BRISTOL METROPOLITAN ACADEMY

Knowledge Organisers 2023-24

Year 8 – Term 6

Monday 3rd June	Week A
Monday 10th June	Week B
Monday 17th June	Week A
Monday 24th June	Week B
Monday 1st July	Week A
Monday 8th July	Week B

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

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

Please note: Maths homework will be on an online platform for this term. It will be set and checked weekly separately from the timetable.

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This Knowledge Organiser is to help you see the key information for each subject for this term. You can use this to help you both with homework and with revision, supporting your learning at home. In the table below you will find the instructions for each subject to be completed on the correct day.

Subject	Tasks
Maths	Homework question tasks/sets will be set weekly on an online platform. You will have one week to complete this online, before it is checked for competition and the next set is published.
Science	For term 1 this will be directed by your classroom teacher. It could involve an online platform too.
English	Using the separate question booklet, divide your homework book page in half length ways, write the questions out on the left hand side. First, attempt to answer the questions from memory/your own knowledge. Then use your knowledge organiser booklets to check your answers and fill in the missing ones.
MFL	Find the correct date in the KO and the question booklet. With the list of 10 key words for that week, complete the look – say - cover – write – check method in your homework book. Complete this process for each word/phrase 4 times each.
Geog/Hist/RS /DT	Same process as outlined for English above. DT have 5 questions and not 10.
ICT	For term 1, continue to use the KO to do revision/key words etc in your homework books.
Music/Art	For music and art, you will have two practical tasks to complete each term for each subject. These will be found in the question booklets and will be checked by you classroom teacher.

At the back of this booklet, you will find: Sentence starters, a history chronology, DT sentence starters, a periodic table, maps of the world, subject websites, a RAG sheet and a timetable.

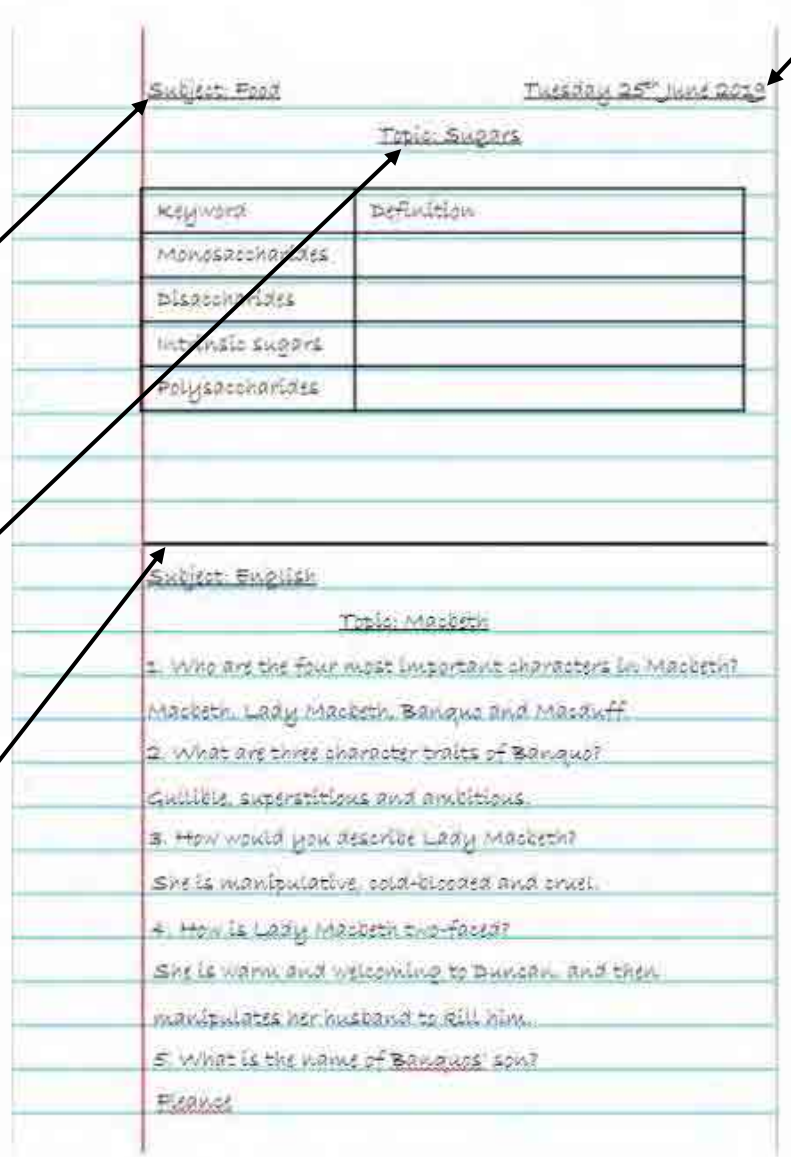
How to present your homework:

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: <u>Food</u>

Topic written on the centre of the page and underlined.
For example: <u>Sugars</u>

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

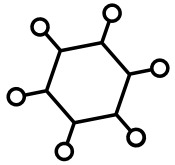
1. Who are the four most important characters in Macbeth?
Macbeth, Lady Macbeth, Banquo and Macduff.
2. What are three character traits of Banquo?
Gullible, superstitious and ambitious.
3. How would you describe Lady Macbeth?
She is manipulative, cold-blooded and cruel.
4. How is Lady Macbeth two-faced?
She is warm and welcoming to Duncan, and then manipulates her husband to kill him.
5. What is the name of Banquos' son?
Fleance

Home Learning Strategies to help you revise

Brain Dump

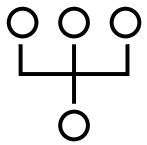
Write down everything you know about o certain topic on a page. Use your KO to add extra notes in a different colour.

Mind Map



Condense a topic showing the important links and connectors between key parts. Use your KO to add in extra notes.

Diagram



Draw a clear diagram for a subject including labels and key features. Make sure you use correct vocabulary and spellings.

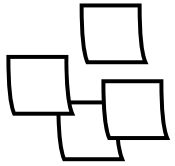
Vocabulary

Learn the key words associated with a topic and commit the word and spelling to memory. Test yourself or ask someone else to test you.

Retrieval Quiz

Write key questions about a topic as well as the answers. Use the content of the KO to help you. Check to see if you can remember the answers without looking.

Compare



Complete a comparison table showing two different sides of a topic. Can you use it to create an argument for one viewpoint?

Year 8 Our Environment

Keywords:

Climate Change

Graffiti

Extinction

Environment

Habitat

Street Art

Content: In this project you will develop knowledge of environmental issues.

Understand-what inspired artists to create their work and how to critically analyse their work.

Develop skills- in observational drawing, colour theory, painting and visual communication.

Outcomes- Art works inspired by environmental issues and the Artists you have studied.

Andy Warhol's "Endangered Species" series includes 10 silkscreen prints. The animals where listed on the endangered at the time they were made in 1983. Andy Warhol made these prints to raise awareness about the endangered species. Andy Warhol is a famous artist from the Pop Art movement. He used images found in popular culture and used an industrial printing method to make his work .

A R T I S T S

NeverCrew are a Swiss based street artist duo; Christian Rebecchi and Pablo Togni. The mural above 'Exhausting Machine' was created for the Vancouver Mural Festival in 2016. Nevercrew's art work explores the issues of climate change and pollution and the effect it is having on nature. You can find more information about their work at their website. https://nevercrew.com/about

In colour theory, a **tint** is a mixture of a colour with white, which reduces darkness, while a **shade** is a mixture with black, which increases darkness.

Complementary colours are pairs of colours that contrast with each other more than any other colour, and when placed side-by-side make each other look brighter.

PROGRAMMING TECHNIQUES

DATA TYPES

Data Type	Definition
String	Text eg: "Hello"
Integer	Whole number eg: 32
Float/Real	Decimal number eg: 1.2
Boolean	Two values eg: true or false
Character	A single character eg: b

Casting is when you want to change between data types. Eg - if you want to use an integer in a sentence you would need to convert it to a string

VARIABLES AND CONSTANTS

Variable - A value which may change while the program is running. Variables can be local or global.

Local Variable - a variable which can only be used within the structure they are declared in.

Global Variable - a variable which can be used in any part of the code after they are declared

Constant - A value which cannot be altered as the program is running.

OPERATORS

Operator/Function	Definition
Exponentiation	Raises a number to a power eg: 2**3 OR 2 ^3 ($=2^3$)
Quotient/DIV	Gives the whole number after a division
Remainder/MOD	Gives the remainder part of a division
==	Is equal to
! or <>	Is not equal to
<	Is less than
>	Is more than
>=	Is more than or equal to
<=	Is less than or equal to

PROGRAMMING CONSTRUCTS

A Sequence is when there are programming steps that are carried out one after another.

Selection is where there are different paths in your code eg: IF, ELIF, ELSE

Iteration is when there is repetition (loops) in code. This could be a WHILE loop (do something WHILE a condition is met) or a FOR loop (do something for a set number of times)

This count-controlled loop would print "Hello World" 8 times.:

```
for i=0 to 7
      print ("Hello")
next i
```

These condition controlled loops would check if a password's correct:

```
while answer != "letmein123"
      answer=input("Enter password")
endwhile
```

```
do
      answer=input("Enter password")
until answer=="letmein123"
```

FILE HANDLING

Myfile=openRead("myfile.text")	Opens the file in read mode
Myfile=openWrite("myfile.text")	Opens the file in write mode
Myfile.writeLine ("Hello")	Writes a line to the file
Line1=myfile.readLine()	Reads one line of the file
Myfile.close()	Closes the file
endOfFile()	Used to determined the end of a file

STRING MANIPULATION

0	1	2	3
W	o	r	d

The characters in a string are numbered starting with position 0.

Function	Purpose
x.length	Gives the length of the string
x.upper	Changes the characters in the string to upper case
x.lower	Changes the characters in the string to lower case
x[i]	Gives the character in position i. Eg: x[2] = "r"
x.substring(a,b)	Gives the characters from position a with length b. Eg: x.subString(1,2) = or
+	Joins (concatenates) two strings together

Using stimuli to develop ideas

There are a wide range of **stimuli** to choose from, from which a **devised** work can be created. These include:

- pictures
- poems
- music
- articles
- artefacts
- paintings

It is important to allow a limited time frame to discuss responses to the **starting point** or stimulus. Ask:

- Who are the **target audience**?
- What should be **said** to them?
- What should be **shown** to them?
- How should they **feel** by the end of the drama?

From the very start of the process, ideas should be tried out practically. For example:

- create six **tableaux** immediately - this could lead to other ideas
- write spontaneously for two minutes in response to the starting point
- share ideas
- **improvise** a two minute scene without thinking or planning - this could generate new ideas
- set tasks:
- research the topic - get images, facts, statistics, interviews, etc
- explore real-life events and use spoken or written stories from people - this may lift practical work to a higher standard.

When thinking about character and body, consider the following points:

- What is the style of the piece being created?
- How might the character stand and move?
- What **gestures** and **mannerisms** do they employ?
- How can they use **posture** and body language to physically tell the narrative?
- How will they walk around the space?
- Experiment with levels, lifts and **proxemics**

Ideas to consider might include:

- experimenting with time frames through use of **flashback** and **flashforward**
- performing a range of roles through **multi-role play**
- trying out **choral speaking** as a group to get across important messages
- **direct address** and **narration** to your audience so you create an extra impact on them
- trying a moment in **slow motion** or at high speed to contrast with other parts of the piece

Do not underestimate the importance and impact of stillness and silence - the inclusion of these can have varying effects on an audience and work especially well to add tension or impact.

Teamwork

It is important to work together as a team and commit wholly to that group:

- turn up on time
- be positive
- say yes to ideas
- respect other opinions
- take it in turns to lead a warm up or direct a section of the piece

At the very beginning of the devising, things will not be perfect. Remember the bigger picture and be positive, knowing that details can be fine-tuned later on. Groups that are always evolving and experimenting with their ideas can experience more success with their work.

Other ideas to try out might include:

- changing the order of events to make the **structure** more interesting
- trying out **monologues** for different characters
- using music and looking at short sections of **mime** to accompany this
- experimenting with your use of space and **levels** within the performance space
- doing something at the same time as **synchronisation** to emphasise the scene

It is important to be willing to let go of things, make changes and keep on researching. It could help to listen to others, step out of the scene and watch it with the eye of a critical friend. Other ideas include:

- Trying some **off-text improvisation**, placing the **characters** in a different situation, eg what would they be like in ten years time, at work or on holiday?
- Trying the play in reverse or swapping characters over to see them through another pair of eyes.
- Re-enacting the **sub-text** only - what is it that's not told and how can this be emphasised?
- **Hot-seating** the characters - if this is done while working around the space, it places less pressure on the person being asked the questions and gives less time to overthink answers.
- Filming and watching it back to make improvements - can everything be heard and seen, does it make sense and can the audience understand what is taking place?
- Trying out and notice endings - what differ ent do they make and could two or more be included to really make the audience think?

Working as a team

Everyone in a production has a clear role, and with that clear **responsibility**. Everyone needs to know what they should be doing, as well as how their role fits in with the rest of the team and the whole production. For this, good communication is essential. In the early stages of the production cycle, research can be done into particular roles, which could include watching videos or reading about a specific topic, going to live theatre performances, or developing a particular skill. Each member of the production crew needs to be aware of all **health and safety considerations** to ensure that everyone, including the audience is kept safe.

Also, try out other additions such as:

- pause
- silence
- emphasis
- travelling
- looping
- whispering
- rhythm

How can a piece be enhanced with extra visual work?

- experiment with **narration**
- narrate actions in the **third person**
- **choral speaking** can be very effective when it's done well
- experiment with **soundscapes** to create atmospheric, repeated, different sounds or words in action.

Blocking

The performance can then be worked through piece by piece to establish where actors should be on the stage and when, known as **blocking**. The main focus should be:

- the use of space
- the set
- how to enhance mood and atmosphere

Drama Year 8 Term 5 & 6 Knowledge organiser

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

Fret Saw

Soldering Iron

Line Bender

Practice your tonal drawing skill here

Electrical Systems Involve Circuits

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.

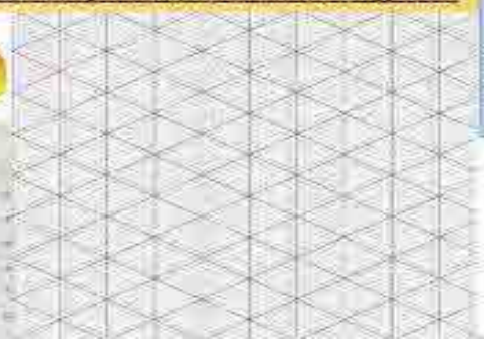
Test and evaluate each model

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.

Develop Ideas with Sketches

Practice your isometric drawing here



Isometric Drawing Shows Objects at 30°

Scene-by-Scene Summary – Take note of the key quotations from each scene.		
Prologue	The Chorus speaks of an ancient grudge between two households, from which two 'star-crossed lovers' appear.	*From forth the fatal loins of these two foes* *A pair of star-crossed lovers take their life. . .*
Act 1 Scene 1	A street brawl breaks out between the Montagues and Capulets. The Prince intervenes. He threatens the death sentence for anyone who breaks the peace again.	*To old Free-town, our common judgment-place.* *Once more, on pain of death, all men depart.*
Act 1 Scene 2	Paris speaks of his desire to marry Juliet to Capulet. They arrange a masquerade ball so that he can begin to woo her. Peter accidentally invites Romeo and Benvolio.	*One fairer than my love? The all-seeing sun* *Ne'er saw her match since first the world begun.*
Act 1 Scene 3	Lady Capulet discusses the prospect of Juliet getting married to Paris. She dutifully says that she will look upon him.	*I'll look to like if looking liking move/ But no more deep will I endart mine eye/ Than your consent gives strength to make it fly.*
Act 1 Scene 4	Before the ball, Mercutio mocks Romeo. He gives his 'Queen Mab' speech. Romeo fears the night will set fate in motion.	*O, then I see Queen Mab has been with you. . . .* *She is the fairies' midwife. . . .*
Act 1 Scene 5	Romeo and Juliet meet at the ball. They immediately fall for each other – Romeo uses metaphors to compare her to a pilgrim. Tybalt spots Romeo and wants to kill him, but Capulet stops him. Romeo and Juliet learn that they are from warring families.	*If I profane with my unworthiest hand* *This holy shrine, the gentle sin is this:* *My lips, two blushing pilgrims, ready stand* *To smooth that rough touch with a tender kiss.*
Act 2 Prologue	The chorus returns and delivers a sonnet about the new love.	*But passion lends them power, time means, to meet,*
Act 2 Scene 1	Benvolio and Mercutio search for Romeo, who has escaped them in the hope of re-finding Juliet.	*Go then, for 'tis in vain* *To seek him here that means not to be found.*
Act 2 Scene 2	The famous 'balcony scene.' Romeo decides that he cannot go home without seeing Juliet again. He trespasses into her garden, where she appears at a window. They decide that they will wed.	*If that thy bent of love be honorable,* *Thy purpose marriage, send me word tomorrow,* *By one that I'll procure to come to thee,*
Act 2 Scene 3	Romeo visits Friar Laurence to ask if he will wed him to Juliet. Whilst shocked at how fickle Romeo's love is, he agrees.	*Thy love did read by rote that could not spell.* *But come, young waverer, come go with me,*
Act 2 Scene 4	Romeo arrives to meet Mercutio and Benvolio. The Nurse and Peter then arrive, and Mercutio makes fun of the Nurse. When Mercutio leaves, Romeo arranges with the Nurse for Juliet to meet him at Friar Laurence's chamber.	*The sovereignty will fall upon Macbeth.* *Bid her devise/ Some means to come to shrift this afternoon.* *And there she shall at Friar Lawrence' cell* *Be shrived and married.*
Act 2 Scenes 5-6	The Nurse sends Juliet to Friar Laurence's cell, where they are married. The Friar warns them to love moderately.	*But come what sorrow can,/ It cannot countervail the exchange of joy/ That one short minute gives me in her sight.*
Act 3 Scene 1	Tybalt duels Mercutio. Romeo tries to make peace, but Tybalt stabs Mercutio dead under Romeo's arm. In rage, Romeo kills Tybalt. The Prince arrives and exiles Romeo.	*"A plague o' both your houses"* *"Ask for me tomorrow, and / you shall find me a grave man"*
Act 3 Scene 2	The Nurse tells Juliet of the fight. Juliet is traumatised by the idea of an exiled Romeo. The Nurse says she knows where he is hiding.	*O nature, what hadst thou to do in hell/ When thou didst bower the spirit of a fiend/ In moral paradise of such sweet flesh?*
Act 3 Scenes 3-4	Romeo despairs at hearing of being banished. The Friar makes a plan for him to visit Juliet before leaving. Elsewhere, Capulet contacts Paris and arranges for Juliet to marry him.	*There is no world without Verona walls* *But purgatory, torture, hell itself.* *Hence "banishèd" is banished from the world,*
Act 3 Scene 5	Romeo reluctantly leaves Juliet. Her mother then tells of the marriage to Paris. She rejects it. Capulet threatens to disown her.	*Hang thee, young baggage! Disobedient wretch!* *I tell thee what: get thee to church o' Thursday,*
Act 4 Scenes 1-2	Juliet meets Friar Laurence, saying that she would rather kill herself than marry Paris. Friar Laurence proposes the sleeping potion plan. She agrees, returns to her parents, and repents.	*Take thou this vial, being then in bed,* *And this distillèd liquor drink thou off,*
Act 4 Scene 3	Juliet is scared, but drinks the contents of the vial.	*Romeo, Romeo, Romeo! Here's drink. I drink to thee.*
Act 4 Scenes 4-5	The Nurse finds Juliet dead on her wedding morning. The family are distraught, but agree to make the funeral arrangements.	*O me, O me! My child, my only life,* *Revive, look up, or I will die with thee!*
Act 5 Scene 1	Romeo is told of the death by Balthasar. Romeo decides that he will return to Verona to kill himself. Before doing so, he purchases poison from an apothecary.	*Well, Juliet, I will lie with thee tonight.* *Let's see for means. O mischief, thou art swift*
Act 5 Scene 2	Friar Laurence learns that Romeo has not received his letter informing him of the plan, and is worried. He doesn't know that Romeo now thinks that Juliet is dead.	*Unhappy fortune! By my brotherhood,* *The letter was not nice but full of charge,*
Act 5 Scene 3	Romeo finds Juliet's body and kills himself. She awakens and kills herself. Montague and Capulet commit to resolve.	*For never was a story of more woe* *Than this of Juliet and her Romeo.*

Dramatic Devices in Romeo and Juliet		Features of a Tragedy in Romeo and Juliet
Dramatic Irony	Mercutio and Benvolio think Romeo is still pining over Rosaline, but the audience knows he has moved on to Juliet. A2 S1	**Tragic Hero** - A main character cursed by fate and possessed of a tragic flaw (Romeo, and to an extent Juliet). 
Soliloquy	Juliet's opening speech in A3 S2 in which she pours her heart out over her love for Romeo.	**Hamartia** - The fatal character flaw of the tragic hero (his passion and impulsiveness).
Aside	Juliet secretly hopes for the 'villain' Romeo: *Villain and he be many miles asunder God pardon him!* A3 S5.	**Catharsis** - The release of the audience's emotions through empathy with the characters. 
Foreshadowing	Friar Laurence: *These violent delights have violent ends, And in their triumph die, like fire and powder.* A2 S6	**Internal Conflict** - The struggle the hero engages in with his/her fatal flaw.

Context – The play was written by William Shakespeare, and was first performed around 1594.

Shakespeare's Time – Shakespeare wrote his plays at the time of two monarchs: Queen Elizabeth I and James I. *Romeo and Juliet was* written relatively early in Shakespeare's career (the bulk of his tragedies were written in the 17th century) yet was extremely popular in his lifetime, as it is now. Shakespeare borrowed heavily from two texts: *The Tragical History of Romeo and Juliet* (1562) and *Palace of Pleasure (1567)*

Elizabethan England and Italy –Shakespeare frequently engaged with Italy in his plays, leading many to believe that he travelled there between the late 1580s and early 1590s. Italy was a place that Shakespeare's contemporaries would have had a keen interest in; it was already an advanced and beautiful place for travel. Shakespeare's depictions of many areas of Italian life at the time are deemed largely accurate.

Religion – The heavy religious presence is evident across several parts of *Romeo and Juliet*. This is reflective of a society across Europe that was deeply religious (predominantly catholic or protestant). Several characters demonstrate their commitment to the church, such as Romeo and Juliet who choose to marry rather than fornicate, and the Capulets, who are quick to contemplate that Juliet is in a better place (heaven) after she is found 'dead.'

Patriarchal Society –Society throughout the Middle Age and at Shakespeare's time was patriarchal – women were considered inferior to men. This was also the case in much of Europe, including Italy. Women belonged to their fathers (or brothers if their fathers had died) and then their husbands, so Juliet would be expected to obey her father. Women were not permitted to own land or enter most professions. They were instead expected to bear children, be gentle and womanly.

Astrology the Supernatural – At the time of Shakespeare, the belief in both astronomy and the supernatural was far more preeminent than in society today. The reference to 'star-cross'd lovers demonstrates the large role of horoscopes and planet positions in being used to predict fate. Also, Romeo and Juliet make reference to the fact that they feel they are being guided by a supernatural force (e.g. 'fortune's fool).

Healthcare and Medicine – Healthcare and medicine were not as advanced in Shakespeare's age as they are today – there were numerous ailments and diseases that were not yet understood. This makes it much more believable for both the Capulets and Romeo that Juliet could have died so suddenly and so young. The high death count in the play would seem slightly more common in those days!

Main Characters – Consider what Shakespeare intended through his characterisation of each of the below...

Romeo – The son and heir of Lord and Lady Montague. Romeo is handsome and intelligent, yet he is also impulsive and extremely sensitive. Romeo is a peaceful character, and is not interested in the violence that goes on around him, choosing instead to focus his energies on love. Although Romeo's love seems fickle (he loves Rosaline at the outset) his commitment can't be debated in the end!

First Scene: Act I Scene II **Final Scene:** Act V Scene III

Juliet – The daughter of Capulet and Lady Capulet. Juliet is a beautiful young girl (13 years old at the start of the play). Juliet is caring, compassionate, and at times demonstrates courage (she defies her parents in order to marry Romeo, and drinks the contents of the vial without fully trusting its effects). At times, she shows great intelligence and wit, particularly in conversations with her mother.

First Scene: Act I Scene III **Final Scene:** Act V Scene III

Prince Escalus– The most powerful character in the play, with the authority to govern the other characters and administer sentences. He is also a kinsman to Mercutio and Paris. As the seat of Verona, his main concern throughout most of his appearances are in relation to ensuring that the peace is kept. He is merciful in banishing Romeo for the death of Tybalt, as opposed to sentencing him to death.

First Scene: Act I Scene I **Final Scene:** Act V Scene III

Mercutio – A kinsman to the prince and one of Romeo's closest friends. Mercutio is an extraordinary character in that he has sparkling wit and a vivid imagination. Much of Mercutio's speeches deal in puns and word-play. He appears to see himself as being above the vices of love, choosing instead to view it as misplaced sexual appetite. His hot-headedness is eventually his downfall.

First Scene: Act I Scene IV **Final Scene:** Act III Scene I

Montague and Capulet – The patriarchs of the Montague and Capulet families, who have held a long and violent feud with one another from some time before the play begins. Both seem to deeply love their respective child, yet do not always seem appropriately aware of their emotional wellbeing. For example, Romeo chooses to walk the streets in melancholy rather than share his feelings with his father, and Capulet feels the best thing for Juliet would be a marriage with Paris.

Friar Laurence and the Nurse – Both Friar Laurence and the Nurse act as guidance counsel for Romeo and Juliet. They appear to be the two people that Romeo and Juliet trust more than any others in the world, as they are the two that they confide in. Friar Laurence is kind and civic-minded (believing the marriage may heal the feud), whilst the Nurse is kind and sentimental (yet at times vulgar). She seems as though she is more of a mother to Juliet than Lady Capulet has ever been.

Themes – A theme is an idea or message that runs throughout a text.

Love – In Romeo and Juliet, love is an extremely overpowering force that supersedes all other values, emotions, and loyalties. Through their love, Romeo and Juliet conspire to go against the forces of their entire social world. Romeo returns to visit Juliet at points, even though he is well aware of the threat of death. At times, love is presented as fickle (Mercutio's speeches, Romeo + Rosaline).

Individual vs Society – Romeo and Juliet are forced to undermine the oppressive rules of society at the time. For example, rules of the patriarchal family force Juliet to be subservient to her parents, rules of religion mean that they must marry in haste, and rules of masculinity force Romeo into conflict with Tybalt.

Violence – Extreme violence takes place sporadically throughout the play. The feud between the two families is so bitter that the mere sight of each other can be the cause of a fight to the death. Unchecked violence is personified through the character of Tybalt. The violence culminates in Act 3 Scene 1, in which both Mercutio and Tybalt are murdered.

Fate – In the first address to the audience, the Chorus states that Romeo and Juliet are 'star-cross'd' lovers, meaning that fate had intended for their paths to cross, and that fate controls their actions. A series of unfortunate accidents towards the end of the play thwart Friar Laurence's plan and eventually manifest in both Romeo and Juliet committing suicide, thus adding to the sense of fate.

Food

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

Micronutrients

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

[illegible]

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

[illegible]

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: houmous 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): [illegible]
Enriching: [illegible]
Raising Agent: [illegible]
As a glaze and to add colour: [illegible]
Aeration: [illegible]

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

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Past holidays 8.8 French Vocab list

les participes passés irréguliers?	Irregular past participles ?
Faire → fait	To do → did
Prendre → pris	To take → took
Boire → bu	To drink → drank
Voir → vu	To see → saw
Lire → lu	To read → read
Vouloir → voulu	To want → wanted
Dire → dit	To say → said
Devenir → devenu	To become → became
Avoir → eu	To have → had
Écrire → écrit	To write → wrote

Les opinions	Opinions
C'était	It was ...
Génial	Great
Fantastique	Fantastic
Intéressant	Interesting
Touchant	Moving (emotionally)
Inoubliable	Unforgetable
Incroyable	Incredible
Trop court	Too short
Ennuyeux/barbant	Boring
Trop long	Trop long
Passionnant	Exciting
Émouvante	Emotional
Triste	sad

Quand?	When?
Aujourd'hui	Today
Normalement	Normally
D'habitude	Usually
Parfois/quelquefois	Sometimes
Pendant la pause/ le trajet	During breaktime/the journey
Le week-end	On the weekend
Après le collège	After school
deux fois par semaine	Twice a week
souvent	Often
Toujours	Always
Rarement	Rarely
De temps en temps	From time to time
Le lundi	On Monday
Hier	Yesterday
Récemment	Recently
Le week-end dernier	Last weekend
La semaine dernière	Last week
L'année dernière	Last year
Il y a un mois	A month ago
Demain	Tomorrow
Bientôt	Soon
A l'avenir	In the future
Le week-end prochain	Next weekend
La semaine prochaine	Next week
L'année prochaine	Next year
Dans un mois	In a month

Qu'est-ce que tu fais normalement?	What do you do normally?
Se reposer (je me repose)	To relax
Se relaxer (je me relaxe)	To relax
S'amuser (je m'amuse)	To have fun
Se baigner (je me baigne)	To bathe
S'habiller (je m'habille)	To get dressed
Se lever (je me lève)	To get up
Se laver (je me lave)	To wash
Se réveiller (je me réveille)	To wake up
S'entendre avec (je m'entends avec)	To get on with
Se brosser les dents/ les cheveux (je me brosse)	To brush teeth/hair
Se doucher (je me douche)	To shower
Se maquiller (je me maquille)	To put on make-up

Il faisait quel temps?	What was the weather like?
il faisait beau	The weather was nice
il faisait mauvais	The weather was bad
il faisait chaud	It was hot
il faisait froid	It was cold
il faisait gris	It was grey / overcast
il faisait nuageux	It was cloudy
il y avait du soleil	It was sunny
il y avait du vent	It was windy
il y avait du brouillard	It was foggy
il y avait de l'orage	It was stormy
il pleuvait	It was raining
il neigeait	It was snowing
il geleait	It was icy

Past holidays 8.8 French Knowledge Organiser

Reflexive verbs, the perfect tense (past tense)

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A **verb** is a doing, being or having word. e.g. to speak, to eat, to be. **Reflexive verbs** in French are verbs which usually mean an action done to yourself (e.g. straighten your hair, brush your teeth, etc.). Many are regular -er verbs and they need an extra **reflexive pronoun**.

Subject pronouns	Reflexive pronoun
je (I)	**me**
tu (you)	**te**
il (he), **elle** (she), **on** (we)	**se**
nous (we)	**nous**
vous (you) (pl)	**vous**
ils/elles (they)	**se**

Examples:
Se lisser les cheveux - to straighten one's hair
Je **me** lisse les cheveux > I straighten my hair
Se brosser les dents – to brush one's teeth
On **se** brosse les dents > we brush our teeth
Se doucher - to shower
Tu **te** douches le matin ou le soir? Do you shower in the morning or in the evening?

The perfect tense:
You can talk about the past by using the **perfect** tense (*le passé composé*). The perfect tense has 3 parts:
1. The subject pronoun (eg. Je,nous)
2. The auxiliary (*avoir* or *être*)
3. The past participle
To form the past participle, take off the infinitive endings (**–er**, **-ir** or **–re**) and add the following endings instead:
-ER verbs > - é
-IR verbs> - i
-RE verbs > - u
Examples:
J'**ai** acheté des baskets au centre commercial. *I **have bought** trainers at the shopping mall.*
Hier il **a** joué au foot dans le parc. *Yesterday he **played** football in the park.*
Tu **es** allé en ville hier? *You **went** to town yesterday?*

The 2 auxiliary verbs are AVOIR or ÊTRE.

- **Use AVOIR with most verbs.**
- **Use ÊTRE with reflexive verbs and DR. MRS VANDERTRAMP verbs.** [*Devenir* (to become), *Revenir* (to come back), *Monter* (to go up), *Retourner* (to return), *Sortir* (to go out), *Venir* (to come), *Aller* (to go), *Naître* (to be born), *Descendre* (to go down), *Entrer* (to enter), *Rentrer* (to go home/to return), *Tomber* (to fall), *Rester* (to remain), *Arriver* (to arrive), *Mourir* (to die), *Partir* (to leave).]

AVOIR	ÊTRE
J'**ai**	Je **suis**
Tu **as**	Tu **es**
Il /elle **a**	Il /elle **est**
Nous **avons**	Nous **sommes**
Vous **avez**	Vous **êtes**
Ils /elles **ont**	Ils /elles **sont**

Remember!
When using *être* to form the perfect tense your past participle must agree with the subject pronoun.

Add –e if feminine e.g. elle est allé**e**

Add –s if plural e.g. ils sont allé**s**

Add –es if feminine plural eg. elles sont allé**es**

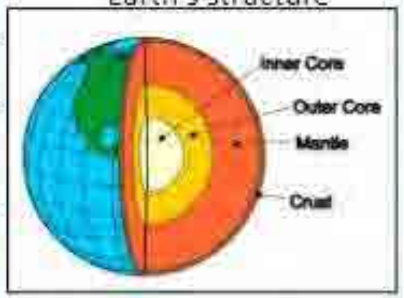
Year 8 Geography

Why do people live in the danger zone?

Keywords	
Natural hazard	A natural process that poses a threat to people and property
Tectonic hazard	A hazard caused by tectonic plate movement
Atmospheric hazard	A hazard in the atmosphere (hurricane, thunder and lightning, drought)
Tropical storm	A very powerful, low-pressure weather storm (e.g. hurricanes, typhoons and cyclones)
Plate boundary	The line between two plates, also known as a fault line

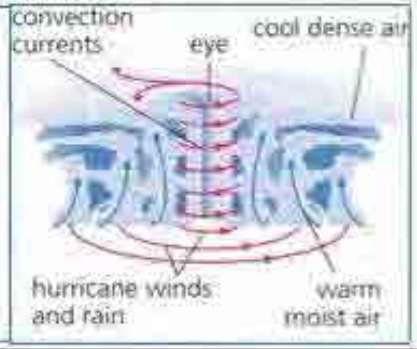
Name of plate margin	Movement of plates	Hazards that occur
Constructive		Volcanoes, earthquakes
Destructive		Volcanoes, earthquakes
Conservative		Earthquakes

Earth's structure



Tropical storms

- Large storms that can have winds up to 320mp/h
- Form in the tropics where the ocean is over 27°C.=
- Warm air rises and the Earth's spin causes the swirling pattern of clouds



Hazard	**Japan 2011:** an earthquake created a tsunami with waves up to 39 metres high	**Afghanistan earthquake 2022:** an earthquake of 6.2 magnitude occurred 4km below ground
Primary	15,000 people killed and 6000 injured Ports and airports were damaged and closed	1150 people killed and 1600 injured 1900 homes destroyed and 10,000 homes suffered damage
Secondary	4 years later 230,000 people were still living in temporary accommodation	Diseases such as cholera spread due to the cramped living conditions
Immediate	A tsunami warning was issued 3 minutes after the earthquake Search and rescue experts flew out	Afghanistan military carried out search and rescue operations UN response teams sent trucks of supplies
Long term	Installed a new tsunami warning system	A team set up to review responses and create a plan to prepare for future emergencies

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Past Holiday! Year 8.4 German Vocab list

Past participles	**Past participles**
machen → gemacht	To do → did
nehmen→ genommen	To take → took
trinken→ getrunken	To drink → drank
sehen → gesehen	To see → saw
lesen → gelesen	To read → read
wollen → gewollt	To want → wanted
sagen → gesagt	To say → said
gehen → gegangen	To go → went
haben → gehabt	To have → had
fahren → gefahren	To go → went
bleiben → geblieben	To stay → stayed
kaufen → gekauft	To buy → bought
essen → gegessen	To eat → ate
besuchen → besucht	To visit→ visited

Meinungen	**Opinions**
Es war	It was …
toll/spitze	Great
fantastisch	Fantastic
interessant	Interesting
ergriefend	Moving (emotionally)
unvergesslich	unforgetable
unglaublich	Incredible
zu kurz	Too short
langweilig	Boring
zu lang	Trop long
Spannend	Exciting
emotional	Emotional
traurig	sad

Wann?	**When?**
heute	Today
normalerweise	Normally
gewöhnlich	Usually
manchmal	Sometimes
Während der Pause/ der Reise	During breaktime/the journey
am Wochenende	On the weekend
nach der Schule	After school
zweimal pro Woche	Twice a week
oft	Often
immer	Always
selten	Rarely
ab und zu	From time to time
Montags	On Monday
gestern	Yesterday
neulich	Recently
letztes Wochenende	Last weekend
letzte Woche	Last week
letztes Jahr	Last year
vor einem Monat	A month ago
morgen	Tomorrow
bald/früh	Soon
in der Zukunft	In the future
nächstes Wochenende	Next weekend
nächste Woche	Next week
nächstes Jahr	Next year
In einem Monat	In a month

Was machst du normalerweise?	**What do you do on holidays?**
sich entspannen (ich entspanne mich)	To relax
Spaß haben (Ich habe Spaß)	To have fun
schwimmen (ich schwimme)	To swim
sich anziehen (ich ziehe mich...an)	To get dressed
aufstehen (ich stehe...auf)	To get up
sich waschen (ich wasche mich)	To wash
aufwachen (ich wache auf)	To wake up
auskommen mit (ich komme gut mit...aus)	To get on with
Ich putze mir die Zähne	I brush my teeth
sich duschen (ich dusche mich)	To shower
sich schminken (ich schminke mich)	To put on make-up

Wie war das Wetter?	**What was the weather like?**
Es war schön	The weather was nice
Es war schlecht	The weather was bad
Es war heiß	It was hot
Es war kalt	It was cold
Es war bewölkt	It was grey / overcast
Es war wolkig	It was cloudy
Es war sonnig	It was sunny
Es war windig	It was windy
Es war neblig	It was foggy
Es war stürmisch	It was stormy
Es hat geregnet	It was raining
Es hat geschneit	It was snowing
Es war frostig	It was frosty

Enquiry: How and why has democracy in Britain changed 1215-1928?

Today, in the United Kingdom, we live in a democracy, where laws are made by a Parliament that we have elected. However, this hasn't always been the case, we are going to be exploring how people in the UK have protested for their right to vote.

History – Year 8 Knowledge Organiser Topic 4

Key Events

1	15 June 1215 – The **Magna Carta** was signed by **King John** at Runnymede.
2	22 August 1642 – 3 September 1651 – The **English Civil War** between the **Parliamentarians** and the **Royalists** over how England should be ruled.
3	1688 - **Glorious revolution** ends absolute power of the monarch.
4	16th August 1819 - **Peterloo Massacre** – Cavalry charged at protesters wanted electoral reform.
5	1832 – **The Great Reform Act** – Gave 40,000 extra men the vote, mostly just the middle classes.
6	**1838-1848** – The **Chartists Movement** – a series of petitions demanding equal voting rights for all men.
7	**1918 – Representation of the People Act** was passed **extending voting rights** to all **men** over 21 and some **women** over 30.
8	**1928 – Representation of the People Act** was passed **extending voting rights** to **women** over 21 bringing **electoral equality**.

Historical Skills Focus

interpretation	A viewpoint or opinion.
change	What aspects of democracy changed and why. Considering rates/speed of change, the amount of change and which groups of people were effected by this change.
continuity	What aspects of democracy stayed the same and why.

Further your learning

Want to find out more about our journey to democracy: https://assets.parliament.uk/education/houses-of-history/main.html

Key Terms

9	propaganda	Information, can be biased or misleading, that promotes a political cause of point of view.
10	democracy	A form of government where the people have a say in how the government is run by voting.
11	reform	To make changes.
12	Suffrage	The right to vote in political elections.
13	Cavaliers	Supporters of King Charles I in the English Civil War – Royalists.
14	Roundheads	Supporters of the English Parliament in the English Civil War – Parliamentarians.
15	MP's	Members of Parliament – they represent voters.
16	charter	A document granting rights/privileges.
17	Suffragists	NUWSS – National Union of Women's Suffrage Societies – Campaigned non-violently for votes for women.
18	Suffragettes	WSPU – Women's Social and Political Union – a militant movement campaigning for votes for women.
19	Historical Significance	To evaluate what was significant about events, people, and developments in the past that had an impact towards changing the future

Key Individuals

King John
Magna Carta

King Charles I
English Civil War

Oliver Cromwell
English Civil War

Henry Hunt
Peterloo Massacre

William Lovett
Chartist

John Frost
Chartist

William Cuffay
Chartist

Millicent Fawcett
Suffragist

Emmeline Pankhurst
Suffragette

Emily Davison
Suffragette

Solid Geometry is the geometry of three-dimensional space, the kind of space we live in.

There are two main types of solids, "**Polyhedra**", and "**Non-Polyhedra**"

Polyhedra

A **polyhedron** is a solid with flat faces
Each face is a polygon (a flat shape with straight sides)

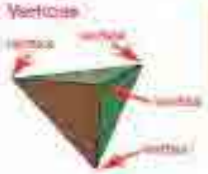
Note: the plural of **polyhedron** is either **polyhedrons** or **polyhedra**

Non –Polyhedra

Non-Polyhedra are solids where not all the faces are flat.

Vertices, Edges and Faces

A **vertex** (plural: **vertices**) is a point where two or more line segments meet. This is often called a corner.



This tetrahedron has 4 vertices.

This pentagon has 5 vertices.

An **edge** is a line segment between faces.

For a **polygon** an edge is a line segment **on the boundary** joining one vertex (corner point) to another.

This Pentagon Has 5 Edges

This Tetrahedron Has 6 Edges

For a **polyhedron** an edge is a line segment where **two faces meet**.

A **face** is any of the individual flat surfaces of a solid object.

This tetrahedron has 4 faces (there is one face you can't see)

Prisms: A prism is a solid object with:

- Identical ends
- Flat faces
- The same cross section (found by cutting straight across an object) throughout

Sides

"Side" is not a very accurate word, because it can mean:

- An edge of a polygon, or
- A face of a polyhedron

Euler's Formula

For any polyhedron *that doesn't intersect itself*, then the number of faces (F), edges (E) and vertices (V) are linked using **Euler's Formula**

This can be written: **F + V − E = 2**

Example: Cube

A cube has:

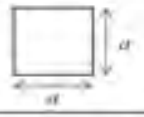
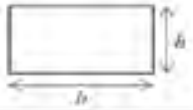
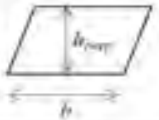
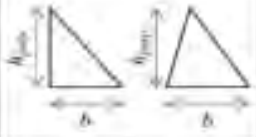
- 6 faces
- 8 vertices (corner points)
- 12 edges

F + V − E = 6 + 8 − 12 = 2

Area recap

The **area** of a shape is a measure of the two dimensional space that it covers.

Units include: cm^2, mm^2, m^2

Shape	Dimensions	Area formula
Square		a^2
Rectangle		bh
Parallelogram		bh_{perp}
Triangle		$\frac{bh_{perp}}{2}$
Trapezium		$\frac{(a+b)h_{perp}}{2}$
Circle		πr^2

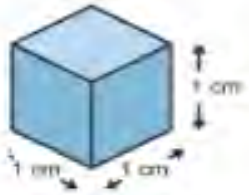
Volume

Volume is the amount of 3-dimensional space something takes up. You can imagine how much water would fit into a container.

Units include: litres, cm^3, mm^3, m^3

Volume is measured in **cubes**.

A cubic centimeter is the volume within a cube that has sides of length 1cm. It has a volume of $1cm^3$ (1cm cubed).



Cubes and Cuboids

This cuboid is made up of 12 cubes. Each cube is $1cm^3$ so the volume of this cuboid is $12cm^3$

To find out how many cubes are in a cuboid, we can multiply the width by the length by the height

$V = w \times l \times h$

In the cuboid above, we would do $2 \times 2 \times 3 = 12cm^3$

Example (Area)

Area = b × h

= 3 × 8

= 24 cm²

Area = πr^2

= $\pi \times 8^2$

= 64π = 201.1cm²

Area = $\frac{(a+b) \times h}{2}$

= $\frac{(4+10) \times 6}{2}$

= $\frac{84}{2}$ = 41cm²

Volume of a prism

The volume of a cuboid is width × length × height ($V = w \times l \times h$).

We can also think of this as the area of the cross section (in green, which is w × h) × length

So the Volume = area of the cross section × length

The formula works for all prisms.

1. volume of a cylinder = area of circle × length
2. volume of triangular prism = area of triangle × length
3. volume of L-shaped prism = area of L-shape × length

Example

Here is a triangular prism

The area of the cross section (triangle) is $\frac{b \times h}{2}$

Area = $\frac{5 \times 6}{2} = 15cm^2$

Volume = area of cross section x length

= 15 × 3.5 = 52.5 cm³

Useful Links https://www.mathsisfun.com/geometry/index.html https://www.bbc.co.uk/bitesize/topics/zrf3cdm https://www.bbc.co.uk/bitesize/guides/zc9wxnb/revision/3

CALCULATING ANGLES - TYPES OF ANGLE

Key Concepts

Regular polygons have equal lengths of sides and equal angles.

Angles in polygons

Sum of interior angles $= (number\ of\ sides - 2) \times 180$

Exterior angles of **regular** polygons $= \frac{360}{number\ of\ sides}$

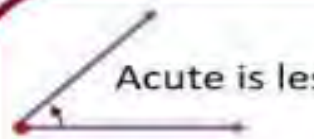
Types of angle

There are four types which need to be identified – acute, obtuse, reflex and right angled.

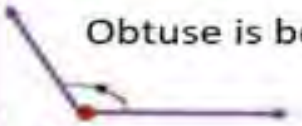
Key Words

Reflex, Polygon, Interior angle, Exterior angle, Acute, Obtuse, Right angle,

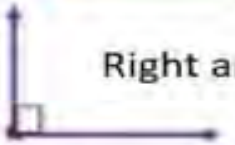
Examples



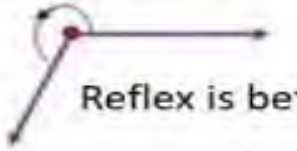
Acute is less than 90°



Obtuse is between 90° and 180°



Right angled is 90°



Reflex is between 180° and 360°

Example:

Sum of the interior angles = (Number of sides − 2) × 180°

= (6 − 2) × 180°

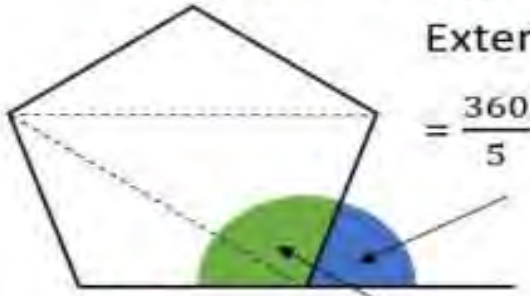
= 4 × 180 = **720°**

Sum of the interior angles = 120° + 140° + 130° + 150° + 88° + x

720° = 628° + x

x = 720° − 628° = 92°

Regular Pentagon



Exterior angles

$= \frac{360}{5} = 72^o$

Sum of interior angles

$= (5 - 2) \times 180$

$= 540^o$

Interior angle $= \frac{540}{5} = 108^o$

Questions

1) Calculate the sum of the interior angles for this regular shape
2) Calculate the exterior angle for this regular shape.
3) Calculate the size of one interior angle in this regular shape.

ANSWERS: 1) 720° 2) 60° 3) 120°

Useful Links

https://vle.mathswatch.co.uk/vle/

https://corbettmaths.com/contents/

https://www.bbc.co.uk/bitesize/subjects/zqhs34j

CALCULATING ANGLES

Key Concepts

Angles in a **triangle equal 180°**.

Angles in a **quadrilateral equal 360°**.

Vertically opposite angles are equal in size.

Angles on a **straight line equal 180°**.

Base angles in an isosceles triangle are equal.

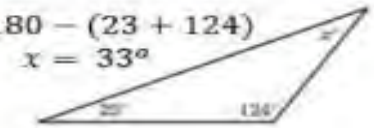
Alternate angles are equal in size.

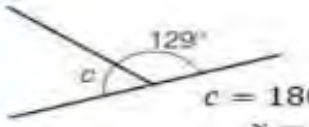
Corresponding angles are equal in size.

Allied/co-interior angles are equal 180°.

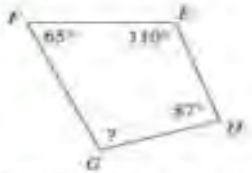
Examples

$x = 180 - (23 + 124)$
$x = 33°$

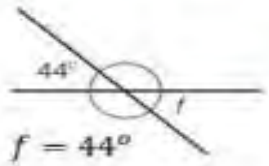




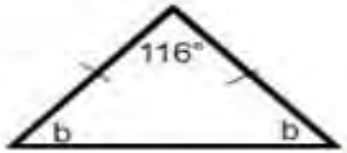
$c = 180 - 129$
$x = 51°$



$? = 360 - (65 + 110 + 87)$
$? = 98°$



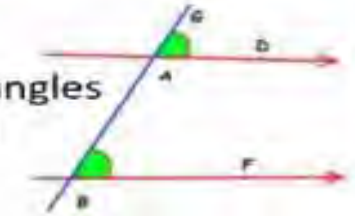
$f = 44°$



$b = (180 - 116) \div 2$
$b = 32°$

Alternate angles are equal

Corresponding angles are equal



Allied/co-interior angles equal 180°

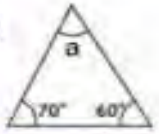
Key Words

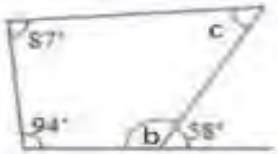
Angle, Vertically opposite, Straight line, Alternate, Corresponding, Allied Co-interior

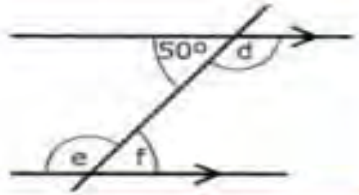
Questions

Calculate the missing angle:

a)







Useful Links

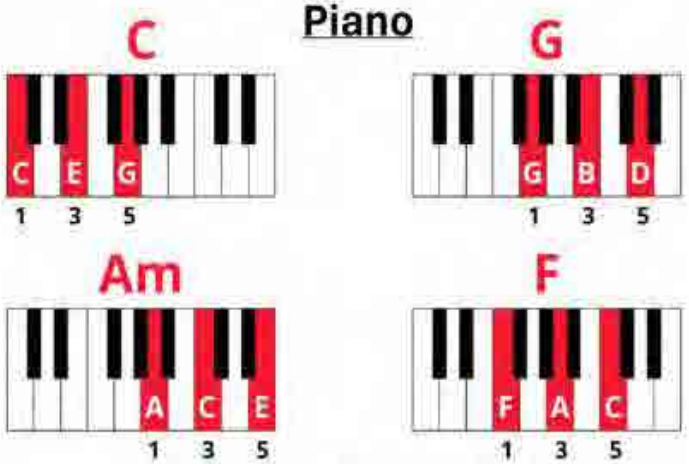
https://vle.mathswatch.co.uk/vle/
https://corbettmaths.com/contents/
https://www.bbc.co.uk/bitesize/subjects/zqhs34j

ANSWERS: 1) a=50° 2) b=122° c=57° 3) d=130° e=130° f=50°

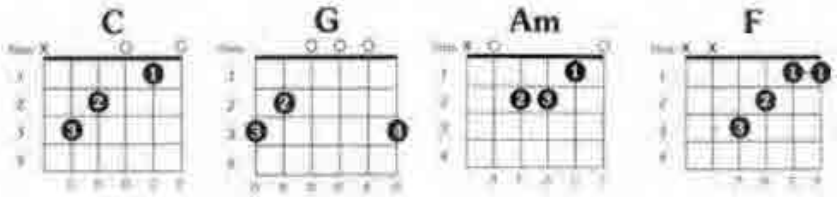
Music KO – Instrumental Skills

Chords

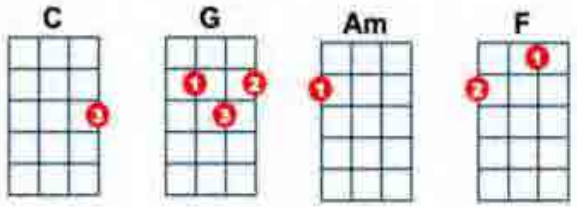
Piano



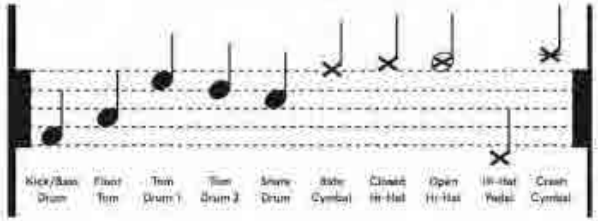
Guitar



Ukulele



Drum Notation



Keywords

- Chords – Multiple notes played at the same time
- Inversion – Changing the order of notes in a chord
- Structure – The order of sections in a piece of music
- Melody – A string of notes one at a time, the melody is sung in a song
- Pulse – The constant, steady beat in music that keeps different parts in time
- Riff – a repeating musical pattern
- Frets – The spaces between the metal bars on the neck of a guitar, ukulele or bass (Start counting from furthest away from the instrument body)

Bass

METHODS OF TRAINING

Plyometric training

- Plyometric training improves power.
- It is used by sports performers such as sprinters, hurdlers, and netball, volleyball and basketball players.
- Plyometric exercises need maximal force as the muscle lengthens (eccentric action) before an immediate maximal force as the muscle shortens (concentric action).


Aerobic endurance training

- **Continuous**

This involves training at a steady pace and moderate intensity for a minimum of 30 minutes.

- **Fartlek**

Fartlek training involves changes in intensity.

- **Interval**

This is where the individual performs a work period followed by a rest or recovery period.

Circuit training

- Circuit training involves doing one exercise after another.
- Each exercise is called a station (usually 60-10 stations).
- Circuit training can be used to improve:
  - Muscular strength
  - Muscular endurance
  - Power
  - Aerobic endurance

Weight training

- Improves muscular strength or muscular endurance.
- Free weights are weights that are not attached to a machine.

Muscular strength:
- High loads and low reps

90% 1RM and 6 reps

Muscular endurance:
- Low loads and high reps

50-60% 1RM and 20 reps

Elastic strength:
- Medium loads and medium reps

75% 1RM and 12 reps

Flexibility training

- **Static stretching**
  - Active stretching
  - Passive stretching


- **Ballistic stretching**

- **Proprioceptive Neuromuscular Facilitation (PNF)**

Speed training

- **Hollow sprints**

- **Acceleration sprints**

- **Interval training**

RS

Evil and Suffering Knowledge Organiser

NEED TO KNOW WORDS

Angels	Follow the orders of Allah including protecting us from harm.
Atheist	Someone who do not believe in a god
Evil	Something wicked and immoral
Free will	The ability to make your own choices
Humanist	A belief that humans should be free to give meaning to their own lives.
Immoral	Doesn't meet the accepted moral standard.
Karma	The belief that our actions have consequences
Moral	Standards of good behaviour
Moral evil	Suffering caused by our behaviour (e.g. bullying)
Natural evil	Suffering caused by nature (e.g. natural disasters)

Inconsistent triad: The problem of evil and suffering

Various types of evil and suffering are evident in the world. This can cause problems for many believers, as they believe in a loving, powerful and all-knowing 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?

Free Will

Free will is the ability to make choices and act upon them without being forced to do so. In many religions, people believe that God gives us free will so that we can make our own choices in life.

Sometimes, when we make choices that are not good, they can lead to negative consequences like sadness, pain, or suffering. However, God also gives us the ability to make good choices, and when we do, it can bring happiness and positive things into our lives.

So, while we might experience suffering or difficulties in life, it is not necessarily because God is punishing us. Instead, it can be a natural result of our choices or circumstances.

Soul making

The belief is that when we face challenges, we are given the opportunity to develop our character, cultivate virtues like courage, compassion, and perseverance, and deepen our relationship with God.

For example, when we face difficulties, we can learn to be more empathetic and understanding towards others who are going through similar experiences. Or, when we overcome obstacles, we can become stronger and more resilient, and learn to trust in God's guidance and grace.

So, even though pain and suffering can be difficult to bear, they can also be seen as opportunities for growth and transformation, and for strengthening our spiritual lives.

Life is a test

The idea that life is a test means that our time on earth is meant to challenge us and help us grow. It's like taking a test at school - we are given the chance to show what we know, and to learn from our mistakes.

In life, we are given the opportunity to choose between good and bad, and to act in ways that show our values and beliefs. By doing the right thing, helping others, and being kind and fair, we are passing the test and we can show that we are worthy of a good and happy life, and of eternal reward.

Evil and Suffering Knowledge Organiser

RS

NEED TO KNOW WORDS

Nature	Characteristics we inherit from our parents
Nurture	Influences from our environment
Original Sin	inherited from Adam in consequence of the Fall
Omnipotent	All-powerful
Omnibenevolent	All-loving
Satan	A force that tempts people from God
Soul making	The idea that suffering helps us develop
Suffering	the state of undergoing pain, distress, or hardship.
Upbringing	the treatment and instruction received by a child from its parent (s) or caregiver throughout its childhood

Nature

- Refers to the genetic traits and features that we inherit from our parents
- Includes things like eye colour, height, and personality traits
- Cannot be changed or controlled by us
- Plays a role in determining who we are and how we behave

Nurture

- Refers to the environmental factors that shape our development
- Includes things like our upbringing, social environment, and life experiences
- Can have a big impact on our beliefs, values, and behaviours
- Can be influenced and changed by us, and by the people and experiences around us

The Role of Angels in Islam

Angels are spiritual beings in Islam who are created by God to carry out various tasks. They are believed to have no free will and always obey God's commands.

According to Islamic teachings, angels are responsible for many things, including recording people's good and bad deeds, guarding and protecting humans, and communicating messages from God to His prophets.

Angels do not cause suffering or allow it to happen. Instead, it is believed that God allows suffering to occur for a variety of reasons, including to test people's faith, to help them grow and learn, and to bring about a greater good.

Karma in Buddhism and Hinduism

Karma is a concept in Hinduism, Buddhism, and other religions that suggests that our actions have consequences, and that what we do in this life will affect our future lives.

The idea is that every action we take - whether good or bad - creates a kind of energy that will eventually come back to us in some way. This energy can affect our future lives, either positively or negatively, depending on the nature of our actions.
For example, if we do good deeds, we create positive karma that can lead to good things happening to us in the future. On the other hand, if we do bad deeds, we create negative karma that can lead to negative consequences.

Book of Job

The story follows a man named Job, who is a faithful servant of God. One day, Satan challenges God, saying that Job only loves and serves God because he has a good life. God allows Satan to test Job's faith by taking away everything he has, including his family and his possessions.

Despite all the suffering he endures, Job remains faithful to God and refuses to curse Him or give up his faith. In the end, God rewards Job's faithfulness by restoring everything he lost and giving him even more than he had before.

The Book of Job teaches us that suffering is not always a punishment for something we have done wrong. Sometimes, good people suffer for reasons that we may not understand, and it is important to trust in God and remain faithful, even in the face of hardship.

KS3 Science

Photosynthesis and Ecosystems

1. Photosynthesis in Plants

Animals need to eat food to get their energy. But green plants and algae do not. Instead they make their own food in a process called **photosynthesis**. Almost all life on Earth depends upon this process. Photosynthesis is also important in maintaining the levels of oxygen and carbon dioxide in the atmosphere.

Word equation

carbon dioxide + water → glucose + oxygen

from the air — from the ground — their food — released into the air

Balanced symbol equation

$6CO_2 + 6H_2O \rightarrow C_6H_{12}O_6 + 6O_2$

2. Location of photosynthesis in plants

Photosynthesis takes place inside the **chloroplasts** of the plant cells, these contain a green pigment, **chlorophyll**. This absorbs the light energy needed to make photosynthesis happen. The leaf is a plant organ adapted to carry out photosynthesis. The table describes some of its adaptations:

Thin	a short distance for CO_2 to move by diffusion
Chlorophyll	Absorbs light
Stomata	Allows CO_2 to move in by diffusion
Guard cells	open and close the stomata depending on the conditions
Tubes	To transport water (xylem) and glucose (phloem)

3. Measuring the effect of light intensity on photosynthesis

Method:

1. Leave for five minutes for the pondweed to acclimatise to the new
2. Count the number of bubbles given off in one minute.
3. Move the light 10 cm further back.
4. Leave for five minutes for the pondweed to acclimatise again.
5. Count the number of bubbles given off in one minute.
6. Repeat by moving the lamp away by 10 cm intervals until 50 cm is reached.

4. Habitats and Ecosystems

An **ecosystem** consists of **communities** of different living things, in single species **populations** living in their habitats. Examples of these include habitats include coral reefs, marshes and lakes. All the living things (**biotic factors**) and non-living things (**abiotic factors**) in an ecosystem depend upon each other for survival. This interdependence includes through feeding, pollination.

5. Sampling Techniques

Sampling is done to look at the organisms in a population within an ecosystem in a practical way as counting each one individually is not always feasible. This is usually done using quadrats which marks off small areas to then use to estimate the population. A quadrat is usually a square made of wire. It may contain further wires to mark off smaller areas inside, such as 5 × 5 squares or 10 × 10 squares. The organisms underneath, usually plants, can be identified and counted. Quadrats may also be used for slow-moving animals, eg slugs and snails.

6. Food Chains/Biomass

A food chain shows the different species of an organism in an ecosystem, and what eats what. Organisms at each level have different terms:

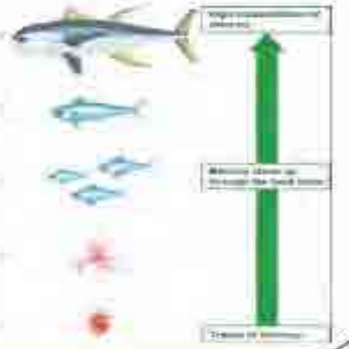
The population of each organism in a food chain can be shown in a bar chart called a pyramid of numbers or a pyramid of biomass where the bars are drawn to scale. Energy is lost to the surroundings as we go from one level to the next, so there are usually fewer organisms at each level in this food chain.

7. Food Webs

When all the food chains in an ecosystem are joined up together, they form a **food web.** Although it looks complex, it is just several food chains joined together. This leads to some interesting effects if the population in the food web decreases. Some animals can just eat more of another organism if food is in short supply, while others may starve and die. This in turn can affect the populations of other organisms in the food web.

8. Pollution and Pesticides

Some pollutants (including pesticides) quickly break down in the environment whilst others do not. These bio-accumulate in the food chain and damage the organisms in it. The predators at the end of the chain are most effected because compounds cannot be excreted and travel up the food chain.



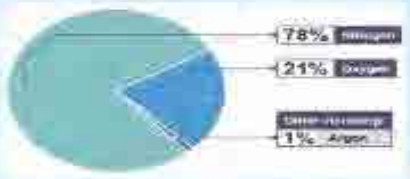
1. Composition of the Earth

The Earth's crust, it's atmosphere and the oceans are the only sources of natural resources for human life!

The Earth has four layers:
– Crust (thin and rocky)
– Mantle (properties of solid but flows easily)
- Outer core (made from nickel and iron)
– Inner core (made from nickel and iron)

4. Composition of the Today's Atmosphere

Nitrogen is the most abundant gas in today's atmosphere at 78%. Today's atmosphere contains 21% Oxygen and 1% Argon.

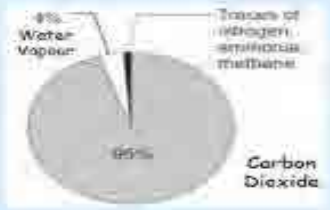


5. Fossil Fuels

About three-quarters of the electricity generated in the UK comes from power stations fuelled by fossil fuels. Energy from the burning fuel is used to boil water. The steam turns turbines, and these turn electrical generators.

2. Composition of the Early Atmosphere

The Earth's early atmosphere was composed of 95% carbon dioxide, 4% water vapour and 1% of trace gases which included Nitrogen, Ammonia and Methane.



KS3 Science

Earth & Atmosphere

6. Generating Electricity

Crude oil, coal and gas are fossil fuels. They were formed over millions of years from the remains of dead organisms. Coal was formed from dead trees and plant matter. Crude oil and gas were formed from dead marine organisms.

3. Evolution of Atmosphere

In the 4.5 billion years since the Earth formed it's atmosphere has changed considerably. This has happened in three main stages:

Stage 1 – Volcanoes:
The majority of the early atmosphere was carbon dioxide and water vapour. This was produced by volcanoes. After a time the water vapour condensed and formed the oceans.

Stage 2 – Green plants:
Green plants and algae evolved and used the carbon dioxide for photosynthesis. They also produced oxygen. Basic organisms evolved that were able to use the oxygen.

Stage 3– Complex animals:
The oxygen allowed more complex organisms to form. The ozone layer formed and this allowed further evolution of complex organisms.

7. Non Renewable Energy Sources

Non renewable energy sources include fossil fuels such as coal, oil and natural gas. These sources are a finite resource, which means when they have been used up, they cannot be replaced. Worryingly, humans are using them faster than they are forming!

8. Renewable Energy Sources

Scientists are trying to find alternative methods of generating electricity using renewable energy sources.

These are energy sources that will not run out or produce carbon dioxide and other greenhouse gases. They are 'cleaner' and more sustainable although they do come with advantages and disadvantages.

9. Renewable Energy Resources

Resource	Adv.	Disadv.
Wind	no CO_2	Unsightly, not always windy
Solar	No CO_2	Expensive, not always sunny
Hydroelectric	No CO_2	Destroys habitat
Geothermal	No CO_2	Specific locations

10. Carbon Cycle

All cells - whether animal, plant or bacteria - contain carbon. Carbon is passed from the atmosphere (as carbon dioxide) to living things, passed from one organism to the next and returned to the atmosphere as carbon dioxide again. This is known as the carbon cycle.

KS3 Science

Earth & Atmosphere

11. Carbon Cycle

Step 1: Removing carbon dioxide from atmosphere
Green plants remove carbon dioxide from the atmosphere by photosynthesis. The carbon becomes part of complex molecules such as proteins, fats and carbohydrates in the plants.

Step 2: Returning carbon dioxide to atmosphere
Organisms return carbon dioxide to the atmosphere by respiration. It is not just animals that respire. Plants and microorganisms do, too.

12. Carbon Cycle

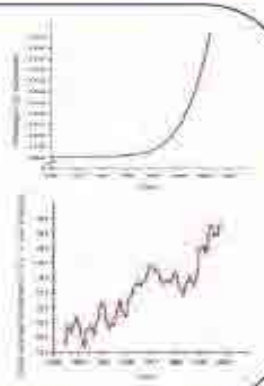
Step 3: Passing carbon from one organism to next
When an animal eats a plant, carbon from the plant becomes part of the fats and proteins in the animal. Microorganisms and some animals feed on waste material from animals, and the remains of dead animals and plants. The carbon then becomes part of these microorganisms and detritus feeders.
Step 4: Returning carbon dioxide to the atmosphere
When fossil fuels are burned (combustion) in factories or transportation, carbon is released into the atmosphere as carbon dioxide gas.

13. Greenhouse Effect

The greenhouse effect is when greenhouse gases (carbon dioxide, methane and water vapour) in the Earth's atmosphere trap radiation from the sun and heat up the planet. Without the greenhouse effect the Earth would be too cold for us to survive on it.

14. Global Warming

The extra greenhouse gases released by human activity lead to the enhanced greenhouse effect. More heat is trapped by the atmosphere, causing the planet to become warmer than it would be naturally. The increase in global temperature this causes is called global warming.



Year 8 Block 4 Biology Knowledge Organiser Ecosystems

Revision guide Pgs: 23-24 + 28

https://www.bbc.com/bitesize/subjects/z4882hv

KPI 8.1: Describe feeding relationships and food webs, and explain how a changing environment may affect them.

All food chains start with a green plant, producers. Arrows point to the eater and show the flow of energy in a food chain. Each stage is called a trophic level.

mahogany tree → caterpillar → song bird → hawk

maize → locust → lizard → snake

The first eater in a food chain is called the **primary consumer** and is a herbivore.

The next organism is the **secondary consumer** and the next is the **tertiary consumer** and this is usually the **top carnivore.**

Food chains do not go on indefinitely as energy is lost at each stage of the food chain. Some of the available energy goes into growth and the production of offspring. This energy becomes available to the next stage, but most of the available energy is used up in other ways: in respiration, keeping warm, movement and waste materials, such as faeces.

All of the energy used in these ways returns to the environment, and is not available for the next stage.

Key Terms	Function
Herbivore	Organism eats plant only, prey organisms
Carnivore	Organism eats other organisms, they hunt prey for their dinner
Omnivore	Organism eats both plant and animals
Primary consumer	The first eater in a food chain
Secondary consumer	The second eater in a food chain
Tertiary consumer	The 3rd organism feeding in the food chain, usually the top carnivore
Trophic level	Stages in the food chain e.g producers, or primary consumers
Bioaccumulation	The build up of toxic substances in the food chain, affecting organisms at the top of food chains
Ecosystem	A community of interacting organisms and their physical environment

Food chains show a simplistic view of who's eating who in an **ecosystem.** Organisms eat more than 1 food so food chains link together to make **food webs.**

Removing an organism or adding an organism to a food chain can have big implications on other organisms.

Year 8 Block 4 Biology Knowledge Organiser Ecosystems

Revision guide Pgs: 23-24 + 28

https://www.bbc.com/bitesize/subjects/z4882hv

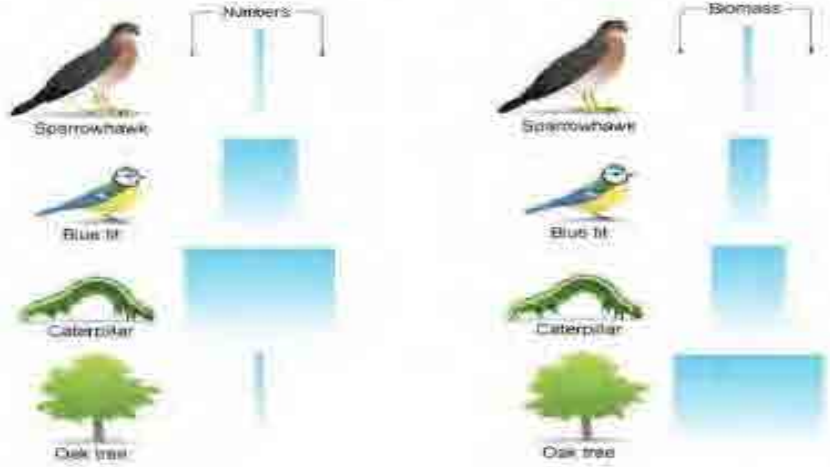
KPI 8.1: Describe feeding relationships and food webs, and explain how a changing environment may affect them.

Pyramids of numbers and biomass

Pyramids of numbers show how many organisms are at each **trophic level.** The width of each box represents the number of organisms.

Pyramids of number can end up odd shapes when 1 producer is large in size e.g one tree that supports lots of tiny organisms e.g aphids.

Pyramids of biomass show more accurately what is happening to the energy in a food chain than pyramids of number do. Pyramids of biomass are always pyramid shaped.



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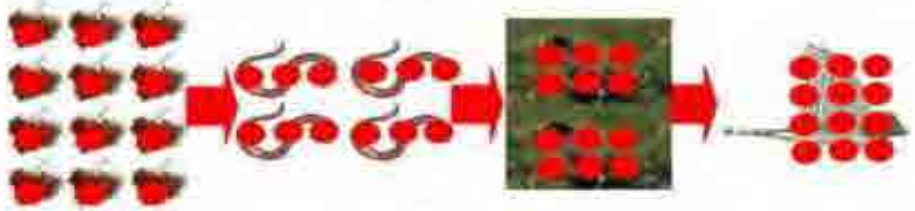
Bioaccumulation	The build up of toxic substances in the food chain, affecting organisms at the top of food chains

Some toxic substances like pesticides can pass up food chains.

Organisms near the bottom of the food chain absorb them in small amounts. The concentration in these organisms is too low to cause significant harm. However, as these organisms cannot excrete these substances, when they are eaten by others higher up the food chain, the concentration becomes more toxic and eventually causes harm. DDT is an example of a pesticide that was used and built up in the food chain.



Year 8 Block 4 Biology Knowledge Organiser Ecosystems

Revision guide Pgs: 23-24 + 28

https://www.bbc.com/bitesize/subjects/z4882hv

KPI 8.2: Explain how variation allow organisms to compete, and the way this drives natural selection

Organisms compete for resources like food, water, mates, space, light, and minerals.

There are 2 types of competition. **Interspecific competition** is between individuals of different species and **Intraspecific competition** is between individuals of the same species.

Organisms have special features known as **adaptations** to help them survive in their environment. For example polar bears are white so they are camouflaged in the snow.

Variation

Variation can be caused by genes e.g. eye colour and your blood group. It can also be caused by environment which means the food you eat, the chemicals you're exposed to , the way you're brought up. Often variation is a combination of genes and environment e.g. intelligence and weight.

Genetic variation always gives rise to **discontinuous data** where there is a limited set of data e.g. tongue roller or non roller.

Continuous data can be of any value and is caused by genetic and environmental factors.

Key Terms	Definition
Interspecific competition	Competition between individuals of different species
Intraspecific competition	Competition between individuals of the same species
Camouflaged	When an organisms blends in to their environment
Variation	Differences between organisms caused by genetics, environment or both
Continuous variation	This variation has no limit on the value e.g. height
Discontinuous variation	This type of variation has set categories or a limited set of values e.g. eye colour and is caused by genetic factors
Natural selection	The process whereby organisms better adapted to their environment tend to survive and produce more offspring

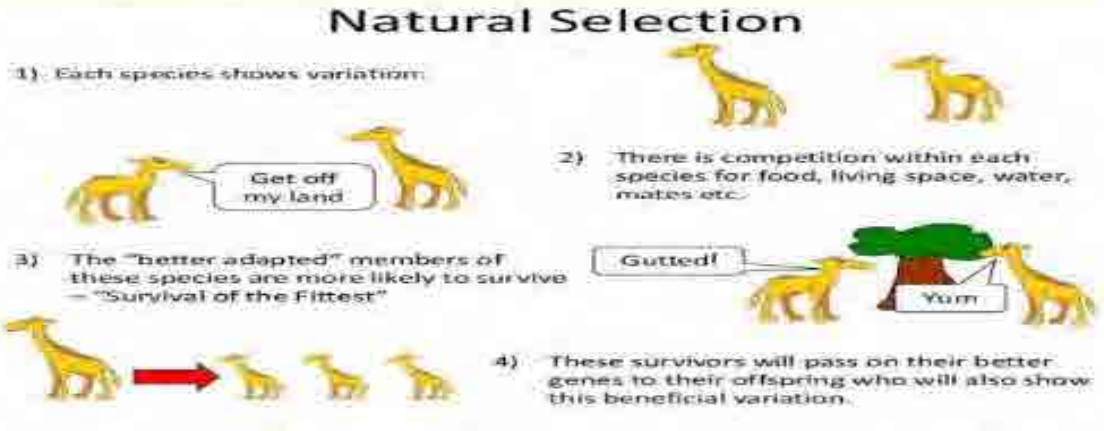
Natural selection

Natural selection states that there is variation within a species.

Some adaptations are better than others. Those with the best adaptations **survive**, and the others die.

The survivors can **reproduce** and have **offspring**.

Their offspring **inherit** the **genes** for the best adaptations, so the organisms **population** changes over time. This is survival of the fittest. Charles Darwin came up with this theory in the 1800's.



7.4 Spanish Free Time Knowledge Organiser

Sports and other hobbies with opinions + inf. including. jugar and hacer
Weather.

Cabot Learning Federation

Llevar, vivir & comer are a regular verbs which follow the pattern below. The verbs "jugar" and "hacer" are irregular but important verbs, especially for this topic on sports.

Pronouns	**Estudiar** – to study	**vivir**– to live	**comer**– to eat
Yo (I)	Estudio – I study	Vivo– I live	Como – I eat
tú (you)	Estudias – you study	Vives – you live	Comes – you eat
el (he), **ella** (she),	Estudia - He/she studies	Vive - He/she lives	Come – he/she eats
nosotros (we)	Estudiamos – we study	Vivimos – we live	Comemos – we eat
vosotros (you) (pl. or formal)	Estudiáis – you study (pl. or formal)	Vivis – you live (pl. or formal)	Coméis – you eat (pl. or formal)
Ellos/ellas (they)	Estudian – they study	Viven – they live	Comen – they eat

Hacer– to do

Yo hago - I do
Tu haces – you do
Él/ella hace – he/she does
Nosotros hacemos –we do
Vosotros hacéis – you (pl) do
Ellos hacen – they do

Jugar– to play

Yo juego- I play
Tu juegas – you play
Él/ella juega – he/she plays
Nosotros jugamos –we play
Vosotros jugáis – you (pl) play
Ellos/ellas juegan – they play

How to improve your writing?
When writing in Spanish, you can make your sentences better by adding the following:

- Range of opinions and reasons
- Rather than just using 'yo', write verbs using other pronouns
- Connectives to extend your sentences
- Qualifiers e.g. muy, bastante
- Comparisons

Now you should be able to create some of your own questions using the question words below. Don't forget the upside down question mark at the beginning of a question.

¿Cuándo? – When?
¿Quién? – Who?
¿Dónde? – Where?
¿Cuántos? – How many?
¿Qué? What?
¿Cómo? – How?
¿Por qué? – Why?
¿Cuál? – Which?

7.4 Free time
SPANISH

Cabot Learning Federation

¿ Qué te gusta hacer?	What do you like to do?
Ver la televisión	To watch TV
Escuchar música	To listen to music
Ir al cine	To go to the cinema
Leer un libro	To read a book
Ir de compras	To go shopping
Ir al parque	To go to the park
Ir al gimnasio	To go to the gym
Ir al polideportivo	To go to the sports centre
Salir con mis amigos	To go out with my friends
Tocar el piano	To play the piano
Visitar mi familia	To visit family
Ir al centro	To go to town
Hacer la cocina	To cook
Cantar	To sing
Nadar	To swim
Hacer mis deberes	To do my homework
Descargar música	To download music
Navegar por Internet	To surf the Internet
Jugar a los videojuegos	To play video games
Chatear con mis amigos	To chat with my friends
Sacar fotos	To take photos
Ver los videos divertidos	To watch funny videos
Mandar mensajes	To send texts
Comprar en línea	To buy online
Ver los videos de youtube	To watch Youtube videos
Escribir un correo electrónico	To write an email
Usar mi móvil	To use my mobile phone

¿ Qué deporte te gusta?	What sport do you like?
Jugar al fútbol	To play football
Jugar al rugby	To play rugby
Jugar al tenis	To play tennis
Jugar al golf	To play golf
Jugar al voleibol	To play volleyball
Jugar al baloncesto	To play basketball
Hacer ciclismo	To do some cycling
Hacer esquí	To do some skiing
Hacer patinaje	To do some ice skating
Hacer natación	To do some swimming
Hacer gimnasia	To do some gymnastics
Hacer equitación	To do some horse-riding
Hacer atletismo	To do some athletics

¿Cuando?	When?
Normalmente	Normally
Generalmente	Generally
Todos los días	Every day
Dos veces a la semana	Twice a week
De vez en cuando	From time to time
Rara vez	Rarely
Cuando puedo	When I can
Jamás/nunca	Never
A veces	Sometimes

¿ Qué te gusta ver?	What do you like to watch?
Me gusta ver	I like to watch
Las noticias	The news
Comedias	Comedies
Dibujos animados	Cartoons
Documentales	Documentaries
Programas	Programmes
Telenovelas	Soap operas
Películas románticas	Romantic films
Películas de acción	Action films
Películas de terror	Horror films
Películas policíacas	Detective films
Concursos	Game shows
Series	Series

¿Qúe tiempo hace?	What is the weather like?
Hace buen tiempo	It is good weather
Hace calor	It is hot
Hace sol	It is sunny
Hace frío	It is cold
Hace 25 grados	It is 25 degrees
Hace mal tiempo	It is bad weather
Llueve	It is raining
Nieva	It is snowing
Hay viento	It is windy
Hay nubes	There are clouds
Hay tormenta	There are storms

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

Use these in your writing and speaking

Use connectives to link each paragraph!	**Explain an idea:** • Although • Except • Unless • However • Therefore	**Sequencing:** • Firstly • Secondly • Next • Finally • Since
Adding to: • Furthermore • Also • As well as • Moreover	**Cause and effect:** • Thus • So • Therefore • Consequently	**Contrasting:** • Whereas • Instead of • Alternatively • Otherwise • Then again
To empathise: • Above all • Ultimately • Especially • Significantly	**To compare:** • Likewise • Equally • In the same way • Similarly	**Give examples:** • Such as • For example • In the case of • As revealed by • For instance

DESCRIBE

I believe that...

I think that...

The main idea is...

EXPLAIN

This means that...

Therefore...

This maybe because...

JUSTIFY

This is positive because...

This is negative because...

It is useful/not useful because...

ANALYSE

One strength is...

One weakness is...

One argument is...

EVALUATE

One advantage is...

One disadvantage is...

The best option is...

COMPARE AND CONTRAST

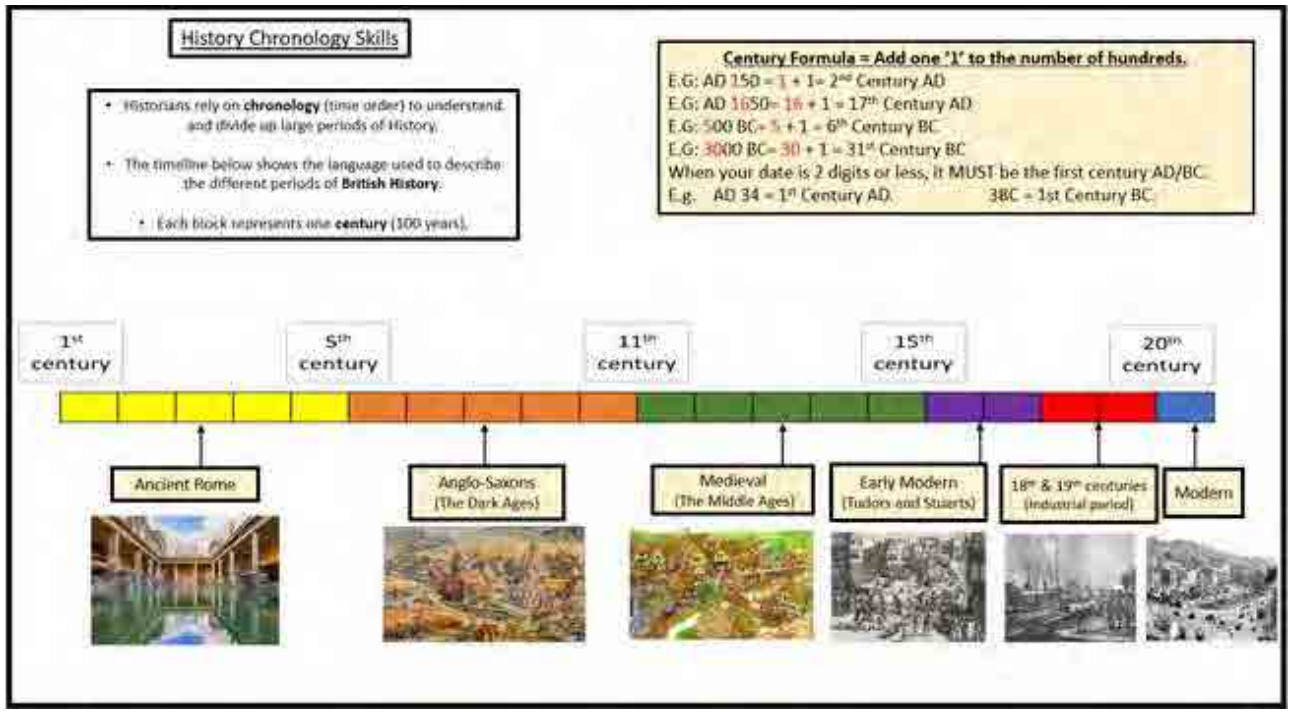
One similarity is...

One difference is...

On the other hand...

Sentence starter phrases

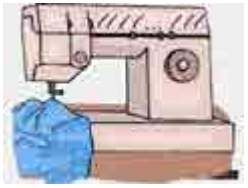
Most people would agree...
Only a fool would think...
We all know...
A sensible idea would be...
The fact is that...
Surely you would agree that...
Without a doubt...
I am certain that...
Some people might argue...
However...
Also...



Use these in your writing and speaking in DT

Design and Technology Keywords

Food and Nutrition	Design and Technology	Textiles
Caramelisation Aeration Amino acids Plasticity Shortening Denaturation Coagulation Gelatinisation Emulsification Pasteurisation	Carbon footprint Planned Obsolescence Iterative Design Tolerance Technology Push Anthropometrics Consumer Social Footprint Ergonomics Forming Processes	Plain seam analyse sustainable embellishment Woven/ bonded/ knitted Free machine function embroidery develop
Unsaturated Protein Radiation Saturated Carbohydrates Conduction Deficiency Digest Convection Cross-contamination Micro-organisms	Aesthetics Target Market Properties Deciduous Coniferous Automation Functionality Primary Source Sustainability Continuous Improvement	Complementary colours contrast environment fastening compare embroidery iron equipment context appliqué effect improve
Claw grip Flavour Texture Aroma Nutrients Energy Appearance Bridge hold Mix Smell	Cost Customer Materials Annotation Product Safety Environment Design User Prototype	colour design shape machine pattern Texture line tone theme Fabric thread sew



Sentence Starters - DT

I have designed…because
My project was about…
I found… during my research
My design is suitable for…
I have learnt how to…
The most enjoyable part of my project was….
The area I found the most challenging was…
Equipment I have used include…
I would improve my work by…
I am pleased with my finished product because…

Sentence Starters- Food and Nutrition

In order to work hygienically/safely I made sure I ….
I worked safely when in the kitchen by...
If I could improve any skill, I would improve...because...
Overall, I am happy/unhappy with my progress/dish because....
The texture of my dish is… this is because…

Sentence starters- Textiles

I have designed….
The context of my design is…
My research is useful because…
By researching, I am able to…..
By researching I have found out….
I researched into….
My design is suitable for…..
My design is based upon…
I have planned to..
The order I will work in is…
The most enjoyable part of m project was…
The area I found most challenging was…
I am most pleased with…
I am pleased with my finished project because…
Equipment I used was…

The periodic table of the elements

1	2											3	4	5	6	7	0
							1 H hydrogen 1										4 He helium 2
7 Li lithium 3	9 Be beryllium 4		Key: relative atomic mass / atomic symbol / name / atomic (proton) number									11 B boron 5	12 C carbon 6	14 N nitrogen 7	16 O oxygen 8	19 F fluorine 9	20 Ne neon 10
23 Na sodium 11	24 Mg magnesium 12											27 Al aluminium 13	28 Si silicon 14	31 P phosphorus 15	32 S sulfur 16	35.5 Cl chlorine 17	40 Ar argon 18
39 K potassium 19	40 Ca calcium 20	45 Sc scandium 21	48 Ti titanium 22	51 V vanadium 23	52 Cr chromium 24	55 Mn manganese 25	56 Fe iron 26	59 Co cobalt 27	59 Ni nickel 28	63.5 Cu copper 29	65 Zn zinc 30	70 Ga gallium 31	73 Ge germanium 32	75 As arsenic 33	79 Se selenium 34	80 Br bromine 35	84 Kr krypton 36
85 Rb rubidium 37	88 Sr strontium 38	89 Y yttrium 39	91 Zr zirconium 40	93 Nb niobium 41	96 Mo molybdenum 42	[98] Tc technetium 43	101 Ru ruthenium 44	103 Rh rhodium 45	106 Pd palladium 46	108 Ag silver 47	112 Cd cadmium 48	115 In indium 49	119 Sn tin 50	122 Sb antimony 51	128 Te tellurium 52	127 I iodine 53	131 Xe xenon 54
133 Cs caesium 55	137 Ba barium 56	139 La* lanthanum 57	178 Hf hafnium 72	181 Ta tantalum 73	184 W tungsten 74	186 Re rhenium 75	190 Os osmium 76	192 Ir iridium 77	195 Pt platinum 78	197 Au gold 79	201 Hg mercury 80	204 Tl thallium 81	207 Pb lead 82	209 Bi bismuth 83	[209] Po polonium 84	[210] At astatine 85	[222] Rn radon 86

* The elements with atomic numbers from 58 to 71 are omitted from this part of the periodic table.

The relative atomic masses of copper and chlorine have not been rounded to the nearest whole number.


UNITED KINGDOM
LOW / HILLS / MOUNTAINS
Orkney Islands
Shetland Islands
Prime Meridian
Outer Hebrides
Highlands
Scotland
North Sea
Atlantic Ocean
Inverness
Aberdeen
Ben Nevis
Edinburgh
Northern Ireland
Glasgow
Sunderland
N
United Kingdom (UK)
Londonderry
Belfast
Carlisle
PENNINES
Leeds
Isle of Man
Irish Sea
Dublin
Liverpool
England
Ireland
Cambrian Mts.
The Fens
Birmingham
Ipswich
Wales
Oxford
London
Bristol
Celtic Sea
130 mi
130 km
Cardiff
Thames
Portsmouth
Dover
Plymouth
Exeter
Falmouth
English Channel
Channel Tunnel
France
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EUROPE
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15° W
0°
15° E
30° E
45° E
60° E
ARCTIC CIRCLE
Barents Sea
Norwegian Sea
White Sea
400 mi
400 km
Russia
Iceland
Faroe Islands (Denmark)
Norway
Finland
60° N
Atlantic Ocean
Scotland
Sweden
North Sea
Estonia
Latvia
Lithuania
Baltic Sea
(European Russia)
Ural Mountains
Northern Ireland
Netherlands
Belarus
Ireland
UK
Belgium
Denmark
Poland
England
Wales
50° N
Germany
Ukraine
Czech Rep
Slovakia
English Channel
Luxembourg
Liechtenstein
Sea of Azov
Kazakhstan
Azores
Switzerland
Austria
Hungary
Romania
Moldova
Madeira Islands
Bay of Biscay
France
Slovenia
Croatia
Bosnia and Herzegovina
Monaco
Serbia
Bulgaria
Black Sea
Italy
San Marino
Montenegro
Macedonia
Georgia
Andorra
Vatican
Albania
Corsica (France)
Sardinia (Italy)
Armenia
40° N
Spain
Greece
European Turkey
Turkey
Azerbaijan
Portugal
Balearic Islands
Iran
Sicily (Italy)
Malta
Crete (Greece)
Cyprus
Syria
Canary Islands
Algeria
Mediterranean Sea
Lebanon
ASIA
Gibraltar (UK)
PRIME MERIDIAN
Tunisia
15° E
30° E
Iraq
Morocco
Israel
Jordan
Libya
worldatlas
AFRICA
Egypt
Saudi Arabia
30° N
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Norwegian Sea
Barents Sea
Novaya Zemlya (Russia)
Kara Sea
Laptev Sea
Arctic Ocean
NORTH AMERICA
ARCTIC CIRCLE
Ostrova Anzhu (Russia)
worldatlas
Russian Federation
Bering Sea
Alaska
European Russia
EUROPE
Lake Baykal
Ostrov Sakhalin (Russia)
Sea of Okhotsk
Kamchatka Peninsula
Aleutian Islands
Kazakhstan
Aral Sea
Caspian Sea
Black Sea
Mongolia
North Korea
Kuril Islands (Russia)
Uzbekistan
Turkmenistan
Kyrgyzstan
Tajikistan
ASIA
Sea of Japan (East Sea)
INTERNATIONAL DATE LINE
MONDAY
SUNDAY
Lebanon
Turkey
Syria
MIDDLE EAST
Israel
Iraq
Iran
Afghanistan
Nepal
Bhutan
China
Yellow Sea
Japan
South Korea
Pacific Ocean
Persian Gulf
Jordan
Kuwait
Qatar
Bahrain
Pakistan
India
Bangladesh
Hong Kong (China)
Macau (China)
East China Sea
Ryukyu Islands (Japan)
Bonin Islands (Japan)
Gulf of Tonkin
TROPIC OF CANCER
Saudi Arabia
U.A.E.
Oman
Gulf of Oman
Bay of Bengal
Burma
Laos
Hainan (China)
Taiwan
Okinawa (Japan)
Volcano Islands (Japan)
Red Sea
Yemen
Gulf of Aden
Arabian Sea
Andaman and Nicobar Islands (India)
Thailand
Vietnam
Philippines
SOUTHEAST ASIA
South China Sea
Lakshadweep Islands (India)
Laccadive Sea
Andaman Sea
Brunei
Philippine Sea
AFRICA
Socotra (Yemen)
Sri Lanka
Phuket (Thailand)
Cambodia
Malaysia
Sulu Sea
Celebes Sea
New Guinea (Indonesia)
Maldives
Gulf of Thailand
Borneo (Indo.)
EQUATOR
Singapore
Java Sea
Indonesia
Banda Sea
Sumatra (Indo.)
Java (Indo.)
Bali (Indo.)
Flores Sea
Savu Sea
East Timor
Arafura Sea
OCEANIA
British Indian Ocean Territory (UK)
Indian Ocean
1000 mi
1000 km
AUSTRALIA
Coral Sea
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Azores (Portugal)
Portugal
Spain
EUROPE
Turkey
Syria
ASIA
15° W
Algiers
Mediterranean Sea
Iran
Madeira Is. (Portugal)
Tunisia
Israel
Iraq
MIDDLE EAST
30°N
Morocco
Cairo
Canary Is. (Spain)
Algeria
Libya
Egypt
Jordan
Persian Gulf
Kuwait
Western Sahara
Atlantic Ocean
TROPIC OF CANCER
Qatar
U.A.E.
Oman
Saudi Arabia
Mauritania
Nile River
Red Sea
Cape Verde
Niger
Arabian Sea
Senegal
Mali
Eritrea
15° N
Dakar
Burkina Faso
Chad
Yemen
Gambia
Benin
Lake Chad
Sudan
Gulf of Aden
Djibouti
Socotra (Yemen)
Guinea-Bissau
Guinea
Togo
Cote D'Ivoire
Nigeria
South Sudan
Ethiopia
Sierra Leone
Central African Rep.
Somalia
Accra
Liberia
Ghana
Gulf of Guinea
Cameroon
Uganda
Indian Ocean
0° EQUATOR
Eq. Guinea
Rwanda
Kenya
Nairobi
Sao Tome & Principe
Dem.Rep. of the Congo
Congo
Lake Victoria
Zanzibar (Tanzania)
800 mi
800 km
Gabon
Tanzania
Burundi
Cabinda (Angola)
Malawi
Seychelles
AFRICA
PRIME MERIDIAN
Angola
Lake Malawi
Comoros
15° S
Zambia
Lusaka
Mozambique Channel
Mauritius
Namibia
Zimbabwe
TROPIC OF CAPRICORN
Windhoek
Botswana
Reunion (France)
Madagascar
Atlantic Ocean
Mozambique
30° S
South Africa
Swaziland
worldatlas
Lesotho
Indian Ocean
Cape Town
60° E
30° W
0°
15° E
30° E
45° E
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Subject websites

These websites will help you with homework, reading around the subject and revision

English

https://www.sparknotes.com/ - *Macbeth, A Christmas Carol, An Inspector Calls*
https://app.senecalearning.com/ - *Macbeth, A Christmas Carol, An Inspector Calls, Power and Conflict Poetry*
https://www.bbc.com/bitesize - *Macbeth, A Christmas Carol, An Inspector Calls*

Maths

https://corbettmaths.com/
https://vle.mathswatch.co.uk/vle/
https://www.mathspad.co.uk/

Science:

https://www.bbc.com/bitesize
https://www.senecalearning.com/
https://www.memrise.com/

Geography

Time for Geography - videos (mainly focused on physical processes)
Bitesize
Cool Geography

History

Seneca Learning
BBC bitesize - use Edexcel resources for GCSE.

Art Websites

https://www.tate.org.uk/
https://www.bbc.co.uk/bitesize/subjects/z6f3cdm
https://www.incredibleart.org/

Computer Science and IT.

www.mrahmedcomputing.co.uk

Drama

https://youtu.be/VeTpob9LBM8
https://youtu.be/wISEU13mRBE
https://www.bbc.co.uk/bitesize/guides/zsf8wmn/revision/1

DT:

http://www.mr-dt.com/
http://technologystudent.com/
https://www.senecalearning.com/

PE

https://www.bbc.com/bitesize/examspecs/ztrcg82
https://sites.google.com/view/ocrgcseperevision/home

RS

KS3 https://www.bbc.co.uk/bitesize/subjects/zh3rkqt

Timetable

	Monday	Tuesday	Wednesday	Thursday	Friday
Tutor time					
Lesson 1					
Lesson 2					
Break					
Lesson 3					
Lesson 4					
Lunch					
Lesson 5					
Lesson 6					