com/bitesize https://mathsmadeeasy.co.uk/ks3-revision/

Key ideas

- To be able to draw and measure angles to within 3°
- To know that angles on a straight line sum to 180°
- To know that angles around a point sum to 360°

Angles

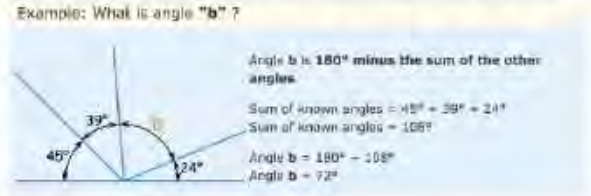
The corner point of an angle is called the **vertex** and the two straight sides are called **arms.** The angle is the *amount of turn* between each arm

There are different types of angles as can be seen below:

Type of Angle	Description
Acute Angle	is less than 90°
Right Angle	is 90° exactly
Obtuse Angle	Is greater than 90° but less than 180°
Straight Angle	is 180° exactly
Reflex Angle	Is greater than 180°
Full Rotation	is 360° exactly

Angles around a point will always add up to 360°. We can use this fact to find missing angles:

Angles on one side of a straight line always add up to 180°



Fractions, Decimals and Percentages

Fraction: How many parts of a whole. The numerator tells us how many parts we have, the denominator tells us how many equal parts it is divided into

$$\frac{5}{8} = 5 \div 8$$

Decimals: Based on ten. "Decimal number" is often used to mean a number that uses a decimal point followed by digits that show a value smaller than one.

Percentage: Means parts per 100, for example 25% means 25 parts per 100

Misleading Statistics

When we examine data, we have to be critical about where it has come from.

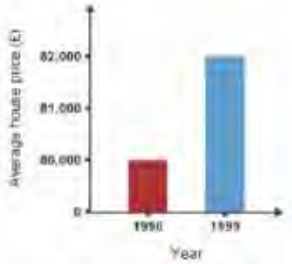
Ask yourself:

Where has the data come from?

What 'story' does the data tell you?

Does the graph/chart have a consistent scale?

Is the source bias?



For example, if we look at the graph to the right, it looks like there has been a big increase in house prices in one year. When we look more carefully though, we can see that it has only changed by £2,000. If the graph had a different scale that did not start at £80,000 it would look much different. This graph might be used, for example in a news story about increasing house prices, because it looks so shocking.

Using a Protractor

We use a protractor to help us draw and measure angles

Protractors usually have two sets of numbers going in opposite directions.

Be careful which one you use!

When in doubt think 'should this angle be bigger or smaller than 90°?'

Remember to use a pencil and ruler when drawing an angle

You can watch how to use a protractor and practice measuring angles on this website

Useful Links: https://vle.mathswatch.co.uk/vle/ https://www.bbc.com/bitesize https://mathsmadeeasy.co.uk/ks3-revision/

Baroque – A genre of music popular between 1600 and 1750

Year 8 – Topic 1

Harpsichord – A piano-like instrument where the strings are plucked (Unlike a piano where they are struck)

Sequence – A pattern of notes repeated higher or lower

Ground Bass – A repeating bass part

Polyphony – A texture with layers containing different rhythms

Listening examples

J. S. Bach – Toccata and Fugue

Features - Church Organ - Melodic sequences

Pachelbel – Canon in D

Features – Ground Bass - String Quartet

Handel – Zadok the Priest

Features – Choir and Orchestra - Brass Fanfares

Vivaldi – The Four Seasons

Features – Virtuosic Violin - Represents the seasons

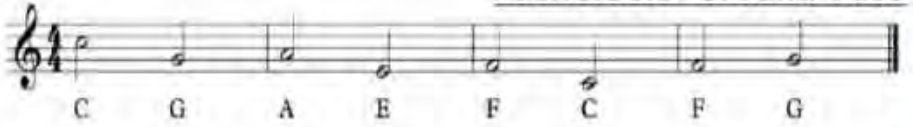

Pachelbel


J.S. Bach


Vivaldi


Handel

Pachelbels' Ground Bass



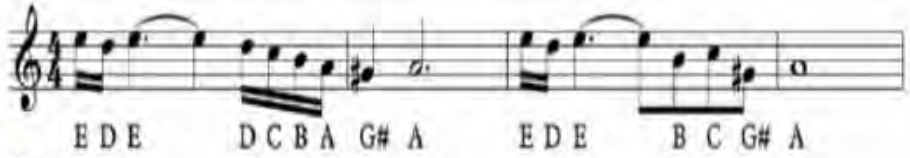
Harpsichord

The Harpsichord was a smaller instrument than modern pianos and couldn't play with much dynamic variation.

Organ

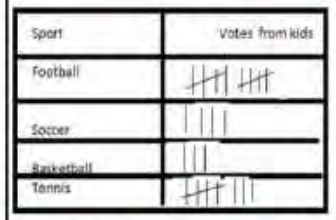
Church or Cathedral organs were used for religious and dramatic kinds of music.

Toccata & Fugue Main Motif



Key Stage 3 Knowledge Organiser –
Year 8 Core PE Unit 3: Analysis Of Performance

Anatomical Movements		
1	**Flexion**	**Decreasing** the **angle** at the joint.
2	**Extension**	**Increasing** the **angle** at the joint.
3	**Adduction**	Limb moves **towards** the mid-line of **the body.**
4	**Abduction**	Limb moves **away from** the mid-line of **the body.**
5	**Rotation**	A **circular movement** around a **fixed joint.**
6	**Circumduction**	When the limb moves in a **circle.**
7	**Dorsi Flexion**	**Bending** the **foot up** towards the shin.
8	**Plantar Flexion**	**Bending** the **foot downward** towards the ground.

Methods of Performance Analysis			
	Method of analysis	**Explanation**	**Example**
9	**Verbal feedback**	Spoken feedback used to improve performance levels.	
10	**Tally chart**	Visual information on the number of items or happenings.	
11	**Peer observation**	When someone else in the class watches you perform and feeds back to you.	

Introduction to Ethics Knowledge Organiser

Picture	Key Concept	Meaning
	Morality	Ways to decide if an action is right or wrong, for example, some people look at the consequence of an action to decide.
	Natural evil	Suffering that is caused by nature, for example floods and earthquakes.
	Moral evil	Suffering caused by humans, for example bullying and murder.
	Free will	Being free to make our own moral choices. God does not control our actions.
	Absolutism	What is right stays the same in ALL situations, for example believing that killing someone is always wrong.
	Relativist	What is right changes depending on the situation, for example believing that killing someone to save many others is the right thing to do.
	Conscientious Objectors	An individual who refuses to perform military service because of their personal beliefs. For example, believing that murder is never justified.

How can we work out what is right?

Consequentialists (or the teleological approach)	Intentionalists (or the deontological approach)
Say that an action is good if the **consequences of** that action are of benefit to others. For example: "Giving money to a homeless person is good if the homeless person spends it on food or shelter, However, if the homeless person spends the money on drugs, giving the money was a bad thing to do."	Say that an action is good if the person had good **motives** for doing it even if the consequences are not all good in the end. For example: "Helping your friend with their homework is a good thing to do, even if they get a really bad mark because of your help, you had good intentions so it was a good thing to do"

Are there situations when 'doing nothing' is an evil act?

Is it right to 'Conscientiously Object' to military service?

- ✓ 'God says it's never OK to kill!'
- ✗ '...But God says we should fight for what is right!'
- ✓ 'In war, nobody wins! There is always suffering on both sides.'
- ✗ 'You have a duty to protect your family and those who are being oppressed!'
- ✓ 'There is always a better way than violence!'
- ✗ 'We can't just let evil spread!'
- ✓ 'There are other ways to help those in battle! (Medic, Engineer etc.)'
- ✗ '...But you are relying on others fighting so you can make that choice!'

What is a Conscientious Objector?

- Some people refused to join the army, even under conscription.
- These **conscientious objectors** were against the war on moral or religious grounds.
- Some **conscientious objectors** agreed to work in hospital or act as stretcher bearers.
- Those who refused to go were put in prison.
- **Conscientious objectors** were people who simply did not want to fight in World War One.
- **Conscientious objectors** became known as 'conscies', 'conchies' or C.O's and they were a sign that not everybody was as enthusiastic about the war as the government would have liked.

Salahuddin Jitmoud was stabbed and robbed as he delivered his last pizza of the night. He was a delivery driver for Pizza Hut.

A man names Trey Relford was found guilty of the murder. This is how Abdul-Momin Jitmoud responded in court.

Abdul-Mumin Jitmoud- A case study in forgiveness

a. My son, my nephew,

b. I'm not angry with you, I don't blame you for hurting my son.

c. I'm angry at the devil, I blame the devil who misguided you and misled you to do such a horrible crime.

The Problem of Evil

(This is an important reason for why many people do not believe in God)

If God was all - knowing (omniscient), He would know that we were suffering.

If God was all - powerful (omnipotent), He would be able to stop our suffering.

If God was all -loving (omnibenevolent), He would want to stop our suffering.

We know evil and suffering exist so how can God exist?

Show forgiveness, speak for justice and avoid the ignorant

Do not judge and you will not be judged.
Do not condemn and you will not be condemned.
Forgive and you will be forgiven.

Forgive 70 x 7

The Freewill Defence

Some religious people would say that all evil and suffering is caused by human Freewill.

They believe God created the world it was perfect, people were created, called Adam and Eve and they had **free will:** they were able to choose to make good or bad decisions. The people made bad decisions and disobeyed God which brought suffering and sin into the world so it was no longer perfect. This is called **the Fall.**

This is the same with us today – we can choose to greet people with a high five or a slap. What we **choose** to do will create suffering or happiness in the world. It is up to us to choose to do the right thing to make the world a better place.

God allows people to have **freewill**, and their actions to have consequences, this brings a lot of suffering into the world BUT...people who have **freewill** can make real moral choices. If God had created humans like puppets (without free will) they would never be able to **choose** to do the right thing, it would just be automatic. They would also not be able to **choose** to love God or love other people.

God lets people have **freewill**, even though he knows we will cause suffering. But he thinks it is worth it so we can have **freewill** and real **morality**.

The Soul-Making Defence

Some religious people would say that evil and suffering are actually good things because they help us learn and develop. This is the way we can make our **souls**.

They believe God created the world but it was **not perfect**, God has deliberately put some **challenges** and **suffering** in our world because through learning from suffering we can develop our own **morality**.

By making mistakes and learning from the consequences we grow and learn not to make that mistake again because it causes suffering and evil to us and others. For example, if you choose not to revise for a test you will be disappointed with your grade, this suffering will help you to revise next time.

These religious believers think that God also **allows** other people to suffer because it gives us an opportunity to help. If we see someone starving, we have an opportunity to learn how to be **compassionate** and share our food. If someone is being bullied we can learn how to have **courage** to stand up for them. If there was no suffering in the world we would never develop these good qualities.

These believers think that is there was no suffering in the world, we would never learn how to do the right thing and become good people.

Life is a Test

Some religious people would say that the whole point of life is for God to test us so he can know whether to send us to Heaven or Hell.

Some people believe that everyone can choose to do right and wrong, they follow God or the Devil.

God is in control but he gives the devil permission to tempt people away from him during their lives. The suffering we experience is a test to see if we will continue to follow God when times are hard.

These people think God has picked out just the right amount of suffering for us to go through in our lives. If you suffer a lot, it means God knows you have a strong faith and knows you can handle a difficult test.

The test results come out when the world ends: many people believe there will be a judgement day, the good things you have done will be weighed against the evil things. If there is more good than evil then you will go to Heaven.

Year 8 Block2 Knowledge Organiser Forces
Revision Pgs: 75-78 (77-81 higher)
https://www.bbc.com/bitesize/subjects/zh2xsbk

A force can be a **push or a pull,** for example when you open a door you can either push it or pull it. You can not see forces, you can only see what they do.

When a force is applied to an object it can lead to a change in the objects

- **Speed**
- **Direction of movement**
- **Shape (think about a rubber band)**

Forces can also be divided into 2 types, contact forces and non contact forces.

1. Contact forces for example friction, are caused when two objects are in contact.
2. Other forces for example gravity, are non contact forces. The two objects do not need to be in contact for the force to occur.

The unit of force is the **Newton (N),** this is named after Sir Isaac Newton, who came up with many theories including those to do with gravity and the three laws of motion. We measure force using a piece of equipment called a Newton metre. See the picture below.

Floating duck

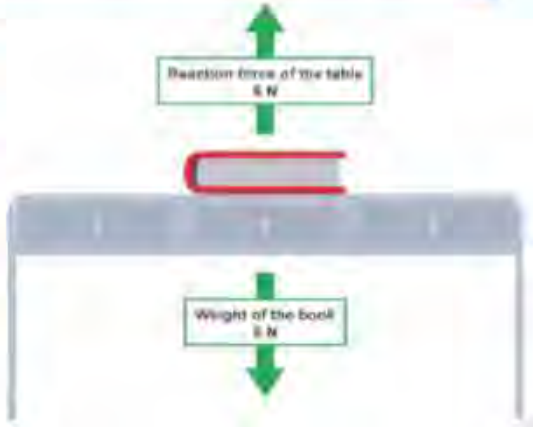
Rising air balloon

Key Terms	Definitions
Newton	The unit of force
Newton meter	A piece of equipment that can be used to measure the size of the force
Contact Force	A force caused by the contact between two objects
Non Contact Force	A force between two bodies that are not in contact for example gravity
Free body force diagram	A diagram which shows all the forces acting on an object

Force Diagrams

To show the forces acting on a body we use a free body force diagram. A **free body force diagram** shows all of the forces that are acting on the body. It has arrows that show the direction the force acts, the larger the arrow, the larger the force. A free body fore diagram should always have labelled arrows.

Submarine at constant speed and depth



Year 8 Block2 Knowledge Organiser Forces
Revision Pgs: 75-78 (77-81 higher)
https://www.bbc.com/bitesize/subjects/zh2xsbk

Types of force

In the table below different forces are summarised:

Name of Force	What causes it?	Example
Friction	When two objects rub together	Car tyres moving on a road.
Air resistance	When an object rubs against air particles	A sky diver falling through the air
Reaction	A force that acts in the opposite direction	A book on a desk, the force acting up is a reaction force
Weight	The force an object exerts on the ground due to gravity	You will exert a force on the ground, that is your weight
Thrust	The force that drives on objects with an engine	Thrust moves a plane forwards

Unbalanced Forces

If the forces are unbalanced on an object there are two things that could happen:

1. If the object is stationary then it will move in the direction of the resultant force
2. If the object is moving, then the object will speed up or slow down in the direction of the resultant force.

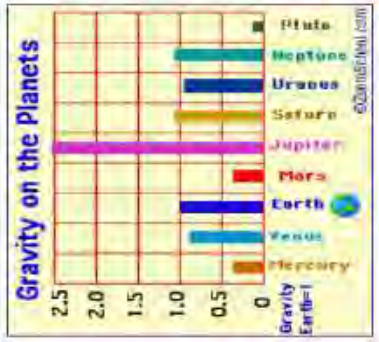
For example, what is the resultant force on the lorry below?

100N-60N= 40N (to the right)

Remember the resultant force does not tell you what direction the lorry is moving in.

- If the resultant force is in the same direction as the movement of the lorry then the lorry will speed up
- If it is in the opposite direction the lorry will slow down

The larger the resultant force the larger the change in movement



Weight on different Planets

As planets have different masses a person's weight would be different depending which planet they were on. For example, a person's weight on Earth is 1000N. If that same person was on Jupiter their weight would be 2500N.

Balanced Forces

When we talk about the total force acting on object we call this the **resultant force.** When the forces acting in opposite directions are the same size we say the forces are **balanced**. This means one of two things:

1. The object is stationary (not moving)
2. The object is moving at a constant speed This is known as Newton's first law.

For example, the resultant force acting on this object is 5N-5N=0N

Key Terms	Definitions
Resultant force	The total force acting on an object
Balanced force	When the resultant force on an object is 0
Unbalanced forces	When the resultant force on an object is more or less than 0

Year 8 Block 1 Knowledge Organiser Chemical reactions
Revision guide Pgs: 45-48 + 51 (48-51+54 higher)
https://www.bbc.com/bitesize/subjects/znxtyrd

KPI 4.1: Represent chemical reactions as word equations and apply this to the idea of conservation of mass

Chemical Change vs Physical Change

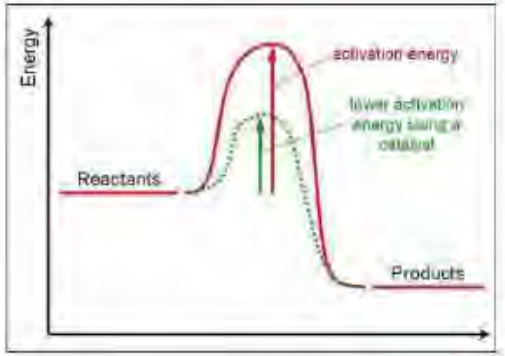
Physical Change
In a physical change, the matter's physical appearance is changed, but no chemical bonds are broken or formed. For example, when water is heated from liquid water to gaseous steam, only the appearance of water is changed – both steam and liquid water have the chemical formula H_2O.

Chemical Change
A chemical change involves a change in the chemical composition. Different elements or compounds are present at the end of the chemical change. Bonds of the reactants are broken down; new bonds are formed after the chemical change to produce new compounds.
A chemical change usually is indicated by:
1. A colour change
2. Emission of a gas
3. An increase or decrease in mass
4. Formation of a new solid

Key terms	Definition
Physical change	A physical change usually refers to a change of state. No chemical bonds are broken or formed in a physical change
Chemical change	A chemical change involves the breaking and forming of bonds. Usually a new chemical (product) is formed afterwards
Catalyst	A catalyst is a substance that speeds up a chemical reaction without being used up itself.

Catalysts:

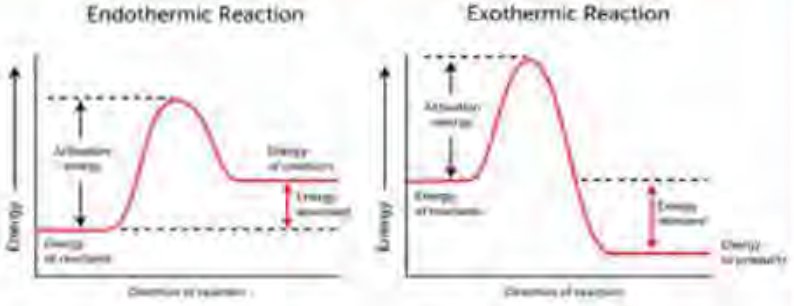
A catalyst is a substance that speeds up a chemical reaction. It does this by lowering the **activation energy**. It is used in industrial processes to lower costs



Exothermic and endothermic reactions:

An **exothermic reaction** is one where energy is given off to the surroundings shown as a temperature increase. The energy needed to break bonds is more than the energy needed to create new bonds.

An **endothermic reaction** is one where energy is absorbed from the surroundings shown as a temperature decrease. This is because more energy is needed to make new bonds is greater than the energy to break bonds.



Year 8 Block 1 Knowledge Organiser Chemical reactions
Revision guide Pgs: 45-48+51 (48-51+54 higher)
https://www.bbc.com/bitesize/subjects/znxtyrd

Chemical and physical properties

Elements in different groups have their own properties. Physical properties refer to physical characteristics such as how their colour and their states. Chemical properties refer to how the elements react when they form new bonds.

Reactivity Series:

The reactivity series is the order of metals based on their reactions with water, air and acid. We can use this to predict the products in a reaction.

potassium	Please
sodium	send
calcium	Charlie's
magnesium	monkeys
aluminium	and
zinc	zebras
iron	in
lead	lead
copper	cages
silver	securely
gold	guarded!

In displacement reactions the metal that is higher up the reactivity series will form a salt.

For example:

Magnesium + copper sulphate → magnesium sulphate + copper

The magnesium is higher up the reactivity series so it displaces copper and takes its place.

Zinc sulphate + copper → no reaction.

Copper is lower down the reactivity series so it does not displace zinc.

Key terms	Definition
Combustion	The scientific word for burning
Reactivity series	Metals arranged in order of their reactivity with water, air and acid.

Combustion.

Combustion is the scientific term for burning. There are 3 things that are needed for a fire: **oxygen, fuel** and **heat**. These things form the fire triangle.

There are 2 types of combustion: complete and incomplete.

Complete combustion occurs when there is good supply of oxygen.

The general equation is:

Fuel + oxygen → carbon dioxide + water

Incomplete combustion occurs where there is a lack of oxygen.

The general equation is:

Fuel → carbon monoxide + water + carbon (soot)

Carbon monoxide is a poisonous compound.

Thermal Decomposition:

Thermal decomposition is where a substance is broken down using heat.

A good example is copper carbonate (green)

Copper carbonate → copper oxide + carbon dioxide

Cabot Learning Federation

Food and Drink – Year 8.5 Spanish vocab list

¿Qué comes?	What do you eat?
El pan	Bread
El pescado	Fish
El queso	Cheese
La mantequilla	Butter
La leche	Milk
El café	Coffee
El té	Tea
La cola	Coke
El azúcar	Sugar
El jamón	Ham
El chocolate caliente	Hot chocolate
La manzana	Apple
La carne	Meat
La mermelada	Jam
El helado	Ice cream
Las judías verdes	Green beans
Las verduras	Vegetables
Las patatas fritas / papas	Chips
Las patatas fritas	Crisps
Las espinacas	Spinach
El huevo	Egg
El agua	Water

¿ Te gusta....?	Do you like...?
sí...	Yes...
no...	No...
porque es/son...	because it's/they are
muy	Very
bastante	Quite
un poco	A bit
demasiado	too
sabroso	tasty
delicioso	delicious
rico	delicious
sano	healthy
terrible	awful
asqueroso	disgusting
picante	Spicy
dulce	Sweet
amargo/a	sour
salado	salty
grasiento	fatty
bueno para la salud	good for your health
malo para la salud	bad for your health

Remember to think about making your adjectives agree!

O – masculine
A – feminine
OS – masc plural
AS – Fem plural

¿Qué quieres comer?	What do you want to eat?
Quiero	I want
Para mí	For me
Para beber	To drink
Para comer	To eat
Una ración de...	A portion of...
¿Tienes...?	Do you have...?
La cuenta, por favor	The bill, please
De primer plato	For the starter
De segundo plato	For the main
De postre	For dessert
Camarero/a	Waiter/waitress
La propina	The tip

¿ Te gustaría...?	Would you like...?
Un paquete de	A packet of
Un litro de	A litre of
Un kilo de	A kilo of
Un medio kilo de	Half a kilo of
Una botella de	A bottle of

¿Cuánto cuesta?	How much?
diez	10
veinte	20
veintiuno	21
treinta	30
treinta y uno	31
cuarenta	40
cincuenta	50
sesenta	60
setenta	70
ochenta	80
noventa	90
cien	100
dos cientos	200
quinientos	500

¿Te gusta(n)...?	Do you like...?
Prefiero	I prefer
Me encanta(n)	I love
Me gusta(n)	I like
No me gusta(n)	I don't like
Odio	I hate
En mi opinión	In my opinion
Pienso que	I think that

¿Cuándo comes?	When do you eat?
El desayuno	Breakfast
La comida	Lunch
La merienda	Snack
La cena	Evening meal/tea

Desayunar	To eat breakfast
Comer	To eat lunch
Merendar	To snack
Cenar	To eat dinner

8.5 Food and Drink
Year 8 Spanish Knowledge Organiser

Food, prices and quantities. Ordering food in a restaurant.

Verbs and the present tense in Spanish

The infinitive

When you look up a verb in the dictionary, you find its original, unchanged form which is called the ***infinitive*** (comer, beber, jugar, visitar, vivir, ir etc.). The infinitive ends in **–ar, -er** or **–ir.**

Forming the present tense in Spanish

Take off the last 2 letters of the infinitive **(–ar, -er** or **–ir)** and add the following endings depending on the pronoun:

*Important! There are some key irregulars to learn which don't follow this pattern – ir (as shown here), ser, tener and hacer are really important!

	AR verb	ER verb	IR verb
yo (I)	**-o**	**-o**	**-o**
tu (you)	**-as**	**-es**	**-es**
él/ella (he/she)	**-a**	**-e**	**-e**
nosotros/as (we)	**-amos**	**-emos**	**-imos**
vosotros/as (you all)	**-áis**	**-éis**	**- ís**
ellos/ellas (they)	**-an**	**-en**	**-en**

Comparisons

más - more	La cola es **más** deliciosa que el café
menos - less	El café es **menos** delicioso que la cola

Superlative

El /la más– the most	El queso es **el más** rico
El /la menos – the least	La carne es **la menos** sabrosa

Words come before the noun	Masculine (sing.)	Feminine (sing.)	Masculine plural	feminine plural
A / some	un	una	unos	unas

Adjective agreement.

Remember adjectives have to agree with the noun they are describing. Normally we change the –o to an –a to make it feminine unless there is already an –a then it stays the same and we add an –s to make it plural.

El helado es **delicioso** – La pizza es **deliciosa**

El pan es **asqueroso** – La pasta es **asquerosa**

Other rules :

- **Adjectives which end in – e stay the same when feminine (just add –s to make it plural)**

e.g. El café es terrible – La leche es terrible

- **Adjectives which end in –or change to –ora when feminine**

e.g. El deporte es agotador – La natación es agotadora

- **Adjectives which end in –l (or other consonants) stay the same whe feminine**

e.g. El helado es genial – La mantequilla es genial

Opinion phrases help to make your work more interesting – have a look at the list on your vocabulary list. Try to use a range of different ones in your work e.g. Me gusta (I like)/ Pienso que (I think that)/ En mi opinión (in my opinion).

REMEMBER!
Any practical work you do at home, take photos and this can be classed as homework if there is evidence in your homework book!

Decorative Textile Techniques

Applique is the method of sewing pieces of fabric onto other fabric bases in beautiful designs. You can stitch the applique pieces by hand as well as by sewing machine.

Spray dying creates a speckled, graffiti effect on fabric. Try not to spray too close as it will not have the same effect on the fabric.

Dyeing involves adding colour to the fabric by way of soaking it in a solution of dye. You can dye a fabric fully or partially ; Batik, tie and dye, shibori dyeing are all variations of dyeing fabric to bring about beautiful patterns on fabric surface.

Rubbings use natural textures to create interesting designs on to fabric, layer different colours to make your design more original.

Shaving foam marbling is a method of creating a marble effect, using shaving foam and acrylic paints. You can mix colours together to create a colourful design. Be careful not to overmix as this could result in to getting an all over brown colour.

Decorative stitches are created by selecting different stitch settings on a sewing machine, these are good to use in different colours to match your creative work. They can be sewn in a curved line as well as just sewing straight.

Year 8 Textiles Knowledge Organiser

The 4 Rs of sustainability

The UK wastes around £1 billion of clothing each year, which effects the environment we live in. A way to support the environment is to follow the four Rs of sustainability at home.

Recycle – Making unwanted clothing in to something new i.e. Jeans in to shorts.
Reduce – Buy high quality clothing which will last for longer.
Repair – If there is a rip or hole in your clothing, fix it by hand sewing it or adding a patch.
Reuse – If you no long want your clothing, donate it to a sibling or local charity shop.

Textiles Hierarchy of Key words

Tier 3 'Academic' keywords.

Plain seam
analyse
sustainable
embellishment
Woven/ bonded/ knitted
Free machine embroidery
function
develop

Tier 2 Valuable keywords used in most lessons every lesson.

Complementary colours
contrast
environment
fastening
compare
embroidery
iron
equipment
context
appliqué
effect
improve

Tier 1 Basic keywords used in almost every lesson.

colour
design
shape
machine
pattern
line
Texture
tone
theme
Fabric
thread
sew

Year 8 Creature & Characters

Content: In this project you will

Knowledge—of different artists who create creatures and characters

Understand—What inspired artists to create their work and how to write about the work

Skills—drawing, collage, painting, clay and showing the influence of other artists in your own work and presentation

Outcome— a 3D monster and watercolour painting

Cressida Cowell

Analysis

All artist research pages should be annotated

Artwork-

- **Artist name**
- Describe the work-what does it look like?
- Use the formal elements i.e. colour, line etc.
- What techniques/materials were used?
- What is your opinion of the work?
- How is it relevant to your own idea?

Sentence starters

I like/dislike the way the artist has used...because

I think the colour scheme used is effective because...

I think the artist has been inspired by...because

Evaluation of Your Artwork-

- What inspired you to create the piece?
- What techniques did you use and why?
- What does it mean to you?
- How is it relevant to your idea?

Nicola L Robinson is an illustrator for children's books. She is interested in mythology, history and fairy tales. Her favourite media to work in is *'pen and ink.'* She is still working around the UK.

Artists

Alex Lucas is a Bristol based artist, who creates illustrations in a range of media. He also creates murals on walls and garages around the city. Keep an eye out for his artwork!

Keywords

Illustration—a decoration, interpretation or visual explanation of a text.

Texture—used to describe how an object would feel when touched

Complementary Colours—opposite each other on the colour wheel

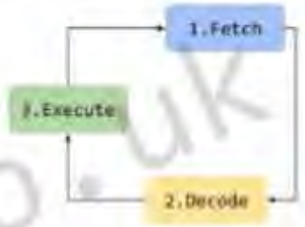
Consider

Mythology, Fantasy and Surrealism as sources of inspiration

Assessment

D	Demonstrate a deepening knowledge, understanding and skill
O	On Track—demonstrate some knowledge, understanding and skills
Y	Yet to be on track—developing some knowledge, understanding and skills
A	At an earlier stage—starting to develop some knowledge, understanding and skills

Year 8 - Hardware



Year 7 - Knowledge

Hardware
Any physical component of a computer system.
Internal Hardware: Found inside the computer
External Hardware: Found outside the computer

Peripheral Device
Addition hardware connected externally.

Input Device
Hardware used to put data into a system.

Output Device
Hardware used to present data to a user.

RAM
Primary Memory - Memory accessed directly by the CPU
Volatile memory (lost when the power is off) used to store data in current use. The CPU fetches data from the RAM.

Storage Devices
Secondary Storage - Long term data store
Non-volatile memory (not lost when the power is off)

Magnetic - Data on magnetic disks
+ Relatively cheap
- Can be damaged easily

Solid State - Data on ROM chips
+ Fast, shockproof, energy usage
- Expensive

Optical - Data on disks, read by laser
+ Cheap and portable
- Easily damaged

CPU - ***Hardware component that processes data***
Stands for Central Processing Unit. The processor works by using the "Fetch Decode Execute Cycle".

Embedded System
A computer inside of a larger system
Example: Microwave, Dishwasher, Fridge

Year 8 - Knowledge

CPU

CPU is a component that processes data

The processor works by using the "Fetch Decode Execute Cycle".

- Instructions are fetched from memory.
- Instructions are then decoded to find out what processing needs to be done.
- Instructions are the executed.

Factors that affect speed

- **Clock Speed -** How fast data is processed in a second
- **Cores -** How many instructions can be processed at once
- **Cache -** Amount of data that can be stored close to the CPU.

Factors affecting choice

- Cost
- Storage Size
- Physical Size
- Performance
- Reliability

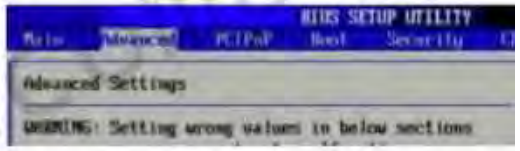
Boolean Logic

Logic Gates - Elements that take inputs and produce outputs

Truth Tables - A table that shows all the input and output combinations of a logic circuit or gate

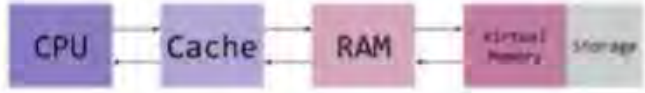
ROM

Non volatile memory used to data to operate a system e.g. BIOS



Virtual Memory

Created as temporary RAM on the storage when the RAM is full.



Questions and activities – hints and tips

Summarising a lesson:

Answer the following questions to help you summarise your learning in a lesson. This will help you recap and think again about your learning, and will be useful to look back on in the future.

- What key words did you use in the lesson?
- Can you define those key words and use them in a sentence?
- What new content did you cover?
- How does this link to your previous learning?
- Can you summarise your learning into one sentence?

Revision:

If you have an MCQ approaching, you could create some revision material based on your knowledge organiser.

Can you get down the key information in a spider diagram?

Can you use diagrams, pictures, symbols etc to recall your knowledge?

Knowledge quizzes:

Create a set of questions using the information from your knowledge organiser, or from your lesson.

You could make them about key words, and maybe even give multiple choice answers.

Go over the questions you keep getting wrong.

Try the questions out with those at home, or maybe your teacher could use them for their starter quiz in class.

Keyword Development:

Practise the spellings of key words. Use the look-cover-write-check method to help you.

Can you explain what the key words mean?

Can you link the key words together?

Copy out the key words with their definitions.

What might it look like?

Geography — Thursday 1st October

Topic: Our Place in the World

Lesson Summary:

Longitude - the distance, in degrees, E or W of the Prime Meridian.

Latitude - the distance, in degrees, N or S of the Equator.

Today we learnt about how the world is divided up using lines of latitude + longitude. The Equator is an 0° latitude, and the poles are 90° N +S.

This links to our previous learning because now I can say where the continents are using longitude + latitude to find them on a map

Lesson summary:

Knowledge Quiz:

Science

Topic: Cells — Monday 28th September

Knowledge Quiz:

1.) What is the name of the part of the microscope where the specimen is placed?
A= Stage

2.) How many cells are there in a 'unicellular' organism?
A= one

3.) What does the 'cell membrane' do?
A= controls movement of substances in + out of the cell

4.) Where does photosynthesis take place in a cell?
A= Chloroplast

5.) What is the function of the red blood cells?
A= to carry oxygen

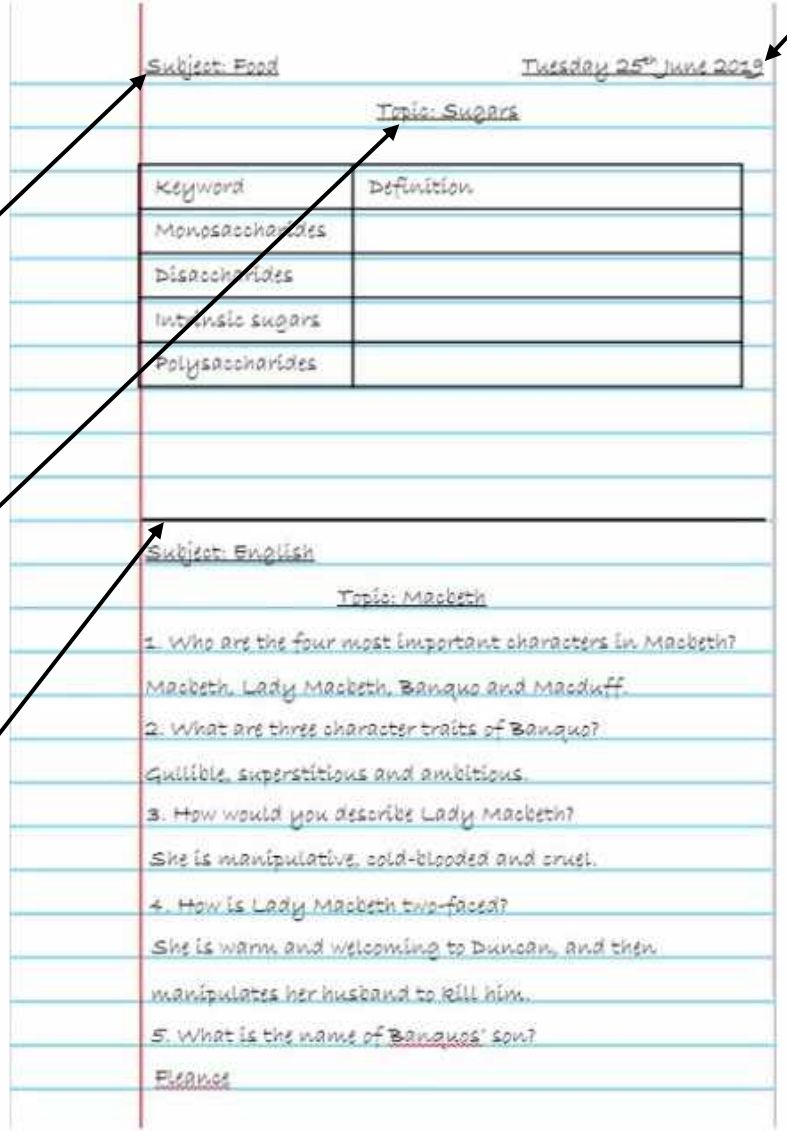
How to present your homework:

Date written fully on the right hand side of the page and underlined – this should be the day you complete the homework.

Subject written on the left-hand side of the page and underlined.
For example: Food

Topic written on the centre of the page and underlined.
For example: Sugars

One single straight line between both pieces of homework.



Subject: Food — Tuesday 25th June 2019

Topic: Sugars

Keyword	Definition
Monosaccharides	
Disaccharides	
Intrinsic sugars	
Polysaccharides	

Subject: English

Topic: Macbeth

1. Who are the four most important characters in Macbeth?

Macbeth, Lady Macbeth, Banquo and Macduff.

2. What are three character traits of Banquo?

Gullible, superstitious and ambitious.

3. How would you describe Lady Macbeth?

She is manipulative, cold-blooded and cruel.

4. How is Lady Macbeth two-faced?

She is warm and welcoming to Duncan, and then manipulates her husband to kill him.

5. What is the name of Banquos' son?

Fleance

Notes

Notes