The Trafalgar School at Downton

Knowledge Organiser

Year 7: Terms 5 and 6

2024/2025

Contents

Name……House……

Being Trafalgar

At the end of your time at the school your knowledge organisers will provide you with lots of help and support when your prepare for your GCSE exams.

To help yourself you should:

- Keep your Knowledge Organisers as tidy as possible
- Highlight parts of them as you go through learning lessons or add in post-it notes etc. to help you learn key knowledge
- Keep your used Knowledge Organisers safe at home. If you have used them since Year 7 you will end up at the end of Year 11 with 14 Knowledge Organisers. Line them up on your shelf at home and keep coming back to them for your revision, homework and learning
- Show them to your parents and talk through with them the facts and knowledge you have learned about in lessons – help them to learn new things too!
- Take your Knowledge Organiser for the term you are in to school every day and use it in every lesson you can!

Using a Knowledge Organiser well

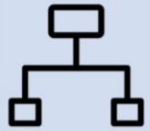
What is a Knowledge Organiser? A Knowledge Organiser is a document that sets out the key information you need to understand, learn and memorise in each of the subjects you study this term.	**Why do I have to carry my Knowledge Organiser around with me?** Your teachers will want you to use your Knowledge Organisers in lessons. They are yours forever and you may want to annotate or highlight on them when your teacher talks about things in them. They will certainly be used in lessons when you have a cover teacher and you can use them whenever you find yourself with some spare time.
How should I use my Knowledge Organiser? You should use your Knowledge Organiser to learn this key information and commit it to memory. Your teachers will often quiz you on the information on the Knowledge Organiser in your lessons. The best way of using it is to use the look, cover, write, check method which you will have been introduced to in your Knowledge Organiser launch assemblies.	**What do I do with my Knowledge Organiser at the end of the term?** You don't have to carry your Knowledge Organiser around with you anymore but you should keep it somewhere safe where you can easily get it out and use it. Remember that the information on the Knowledge Organiser includes things you will need to remember for your GCSE exams, so your teachers will continue to quiz you on it.
Why is a Knowledge Organiser important? GCSE specifications require students to memorise more facts, equations, quotations and information than ever before and there are things you will learn right from the start of year 7 that you will need to know in year 11 when you sit your GCSE exams – the Knowledge Organiser helps you to identify the things that you need to try and commit to your long term memory and return to over and over again during your time at secondary school. There are also things that we think it is important you learn about and remember that might not be in a GCSE exam but represent useful knowledge for life.	

Your Knowledge Organiser is a vital document. It contains all the key things from your lessons that you will need to work on committing to your long-term memory.

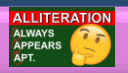
Here are some useful methods to use that will help commit the information to your long-term memory

The Trafalgar School AT DOWNTON

How to use a knowledge organiser – step by step guide

	Look, Cover, Write, Check	Definitions to Key Words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	Look at and study a specific area of your knowledge organiser 	Write down the key words and definitions 	Use your knowledge organiser to condense and write down the facts and or information on flash cards 	Use your knowledge organiser to create a mini quiz. 	Create a mind map with all the information you can remember from your knowledge organiser. 	Ask a partner or family member to have the knowledge organiser in their hands, read out what you remember. 
Step 2	Cover or flip the knowledge organiser over and write down everything you remember. 	Try not to use your knowledge organiser to help you 	Add pictures to help support. Then quiz yourself using the flash cards. You can write questions on one side and answers on the other. 	Answer the questions and remember to use full sentences 	Check your knowledge organiser to see if there were any mistakes with the information you have made. 	They can test you by asking you questions on different sections of your knowledge organiser. 
Step 3	Check what you have written down. Correct any mistakes in green pen and add anything you missed. Repeat. 	Use a different coloured pen to check and correct your work. 	Use a parent/carer or friend to help quiz you on the knowledge. 	You can also use family to quiz you. Keep self-quizzing until you get all questions correct. 	Try to make connections that link information together. 	Write down your answers. 

Language Methods to Practise in your Fortnightly Writing Challenge and Examine in your Reading

alliteration:	the repetition of a consonant sound to begin a series of words. 
anecdote:	a short story to prove a point e.g. a dad, talking to his children about the dangers of running in the house, a dad might include an anecdote about falling in his home as a boy and breaking his arm.
antithesis:	 putting two opposite ideas together to highlight contrasts.
emotive language:	words and phrases that are used to make the reader feel a particular emotion.
extended metaphor:	a version of metaphor that extends over the course of multiple lines, paragraphs, or stanzas of prose or poetry.
foreshadowing:	 the writer hints at an event that will happen later in his story/poem/play/writing.
imperative verbs:	instructional/command words that give the action the speaker/writer wants you to do.
metaphor:	like a simile, but instead of using 'like' or 'as' it compares two things by suggesting that something is something else.
modal verbs:	help show the level of possibility, ability, obligation or permission of the main verb/action e.g. might, can, must, may …
pathetic fallacy:	the projection of human emotions/mood onto non-human objects found in nature e.g. the weather.
sensory description:	 employing the five senses in writing to evoke a mental image and/or sensation for the reader.
simile:	a comparison which finds similar characteristics in two objects and compares them, always by using the words 'like' or 'as'.
statistics:	factual data used in a persuasive way.
superlative:	an adjective or adverb that shows the highest or lowest degree of comparison e.g. best, worst, finest, most, etc.
onomatopoeia:	using words that sound like the noise they represent. 
personification:	 a type of figurative language that gives an object human characteristics (emotions, sensations, speech, physical movements).
rhetorical question:	a question asked for a purpose other than to obtain the information the question asks e.g. create a dramatic effect; emphasise a point; make you think about/eager to learn the answer.

When writing, don't fragment. Fuse or splice your sentences.

Unfortunately, I don't think I'm going to get a good grade. Because I didn't study. ✗ FRAGMENT

Fix it by re-joining the fragment to the sentence: Unfortunately, I don't think I'm going to get a good grade because I didn't study. ✓

In the holiday, I went to Paris it is the most beautiful place I have ever visited. ✗ Fuse

Fix it by using a full stop (never a comma), coordinating conjunction (for, and, but, or, yet, so), or subordinating conjunction (as, because, so that, before, after, until, since, when, although, etc.), or semi-colon to join the two sentences:
In the holiday, I went to Paris **as** it is the most beautiful place I have ever visited. ✓

Heavy rain fell throughout the night, by morning every major road was flooded. ✗ SPLICE

Fix it in the same way you would fix a fuse: Heavy rain fell throughout the night; by morning every major road was flooded. ✓

Fortnightly Writing Challenge Year 7

Use fronted adverbials:

Rather slowly, (manner)
During the night, (time/temporal)
Every minute or two, (frequency)
At the end of the corridor, (spatial)

Just beyond the stairwell on his left, he opened the door.

Use a two and then three word sentence:

It hurt. I was dying!

Snow fell. Flakes floated precariously.

Use anaphora:

Now is the time for action. **Now is the time** to take up arms. **Now is the time** to fight for your country.

Use epiphora (epistrophe)

I can't believe I was robbed. Everything is **gone**. My television and electronics are **gone**. The money I left on my nightstand is **gone**.

Use a range of sentence structures:

The spotted green frog jumped into the pond.
(simple)

The spotted green frog jumped into the pond **and** he splashed water on me.
(compound – coordinating conjunction: for, and, nor, but, or, yet, so)

The spotted green frog jumped into the pond **when** the hawk flew overhead.
(complex – subordinating conjunction: if, although, as, before, because, when, after, since, until, so that, while etc.)

When the hawk flew overhead, the spotted green frog jumped into the pond.
(subordinate/dependent clause start)

The frog, **which had been lurking underwater,** jumped on the lily pad.
(embedded clause)

Use a past participle - 'ed' start:
Glazed with barbecue sauce, the rack of ribs lay nestled next to a pile of sweet coleslaw.

Use a present participle - 'ing' start:
Whistling to himself, he walked down the road.

Use a tricolon (tripartite list):

'I stand here today **humbled** by the task before us, **grateful** for the trust you have bestowed, **mindful** of the sacrifices borne by our ancestors.'

Snap! Crackle! Pop! **(Rice Krispies slogan)**

Use a conditional sentence:

When people smoke cigarettes, their health suffers.

If I had cleaned the house, I could have gone to the cinema.

Use paired adjectives to describe a noun:

Take a look at this bright red spider.

Luckily, it isn't a wild, dangerous one.

Use anadiplosis (yoked sentence):

Building the new motorway would be **disastrous, disastrous** because many houses would need to be destroyed.

'Fear leads to **anger**. **Anger** leads to **hate**. **Hate** leads to suffering.'
Yoda, *Star Wars*.

Use different sentence types:
The wind is blowing. **(declarative)**

Put your pen down. **(imperative)**

Who do you trust most in the world? **(interrogative)**

Pollution is killing us! **(exclamation)**

Use discourse markers to begin paragraphs and start/link some sentences:
First of all, To begin with, Firstly,

Therefore, Consequently, Hence, As a result,

Furthermore, In addition, Additionally, Moreover,

Meanwhile, Later that day, Seconds later, Subsequently, That afternoon,

On the whole, Interestingly, Basically, In short, Broadly speaking,

Alternatively, Conversely, Similarly, On the other hand, Despite this, Likewise, However,

To conclude, Finally, In conclusion, Eventually, In the end,

PUNCTUATION PIT STOP

Full Stop

Full stops are used to:

1) **mark the end of a sentence.**

Carefully, he kicked the ball into the goal.

2) show when a word has been abbreviated.

Saint Peter's Road is on the High Street.

→ St. Peter's Road is on the High Street.

COMMAS

Commas are used to separate:

1) items in a list .

Bert, Ernie and Elmo are my three pet rats.

2) dependent clauses and phrases.

While I was in the bath, the cat scratched at the door. That meant, because I was on my own in the house, I had to get out to let him in. Thankfully, I had a towel handy!

Quotation Marks

Quotation marks show exact words that are spoken or written by someone.

'Don't be late!' shouted Mrs Smith.

'I will be,' Molly said, and added, 'so don't expect me before 11.'

Question Mark

Question marks are used at the end of direct questions instead of a full stop.

What is your favourite food?

How do you feel today?

An indirect question ends with a full stop, rather than a question mark:

I'd like to know what you've been doing all this time. I wonder what happened.

Exclamation Mark

Exclamation marks express strong emotions: forcefulness, commands, anger, excitement, surprise etc.

Don't buy that car! Stop telling me what to do! I'm free! You're late! She actually won!

They're also used for most interjections:

'Hi! What's new?' 'Ouch! That hurt.'

'Oh! When are you going?'

Semi-colon

Semi-colons are used to separate two sentences that are closely related:

It was winter; the snow was falling heavily.

They can also be used to separate items in a list made of longer phrases. I have been to Newcastle, Carlisle, and York in the North; Bristol, Exeter, and Portsmouth in the South; and Cromer, Norwich, and Lincoln in the East.

Colon

Colons are used to:

1) **begin a list.**

I have three pet rats: Bert, Ernie and Elmo.

2) **indicate that what follows it is an explanation or elaboration of what precedes it.**

Unfortunately, the weather forecast was wrong: it rained all day!

Apostrophe

An apostrophe is used to show:

1) **omission - where a letter or letters has been missed out.**

does not → doesn't I am →I'm

2) possession – when some thing/one owns something. Thankfully, they played Susan's game. Interestingly, David's house has no garden, but Susan's ~~house~~ does.

Dash –

Dashes are used for parenthesis: a word or phrase inserted as an explanation or afterthought into a passage which is grammatically complete without it. E.g.

Last year, they roasted the winning brisket — the size of a pillow — in a mighty clay oven. Paul felt hungry – more hungry than he'd ever been.

Brackets

Brackets are used in pairs for parenthesis: a word or phrase inserted as an explanation or afterthought into a passage which is grammatically complete without it. E.g.

Andrew Jacklin (last year's losing finalist) is expected to win this heat.

Tigers are carnivores (meat eaters)!

Ellipsis ...

Ellipsis is used to:

1) **show a pause or hesitation in someone's speech or thought.**

I don't know … I'm not sure.

2) build tension or show that something is unfinished.

Looking up, Paul couldn't believe what he saw …

Writing the text for a Leaflet/Guide

Stay Safe and Sound Online — clear/apt/original title

Manage your online reputation — subtitles

Anything that you upload, email or message could stay online forever. Therefore, before you post anything online, consider whether or not you would want your parents, teacher or a future employer seeing it. If the answer is no, don't post it! Your privacy is key here.

Privacy Matters

Make sure you set high privacy settings on social networks. Regularly you should change passwords and never share or put online any of your personal details like a phone number, address or your school details. Make sure your safety and privacy settings are activated on your mobile devices too, so you aren't sharing private information. Be aware that using public WiFi might not filter inappropriate content, so look for friendly WiFi symbols when you're out and about.

effectively/fluently sequenced paragraphs

....

Remember:

bullet points

- make sure you know how to block abusive comments and report worrying content;
- don't arrange to meet people in real life that you've only talked to online;
- use secure and legal sites to download music and games;
- when using the internet for homework, use information appropriately and explain things in your own words rather than copying.

Text for a Speech/Talk

'Address to Nation on the Challenger' by Ronald Regan (28th January, 1986)

Ladies and Gentlemen, I'd planned to speak to you tonight to report on the state of the Union, but the events of earlier today have led me to change those plans. Today is a day for mourning and remembering. Nancy and I are pained to the core by the tragedy of the shuttle Challenger. We know we share this pain with all of the people of our country. This is truly a national loss.

a clear address to an audience

...

For the families of the seven, we cannot bear, as you do, the full impact of this tragedy. But we feel the loss, and we're thinking about you so very much. Your loved ones were daring and brave, and they had that special grace, that special spirit that says, 'Give me a challenge and I'll meet it with joy.' They had a hunger to explore the universe and discover its truths. They wished to serve, and they did. They served all of us.

rhetorical indicators that an audience is being addressed throughout

...

The crew of the space shuttle Challenger honoured us by the manner in which they lived their lives. We will never forget them, nor the last time we saw them, this morning, as they prepared for the journey and waved goodbye and 'slipped the surly bonds of earth' to 'touch the face of God.'

Thank you.

a clear sign off e.g. 'Thank you for listening'.

Writing Forms

Article

Andy Murray's Appliance of Science — clear/apt/original title

By Jim White — by-line

If the Caledonian superman wins Wimbledon this year, it will be thanks to [illegible] pieces of sushi a day, a magic potion and a battalion of experts. — strapline

If you want to know what it is about Andy Murray that makes him stand out from the rest of us – apart from that fizzing backhand return and the huge-mouthed celebratory yodel – it is summed up in one word: science!

Sample Check — sub-headings

Today, before he even steps out on to the Centre Court for his Wimbledon semi-final against the huge-hitting Pole Jerzy Janowicz, Murray will [illegible]ve been subject to several of these. He does [illegible] time he pops to the lavatory. The osmolality check is conducted by one of his staff, its purpose to gauge the percentage of water and minerals in his urine, to show whether his body is correctly hydrated. The fact is, if Murray wins [illegible] it will partly be thanks to the bloke who inspects his wee.

introductory (overview) paragraph

fluently sequenced paragraphs

fluently sequenced paragraphs

Daily Diet

At 7.30 this morning, while many of [illegible] arriving at Wimbledon's press restaurant will have begun their day assaulting a tottering Himalaya of fried starch, Murray will have eaten yogurt, fruit and a bagel smeared in peanut butter ...

Writing to Review

clear, engaging title

Feeling Icy About Frozen?

effective introduction

Last weekend I **was forced to endure** a new DVD that has been added to **my little sister's** ever-growing Disney collection: Frozen 2. For those of you who have been living on a different planet for the last few years, the Frozen franchise is particularly big business for girls under the age of around 7 or 8.

At first, **I have to be honest**, I was pretty reluctant to watch it. The first version of Frozen followed the usual Disney drama of: boy meets girl, dramas occur, friends are made, and annoyingly catchy songs are sung. There were the conventional talking animals too and (**I have to admit it**), a cute little snowman. In hope of reacquainting myself with the humour of this cold, carrot-nosed cutie – **I gave up the fight**, and decided **I'd try to grin and bear it** through the sequel...!

use topic specific language

use your tone to make the reader feel like you are sharing personal information and advice.

Surprisingly, having sat through the whole of the movie, **I'm willing to confess**: it actually wasn't too bad. The music is slightly better than the first one. In Frozen 2, there are some instrumental versions of songs and the riffs are well pitched and engaging. This was a definite **positive for me**, although I was a little annoyed when **I started humming the tune** on the school bus yesterday morning!

...

effectively/fluently linked paragraphs to sequence a range of ideas (no room to produce the other paragraphs/conclusion here).

As for the characters... Elsa and Anna are still the leading ladies, with Sven, Olaf, and the talking reindeer, (whose name I can't actually remember). Elsa is still a little too overly heroic as she constantly runs off to try and fix things with the customary 'we know it's going to end badly' music tinkering away in the background...

Writing a formal letter

writer's address

35 Hibiscus Crescent
Andover
Hants
SP10 3WE

221B Bakers Street
London
NW1 6XE

reader's address

date

20th February, 2020

Dear Sir or Madam

Formal Salutation: Sir/Madam/Mr Roderick/Mrs Roderick

I am writing because you chair a committee in charge of the compulsory wearing of school uniforms. I am a student at Brinsley High School, a friendly and successful school where uniforms are not worn.

fluently sequenced paragraphs

Of course, I understand that students won't spend all morning choosing what to wear or beg parents for clothes that will impress. However, there is another side to this case: uniforms breed uniformity. We are a culturally diverse nation and by all dress the same, this encourages us to be the same. At Brinsley High, we are encouraged to express individuality, yet this seems to be in contradiction of the message enforced uniform sends to us.

Furthermore, ...

Yours faithfully
Boris Johnson

formal sign off: Yours faithfully (Sir/Madam = Faithfully) (Mr/Mrs = Sincerely)

Description of Place

spatial discourse markers

adjectives

Green limbs tangled above the decaying shells of long-abandoned vehicles, forming a canopy that barely permitted the harsh rays of the sun to burn through. The stealthy fingers of squat oak trees reached out tenaciously towards them. The vehicles themselves were coated in a thick layer of rust, the colour of burnt copper – and were battered and bruised through years of exposure to the elements.

Metaphor, simile, personification

Like a queue of taxi cabs, the vehicles waited patiently in the forgotten depths of the forest. Specks of light from the midday sun, which had successfully fought their way through the overhead canopy, lit up their broken bodies. Their trunks gaped open woefully and their shattered eye sockets stared blindly forward.

sensory description

sensory description

The aroma of rust and decay occupied the clearing: it was choking, corrosive. No fresh breeze could infiltrate the thick shrubbery to provide relief. The cars lay there, suffocating on their own putrid stench. It was overpowering. Meanwhile, the squawks of blackbirds echoed like sirens around the clearing. The chilling sound was relentless. It echoed through the car's hollow bodies, feeding its way through the cracks in windows and doors, stroking the upholstery of the rotting seat as it passed.

sensory description

spatial discourse markers

Spread over the floor of the clearing, a thick blanket of autumn leaves hid the earth beneath. They had turned a shade of burnt red and had bleached edges that resembled torn parchment. They were brittle and cracked from the heat in the clearing. Amongst them, all manner of insects scuttled- manoeuvring themselves between moments of shade, before the unforgiving rays of sun could scorch their exposed bodies.

adjectives

Dystopian Narrative: *The Machine Stops* by E.M. Forster

Above her, beneath her, and around her, the Machine hummed eternally; she did not notice the noise, for she had been born with it in her ears. The earth, carrying her, hummed as it sped through silence, turning her now to the invisible sun, now to the invisible stars. She awoke and made the room light.

"Kuno!"

"I will not talk to you," he answered, "until you visit me."

"Have you been on the surface of the earth since we spoke last?"

His image faded.

Again she consulted the book. She became very nervous and lay back in her chair palpitating. She directed the chair to the wall, and pressed an unfamiliar button. The wall swung apart slowly. Through the opening she saw a tunnel that curved slightly, so that its goal was not visible. Should she go to see her son, this would be the beginning of the journey.

Of course she knew all about the communication-system. There was nothing mysterious in it. She would summon a car and it would fly with her down the tunnel until it reached the lift that communicated with the air-ship station: the system had been in use for many, many years, long before the universal establishment of the Machine. Those funny old days, when men went for change of air instead of changing the air in their rooms! And yet — she was frightened of the tunnel: she had not seen it since her last child was born.

Journey Description

Sitting in my seat – aisle, two rows from the front – I look out. Illuminating a town engulfed in darkness, lights flash past me: shop lights, street lights, car lights, and as the clouds part just enough for the moon to penetrate through the smog, moonlight!

Inside it's silent. No one speaks. The bus windows shut, lulled by the rocking motion, side-to-side, back-and-forth, up-and-down, my eyes feel heavy. Outside, I'm mesmerised by the noise I can only see, only imagine: mouths asking, replying, laughing, traffic screeching, angry drivers honking, shop doors opening and closing.

Once more the bus door opens and, as if I've lifted my head out from underwater, I can hear the street bustle, smell the takeaways, taste the diesel fumes.

Climax (turning point, height of action/problem at its worst):

- use exciting adverbs and verbs;
- accelerate pace and heighten tension using lots of shorter sentences.

Fail to Plan
Plan to Fail!

Rising Action (build towards conflict):

- build on character, setting, plot;
- introduce a complication/problem;
- build tension/ excitement;
- use interesting adjectives, sensory description, figurative language etc.

Freytag's Pyramid/ the Story Mountain is the best for planning narratives (stories).

Falling action (turning point, height of action/problem at its worst):

- what events happen to solve the problem?

Exposition (Introduction):

- use an opening hook to grab attention e.g. mysterious atmosphere, in medias res, etc.
- use descriptive vocabulary to set the scene and describe the main character/setting;
- foreshadow what is to come.

Dénouement/Resolution (ending):

- link back to the start (circular);
- what has the character learned?
- how are things different now?
- is there an exciting twist or cliff-hanger ending?

Intro: My address right hand side, + date, school address left, Dear Mr Cole
Should we consider discontinuing wearing a school uniform, you've asked? Quite simply, yes! Within this letter, you will find several arguments setting out precisely why we should make this change.

Conclusion: To conclude, repeat RQ, Quite simply, yes!

Yours Sincerely

P1

Counter reason: old-fashioned tradition, so easier to continue
Argument reason: other traditions - burnt witches, slept on straw, walked barefoot – now discontinued so …
Supporting example: anecdote, use experts

Form: Letter
Audience: Headmaster
Purpose: Argue change uniform

P2

Counter reason: all look same so no prejudice/bullying over clothes,
Argument reason: no individualism, learning who we are
Supporting example: RQ +triple
Isn't part of our learning at school about learning how to dress appropriately, learning who we are, learning how to judge people on what is inside, not what wear?

P3

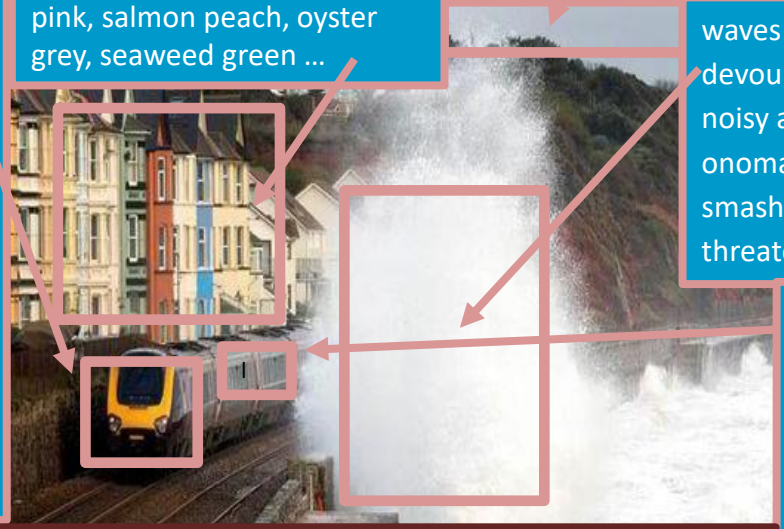
Counter reason: cost cheaper as not designer or from shops making huge profit
Argument reason: cost of blazers, trousers and skirts from school uni shop expensive as no competition, own clothes mix 'n' match so fewer outfits needed, wear weekends so more use,
Supporting example: emotive language: force poorer families to go without, statistics

Mind maps/spider diagrams, allow you to jot down content ideas in no particular order and then decide on the best order to write them up in – so they're ideal for non-fiction writing. Each leg = a paragraph

Personify train - a victim moving along railway line, past houses, towards destination - metaphor: caterpillar train sways and pitches precariously along the track to its daily destination. Snatching bites, the sea salt nips at its metal skin as passes, gnawing at it, killing it. Rattles. Will it survive?

houses , like soldiers standing to attention - defending their inhabitants. Diff pastel colours of a seaside town: prawn pink, salmon peach, oyster grey, seaweed green …

canopy of sky above threatening Adjectives for mood: grey sky, stuffed clouds full of cold, sharp rain, Verb: beating down, attacking!



waves engulfing and devouring the sea side town - noisy and disruptive, onomatopoeia: Crash! whip, smash personify so violent/ threatening movement.

zoom in - one carriage window. Windows hit by spray that's 'like a tame cat turned savage'. Passenger pitched side-to-side; bubbling sickness, rising bile from stomach!

Plan describing pictures by boxing/framing parts of the image to help you to focus description on specific areas, zooming in on minute detail, and out again to another area. Each boxed area = a paragraph.

1. Intro: Here you will find everything you need to know about buying a goldfish. Follow this advice to …
2. First of all, research the fishes needs and best fish breeds …
3. Next, decide where to put … bedroom could be best habitat for your fish because … However, it might be better to …
4. After this, it's back to the research. Make a list of … Don't …. Do …
5.

Linear flow and vertical charts are useful for planning writing that has to follow a step-by-step process. Each section/shape = a paragraph.

The Grid Plan is good for making sure you include lots of different methods, or to compare two/more things side-by-side. Each row/column = a paragraph.

Paragraph content/ topic	Language method/vocab	Sent structures	Punc
1: waves engulfing and devouring the sea side town - noisy and disruptive, movement	onomatopoeia crash, whip, smash personify so violent/threatening	'ing' start verbs (pres part)	! ;
2: train victim moving across railway line past houses towards destination	personify - victim, alliteration, metaphor: A caterpillar, the train sways and pitches precariously along the track to its daily destination. Snatching bites, the sea salt nips at its metal skin as it passes, eating away at it, killing it. Rattles. Will it survive?	Chain/ tricolon Question	? - -
3: zoom in on one carriage window, motion sick	Windows hit by spray that 'like a tamed ca' has 'turned savage' today. Passenger pitched side-to-side; bubbling sickness rising bile from stomach!	Anadiplosis (yoked)	' ' ; !
4: houses	Like soldiers standing to attention they are defending their inhabitants. Diff pastel colours of a seaside town: prawn pink, salmon peach, oyster grey, seaweed green, cracking paintwork	Fronted spatial adverbials	( ) :
5: canopy of sky above threatening	Adjectives for mood: grey sky, stuffed clouds full of cold, sharp rain, Verb: beating down, attacking,	Two then three word sentences	… ;

Fail to Plan
Plan to Fail!

Writing Purposes	Key Language/Structural methods	Chocolate Model!
Inform: tell the reader what they want/need to know.	➢ **Use interesting facts details;** ➢ **use brackets to explain technical terms.**	**Interestingly, chocolate** is actually made from the seeds of a cacao tree. After fermentation, the beans are dried, cleaned, and roasted. The shell is then removed to produce cacao nibs **(unadulterated chocolate in rough form).**
Explain: tell the reader how and why.	➢ **Use connectives: 'as a result', 'because', 'so that', when;** ➢ **use sequence discourse markers: Eventually, Another, Furthermore.**	**Often, when** in need of comfort or reassurance, or in stressful situations, people crave chocolate. Primarily, this is **because** dopamine is released into your brain **when** you eat chocolate, and **as a result** it can lower levels of anxiety ...
Describe: help the reader to picture it and imagine the experience.	➢ **Use similes, metaphors, personification, interesting adjectives/verbs, sensory description.**	**Enticingly,** the **dome** of **dark** chocolate**, flecked sporadically** with **lime slivers, remained encased** in its **fluted carapace. Around** the outside of it **cleaved** the **diminutive remains** of its **neighbour:** a **praline** long ago eaten**! Velvety smooth,** this **solitary bead** of **ganache glistened, revelling** in its **escape**, yet **mourning** its **rejection.**
Narrate: tell the reader a tale that will have them hanging on your every word.	➢ **Use the mountain/ pyramid structure;** ➢ **use some description;** ➢ **use a few lines of direct speech.**	**Suddenly**, she was aware she had arrived at her destination! On the door in front of her, a **scarlet square of shiny plastic printed** with the words 'Chocolate Laboratory' stood out on **splintering wood**. **Why she was standing on this doorstep, though, and what, or who, had led her here in the first place?**
Persuade: try to get the reader to do as you ask/agree with you.	➢ **Use APE FOR REST: anecdote, personal pronouns, emotive language, fact, opinion, rhetorical questions, repetition, experts, statistics, triples.**	**One of** the **world's greatest comfort** foods, Chocolate, is **the unrivalled 'go-to'** when **life takes a bad turn**, an **easy gift** to **thrill** just about **everyone,** and a **tasty treat** that will **uplift even the most melancholy of moods.**
Argue: present two sides, but ensure your side appears strongest so reader agrees with you.	➢ **Use sequence discourse markers;** ➢ **use 'Some believe ..', 'However, most people would agree that';** ➢ **use APE FOR REST (above).**	**First of all, some believe that as chocolate** is high in calories, it is bad for you. **However, scientific experts have proven** that chocolate, as it contains high levels of antioxidants, could **lower cholesterol levels, improve mood and prevent memory decline**!
Advise: help warn and guide reader, but reassure with carefully considered advice.	➢ **Use imperative verbs (stop, do, don't, wait etc.), and modal verbs (if, could, might, should).** ➢ **use second person (you, your).**	**Most importantly, if you** are feeling bored and craving chocolate, **don't** give in to your yearning. Instead, **you could go** for a walk, **run** errands, **call** a friend or **read** a book. **If you** can take your mind off food for a short time, the craving **may** pass.

Most Often Misspelled words

acceptable	camouflage
accidentally	caught
accommodate	changeable
benefit	conscientious
buoyant	definite
business	disastrous

Term 5 & 6 SPIVoT words

correspondence	scissors
commemorate	separate
colleagues	seize
commission	unparalleled
unconscious	scissors
science	animosity
benevolence	antonyms
crescendo	discrepancy

Defining poetry is tricky because
a simple definition can't do it justice.
It's like trying to define a tree or a sunrise.
To truly understand poetry,
you must experience it: you must read it –
deeply, widely, carefully, and repeatedly,
and you must write it as well.

Childrens.poetryarchive.org

Poetryarchive.org

YR 7 POETRY TERMS 5 & 6

Terminology	Definition
Rhyme	Two or more words that have the same or similar ending sounds
Rhyme scheme	A way of describing the pattern of line end rhymes in a poem.
Rhyming couplet	A pair of lines with the same rhythm and end rhyme.
Internal rhyme	Words within a single line of poetry rhyme or in the middle of two adjacent lines of poetry.
Rhythm	The repeated pattern of stressed and unstressed syllables in a line of poetry e.g. de – DUM – de – DUM – de – DUM
Speaker	The narrator of the poem – not necessarily the poet.
Stanza	A verse of poetry.
Sonnet	A 14 line poem, with each line having 10 syllables, written as a single stanza.
Volta	This literally means 'turn' and involves a change in mood or tone.

https://learnodo-newtonic.com/famous-english-poets

Terminology	Definition
Caesura	A pause within a line of verse.
Enjambment	An idea or phrase that continues from the end of one line to the next with no pause or punctuation between.
Prose	The ordinary way of writing – without rhyme or rhythm
Juxtaposition	Placing two ideas/characters/places next to each other so the reader can compare them.

Year 7 Poetry – Term 5 and 6

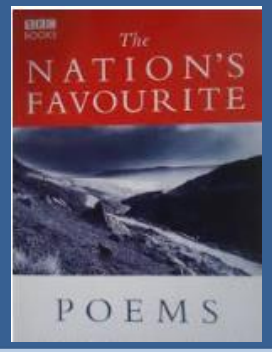
How to write a quotation

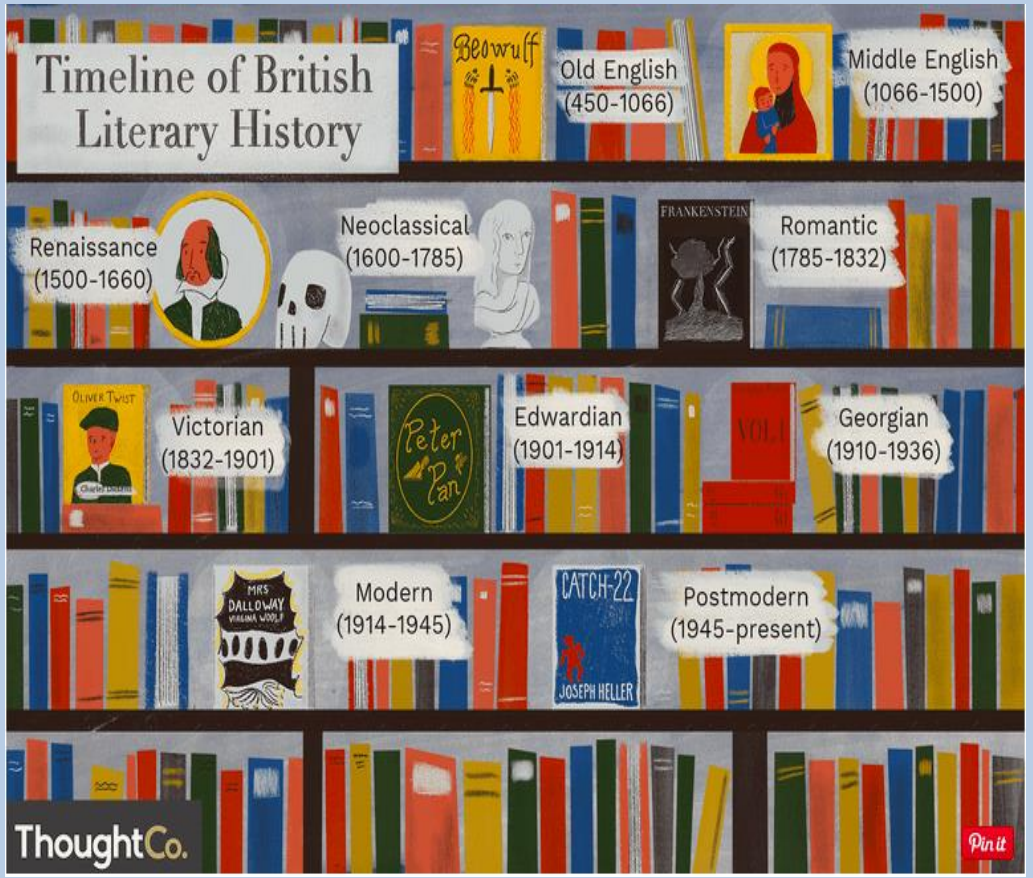
You will often need to use quotations in English. A quotation is a group of words taken from a piece of writing and reproduced in your work to support your ideas.

1. You must show that these are someone else's words and not your own by enclosing them in quotation marks – 'All animals are equal, but some animals are more equal than others.'
2. You must quote accurately, don't swap words or guess what it says, use the same spelling and punctuation.
3. Keep your quotations short – a few words will usually do and you rarely need more than a sentence.
4. If you need to shorten your quotation you can do this by using square brackets and an ellipsis - 'All animals are equal, but some […] are more equal than others.'

SOME USEFUL WEBSITES TO HELP YOU WITH POETRY:
poetryarchive.org
Poetryfoundation.org
Poetrybyheart.org.uk
Poetry4kids.com
Rhyme Zone's Rhyming Dictionary

YOU CAN ALSO GOOGLE 'The Nation's Favourite Poems'





Rhyming Verse

A Rhyme Scheme shows the pattern of rhymes at the end of lines. Every sound is labelled with a letter, starting with 'a'.

Silver

Slowly, silently, now the moon	A
Walks the night in her silver shoon;	A
This way, and that, she peers, and sees	B
Silver fruit upon silver trees;	B
One by one the casements catch	C
Her beams among the silvery thatch;	C

Walter de la Mare

What is a simple definition of poetry?

Poetry is a type of literature, or artistic writing, that attempts to stir a reader's imagination or emotions. The **poet** does this by carefully choosing and arranging language for its **meaning**, sound, and rhythm. Some **poems**, such as nursery rhymes, are **simple** and humorous.

Poetic technique	Definition	Example
Alliteration	When a sentence or phrase has many words or syllables that start with the same sound, not necessarily the same letter e.g. f & ph but not t &th.	The fair breeze blew, the white foam flew, The furrow followed free;
sibilance	A type of alliteration where the repeated consonants are 'hissy' sounds – s, sh, z.	She sells sea shells by the sea shore. 'And the silken sad uncertain rustling'. Six zany zebras.
Assonance	The repetition of similar vowel sounds within a sentence.	Do you like blue? - using 'o', 'ou', 'ue' He received three emails today. - using 'e', 'ei', 'ee' and 'e'
Onomatopoeia	A word that describes and mimics a sound.	Pop, whizz, fizz, crackle, slurp, pow, whoosh, crash.
Repetition	When words or phrases are repeated.	Let it snow, let it snow, let it snow. "Oh, woeful, oh woeful, woeful, woeful day!"
Rhetorical question	A question asked to make a point and where no answer is expected.	Are you kidding me?
Simile	Comparing one thing to another using the words 'as' or 'like' to make a description more vivid.	As brave as a lion; As light as a feather; His heart felt like breaking after they broke up.
Metaphor	A word or phrase used to describe one thing as if it is another thing to aid understanding and description.	My mouth is on fire (after eating chilli) After they broke up, his heart was broken.
Extended metaphor	A metaphor introduced and then further developed throughout all or part of a literary work, especially a poem.	Robert Frost uses two roads as an extended metaphor in "The Road Not Taken."
Personification	When human thoughts, feelings or actions are attributed to something non-human.	My shadow followed me. 'The little dog laughed to see such fun/And the dish ran away with the spoon'
Imagery	Language and description that appeals to our five senses: smell, sight, taste, touch and hearing.	I could hear the popping and crackling as the bacon dropped into the frying pan, and the salty, greasy smell wafted toward me. Glittering white, the blanket of snow covered everything in sight.
Hyperbole	An exaggerated statement not meant to be taken literally, but used for emphasis or humour.	I have told you a million times.

Year 7 Maths Term 5 & 6

Command Words in Maths questions

These words are the clue to what the examiner expects you to do. Remember to always show your workings. You can get marks for it, even if you get the final answer wrong.

TECHNICAL VOCABULARY	
Factor	A number which divides exactly into another.
Multiple	A multiple is a number made by multiplying two other numbers.
Prime	A prime number has exactly two factors.
Integer	The positive and negative whole numbers.
Estimate	Usually a calculation where the numbers have been rounded before the operation is performed.
Index (indices plural)	An index is a power or exponent.
Square root	Is the number that was multiplied by itself to get the square number.
Square number	Is a number that has been multiplied by itself.
Cube number	Is a number that is multiplied by itself then again by the original number.
Cube root	Is the number that was multiplied by itself and itself again to get the cube number
Numerator	The number on the top of the fraction. Shows how many part there are.
Denominator	The number on the bottom of the fraction. Shows how many equal parts the item is divided into.
Common denominator	When two or more fractions have the same denominator.
Equivalent	Having the same value
Inverse	The opposite mathematical operation.
Reciprocal	The number produced by dividing 1 by a given number
Odd	An integer that cannot be divided exactly by two.
Even	An integer that can be divided exactly by two.

	Divisibility Test
2	Even
3	Digits sum to a multiple of 3
4	Last 2 digits are divisible by 4
5	Ends in 5 or 0
6	Divisible by 2 and 3
8	Can be halved 3 times
9	Digits sum to a multiple of 9

Millions	Hundreds of thousands	Tens of thousands	Thousands	Hundreds	Tens	Units	Tenths	Hundredths	Thousandths
1000000	100000	10000	1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
M	HTh	TTh	Th	H	T	U			
5	2	9	7	8	2	1	6	0	3

Five million, two hundred and ninety seven thousand, eight hundred and twenty one point six zero three.

12 X 12 Multiplication Table

X	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

Squares

$1^2 = 1 \times 1 = 1$	$5^2 = 5 \times 5 = 25$	$9^2 = 9 \times 9 = 81$
$2^2 = 2 \times 2 = 4$	$6^2 = 6 \times 6 = 36$	$10^2 = 10 \times 10 = 100$
$3^2 = 3 \times 3 = 9$	$7^2 = 7 \times 7 = 49$	$11^2 = 11 \times 11 = 121$
$4^2 = 4 \times 4 = 16$	$8^2 = 8 \times 8 = 64$	$12^2 = 12 \times 12 = 144$

Square Roots

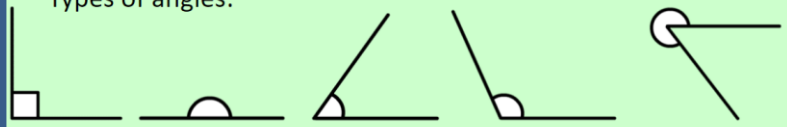
$\sqrt{1} = \pm 1$	$\sqrt{25} = \pm 5$	$\sqrt{81} = \pm 9$
$\sqrt{4} = \pm 2$	$\sqrt{36} = \pm 6$	$\sqrt{100} = \pm 10$
$\sqrt{9} = \pm 3$	$\sqrt{49} = \pm 7$	$\sqrt{121} = \pm 11$
$\sqrt{16} = \pm 4$	$\sqrt{64} = \pm 8$	$\sqrt{144} = \pm 12$

Websites to help you with understanding and revision

- SparxMaths.com
- CorbettMaths.com
- Trafalgar Maths Site
- Maths Genie
- On Maths

Year 7 Maths Term 5: Geometry, constructions and properties of shape

Types of angles:

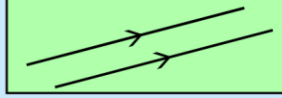


Right angle	Straight Line	Acute Angle	Obtuse Angle	Reflex Angle
L shaped and is shown as a box	Straight Line	Smaller than right angle	Bigger than a right angle but smaller than a straight line	Bigger than a straight line, the angle is on the outside

Sparx M502

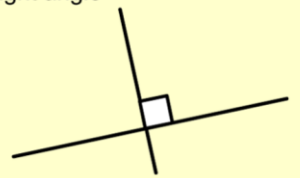
Parallel and Perpendicular Lines

Parallel lines are two lines which travel in the same direction
They are always the same distance apart and will never meet



Parallel lines are marked with arrows

Perpendicular lines meet at a right angle



Drawing a Perpendicular Bisector of a Line

Sparx M239

Bisecting a line means 'cutting it in half'
You need to use a set of compasses and a ruler to bisect a line

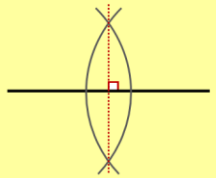
Place the point of a compass on one end of the line and open it so that it is more past the halfway point of the line

Draw an arc above and below the line

Move the point of the compass to the other end of the line (keeping it the same size)

Draw another arc above and below the line

Join the points where the arcs cross with a ruler to form the perpendicular bisector



Bisecting an angle

Sparx M232

Bisecting a line means 'cutting it in half'
You need to use a set of compasses and a ruler to bisect a line

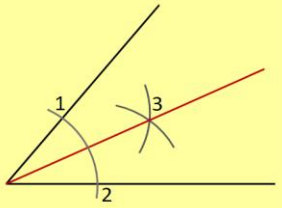
Place the point of a compass at the corner of the two lines and extend open

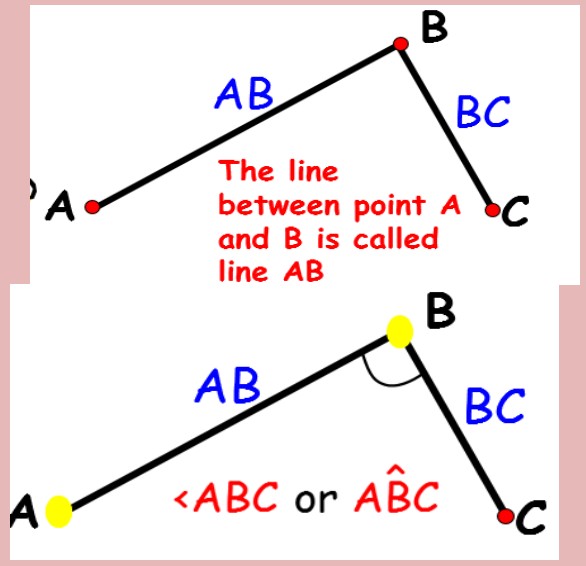
Place an arc through the both lines that are creating the angle

Keeping the compass at the same width, place the compass where the arc crosses the line (1) and draw an arc

Repeat the process from the other cross (2)

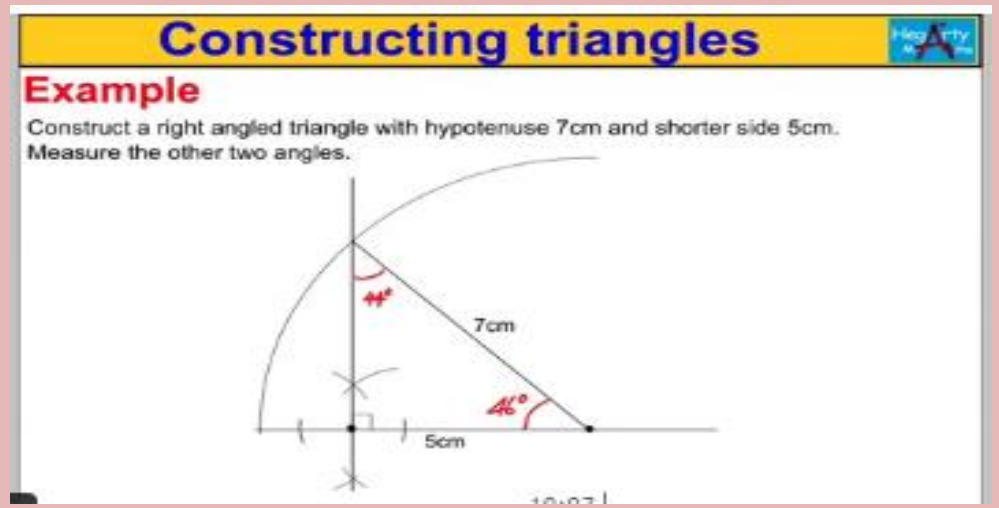
Draw a line to the point where the two arcs cross to make the angle bisector

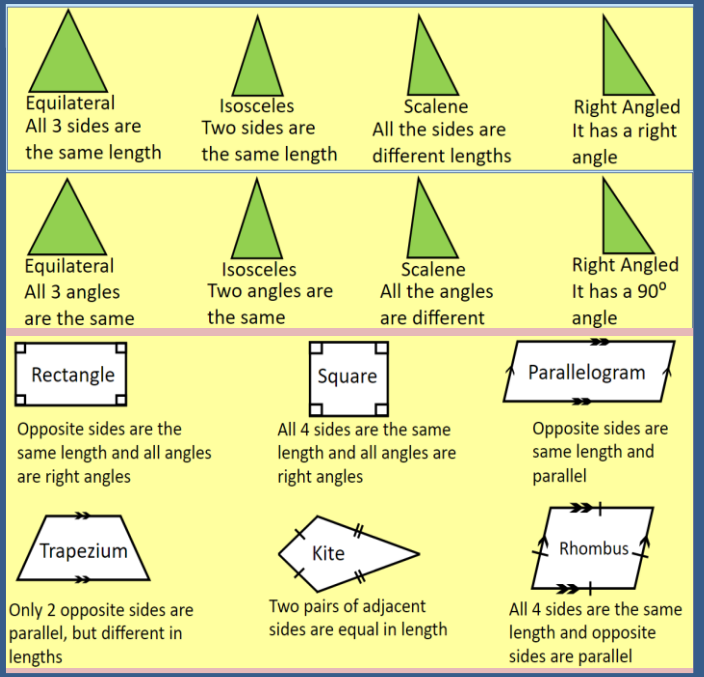




Construct triangles using protractor and compass.

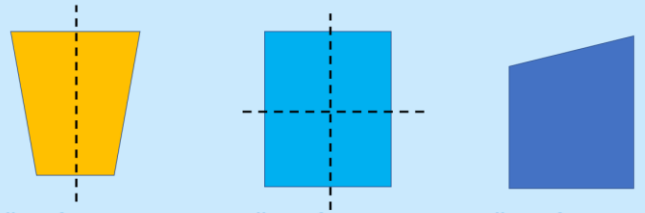
Sparx M565





Reflection Symmetry

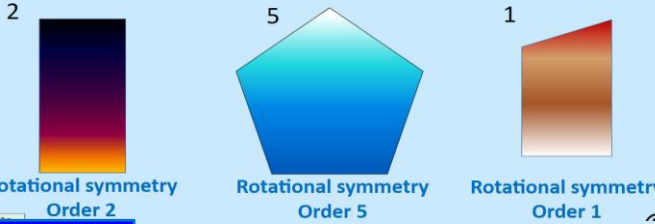
A shape is symmetrical if you can draw a line through it and it is the same both sides
If you fold the shape along the line, one side should fit on top of the other



1 line of symmetry | 2 lines of symmetry | 0 lines of symmetry

Rotational Symmetry

A shape has rotational symmetry if it fits inside itself more than once when rotated
The order of rotational symmetry is the number of times the shape fits inside itself



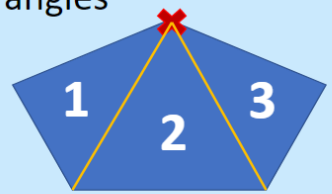
Rotational symmetry Order 2 | Rotational symmetry Order 5 | Rotational symmetry Order 1

Sparx M523

Year 7 Maths Term 5: Geometrical Reasoning

Angles in a Polygon

Any polygon can be split into triangles to find the sum of the interior angles



Step 1: Pick a corner

Step 2: Draw the lines to the other corners from the chosen point

Step 3: Multiple the number of triangles by 180^o

Sum of Interior Angles = $3 \times 180^o = 540^o$

There are two fewer triangles than sides so:

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

Sparx M679, M653

Interior & Exterior Angles

You can calculate the interior angle of any regular polygon by dividing the sum of the interior angles by the number of sides

Example: Calculate the size of the interior and exterior angles in a regular octagon

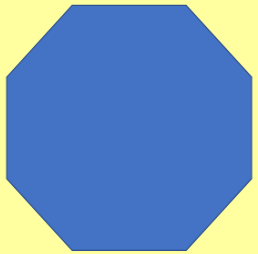
Sum of the interior angles = $(8 - 2) \times 180^o$

$= 1080^o$

Interior angle = $1080^o \div$ number of sides

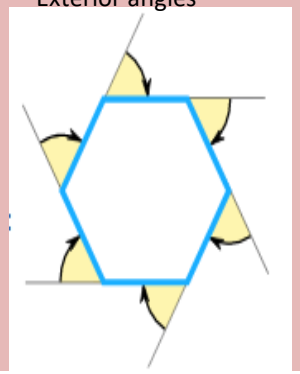
$= 1080^o \div 8 = \mathbf{135^o}$

Exterior angle = $180^o - 135 = 45^o$

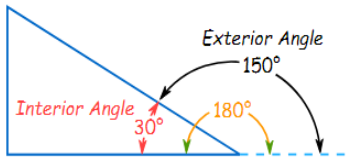


Exterior angle of a regular shape can also be calculated by dividing 360 by the number of sides $360^o \div 8 = 45^o$

Exterior angles



An Interior Angle is an angle inside a shape

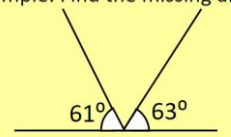


Sparx M818

Straight Lines

Angles on a straight line equal 180^o

Example: Find the missing angle



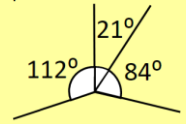
Subtract the know angles from 180^o

$180 - 61 - 63 = 56^o$

Around a Point

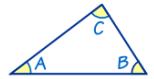
Angles around a point add up to 360^o

Example: Find the missing angle?



Subtract the know angles from 360^o

$360 - 112 - 21 - 84 = 143^o$



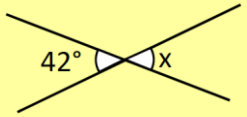
In a triangle, the three interior angles always add to 180°:

A + B + C = 180°

Sparx M163, M606

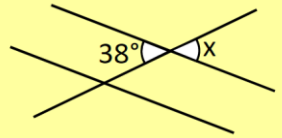
Vertically opposite, alternate, corresponding and co-interior angles

a)



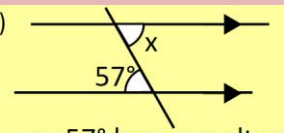
x = 42 because vertically opposite angles are equal

b)



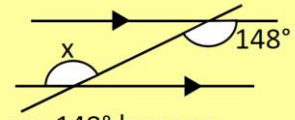
x = 38 because vertically opposite angles are equal

a)



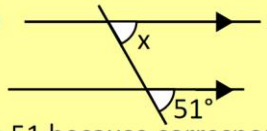
x = 57° because alternate angles are equal

b)



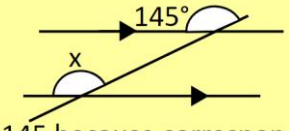
x = 148° because alternate angles are equal

a)



x = 51 because corresponding angles are equal

b)

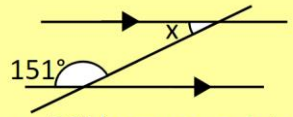


x = 145 because corresponding angles are equal

a)

x = 130° because co-interior angles sum to 180°

b)



x = 29° because co-interior angles sum to 180°

Addition and Subtraction

Year 7 Maths Terms 5 & 6 Number

Mental Methods

Complements

Sparx M952

Group numbers that add to a multiple of 10 together to make numbers simpler to add or subtract:

3 + 4 + 26 + 17

20 + 30 = 50

Partitioning

Break down the number you are adding so you can do the calculation in stages:

54 + 68 =

50 + 60 = 110

4 + 8 = 12

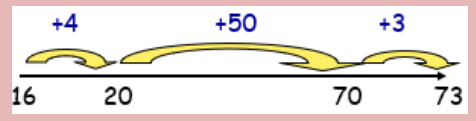
54 + 68 = 122

Counting on

Sparx M347

Find the difference between two numbers by counting on from the smaller

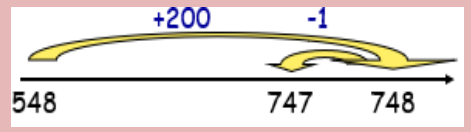
73 - 16 = 57



Compensation

Solve problems by adding or subtracting a near multiple of 10 then adjusting

548 + 199 = 747



Estimation

Sparx M878

When we estimate, we round to one significant figure. It is a good strategy to work out a rough size of a calculation.

Example

Estimate 0.724 + 0.849

Round each of them to 1 s.f.

Answer: **0.7 + 0.8 = 1.5**

This is an **under-estimate** as we rounded each number down.

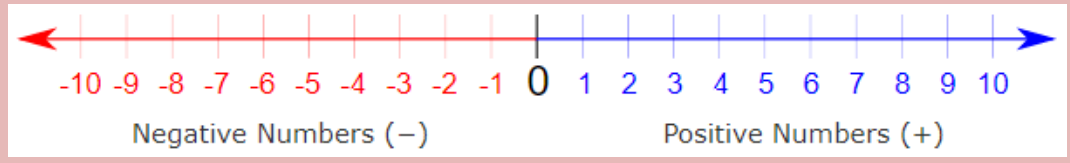
Example

Estimate 374 + 297

Round each of them to 1 s.f.

Answer: **400 + 300 = 700**

This is an **over-estimate** as we rounded each number up.



Negative Numbers

Sparx M106

+ + = +

– – = +

+ – = –

– + = –

Same signs together give a positive: 3 + (+2) = 3 + 2 = 5

Same signs together give a positive: 3 – (-2) = 3 + 2 = 5

Different signs together give a negative: 3 + (-2) = 3 – 2 = 1

Different signs together give a negative: 3 – (+2) = 3 – 2 = 1

Column Method – Addition

- Estimate your answer first.
- Remember to line up the columns by value.
  - Use the decimal points as the marker to line up the columns
  - Write decimals with the same number of decimal places – fill in with zeros as needed
- Add columns from right - "carry" tens to next column over …. and remember to add onto total for that column

543 + 379 =

5 4 3
+ 3 7 9
9 2 2
1 1

Sparx M928

5.4 + 3.79 =

5 . 4 0
+ 3 . 7 9
9 . 1 9
1

Sparx M429

Careful! This changes sign of the middle operation NOT the answer

Column Method – Subtraction

- **Estimate** your answer first.
- Remember to line up the columns by value … and to write the number to be taken away on the bottom
  - Use the decimal points as the marker to line up the columns
  - Write decimals with the same number of decimal places – fill in with zeros as needed
- Subtract columns from right
  - If the bottom digit is bigger than the top, "take 10" from the next column over which has a digit > 0
  - Move "taken 10" back one column at a time to account for size!

543 - 379

4 13
5 4 3
- 3 7 9
1 6 4

Sparx M347

9.1 - 2.76

8 10
9 1 0
- 2 . 7 6
6 . 3 4

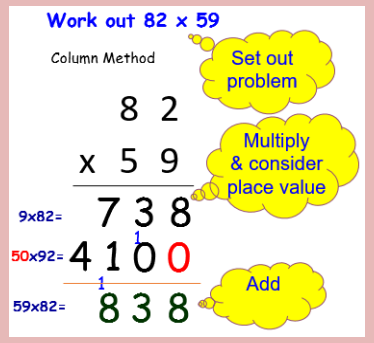
5.04 - 3.79

4 9
5 0 4
- 3 . 7 9
1 . 2 5

Sparx M152

Written Multiplication - Integers

- Consider place value and add a 0 on the second line
- Include your carries



Sparx M187

Multiplying and Dividing Negatives

When multiplying or dividing two numbers, if the signs are the same the answer is positive
If the signs are different, then the answer is negative

+ x + = +	Examples:	+ ÷ + = +
− x − = +	1) −7 x 5 = -35	− ÷ − = +
+ x − = −	2) −3 x −7 = 21	+ ÷ − = −
− x + = −	3) 24 ÷ −8 = −3	− ÷ + = −
	4) −30 ÷ −5 = 6	

Sparx M288

Short Division ("Bus Stop")

Division into an integer

2931 ÷ 3 = 977

0 9 7 7
3) 2 9 3 1

Division into an integer with remainder

1985 ÷ 4 = 496.25

1) Continue ÷ into decimals
2) Remainder as fraction

0 4 9 6.2 5
4) 1 9 8 5.1 0 2 0 0

$496\frac{1}{4}$

e.g."1 out of 4" is left over

Division into a decimal

27.6 ÷ 6 = 4.6

0 4 . 6
6) 2 7 . 6

Division into a decimal with "remainder"

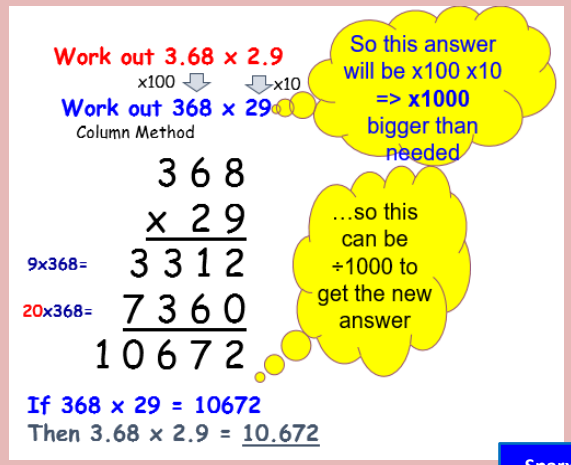
57.2 ÷ 8 = 7.15

0 7 . 1 5
8) 5 7 . 2 0

Sparx M354

Written Multiplication - Decimals

- Multiply both decimals by a power of 10 to change them to integers
- Divide by the same power of 10 to obtain your final answer



Sparx M803

Long Division

2829 ÷ 23 = 123

123
23) 2829
- 23
52
- 46
69
- 69
0

Show the subtraction problem that finds the "carry"

Rather than squeeze the "carry" under the bus-stop, bring down the next digit to the carry. The number you need to divide into now can be clearly seen.

Dividing by a decimal

- Change the number you are dividing by into an integer by multiplying by a power of 10.
- Multiply the dividend by the same power of 10.
- There is no need to alter you answer at the end.

Example: Calculate 6.4 ÷ 0.08	6.4 ÷ 0.08
Step 1: Multiply both numbers by 100	x100 ↓ x100 ↓
Step 2: Calculate the answer	= 640 ÷ 8 = 80

Sparx M263

B	• Do brackets first
I	• Then indices or square roots
D M	• Then division and multiplication, reading from left to right
A S	• Then add and subtract, reading from left to right

3 – 5 + 2 = 0 (not -4)
Add and subtract have the same precedence, so you read from left to right.

Sparx M521

Year 7 Maths Term 6 - Sets and Probability

Keywords

Set: collection of things
Element: each item in a set is called an element
Intersection: the overlapping part of a Venn diagram (AND ∩)
Union: two ellipses that join (OR ∪)
Mutually Exclusive: events that do not occur at the same time
Probability: likelihood of an event happening
Bias: a built-in error that makes all values wrong (unequal) by a certain amount, e.g. a weighted dice
Fair: there is zero bias and all outcomes have an equal likelihood
Random: something happens by chance and is unable to be predicted.

Identify and Represent sets

A set is a collection of things –you write sets inside curly brackets { }

The universal set has this symbol ξ–this means EVERYTHING in the Venn diagram is in this set

ξ= {the numbers between 1 and 50 inclusive}

My sets can include every number between 1 and 50 including those numbers

A= {Square numbers}
A= {1, 4, 9, 16 ,25, 36, 49}

All the numbers in set A are square number and between 1 and 50

Probability of a single event

Probability = number of times event happens / total number of possible outcomes

P(Blue) = 4/10 ← There are 4 blue sectors ← There are 10 sectors overall

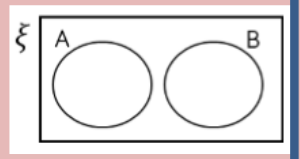
Probability notation:
P(event)

The probability of getting a blue ball is $\frac{1}{5}$

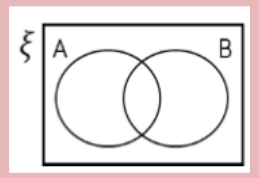
∴ The probability of NOT getting a blue ball is $\frac{4}{5}$

Interpret and create Venn diagrams

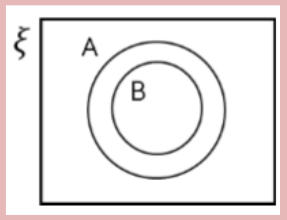
Mutually exclusive sets
The two sets have nothing in common
No overlap



Union of sets
The two sets have some elements in common –they are placed in the intersection

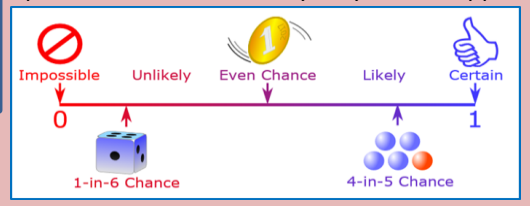


Subset
All of set B is also in Set A so the ellipse fits inside the set.



The box
Around the outside of every Venn diagram will be a box. If an element is not part of any set it is placed outside an ellipse but inside the box

A **Probability Scale** is used to describe all probabilities, or how likely they are to happen



Sparx M655

If an event is **Certain** its probability is 1
Boxing Day will follow Christmas Day in December

If an event is **Impossible** its probability is 0
You will grow to be 5m tall

An event has a probability **Evens** if the two outcomes are equally likely. Flipping a coin and getting heads. The probability of getting a head is ½ or 50%

A **Sample Space** is way of recording the outcomes of two events

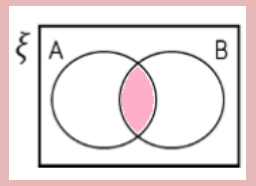
This sample space records all the possible outcomes of a game of rock, paper scissors

	ROCK	PAPER	SCISSORS
ROCK	RR	RP	RS
PAPER	PR	PP	PS

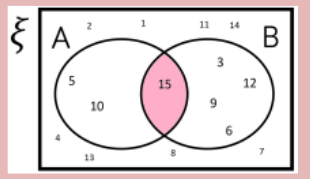
Intersection of sets

Elements in the intersection are in set A AND set B

The notation for this is $A \cap B$



ξ= {the numbers between 1 and 15
A= {Multiples of B= {Multiples of 3}

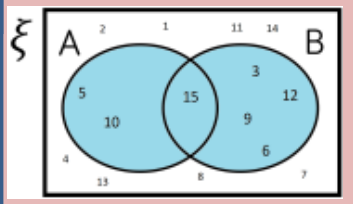


The element in $A \cap B$ is 15

In this example there is only one number that is both a multiple of 3 and a multiple of 5 between 1 and 15

Union of sets

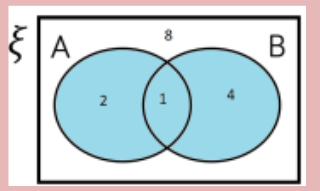
Elements in the union could be in set A **OR** set B



The notation for this is $A \cup B$

ξ= {the numbers between 1 and 15 inclusive}
A= {Multiples of 5}
B= {Multiples of 3}

The elements in $A \cup B$ are 5, 10, 15, 3, 9, 6, 12



This Venn shows the number of elements in each set

There are 7 elements that are either a multiple of 5 OR a multiple of 3 between 1 and 15

Probability is always a value between 0 and 1

0 ≤ probability ≤ 1

Year 7 Maths Term 6: Prime Numbers and Factors

Prime numbers:
integers have only 2 factors – 1 and itself. The first 25 prime numbers are:

2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
53
59
61
67
71
73
79
83
89
97

Sparx M322

Factors are numbers that can be divided evenly into the given number,

Multiples are the results of multiplying that number by another.

Sparx M108

Write 24 as the product of its prime factors

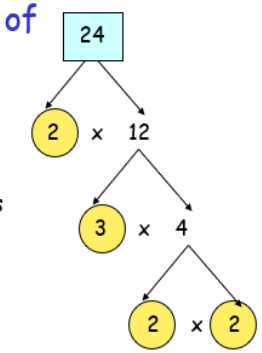
Step 1: Find two numbers which multiply together to make the number

Step 2: Circle any prime factors

Step 3: Continue to break down any factors until they are prime factors.

Step 4: Write the original number as the product of its prime factors

Step 5: Can you simplify using index notation?



$24 = 2 \times 2 \times 2 \times 3$
$= 2^3 \times 3$

Square numbers

Odd even odd

1, 4, 9, 16, 25, 36, 49, 64 ...

Representations are useful to understand a square number n^2

Triangular numbers

Add two consecutive triangular numbers and get a square number

1, 3, 6, 10, 15, 21, 28, 36, 45...

Representations are useful – an extra counter is added to each new row

The **highest common factor** is the biggest number that is a factor of both numbers in question.

Example
What is the highest common factor of 24 and 30?
List the factors of both numbers and circle the biggest one in both lists.

24 and 30

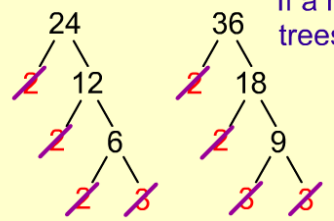
1, 24	1, 30
2, 12,	2, 15
3, 8	3, 10
4, 6	5, 6

1, 2, 3, 4, 6 8, 12, 24
1, 2, 3, 5, 6 10, 15, 30

HCF = 6

Example: Find the HCF of 24 and 36

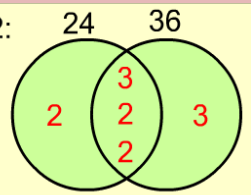
Step 1:



If a number is in both trees it goes in the middle

The leftovers go into their group

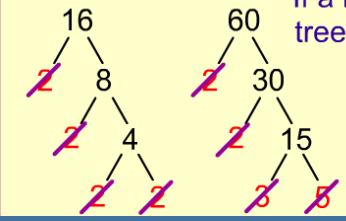
Step 2:



Step 3: HCF = 3 x 2 x 2 = 12

Example: Find the LCM of 16 and 60

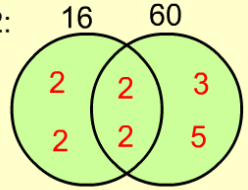
Step 1:



If a number is in both trees it goes in the middle

The leftovers go into their group

Step 2:

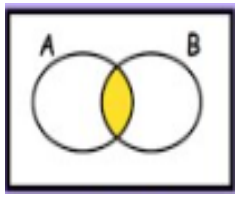


Step 3: LCM = 2 x 2 x 2 x 2 x 3 x 5

Using prime factors for predictions

e.g. 60 is 30 x 2 is 2 x 3 x 5 x 2
150 is 30 x 5 is 2 x 3 x 5 x 5

Venn Diagrams can be used to show the relationship between multiple groups of things and how they overlap.
These diagrams can be used to calculate probabilities

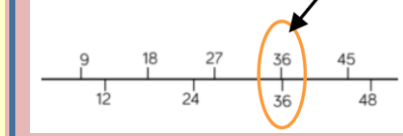


LCM of 9 and 12

9: 9, 18, 27, 36, 45, 54
12: 12, 24, 36, 48, 60

LCM = 36

The first time the multiples match



Conjecture A pattern that is noticed for many cases

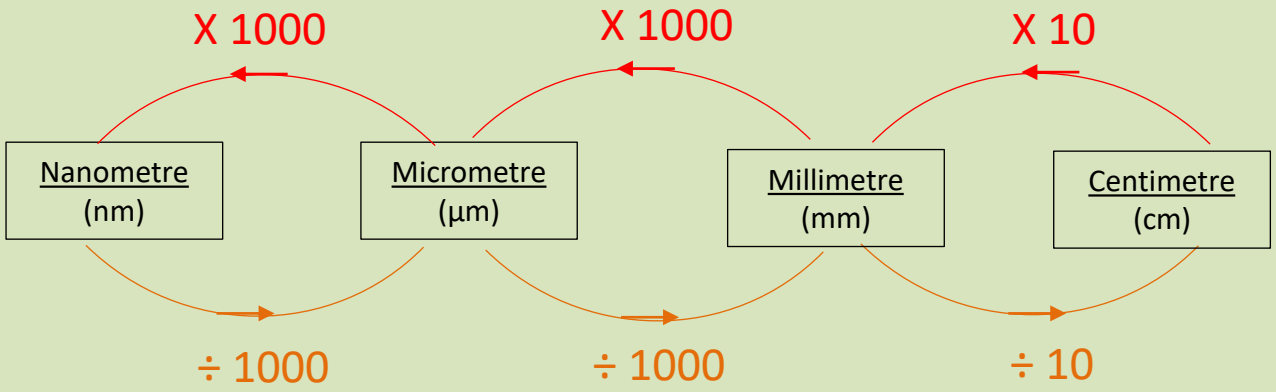
Counter examples Only one counter example is needed to disprove a conjecture

Science: Useful Information

Key Word / Term	Definition
Accuracy	Results are close to the true value
Precision	Results are similar to each other but not necessarily close to the true value
Repeatable	Similar results are obtained if the investigation is done again by the same person
Reproducible	Similar results are obtained if it is repeated by a different person
Resolution	Is the smallest change a measuring instrument can detect
Validity	A measure of how correct the results of an experiment are

Prefix	Number	Standard Form	e.g. metres
Giga	1,000,000,000	$1x10^{9}$	Gm
Mega	1,000,000	$1x10^{6}$	Mm
kilo	1,000	$1x10^{3}$	km
----------	1	1	m
milli	0.001	$1x10^{-3}$	mm
micro	0.000001	$1x10^{-6}$	µm
nano	0.000000001	$1x10^{-9}$	nm

Converting units of measure:



Variables:

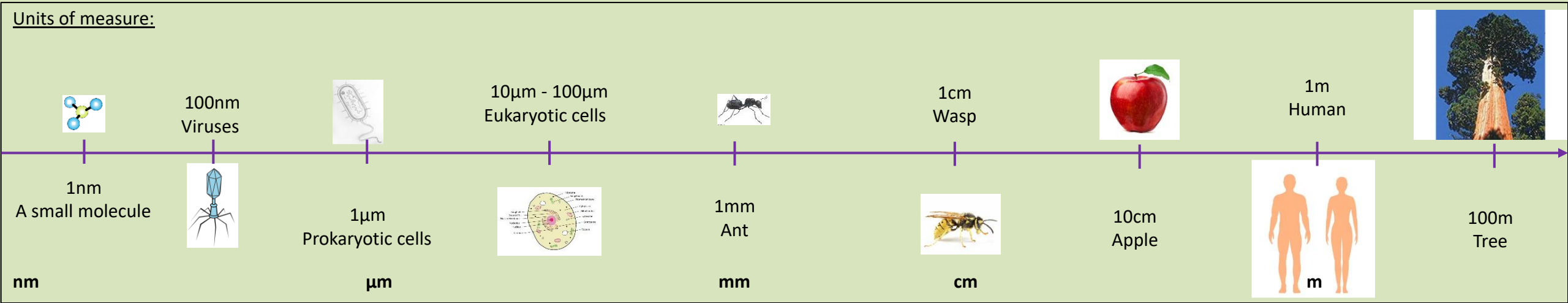
Independent: the variable that is being changed during the experiment

Dependent: the variable being tested or measured during the experiment

The independent variable affects the dependent variable, the others must be controlled

Control: Keep the same (there can be more than one control variable) so that they do not affect the independent variable

Units of measure:



The Periodic Table of 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											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
[223] **Fr** francium 87	[226] **Ra** radium 88	[227] **Ac*** actinium 89	[261] **Rf** rutherfordium 104	[262] **Db** dubnium 105	[266] **Sg** seaborgium 106	[264] **Bh** bohrium 107	[277] **Hs** hassium 108	[268] **Mt** meitnerium 109	[271] **Ds** darmstadtium 110	[272] **Rg** roentgenium 111	[285] **Cn** copernicium 112	[286] **Nh** nihonium 113	[289] **Fl** flerovium 114	[289] **Mc** moscovium 115	[293] **Lv** livermorium 116	[294] **Ts** tennessine 117	[294] **Og** oganesson 118

Key

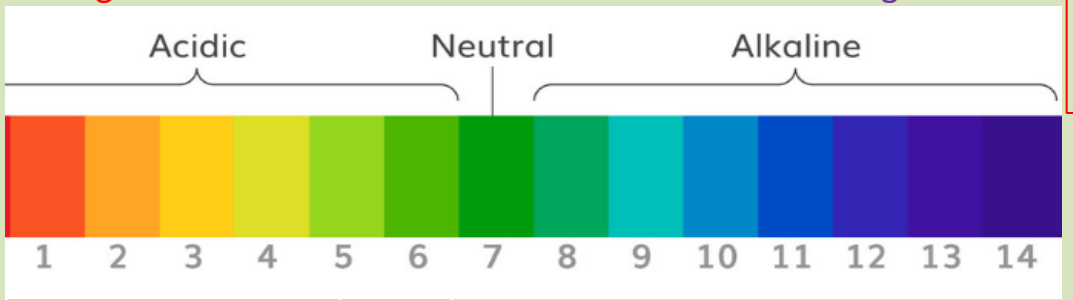
relative atomic mass
atomic symbol
name
atomic (proton) number

* The Lanthanides (atomic numbers 58 – 71) and the Actinides (atomic numbers 90 – 103) have been omitted.

Relative atomic masses for **Cu** and **Cl** have not been rounded to the nearest whole number.

KS3 Chemistry – Acids and alkalis

Strong acid Weak Acid Weak Alkali Strong Alkali



Substance	pH
Battery acid	pH1
Lemon juice	pH2
Vinegar	pH2
Orange juice	pH3
Acid rain	pH4
Black coffee	pH5

Substance	pH
Urine (wee)	pH6
Water	pH7
Eggs	pH8
Very soapy water	pH12
bleach	pH13
Drain cleaner	pH14

Corrosive hazard sign. Usually found on more concentrated acids and alkalis.

Irritant hazard sign, used for substances that are not corrosive but are irritants. Usually found on more dilute acids and alkali.

When an acid reacts with a metal it will produce a metal salt and hydrogen gas- you can test this by putting a lit splint to it: you will hear a squeaky pop as the hydrogen combusts

Uses of acids/alkalis

Acids and alkalis can be added to lakes and soils to neutralise them so that they are habitable. However some plants prefer to grow in acidic (such as blueberries or alkaline soils (lavender)

Some of the salts formed from neutralisation can be used as fertilisers for plants/crops to increase the growth speed

Reactants → Products

Acid + Alkali → salt + water

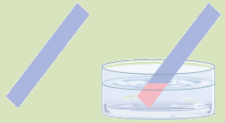
Acid + metal → salt + hydrogen

Acid + metal carbonate → salt + water + carbon dioxide

Acid / Alkali	Formula	Salt that is made
Hydrochloric acid	HCl	Chloride
Sulfuric acid	H_2SO_4	Sulfate
Nitric acid	HNO_3	Nitrate
Sodium hydroxide	NaOH	N/A

Keyword	Definition
Acid	An acid has a pH value of less than 7
Alkali	An alkali has a pH value of 8 or higher and dissolves in water
Base	A substance that neutralises an acid but does not dissolve in water
Citric acid	Acid found in lemons
Concentrated	A substance is concentrated if it has a large number of particles in a litre of water
Corrosive	A substance that causes damage
Dilute	A substance with a small number of particles in a litre of water
Indicator	A substance that changes colour in acid or alkali
Litmus paper	There is red and blue litmus paper, they are indicators
Neutral	A solution with pH of 7 e.g. water
Neutralisation	Adding an alkali to an acid to make a neutral solution
pH scale	The pH scale shows whether a substance is an acid or alkali
Universal Indicator	An indicator that changes colour to show the pH

Blue litmus paper turns red when it is put into an acid.
If the substance was an alkali or neutral, the blue litmus paper would stay blue.



KS3 Physics:
Energy and changes in systems

Energy transformations

Energy transformations describe how the transforms from one form to another.

Chemical energy store → kinetic energy store + sound energy store + thermal energy store

Chemical energy store → Electrical energy store → Light energy store + thermal energy store

Energy transfers can be thought of emptying one energy store and filling another energy store

The arrow means transforms into

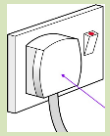
Types of energy store

- **Kinetic energy store** – Energy stored by moving objects

- **Sound energy store**

- **Light energy store**
- **Elastic potential energy store** – Energy stored in compressed springs or stretched elastic bands

- **Thermal energy store**
- **Gravitational potential energy store** – Energy stored by lifting something against the force of gravity



- **Electrical energy store**
- **Chemical potential energy store** – Energy stored in chemical bonds examples include batteries, coal, gas, and food

- **Nuclear energy store**

- **Magnetic energy store**

Energy is measured in Joules (J)

Energy is always conserved, it can not be created or destroyed only transformed from one form to another

The input energy must equal the output energy

Chemical energy store → Light energy store + thermal energy store

200J → 40J + 160J

Work done is the amount of energy transferred during an energy transfer

It can be calculated by using the following equation

Work done (J) = Force (N) x distance (m)

If a person lifts a 10 newton weight from the floor 1.5m off the ground we could calculate the work done (energy transferred) during this process

Work done = Force x distance

W = F x d

W = 10 x 1.5

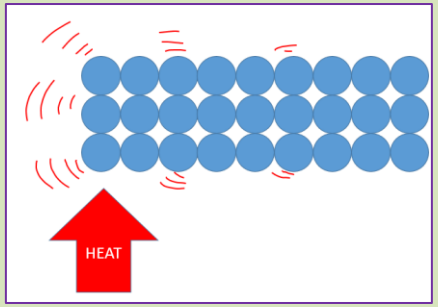
W = 15J

Always write out the equation you will use, substitute in the numbers, calculate the answer and give the unit

Mechanical energy transfer - energy transferred by moving arts of machines and when an objects motion is changed
Radiative energy transfer – by radiation such as IR radiation or light
Dissipation – energy is transferred to the surroundings

Units

Force – Newtons (N)
Energy – Joules (J)
Distance – meters (m)



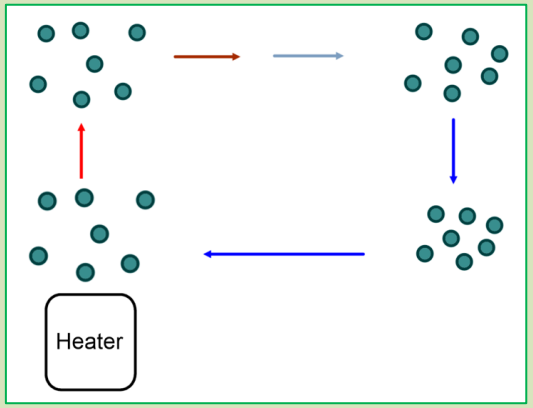
Conduction

Conduction transfers heat through a solid by increasing the kinetic energy of the particles (making them vibrate faster). This energy is then transferred to neighbouring particles causing thermal energy to transfer through the object.

Metals are very good conductors
Non-metals and gases are poor conductors. A poor conductor is called an **insulator**

Insulation

Insulators like foam and wool often trap air which is a poor conductor. They also prevent convection currents. Insulation reduces the rate of thermal energy transfer. So insulating a hot object will make stay warmer for longer. However insulating a cold object will make it stay cold for longer too.



Convection

Convection transfers heat through fluids (gases and liquids)

Particles of a fluid are heated, they move faster and expand, this makes the group of particles less dense than the surrounding particles so they rise. Once they near the top of the container they will be forced across in a different direction. As the particles move away from the heater they cool, contract and become more dense again falling to the base of the container. They then repeat this cycle creating a **convection current**, which raises the temperature of the entire fluid.

Radiation

Heat radiation is known as infrared radiation (IR radiation). It is different from the other types of heat transfer as it does not require particles. It is an electromagnetic wave that can travel through a vacuum and is how energy travels through space from the sun to the earth.

Different surfaces are better/worse at absorbing or Infrared radiation.

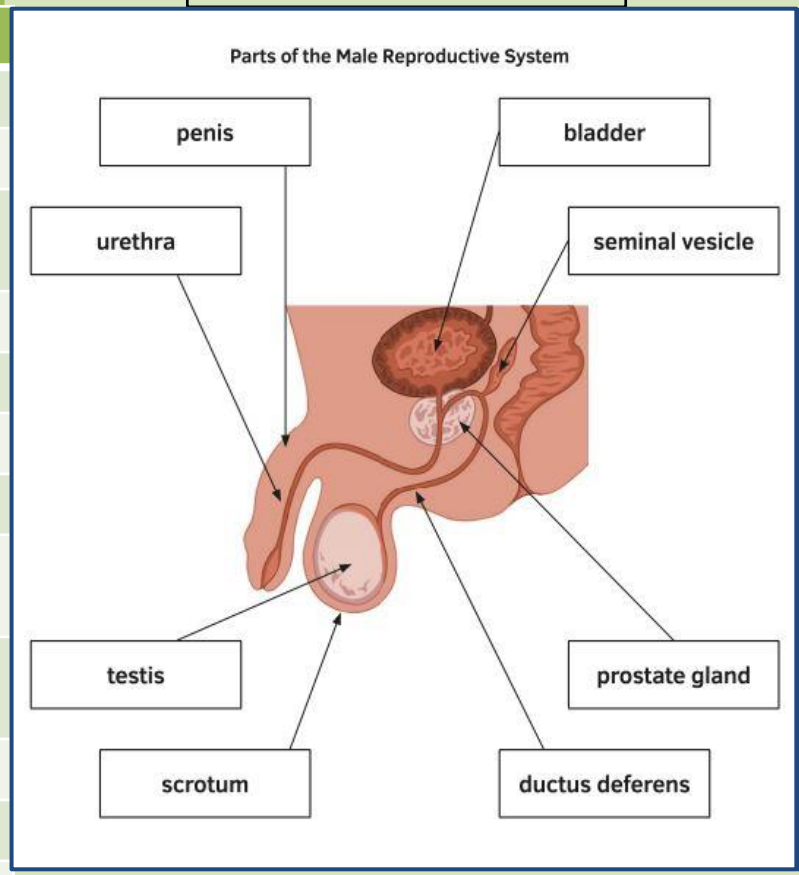
Emitting IR radiation
The best surfaces at emitting IR radiation are matte dark surfaces – Matte Black
The worst surfaces at emitting IR radiation are light shiny surfaces – shiny silver
Absorbing IR radiation
The best surfaces at absorbing IR radiation are also matte dark surfaces – Matte Black
The worst surfaces at absorbing IR radiation are also are light shiny surfaces – shiny silver

Key words and meanings in relation to energy transfer topic
Emit – give out
Absorb – take in
Density – how closely packed **particles** are to each other
Expand – take up more space
Contract – particles take up less space
Work done – energy transfer

KS3 Biology: Reproduction

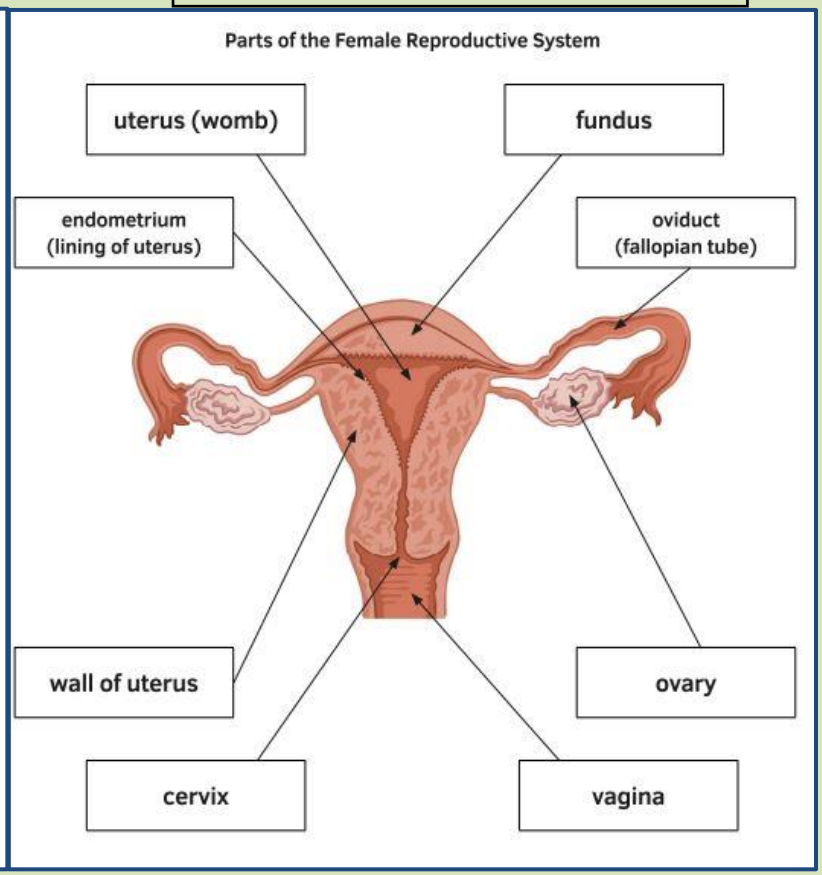
Key word	Definition
Ovary	Organ where egg cells develop in females
Oviduct	Egg tube connecting ovary to womb.
Uterus	Organ where baby develops (also called the womb)
Cervix	Ring of muscle at bottom of the uterus
Vagina	Tube going from outside to the uterus.
Testes	Organ producing sperm in males
Scrotum	Bag of skin containing testes in males
Sperm duct	Tube that carries sperm from the testes to the urethra
Glans	Adds a special fluid to sperm to make it easier for them to swim
Fertilisation	Joining of sperm and egg
Embryo	Tiny new human life
Urethra	Tube down centre of penis carrying sperm
Hormone	Chemical messenger carried in blood
Menstruation	When lining of uterus passes out of the vagina, also called period
Ovulation	Release of an egg from an ovary
Amnion	Bag containing amniotic fluid
Umbilical cord	Cord connecting mother to unborn baby
Placenta	Organ attached to uterus wall, exchanging materials between mother and baby

Male reproductive System



Sperm are produced in the testes, and travel through the urethra and penis during sexual intercourse. They collect useful lubricants at the seminal vesicle to become semen.

Female Reproductive System



Eggs are produced in the ovary, and released once a month during ovulation. The eggs travel through the fallopian tube (or oviduct) towards the uterus (or womb).

Fertilisation of the egg

If a sperm meets an egg in the fallopian tube, fertilisation occurs. The sperm nucleus fuses with the egg nucleus to form a tiny zygote.

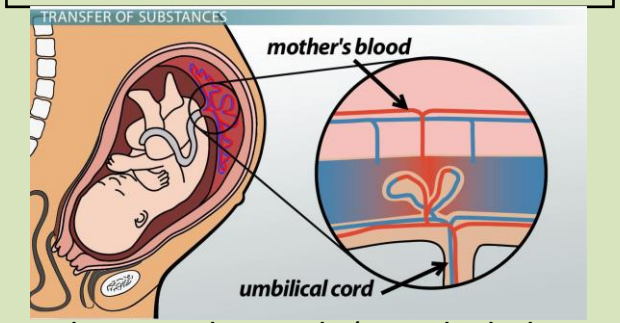
Gestation and Birth

The normal period of gestation in humans is 9 months. The amniotic fluid comes out and then the baby is born head first through the cervix. The umbilical cord needs to be cut.

The Menstrual Cycle

The menstrual cycle lasts about 28 days in females, and is controlled by hormones. Every 28 days the lining of the uterus is passed out of the vagina along with a little blood. Periods help prepare women for becoming pregnant.

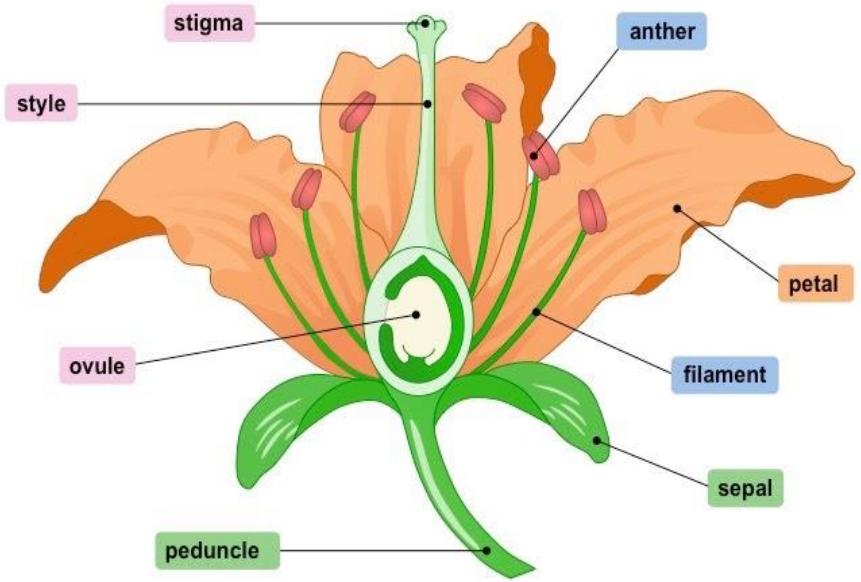
The Impact of lifestyle on the foetus



Any drugs or chemicals (e.g. alcohol or nicotine) the mother takes can get passed into the baby's blood.

Structure of a Flower

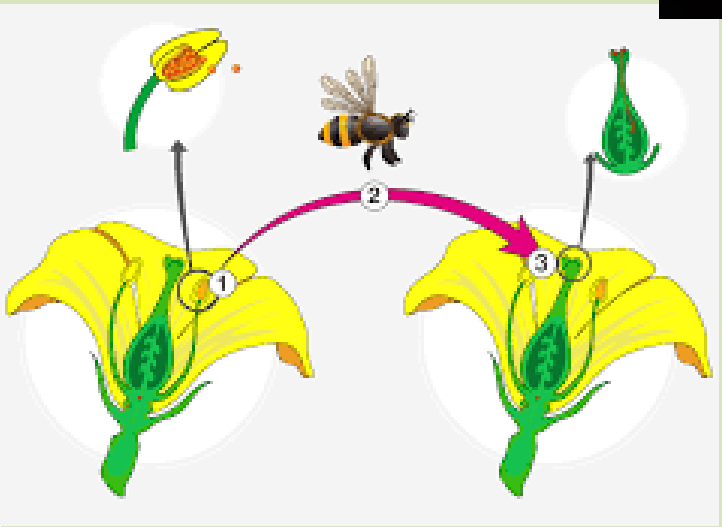
The flower is the reproductive organ of the plant.
The female part is the carpel, which consists of the stigma, style, ovary and ovule.
The male part is the stamen, which consists of the anther and filament.



Pollen grains – containing the male DNA - are produced in the anther.
The Ovule within the ovary contains the female DNA.
When pollen reaches the ovule fertilisation has occurred.
The pollen must arrive on the stigma, and then travels down the style through a pollen tube to reach the ovule. If fertilisation occurs an embryo forms which becomes a seed.

Methods of Pollination

Pollination is the transfer of pollen grains from the anther of one flower to the stigma of another.

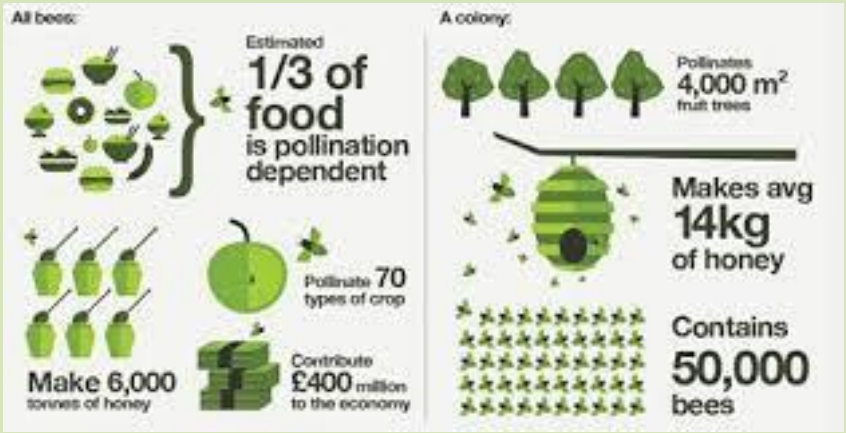


Pollination can be by wind or insect. Pollen grains have special shapes and designs depending on how they are transferred.

The importance of bees

Bees pollinate the majority of the World's crops. Their numbers are declining due to destruction of habitats, over-use of pesticides, and diseases.

Uses of bees



5. USING APPLICATIONS

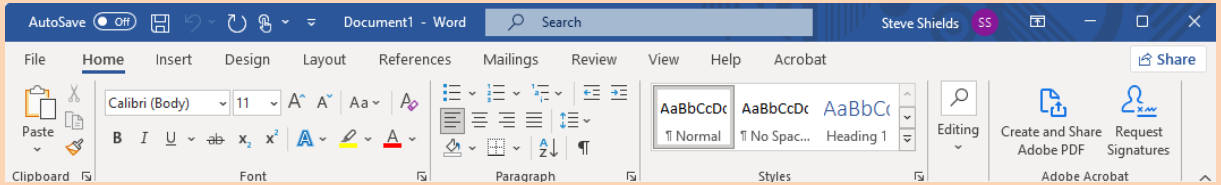
All word processing applications allow you to:

- enter and edit text
- save
- print
- cut/copy/paste
- check your spelling

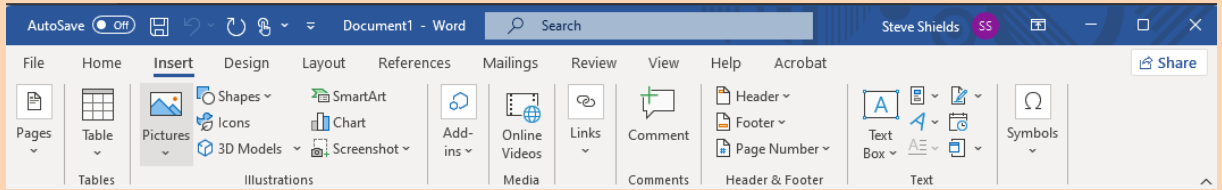
Microsoft Word

Word processors are examples of application software. They are designed to be used for authoring text and feature standard tools which are shared amongst all word-processor providers including: Apple's Pages, Google's Docs, Apache's Open Office Writer, and Microsoft's Word. In school, we are currently running Microsoft Word 2016, but we also have access to Google Docs (and you would be expected to be able to produce work in either application).

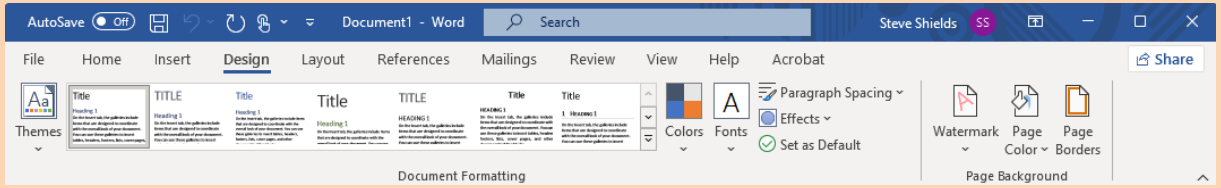
A Word processor is the best choice of software to use to produce reports, letters, an essay, a dissertation, or an article and also has some basic DTP features.



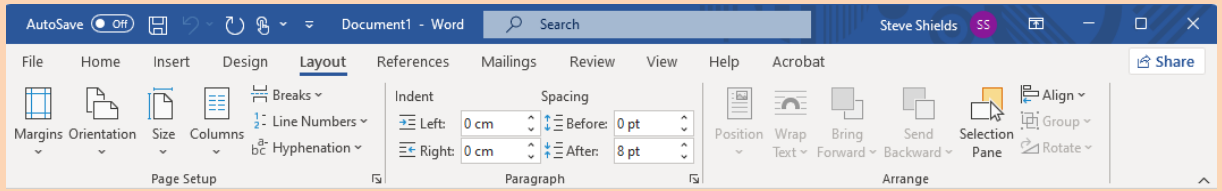
The **Home Ribbon** allows you to: **format** text, apply **styles**, utilise **find** and **replace**, and to apply formats such as **bullet styles** and **indents**. You can also access **colour fills** and **highlighting** from this ribbon too.



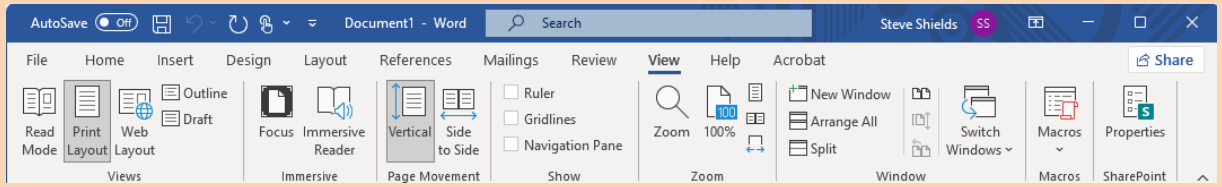
The **Insert Ribbon** allows you to: insert objects such as **Pictures**, **Shapes**, **Charts**, and **Text Boxes**. You can also control what goes in the **Headers** and **Footers** of your documents, and it also allows for the insertion of **hyperlinks**.



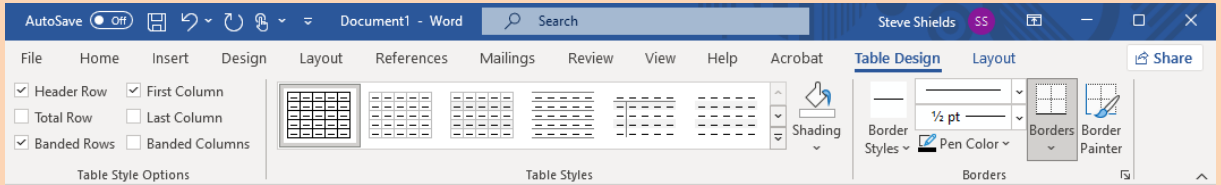
The **Design Ribbon** allows you to: change **page orientation**, **margin**, **page size**, and to divide your page into **columns**. It is where you insert **section breaks** (useful for switching between **Landscape** and **Portrait** pages) and can also help with the **alignment** of objects.



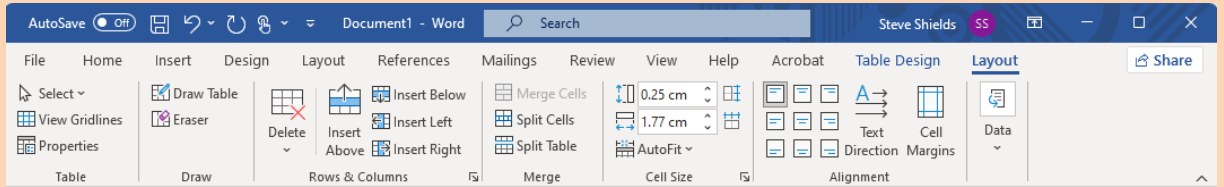
The **Layout Ribbon** allows you to: change page **orientation**, **margins**, **page size**, and to divide your page into **columns**. It is where you insert **section breaks** (useful for switching between **Landscape** and **Portrait** orientation) and can also help with the **alignment** of objects.



The **View Ribbon** allows you to switch between **print**, **web** and **read** views and it also allows you to open viewing tools such as the **navigation pane** (which allows you to navigate using **Header** styles). The **Split** feature is very useful for writing large documents as you can divide the document into two: think 'mirrored conclusion'.



The **Table Design Context Ribbon** gives you all of the options you need to *format* a table in a document. To access it, you simply **click on the table**. Here you can change **styles**, **background colours** (of **rows**, **columns**, or **cells**), change **border colours** and **styles**.



The **Table Layout Context Ribbon** gives you all of the options you need to *alter* a table in a document. To access it, you simply **click on the table**. Here you can add **columns**, **rows**, **change text direction**, adjust **properties** and both **split** and **merge** cells.

Many Office applications are now divided into **Ribbons** (collections of **tools**), **icons**, **menus** and the use of **Windows**.

5. USING APPLICATIONS

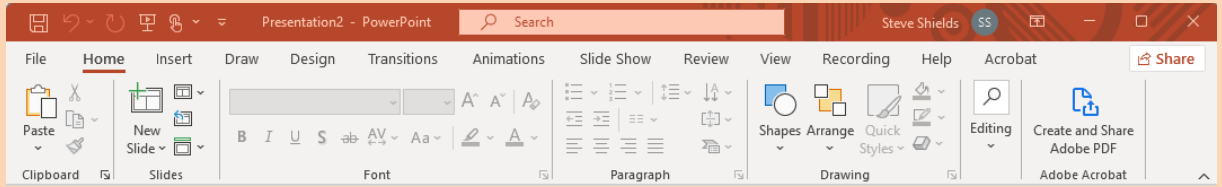
All presentation software applications allow you to:

- divide content into Slides
- Use animations/transitions
- Use multimedia
- Use Note features
- Play autonomously

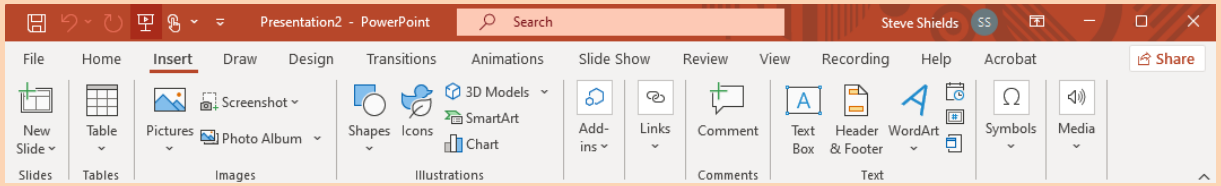
Microsoft PowerPoint

Presentation software are examples of application software. They are designed to be used for presenting and combining multimedia and feature standard tools which are shared amongst all presentation providers including: Apple's Keynote, Google's Slides, Apache's Open Office Impress, and Microsoft's PowerPoint. In school, we are currently running Microsoft PowerPoint, but we also have access to Google Slides (and you would be expected to be able to produce work in either application).

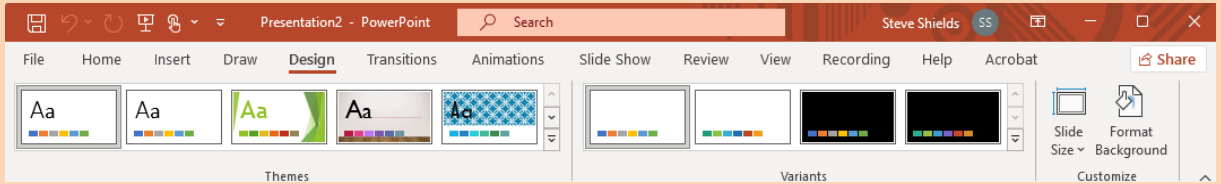
Presentation software is the best choice of software if you intend to present to an audience.



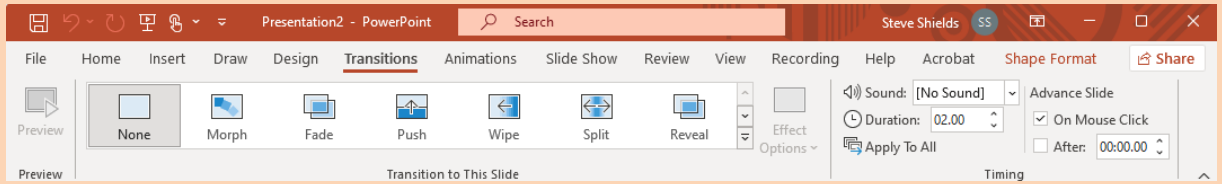
The **Home Ribbon** allows you to: **format** text, apply **styles**, utilise **find** and **replace**, and to apply formats such as **bullet styles** and **indents**. You can **arrange objects** and you can also **insert a New Slide**.



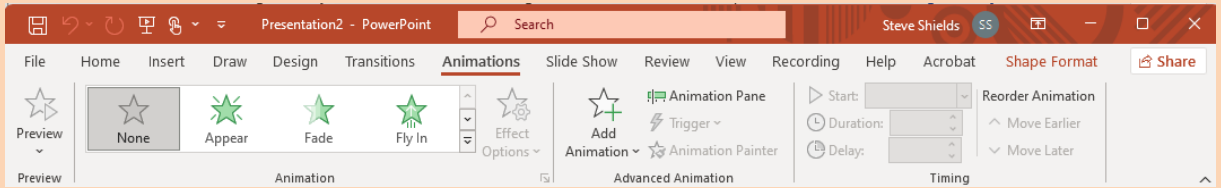
The **Insert Ribbon** allows you to insert the following: a **New Slide**, a **table**, **images**, **shapes** (including **SmartArt** and **Word Art**), **Charts**, a **Text Box**, **Headers** & **Footers**, **Slide Objects**, **Video**, **Audio** and **Symbols**.



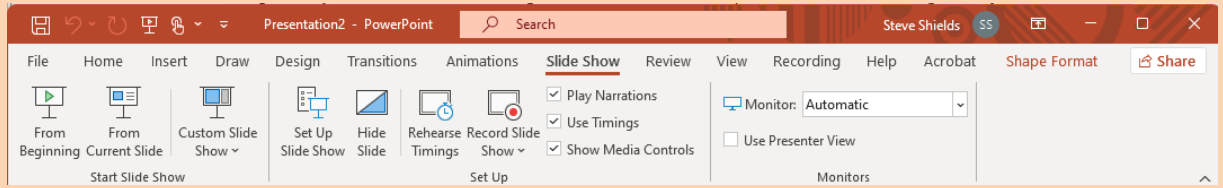
The **Design Ribbon** allows you to: change the **Themes** of the slide using templates (and **Variants** of each template), and it also allows you to alter the **Size** of the slide and to **Format** the **Background** colour.



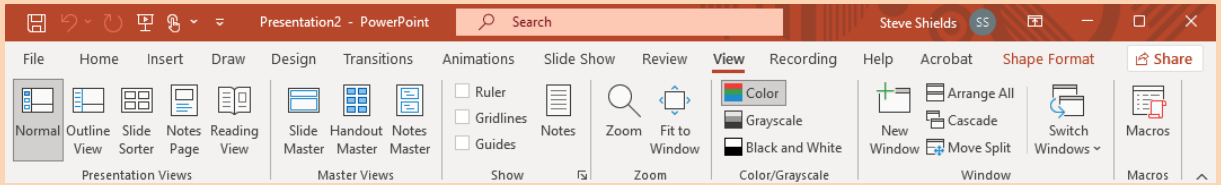
The **Transitions Ribbon** allows you to: select from a set of **Transitions** between slides, and to determine the **length** and **event** (either a **mouse event** or **automatic movement**) between transitions.



The **Animations Ribbon** allows you to: select the appropriate **entrance**, **emphasis** or **exit** animations for any given object, to **reorder** the **order** of animations, to change their **duration**.



The **Slide Show Ribbon** allows you to: decide **when** and **where** to play from, to change the **mode of presenting** (ranging from normal presentation, to **rehearsed** timings, to automatically playing at a **kiosk**) and to select the output device.



The **View Ribbon** allows you to: switch between **Normal**, **Outline**, **Slide Sorter**, **Notes**, and a **Reader** view. You can also switch to **Master** view for template design. You can turn on formatting guides such as **rulers**, **guides**, and **gridlines**. You can switch between **windows** and also change **colour** modes.

Increasingly, Presentation Software is taking on many of the features found in Screen Capture Software. This m,eans you can record your screen and embed a video of you as the presented within the presentation as well as use many of the features of a presentation. This can then be exported as a video and uploaded to a video streaming service such YouTube or Microsoft Stream.

5. USING APPLICATIONS

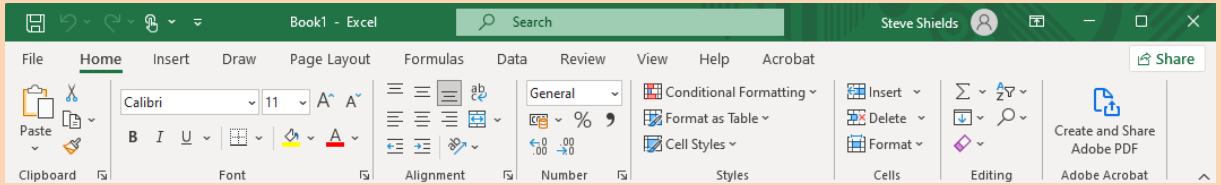
All spreadsheet applications allow you to:

- Use of formula for calculations
- Use functions for tasks
- Create charts and graphs
- Arrange data in a tabular form
- Use filtering by criteria

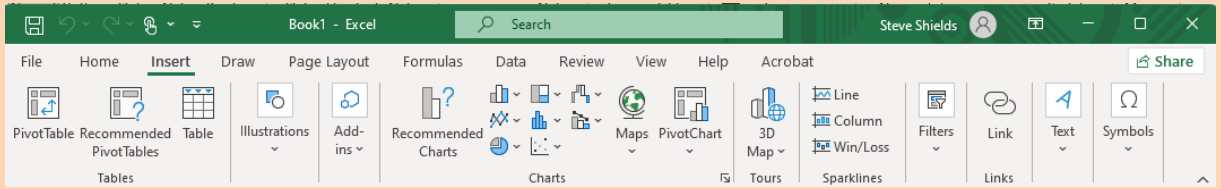
Microsoft Excel

Spreadsheets are examples of application software. They are designed to be used for the handling of number and graphical data and these features are shared amongst all word-processor providers including: Apple's Numbers, Google's Sheets, Apache's Open Office Calc, and Microsoft's Excel. In school, we are currently running Microsoft Excel, but we also have access to Google Sheets (and you would be expected to be able to produce work in either application).

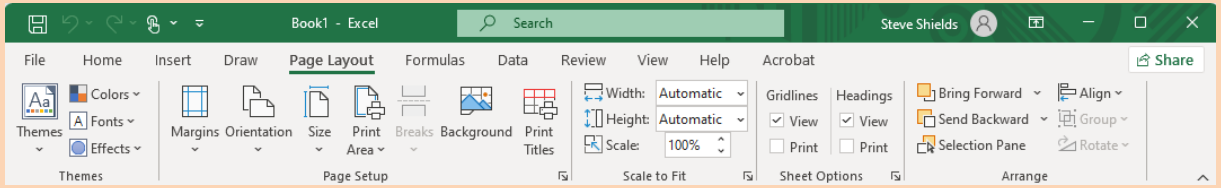
A spreadsheet is the best choice of document to use to handle number and to produce graphical information from that data. It can also act as a simple flat-file database.



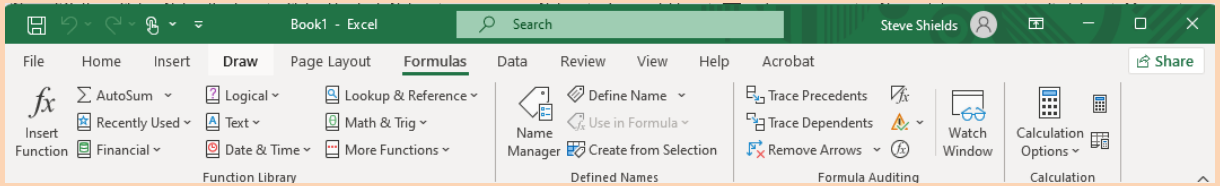
The **Home Menu** allows you to: **format text and cells**. You can also direct cell content **direction**, **merge** and **split** cells, change **data type** of cells, apply **styles** and insert /delete **rows** and **columns**..



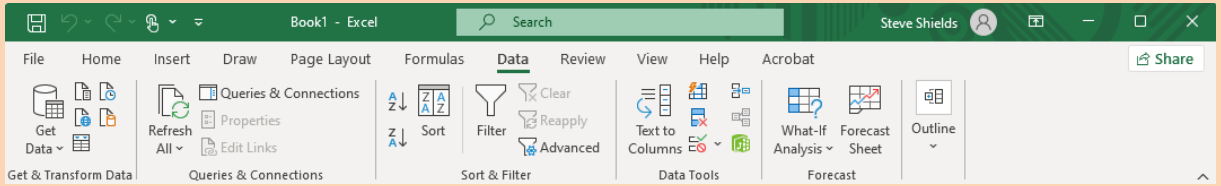
The **Insert Menu** allows you to insert the following: **Tables** and **Charts**, **Images**, **Sparklines**, **Hyperlinks**, a **Text Box** and **Headers and Footers** (as well as **WordArt**, **objects** and **equations** and **symbols**.)



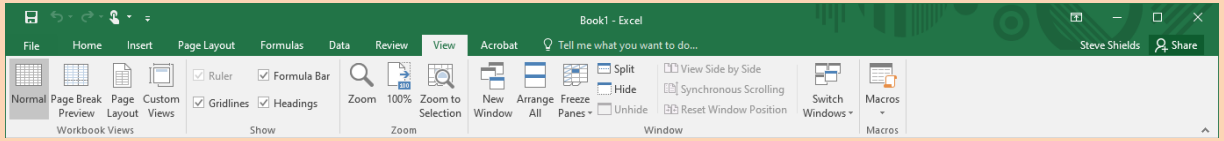
The **Page Layout Menu** allows you to: change the **Themes** of the spreadsheet using templates (and **colours** of each template), and it also allows you to define the **Print Area**, arrange **objects** on the sheet and change **Page Orientation**, **Margins** and **Size**.



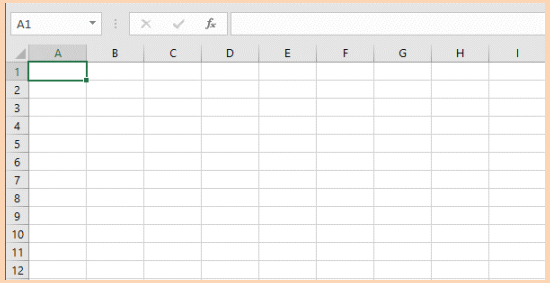
The **Formulas Menu** allows you to: insert predefined **Functions**, manage **named ranges of cells**, use **error checking** and to **trace dependencies** and to **watch contents of cells** in relation to **function operations**.



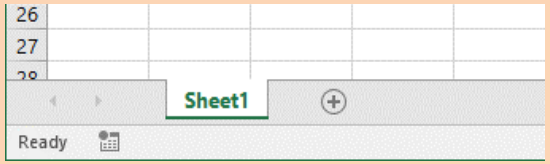
The **Data Menu** allows you to: **connect to other sources of data** and to **manage live connections**, **to Sort Data** and **Apply Filters**, to **separate text into columns** using identifiers, and to use **What-If** tools like **Goal Seek**.



The **View Menu** allows you to: **change views**, **zoom**, **Freeze Panes** (including **columns** and **rows**) and to **arrange active windows**.



The worksheets are divided up into **Columns** (which start with letters) and **Rows** (which start with Numbers) and where they intersect (join) these spaces are called **Cells**. A **cell reference** is the address of the cell. In the image shown here, you can see that cell **A1** has been selected. A cell range tells you all of the cells that have been selected so **A1: D10** would be referring to all cells from **A1**, down to **A10** and then across to **D10**.

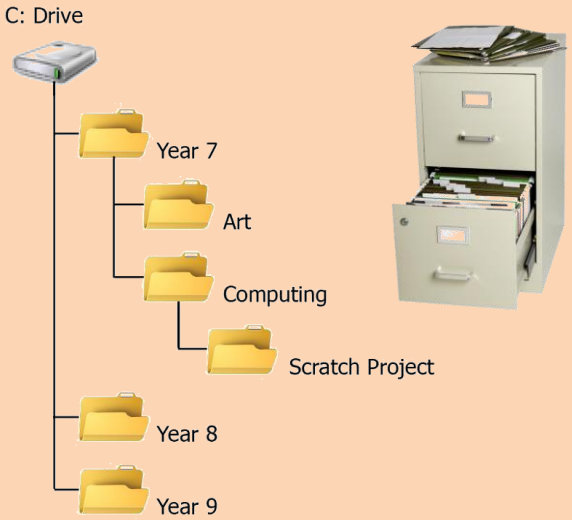


Spreadsheets tend to be divided into **worksheets** which are then organised into **workbooks**. To add a **worksheet**, you would simply click on the **+** symbol.

Knowledge of how to use Spreadsheets effectively is highly regarded. Spreadsheets are considered to be a 'killer app' in the conducting of a business, with multiple applications at work.

6. STAYING SAFE

File and Folder Management



File Types

File Extension	File Type
.doc/.docx	Word Document
.jpg/.jpeg	Image file
.ppt/.pptx	PowerPoint
.html	Web page
.xls/.xlsx	Spreadsheet
.gif	Image file
.png	Image file
.mdb	Access Database

Naming Conventions

science_project: underscore method
ScienceProject: Camel Case

Reasons to Back up your Data

1. Computer drives can fail
2. A virus can corrupt your work
3. A laptop or iPad can be lost or stolen
4. You might accidentally delete a file

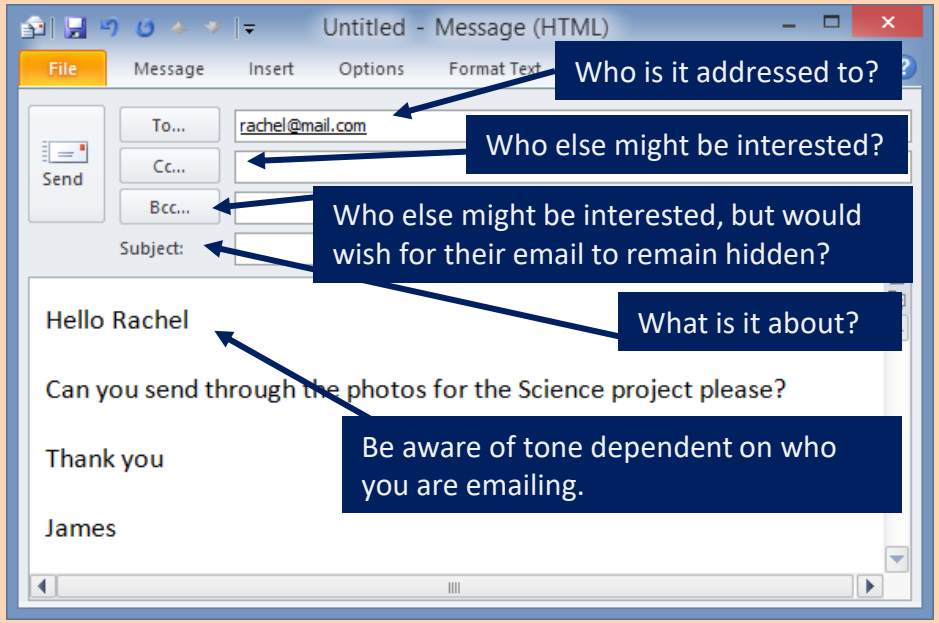
How to Spot a Phishing Email

Greeting: The phishers don't know your name, so the greeting is not personalised. The sender's address is often a variation on a genuine address.
Forged link: The link looks genuine, but it may not link to the website given. Roll your mouse over it to check
Request for personal information: Genuine organisations never ask you to provide personal information via email
Sense of urgency: Criminals try to persuade you that something bad will happen if you don't act fast
Poor spelling and grammar: Generally phishers are not good proofreaders!

Methods of Accessing Systems

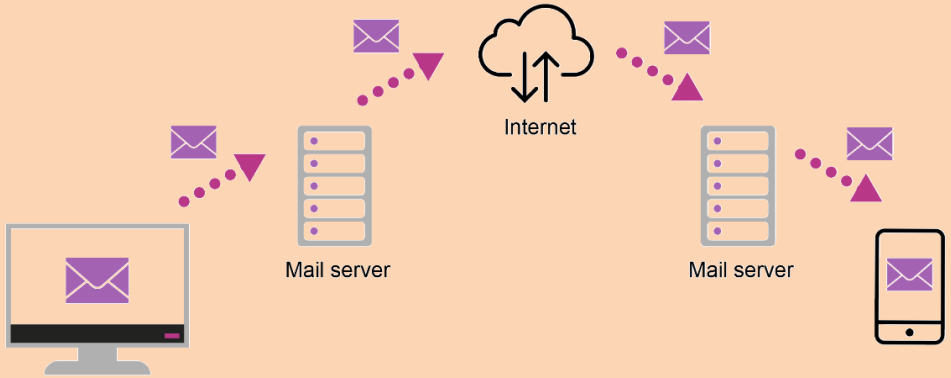
Usernames and **passwords** are one method. A strong Password will usually have a combination of **letters**, **numbers** and **symbols** and not contain personal Information.

Features of an Email



6. STAYING SAFE

How does an email get sent?

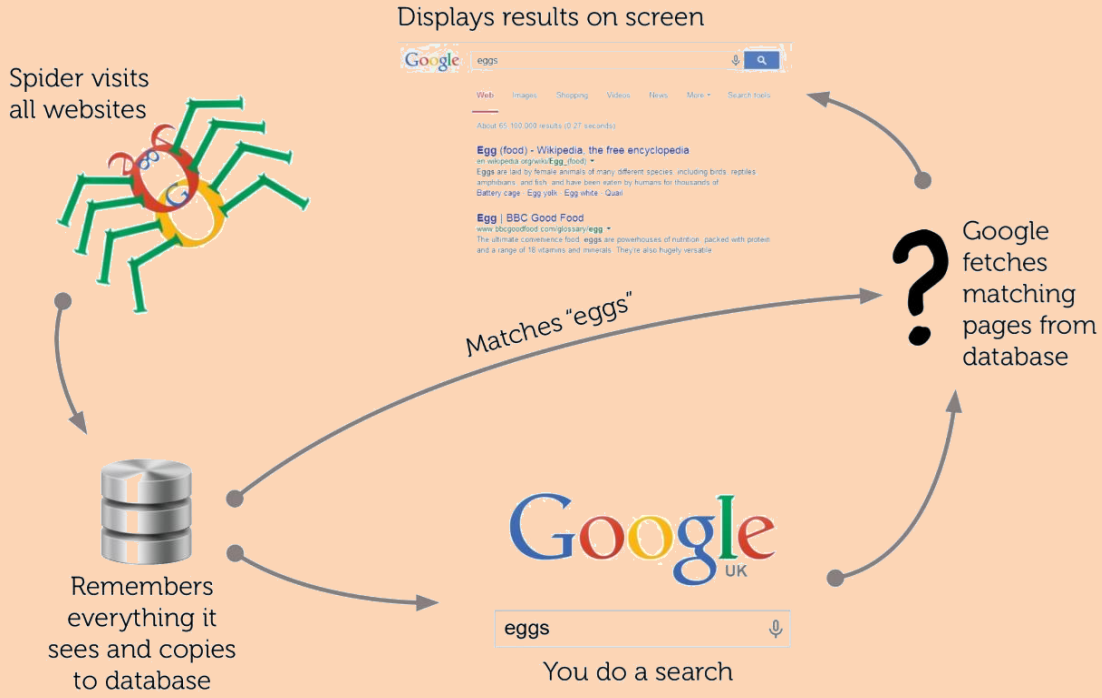


Features of an email signature

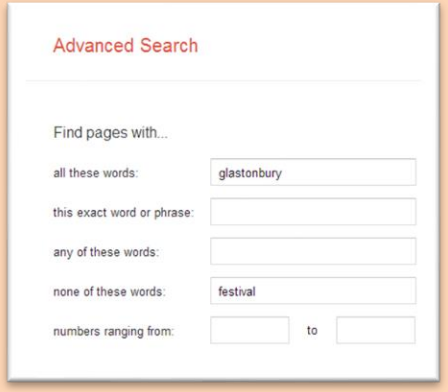
Name and position, contact details, company branding

Advantages of email	Disadvantages of email
Can send to multiple recipients at once	Spam
Can send attachments	Viruses
Sent instantly at any time	Phishing
Can request a receipt that the email has been read	Need an Internet connection
Can send and receive email from any web enabled device	Your message can only be read when the recipient next logs in and checks their mail

What happens when you search the Internet?



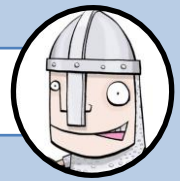
Advanced Search Tools



How can you spot Fake Websites?

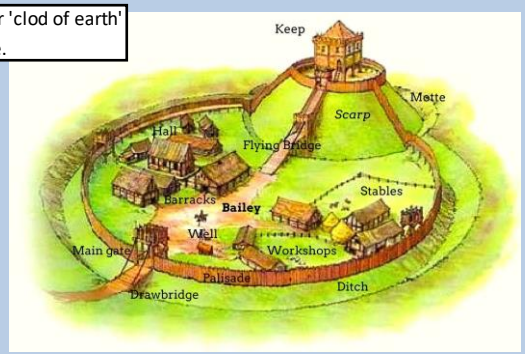
Who is the author of the page? Have you heard of them? Is there contact information?
Is the information up to date? When was it last updated?
What is the purpose of the page – information, public service, news source, advertising etc?
Is there a copyright symbol on the page? Who owns the copyright?
Are there any references?

Year 7 History Term 5 - Medieval Castles



Motte - mound or 'clod of earth'
Bailey - enclosure.

Motte and Bailey

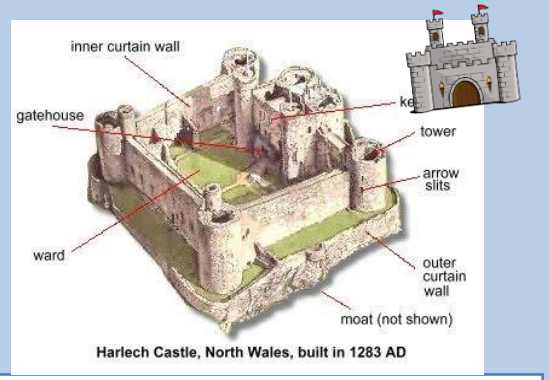


Motte and bailey castles appeared in England after the Norman Conquest of 1066. Motte and bailey castles were a common feature in England by the death of William the Conqueror in 1087. Their construction was the start of what was to become a massive castle building programme in England and Wales.

The most important part of the Motte and Bailey castle was the Keep. It was built on a huge mound (the motte). Mottes ranged from 25 feet (8 metres) to over 80 feet (24 metres) in height

The major weakness of the motte and bailey castle was the likelihood of the keep rotting or burning down. The solution was to build stone keeps but these could not always be built on the same site since the weight of the stone would sink into the motte.

Stone Keep

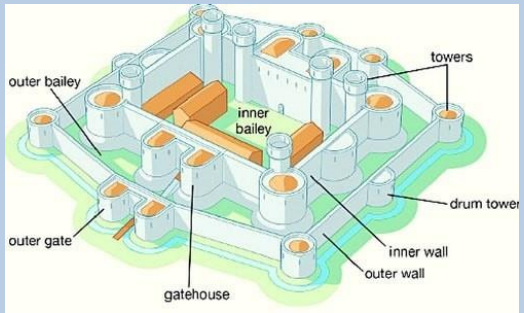


Harlech Castle, North Wales, built in 1283 AD

Stone keep castles were first built during the reign of William I as a natural extension to the more traditional motte and bailey castles. The main difference between the two was that motte and bailey castles were designed to be temporary (although lots survive to this day) while stone keep castles were designed to last as long as possible.

Following rebellion in the north of England, and the subsequent "Harrying of the North" in response, William the Conqueror decided to build stone keep castles as the ultimate display of his power. The most famous of these castles was the White Tower at the Tower of London and Rochester Castle in Kent.

Concentric castles



After stone keep castles, concentric castles became popular in England. This occurred during the reign of Edward I and they are mainly associated with north-west Wales, where many were built. The most famous concentric castles include Harlech, Beaumaris, Caernarfon and Conwy.

While stone keep castles were square and based around a central keep, concentric castles had no 'strong' point and were instead considered to be secure the whole way round. Each of these castles did have a strongly defended entrance point though, and the core of the castle was defended by a series of curtain walls. The furthest of these would have been the shortest to allow defenders to spot an enemy as they approached. Similarly, the curtain wall closest to the edge of the castle would have been longest to give those defending the castle the greatest height advantage over their enemy.

Bailey	**A castle courtyard**
Barbican	**A stone building protecting the gateway or entrance of a castle**
Battlements	**A parapet with indentations and raised portions (merlons). Battlements are sometimes called crenellations.**
Buttress	**Projection from the wall that provides extra support for the building**
Concentric	**Castles built with rings of stone walls one inside the other**
Constable	**Official in charge of a castle when the owner is absent**
Curtain	**Connecting wall between towers of a castle**
Drawbridge	**A movable bridge. Drawbridges usually moved horizontally**
Fosse	**A ditch surrounding a castle**
Garderobe	**A castle toilet. The garderobe was often a projection from the wall over the moat**
Gatehouse	**A building protecting the entrance to a castle**
Great Hall	**The main room in the building where the castle owner and his family lived**
Keep	**Main stone tower of a castle**
Loop	**Narrow opening in castle wall that was used by archers to fire on attacking soldiers**
Machicolations	**Projecting stonework on the outside of castle towers or walls, with holes in floor for dropping missiles on people attacking the castle**
Moat	**A deep wide trench round a castle**
Motte	**A mound of rammed layers of soil. Some mottes were only about 5 metres (16 feet) high, but some were over 18 metres (60 feet). The Normans built wooden watchtowers on the top of their mottes**
Murder-Holes	**Holes (also called meutrieres) in the roof or ceiling of a castle. Cold water could be poured through the holes to put out fires. These holes were also used for pouring scalding water, hot oil or other substances on soldiers who had managed to enter the castle**
Palisade	**A strong timber fence built on top of an earth rampart.**
Parapet	**A low wall on the outer side of the main wall.**
Portcullis	**Grating made of metal and wood. The portcullis was dropped vertically from grooves to block passage through the gate of the castle.**
Rampart	**A defensive stone or earth wall surrounding a castle.**
Shell-Keep	**A wall surrounding the inner portion of the castle.**
Solar	**The upper living room of castle. The solar was usually situated above the hall and was used mainly as a bedroom.**
Tower	**A high building. Towers in castles were either square, many sided (polygonal), or round.**
Turret	**A small tower. A turret on top of the main tower was often the main observation point in a castle**

1066	1085	1095	1170	1215	1314	1348	1381	1415	1485
The Battle of Hastings	The Domesday Book is completed	The First Crusade is decreed	Thomas Becket is murdered	Magna Carta is signed	Battle of Bannockburn	The Black Death arrive in Britain	The Peasant's Revolt	Henry V defeats the French at Agincourt	Richard III is defeated at the battle of

1 Ladders

Ladders were used by those attacking a castle to climb over the walls and fight the castle inhabitants within the castle walls. However, ladders had the disadvantage of leaving the man climbing the ladder subject to attack by arrow, boiling water or oil, or by being thrown to the ground if the ladder was pushed away from the wall.

Attacking a Castle

2 The Battering Ram

The thick stone walls of the Stone Keep castles were difficult for men to knock down. Although pickaxes could be used against castles with thinner walls, it would take a very long time to knock a hole through a castle with very thick walls. The battering ram was particularly useful since the weight of several men would be put behind it. This would seriously weaken and possibly destroy doors or walls. Unfortunately, the defenders of the castle could throw boiling oil or fire arrows at the attackers as the Battering Ram had no protection from these missiles.

Attacking a Castle

3 The Catapult

A variety of catapults or siege engines were developed during the Middle Ages to fire stones, fireballs or other objects such as dead sheep, cattle, or plague victims, at the castle walls or into the castle itself. This type of catapult works by twisting rope as tightly as possible so that it acts like elastic when the arm is released. The catapult was very heavy to pull into place.

Attacking a Castle

4 The Trebuchet

A trebuchet a type of catapult that was used in the Middle Ages. It is sometimes called a counterweight trebuchet. The counterweight trebuchet appeared in both Christian and Muslim lands around the Mediterranean in the 12th century. The average weight of it's projectiles ranged from 50 -100kg with an average throwing distance of 300m, however balls of up to 1500kg were recorded to have been used at the battle of Ashyun.

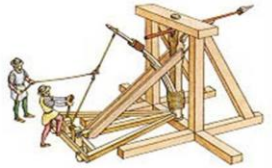
Attacking a Castle

5 The Longbow

- The longbow dominated medieval warfare. he long bow was about six feet long and made from a yew tree. An experienced archer could shoot an arrow every five seconds. From 200 metres, a longbow arrow could penetrate the armour worn by soldiers. Plate armour gave more protection but could still be penetrated from 100 metres. The maximum range of a long bow was 400 metres but at this distance, it was far less effective.
- In 1346 at the Battle of Crecy, English archers devastated the French who lost 11 princes, 1,200 knights and 30,000 common soldiers. The English lost just 100 men.

Attacking a Castle

6 The Ballista

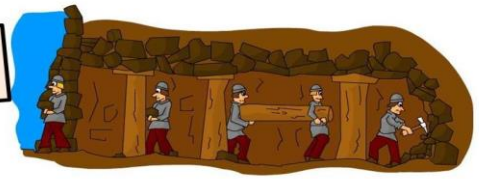


The next medieval weapon is the ballista. This ancient weapon was actually just a giant crossbow capable of firing enormous bolts that could pass through several men at once. It was not very effective and could not be used against walls.

Attacking a Castle

Mining under the castle

7



A good way of attacking a stone castle was through mining. Skilled miners (sappers) were used to dig tunnels under the walls/ towers, using wooden poles to support the tunnel. They would then burn the poles and the wall or the tower would collapse. The advantage of mining was that the attack could not be seen by those living in the castle. However, if those inside the castle were aware that attackers were mining underground, they would often mine from the castle to meet the attackers underground and there would be a sword battle.

Attacking a Castle

Putting the Castle under Siege

Castles were sometimes so strong that the only method of attack was to wait. This was called laying siege. It was basically staying out of arrow range and surrounding the castle until it was starved into submission. Sieges could take a very long time to work. Many castles had wells in the keep and large storerooms always prepared in case of a siege.

8

Attacking a Castle

What were the strengths and weaknesses of these forms of attack?

Castle Defences

Curtain Walls


As castles were static (didn't move), an enemy could usually get close to the actual buildings. Therefore outer walls -curtain walls - were built as a first line of defence. If these were broken into, then the castle itself had many defensive features.

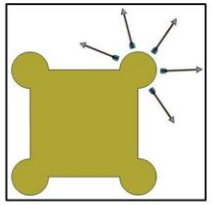
Castle Defences

Machicolations


These were stone boxes that projected from the walls of castles and had holes in the floors for dropping stones or boiling oil on attackers. Wooden versions of these were called hoards.

Castle Defences

Round Towers

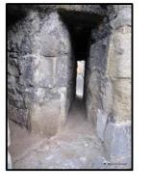



It was harder for attackers to make round towers collapse. Unlike square towers they had no corners, which collapsed if holes were dug underneath the foundations. Furthermore, the tower also allowed the soldiers inside the castle to fire in all directions along the front walls

Castle Defences

Arrow Loops



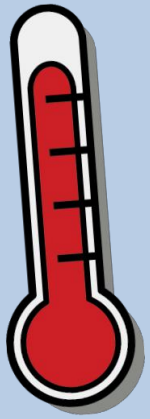


These provided a safer means of firing arrows on the attackers of the castle. They are found in many different styles on the curtain wall and towers of the castle.

Castle Defences

The Moat

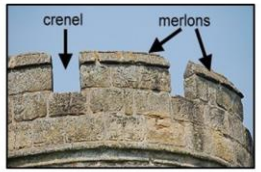

Attackers were easy to shoot whilst swimming or rowing across the moats filled with water. Moats reduced the risk of tunnelling under the castle.



How effective were these features in protecting the castle from attack?

Castle Defences

The Battlements

The top of the castle walls were the battlements, a protective, tooth shaped parapet often with a wall walk behind it for the soldiers to stand on. The defenders could fire missiles through gaps (crenels). The raised sections between, called merlons, helped to shelter the defenders during an enemy attack.

Castle Defences

Spiral Stair Case and Trip Step


Spiral stair cases were a useful defence once the attackers were in the castle. The stair case usually spiralled clockwise which made it difficult for right-handed attackers to use their sword. A trip-step would be built into the stair case. It would be shorter than the other steps which could make the attacker lose his footing and trip up.

Castle Defences

The Portcullis


A spiked wooden or metal barrier, called portcullis, helped protect the doors from fire and battering. It was lowered by chains from a chamber above the gateway.

*The word portcullis comes from the Old French *porte-coleice*, meaning sliding door.

*(one pence coins carry an image of them).

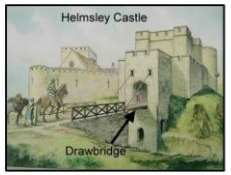
Castle Defences

Murder Holes


Murder holes were openings in the ceiling just in front of a gate or in the passage beyond. They were so called because it was believed that they were used by defenders to pour hot sand, water and lime through to kill and wound an enemy.

Castle Defences

The Drawbridge

To stop the enemy actually getting in, the entrance to the castle was heavily fortified it was known as a barbican. It had a drawbridge which could be lifted up to stop the enemy getting inside the castle.

African Kingdoms

Empire of **Mali,** 1230 CE – 1460's CE

Greatest trading empire in Africa, provided half of the world's gold. 1,600km, ruled over 400 cities. Effective administration and semi-professional army.

Benin Kingdom, 1200 CE – 1800 CE

Bronze, stone and terracotta trade.

Zimbabwe Kingdom, 1200 CE – 1450 CE

Access to gold and copper mines and ports to trade around world.

Mansa Musa was the 10th Mansa of the **Mali Empire.**

He ruled from 1312-1337

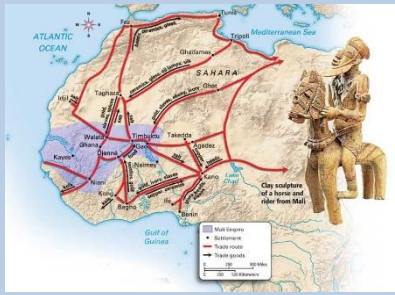
During his rule Malian Empire experienced it's 'Golden Age'.

Mansa Musa was the wealthiest individual in human history.

Medieval world map, the **Catalan Atlas,** produced in 1375.

The Mali Empire was wealthy before Mansa Musa came to power, however during his reign Mali experienced it's '**golden age**', reaching peak of **wealth.**

How did Mansa Musa do it?



Expansion

During his reign Mansa Musa conquered 24 cities. This increased access to resources, slaves to work in mines and taxes to be collected.

Timbuktu

Mansa Musa acquired this city in the 1320's. This was an important commercial centre due to it's ports and location near the River Niger.

Banishing Bandits

Mansa Musa focused on banishing bandits from the countryside. By removing the threat of attack traders were able to extend their routes and began to carry more goods, resulting in larger profits.

Mansa Musa's Control

The Mansa maintained direct communication with foreign traders throughout his empire

Mansa Musa and The Mali Empire

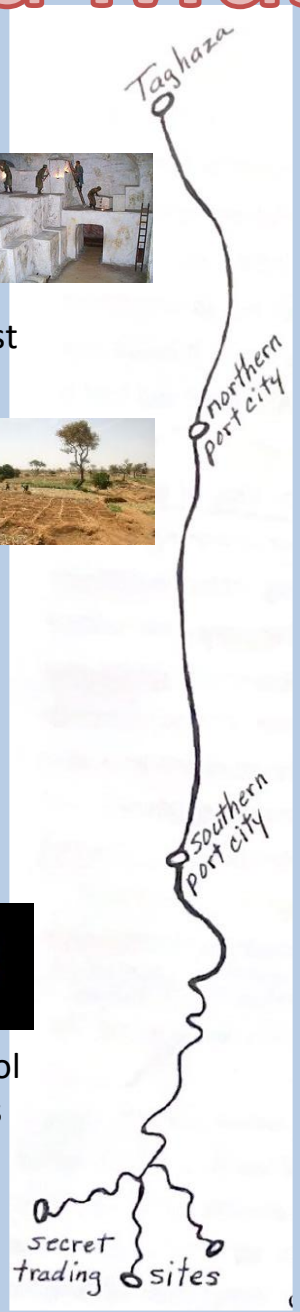
Mansa Musa travelled 9000 miles on a **pilgrimage** to Mecca, during his reign

Mansa Musa is the **richest** man who has ever lived.

Salt Mining
Mali also controlled significant salt mines. Salt was one of the most valuable resources in the Medieval World

Agriculture
Farmers, ranchers and fishermen all became increasingly productive and diversified under Mansa Musa's leadership. This provided a large supply of food, cotton and leather.

Gold Mining
Mines under Mali's control produced large quantities of high-quality gold and copper. Mansa Musa increased the Empire's mining efforts.



Medieval traveller and writer, <u>Ibn Battuta,</u> who visited the Mali Empire records:
"Life in Mali was generally peaceful. He reported that there was very little crime and that the people were always friendly and welcoming"

<u>Education</u>
By the end of Mansa Musa's reign Timbuktu had become a **centre** of **learning** and **knowledge**. The **Mosque** Mansa Musa built became a **university**. There were also 180 **schools**. In Timbuktu many **books** were **produced**. **Scholars** from across Africa and the Arab world often met here to discuss ideas.

<u>Timbuktu Documents</u>
A large collection of documents from the Mali Empire have been found by historians, stored at Timbuktu. They show a **complex legal system** with written **laws** and carefully **documented administration**. This shows the Mali government was **sophisticated** for its time.

Timbuktu was considered *'Jewel of the Mali Empire'*

The atmosphere in Timbuktu must have been reminiscent of the gatherings of intellectuals that transfixed Mansa Musa at Mecca- polishing this jewel on the most easterly tip of his empire would be his great legacy. Even though it was many months' travel from his capital in Niani, and many months travel from his empire's western border, Timbuktu would be Mansa Musa's Florence. It would be the place where he would invest his love- as close to Mecca as his kingdom allowed. Here, in this multi-ethnic city of Songhai, Arabic and Tamashagh cultures, he would deposit his extensive collection of valuable documents.

***Historian* Casely-Hayford**

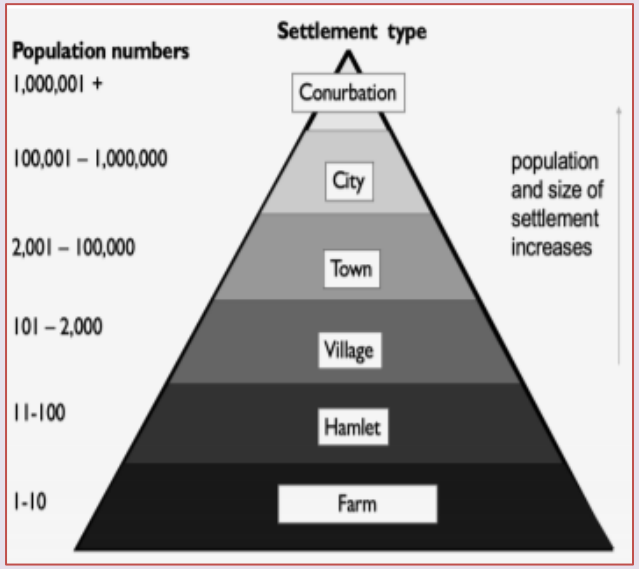
Map showing approximate route taken by Mansa Musa in around 1324. His route started in Niani (modern day Guinea) and passed through Timbuktu and Taghaza (Mali) on to Cairo (Egypt) before finishing in Mecca (Saudi Arabia).

Mansa Musa was a devout Muslim and wanted to go on Hajj as a fulfilment of Islam to be a good Islamic ruler.	Egypt was powerful so Mansa Musa wanted to visit to show how powerful he was to gain some power.	Mecca was home to the finest Arabic scholars who he wanted to help him make Mali the intellectual capital of the world.	By showing off his wealth to the world, Mansa Musa could try and get more gold trade for Mali by taking it away from Egypt.

Settlements – Term 5 Geography

What is a settlement?

"A settlement is a place where people live."
The settlement hierarchy is a way of ordering settlements from their largest to smallest.



Function of settlements

The function of a settlement refers to its main activities.

Site and Situation

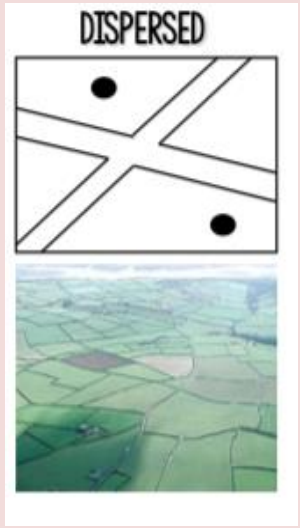
- **Site** is the land which a settlement is built on.
- **Situation** is where a settlement is located in relation to other surrounding, mainly human, features.

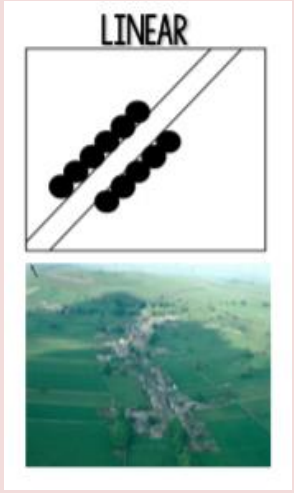
Some Settlement Advantages

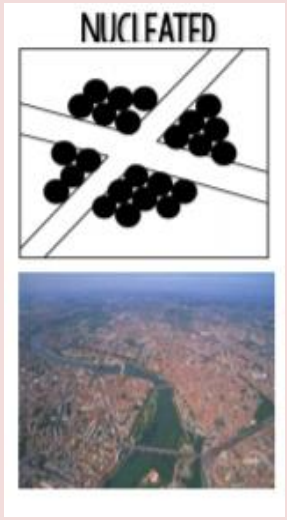
- **Bridging point** - Where a river was shallow enough to be crossed or narrow enough to easily build a bridge
- **Dry Point** - In especially wet areas, settlements were built on slightly raised land to avoid flooding
- **Nodal Point** - Where natural routes meet, such as several valleys or at the confluence of two rivers
- **Defensive** - In order to protect themselves from attack, settlements were built within a river meander, with the river giving protection on three sides, e.g. Shrewsbury, or on a hill with good views, e.g. Edinburgh.
- **Wet Point** -These settlements were built at a source of water in an otherwise dry area. For example, in lowland Britain, many settlements were built at springs at the foot of chalk escarpments

Settlement Patterns

Settlements can be different sizes, shapes and can have different functions. They also look different in different countries. This can be because of cultures, climate, wealth or history as well as topography.







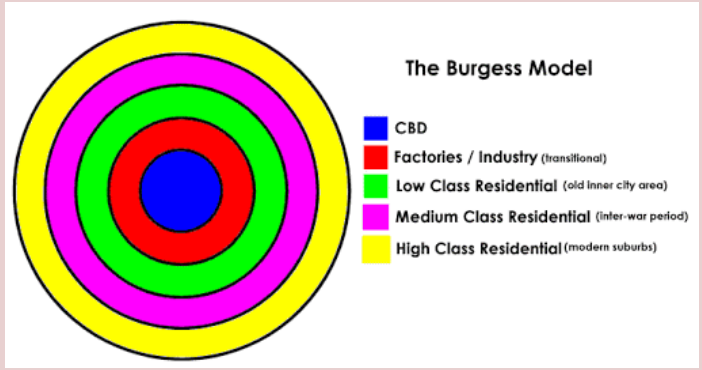
Types of settlement	Description
Hamlet	There is a very small group of homes. They are unlikely to be many other facilities.
Village	This is larger than a hamlet and contains more functions e.g a few shops, post office, doctors practice. Villages can vary in size
Town	This may contain tens of thousands of people. Towns have a range of functions such as shopping centres, secondary schools, railway stations and hospitals.
City	Cities are densely populated. Providing a range of functions including more specialised functions such as universities, football stadiums. Previously Cities were decided upon by whether they had a cathedral.

Burgess and Hoyt Models

Many geographers have noticed how towns develop in very specific sections.

- **CBD (Central Business District)** located at the centre of the city where rail and roads meet. Contains many commercial activities, shops, entertainment and business activities.
- **Inner City** mixed land-use containing small industries as well as high-density residential land-use – often characterised by terraced housing.
- **Inner Suburbs** residential areas which developed during the 1920s/30s – often semi-detached houses with bay windows and front/back gardens.
- **Outer Suburbs** residential areas which grew up later as greater public transport and private car ownership allowed people to commute. These houses are often semi-detached/detached with larger gardens.
- **Rural-urban fringe** this is right on the edge of towns and cities and is mainly low density, private housing (often larger detached properties); new industrial estates/business parks and facilities requiring larger open spaces such as golf courses.

The Burgess Model

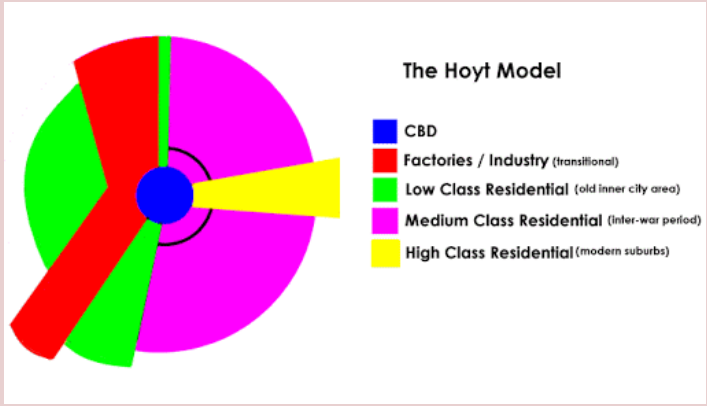


This model is based on the idea that land values are highest in the centre of a town or city.

Limits of this model

- The model is now quite old and was developed before the advent of mass car ownership.
- New working and housing trends have emerged since the model was developed.
- Many people now choose to live and work outside the city on the urban fringe - a phenomenon that is not reflected in the Burgess model.
- Every city is different - there is no such thing as a typical city.

The Hoyt Model



This is based on the circles on the Burgess model, but adds sectors of similar land uses concentrated in parts of the city.

- Notice how some zones, eg the factories/industry zone, radiate out from the CBD.
- This is probably following the line of a main road or a railway.

A village is born

In the nineteenth century, growing cities such as Liverpool and Manchester needed solid roads that could cope with an increasing amount of traffic. The answer was to make roads with bricks of granite.

In 1861 Putman quarry was opened. Quarrymen extracted the granite from the quarry and it was shipped to Liverpool where it was used to build roads.

In the early days, the quarrymen lived in barracks near the quarry during the week and returned to their families at the weekend. However, as more workers appeared, the owners decided to build homes for the families and from this Nant Gwrtheryn was built.

Ghost Town

As tarmac became more popular because it was cheaper, the need for granite decreased. The quarry closed and Nant Gwrtheryn was abandoned – it no longer had a purpose. In 1959 the village became a ghost town.

A New Beginning

In 1978, a local doctor called Carl Clowes heard that the owners of the village were planning to sell it. He thought of a solution to bring back jobs to stop the local people leaving.

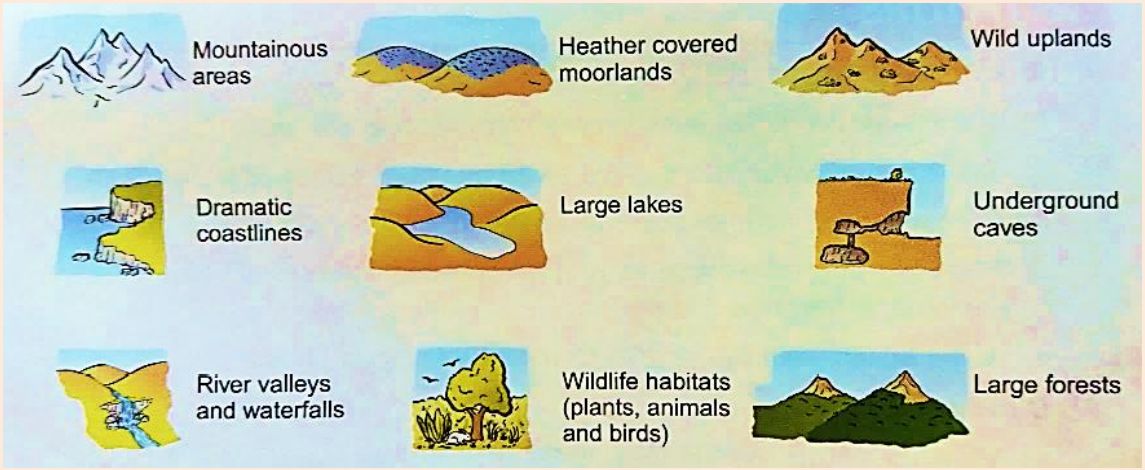
The deserted village was turned into The Welsh language and heritage centre. Since 1982, over 25,000 people have benefited from training at the centre.

Key words:

Burgess model, Hoyt Model, CBD, inner city, suburbs, terraced house, semi-detached house, detached house.

The different environments of a National Park

A National Park does not need to be just one type of landscape, it can be a vary from mountains to forests. All these landscapes below can be found in UK National Parks:



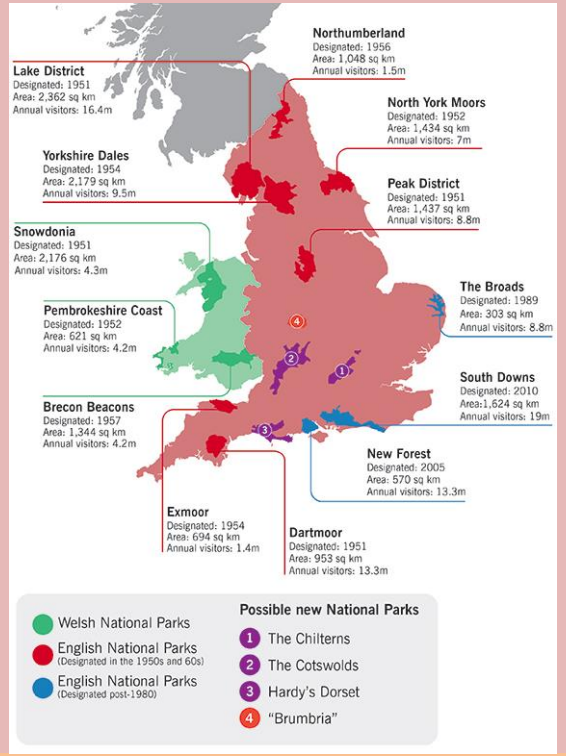
Conflicts in National Parks

Conflicts between visitors and residents:

- Roads can become congested with traffic which makes it difficult for locals to go about their daily lives. This can increase air pollution and even delay emergency services
- Some towns might have their character changed by tourism. Residents might find it easy to find guide books, but find it difficult to buy things like milk
- Visitors might buy second homes. This increases house prices and pushes locals out of the area as they cannot afford to live their anymore – especially young first time buyers
- Tourists may walk over and damage farmers' crops as well as leaving gates open for animals to escape

Conflicts between visitors:

- Many people may visit the area for peace and quiet, but some may want to visit the area for adventurous activities – these activities are not always compatible together
- People go walking in the Forest to get away from it all, but with many people walking on the paths, it can cause destruction to the area
- On popular days, competition for parking spaces and restaurant tables may cause stress – maybe even violence!



Ways to reduce conflict and damage to National Parks

Positive Management:

- Undertaking conservation work
- Providing facilities for visitors such as information centres and picnic areas
- Making new paths and repairing old ones

Negative Management:

- Stopping the building of new houses and extensions in the area
- Limiting access to certain areas
- Restricting activities in the area

Why are National Parks so important?

Many people think National Parks are only important for preserving nature. However, as our cities are constantly expanding and our air quality reduces due to pollution, our National Parks are important for many more reasons:

- Provide facilities for tourists e.g hikes/camping
- Encourage tree planting
- Buy land to protect its character
- Monitor and clean up pollution
- Provide an information service
- Encourage suitable developments/Refuse permission for unsuitable developments

Urban Sprawl

National Parks are also important due to increasing levels of ' urban sprawl'. Urban Sprawl refers to the out migration of residents from urban areas such as cities to the rural countryside. This can be due to wanting a better quality of life, slower pace of living, more space for families and activities.

For example the New Forest is particular important due to urban sprawl from cities such as Bournemouth, Salisbury and Southampton that surround the New Forest.

Why were National Parks set up ?

The National Parks were created as part of the post World War II re-establishment process

The aim was to bring long-term protection to areas of beautiful countryside that were highly valued for physical and spiritual refreshment.

The first UK National Parks were The Lake District, Dartmoor, The Peak District, Snowdonia. Created in 1951

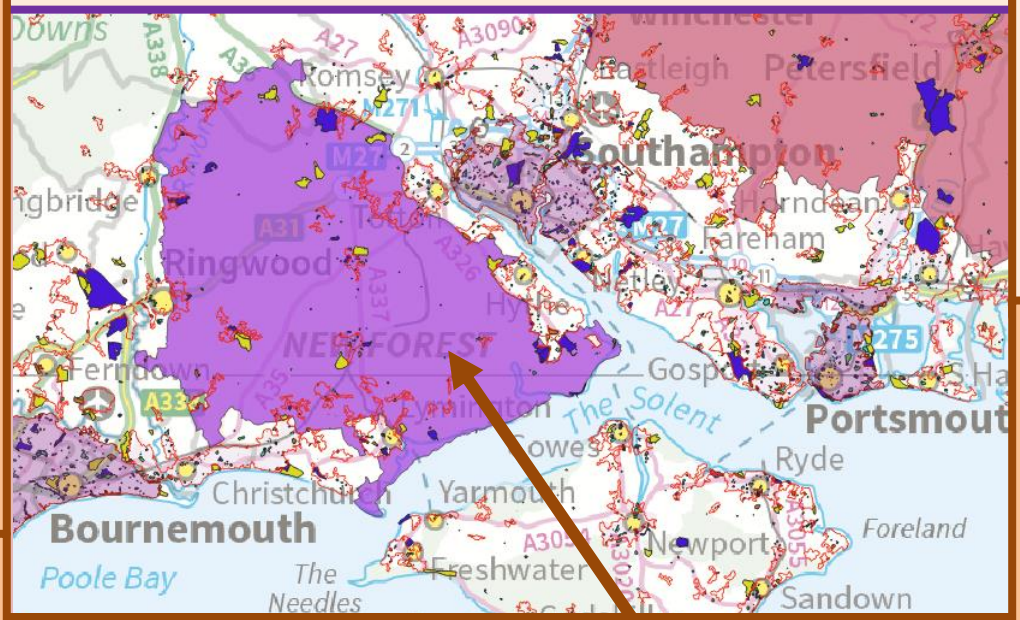
NEW FOREST: National Park Case Study

Positives and negatives of tourism in the New Forest

Activity	Positive	Negative
Walking	People are more likely to spend money. People become more aware of protecting the landscape.	Paths become eroded so will need to be repaired. Areas where tourists visit will become less popular for locals. Wildlife may be affected.
Tourist shopping and (honey pot sites)	People spend money in the local area. These shops can provide jobs for locals.	Busy towns with more cars could cause traffic and environmental problems
Wildlife sanctuaries	Protects wildlife and preserves the ecosystem	Can be expensive. Potential to make wildlife dependent on us.

When did the New Forest become a National Park ?

- The New Forest was created as a royal forest by **William I** in about 1079 for the royal hunt, mainly of deer.
- It was created at the expense of more than 20 small hamlets and isolated farmsteads; hence it was 'new' in his time as a single compact area.
- It was first recorded as "Nova Foresta" in Domesday Book in 1086.
- It officially became what we know to be a National Park in 2005.



New Forest National Park :Location

- The **New Forest is** located in southern England.
- It covers south-west Hampshire and extends into south-east Wiltshire and towards east Dorset.
- It is situated between the cities of Southampton, Bournemouth and Salisbury.
- The boundary of the New Forest is shown highlighted in yellow in the above OS Map

New Forest: Conservation measures

The New Forest is designated as a

- Site of Special Scientific Interest (SSSI)
- EU Special Area of Conservation (SAC),
- Special Protection Area for birds (SPA),
- Ramsar Site is a **wetland site** (designated to be of international importance)
- it also has its own Biodiversity Action Plan (BAP)

The New Forest Marque

The New Forest Marque is a local food and produce scheme set up to champion businesses who pride themselves on producing and providing food, drinks and craft from the New Forest area. Whether you're a Commoner, a Primary Producer, a Processer or you offer local produce to your customers, you can apply to join the New Forest Marque.

It provides many benefits to local businesses by:

- Promoting the use of local resources and providing jobs for locals
- Provides training for local businesses
- Creates a local trading network
- Allows for local businesses to advertise for each other

New Forest: Physical landscape

- New Forest covers 566 km2
- The New Forest includes one of the largest remaining pieces of open pasture land, heathland and **forest** in the heavily-populated south east of England.
- is the largest area of semi-natural vegetation in England and is of international importance.
- The Geology of the New Forest consists mainly of sedimentary rock, in the centre of a sedimentary basin known as the Hampshire Basin.

NEW FOREST NATIONAL PARK

Origins of Judaism

Judaism was started about 4,000 years ago by a man called **Abraham**.

God spoke to Abraham and Abraham knew that there was only one true God. God told Abraham to go to his promised land; a place called Canaan (now Israel). God told him that he and his family would be blessed.

God said *"Leave your country…. I shall make you a great nation… I shall bless those that bless you".*

- Anyone that followed Abraham and God would blessed and protected. These were Gods **chosen people**.
- God gave them his promised **Holy land**.
- In return they followed his commandments.
- This agreement is called the **covenant**.

God said that Abraham's faith to God would be tested 10 times. The first test was when he had to leave him home (above).

The final and greatest test was when God asked Abraham to **sacrifice** his son Isaac as an offering to him. In Genesis it says *"Take your son, your only son, Isaac, whom you love….. Sacrifice him".* Both Abraham and Isaac were willing for God, but just before Abraham was going to kill him, God intervened and stopped him. A ram was sacrificed and given to Abraham instead.

They had passed God's test. This showed Abraham's loyalty and dedication to God.

BVT: Judaism

Key vocabulary

Israelite
Covenant
Mount Sinai
Plagues
Pharaoh
Commandment
Holy Land
Abraham
Canaan

Abraham's sacrifice of Isaac

Moses parting the Red Sea

Moses

1,000 years had passed since Abraham. Abraham's descendants were called the Israelites (this is what the Jewish people were called then) and they had spread to many countries.

In Egypt the Pharaoh saw the Israelites as a threat and made the Israelites his slaves. He ordered all Israelite slave baby boys to be killed.

The story of Moses is a teaching to show how one man was chosen by God to free his promised people.

This is how this happened:

- God appeared to Moses in the flames of a fire in a burning bush and said "You shall tell the Pharaoh that I am the only God and shall lead the Israelite slaves out of Egypt to freedom".
- Moses was scared but went to tell the Pharaoh that he should free the Israelite slaves, but the Pharaoh said no.
- Moses used the power of God to send **10 plagues** to the Egyptians: some of these include the plagues of frogs, locusts, darkness, killing cattle, flies.
- But it was the last plague that was the worst. The first born son of every Egyptian was to be killed.
- After this plague the pharaoh was so angry, but allowed Moses to lead the Israelites out of Egypt. He told his people *"Fear not! Stand your ground... the Lord himself will fight for you".* But the Pharaoh's soldiers chased them. They came to the Red Sea, **Moses parted the sea** so the Israelites could be free.
- Moses and the Israelites spent 40 days together in the desert and on top of Mount Sinai and God gave Moses *"…the two tablets of the covenant law, the tablets of stone inscribed by the finger of God made a promise to God". (Exodus)* This was the promises of the **10 commandments**.

Judaism - Religious Practices

Worship

The Jewish place of worship is called a synagogue; this place contains a variety of symbols which represent and remind Jews of their religious history.

Synagogues contain:

- **An Ark** – which holds the scrolls of Jewish law called the **Torah**
- **Bimah** – a raised platform where readings from the Torah are given
- An **eternal candle** - which represents the light of God

The most famous Jewish prayer is known as the **Shema** – "Hear O Israel, the Lord our God, the Lord is one. You shall love the Lord your God with all your heart and with all your soul and with all your might".

Jews may use these items to also worship:

- **Tefillin** are cubic black leather boxes with leather straps. Inside them are 4 prayers. They are worn in morning prayers.
- A **Tallit** is a shawl for prayer which is often worn too. This represents God wrapping around the person, protecting them.

Tallit

Tefillin

"Commandment 4: You shall remember the Sabbath and keep it Holy"

The Jewish Sabbath is known as **Shabbat** which runs from sundown on Friday to sundown on Saturday.
A traditional Jewish family will gather at the synagogue for worship on Friday night, and then eat together after the service. Special bread called **Challah** is eaten and candles are lite.
This special time for Jews is about worship but also community – meeting together as a family.

Key vocabulary

Synagogue
Tefillin
Ark
Torah
Bimah
Shema
Monotheist
Omnipotent
10 Commandments
Mitzvot

Beliefs

- Jews believe there is only one God. This makes them a Monotheistic religion.
- The Jewish God is the same God as the Christian and Muslim God.
- Jews believe God is **omnipotent** and **all loving** and because of this made the world for them.
- However, Jews believe that **Jesus was a teacher or prophet** (not the son of God like Christianity)
- Jews were given the **10 commandments** by God. These were told to Moses on Mount Sinai.
- These are the laws which they live by, as they are the Word of God. These laws need to be followed so that Jews can go to Heaven.
- These 'laws' are known as **Mitzvot**. There are 613 Mitzvot, of which 10 are the main commandments.

Jewish Festivals

Key vocabulary

Pesach
Seder plate
Hannukah
Maccabees
Menorah Candle
Antiochus
Menorah
chametz
Matzah

Hannukah

History:

- 2,200 Years ago the Jewish people lived in their Promised Land. However at this time the Greeks wanted to increase their empire.
- Greek King **Antiochus** invaded the Promised Land; banned the Jews worshipping their God and banned them reading their Holy Book the **Torah**. Many Jews were killed.
- The Greek army smashed up the religious temple in Jerusalem, including a sacred lamp in the temple and the oil needed to brunt the lamp.
- A family called the **Maccabees** stood up against the Greek army. They beat them and marched back to Jerusalem.
- A new lamp was found and lit, however they only had enough oil for one day. A miracle from God allowed the oil to last 8 days, giving the Jews light in their holy temple.

Festival of Light

Hannukah is therefore named the Festival Light for the lamp burnt for 8 days.
Jews celebrate this festival by coming together as a family, with friends and sharing special food; one is called **sufganiyot** (like donuts) and play games using a **Dreidel**.
The candle that is lit every one of the 8 days in remembrance is called the **menorah.**

sufganiyot

Pesach (Passover)

The main Jewish festival which takes place in April (but moves, like Easter). It celebrates **Moses freeing the Israelites.**
The Jewish home is cleaned of any food containing flour/wheat etc, this is called **chametz**. Special foods are bought, prepared and eaten.

The leader of the house wears white linen robes to signify freedom. He reads the story of Moses freeing the Israelites, from a book called the **Haggadah**, before the special meal. The special meal contains certain foods. These foods are placed on the **Seder plate** and have special meaning. E.g. the bone represents God's mighty arm helping them. 10 drips of wine are split, one for each plague. Special bread called **Matzah** is also eaten.

Matzah bread

Dreidel

Sedar Plate

Monotheism is the belief **in ONE God.**
There are 3 religions that believe in One God that all connect by to one man called Abraham.
This is why these religions are also called the **Abrahamic religions.**

BVT
Who is God?

Around 2,000BC: **Abraham** made an agreement called the **Covenant** with God. God granted his people the land Israel (Holy Land).

Son of Abraham – **Isaac** continued the religion Judaism in Israel.

Second Son of Abraham – **Ishmael** – moved and settled in Arabia.

Around 1,000BC: **Moses** continued as a leader of Judaism, freeing the Israelites from the slave rule in Egypt.

Thousands of years passed, Arabia was lived in by tribal groups; some worshiped One High God – Allah; some worshipped idols.

Judaism

Around the turn of the BC/AD: **Jesus Christ** preached that he was the incarnation of God – God's Son.

Around 600AD: **Muhammad** was chosen by God to unite and start the Islamic Faith. He as also a descendent of Ishmael.

Islam

Christianity

When Muhammad died Muslims split into 2 groups: **Sunni and Shi'a**

Summary: How do the Monotheist Religions compare?

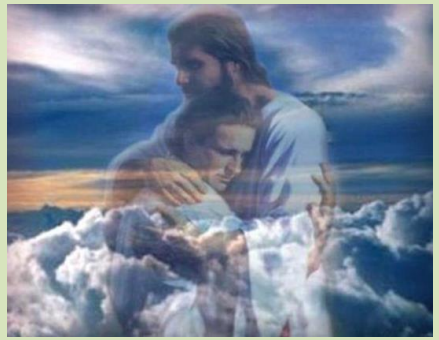
Judaism	Christianity	Islam
All 3 religions have spiritual leaders called prophets to teach their religion. Each religion can use prophets of previous religions.		
Prophets of **Abraham** and **Moses** are most important	**Jesus**, the Son of God, is a their teacher	**Muhammad** is the most important prophet
All 3 religions have sacred texts. Each religion can use books previous to their religion.		
The **Torah.** Written by Moses followers after Moses died.	The **New Testament Bible.** Written by the disciples after Jesus died.	The **Qur'an.** God's words spoken to Muhammad were dictated and written down.
All 3 religions was have a set of teachings that include ideas about God and how to follow their religion		
The **10 Commandments**	Jesus **parables**	The **6 Articles of Faith**
All 3 religions have very special festivals in celebration of their prophets and teachers.		
Festival of **Passover**; recognising Moses freeing the Israelites	Festival of **Christmas** / **Easter**; recognising Jesus birth and death	Festival of **Eid**; recognising when Muhammad spoke to Allah (God) and wrote the Qur'an
All 3 religions have a special place to worship God; so they feel connected and close to Him.		
Synagogue	**Church**	**Mosque**

BVT
Who is God?

God is All Powerful (Omnipotent)

This means God is all powerful
Examples of this include

- God creating the world in 7 days – "In the beginning was the Word and the Word was God" Bible or "I am the Lord, and there is no other. I form the light and darkness" Tenakh
- God working through Moses and Jesus to perform **miracles** e.g. calming of the storm / 10 plagues
- "No vision can grasp him… He is above all comprehension" Qur'an



God is all loving (Omnibenevolent)

This means that God is caring and merciful (forgiving) to religious believers.
Examples of God being all loving include

- The sacrifice or **atonement** of Jesus "God loved the world so much he gave his only Son" Bible
- "The Lord has chosen you to be His treasured possession" Tenakh
- The parable of the Prodigal Son.
- "He will be with you wherever you maybe be" a quote Muslims read in the Qur'an.
- **Lords' prayer** "Forgive us our trespasses (sins)"
- Qur'an "Those that pardon will be rewarded by God"

God is Just

This is the belief that God is fair and brings justice: He can reward those that serve him and punish those that commit sin. This is because God is all knowing (**Omniscient**).
Examples of God being just include:

- **Judgement day.** When religious believers die they believe if they are good their souls will go to Heaven, if not they will go to Hell. In the Qur'an it talks about judgement day "We will show you the truth of what you did"
- The **parable** of Lazarus and the Rich man.
- The story of the **Original Sin** in where Adam and Eve are punished for eating the forbidden fruit.

Parable of Lazarus and the Rich man

A beggar called Lazarus is begging on the street. Each day a rich man walks past and does not give him any money or food. When the rich man dies God sends him to hell.

This teaches God is almighty and can punish those that sin

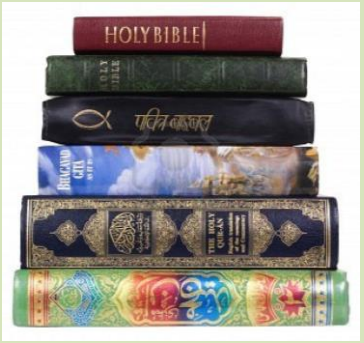
Parable of the Prodigal Son

A farmer leaves his inheritance for his 2 sons. One son saves his inheritance and stays to work on the farm, the other son leaves and spends all his inheritance. He returns home with no money and no place to go. The farmer welcomes his son back and forgives him.

This parable story teaches to be loving to one another and forgiving of mistakes

Holy Books

BVT: Who is God?

Judaism:	**Christianity:**	**Islam:**
Tenakh Section 1: **Torah** (oldest religious writing) – Contains early writing such as **creation** and Moses. It contains the Religious **Laws of God**, from the covenants and commandments given. Section 2: **Nevi'im** – tell the historical stories of the **prophets**, which highlights their teachings and the qualities of God. Section 3: **Ketuvim** – contains a collection of stories, poems, songs, historical writing some are used in Jewish festivals. **Jewish books come from various writers, times and accounts.**	**Bible** Old Testament: Contains the teachings, laws and stories from the Jewish Torah and Nevi'im BUT written from Christian point of view, so the words may differ slightly. New Testament: Written by Jesus followers, we call Apostles between years 50-120 after Jesus death. It tells the **life story and teachings of Jesus**. 	**Qur'an** Qur'an was recited by Prophet **Muhammad** as he heard the words of God and written down straight away from the year 610 (it was collected into a book in 632). It is the only religious book to show the **true word of God** because of this. Qur'an contains early Islamic teachings of creation, prophets Moses, Abraham etc. Even teaching of Jesus – as a see as a prophet. It contains the **teachings and practices Muhammad** set up. This includes **rules and expectations** of how to live as a Muslim.

Glossary of key words

Abraham	Founder, created and leader of Monotheist religions. Founder of Judaism. Prophet of religion.
Apostles Creed	Statement (like prayer) that Christians read and follow
Covenant	Religious agreement between Abraham and God.
Eid	Islamic Festival at the end of Ramadan
Incarnation	Belief that God lives through Jesus.
Monotheist religions	Religions that believe in One God: Judaism, Islam and Christianity.
Moses	Prophet for religion. Freed the Israelites from Egypt.
Mosque	Place of worship for Muslims.
Muhammad	Prophet for Islam; started Islamic faith
Omnibenevolent	God is All Loving
Omnipotent	God is All - Powerful
Omniscient	God is all knowing
Parable	Stories that Jesus told, which had teaching messages.
Passover	Jewish Festival, which celebrates the Prophet Moses.
Predestination	Allah has chosen a Muslims path in life
Qur'an	Religious book / scripture for Muslims.
Six Articles of Faith	Set of beliefs that Muslims follow, which includes the belief about God and other authorities like prophets and angels.
Synagogue	Place of worship for Jews.
Tawhid	God is one is Islam; Allah is almighty and absolute
Tenakh	Religious book / scripture for Jews, it comes in 3 sections: Torah, Nevi'im and Ketuvim
Trinity	God is 3 parts in Christianity; Father, Son, Holy Spirit

What do you normally do at home?

French Term 5

#Term Learning: Conjugation of verbs in the present tense

Key Terminology	Definition
Personal pronoun	The words I, you, he, she, we, you (plural) and they are all **personal pronouns**
Verb	A word which describes an action or state of having or being. To run, to go, to have, to be, to play …
Regular verb	A verb which has a **regular** and predictable conjugation. (I play, you play, he plays …)
Irregular verb	A verb which has a very **messy** (!) **conjugation (I am, you are, he is …)**
Reflexive verb	An action that you do to **yourself**, eg I get dressed (I dress myself)
Tense	**When** the action takes place
Infinitive	A verb with no tense; in English, it has the word 'to' in front of it. **To go, to sleep, to dance, to dream**
Conjugation	Changing the spelling / sound of a verb to match **who** is doing the action and **when** they are doing it. **Examples in English: I play, he plays, I played; I am, you are, I was**
Person	**Who is doing the action:** 1st person singular = I; 2nd person singular = you; 3rd person singular = she, he; 1st person plural = we; 2nd person plural = you(s); 3rd person plural = they

- **Je / j'** = both mean 'I'. We use j' in front of a vowel
- **Tu** = speaking to one person, usually familiar, informal or younger
- You will also find the word '**on**'. This usually translates as 'we', but is quite informal. It conjugates like 'il,elle'
- **Vous** = speaking to an adult or someone in a formal situation
- **Ils / elles** = they
- (If the group is mixed, we use 'ils' !)

All **infinitive verbs** in French will **end** in **two letters**:

-er

-ir

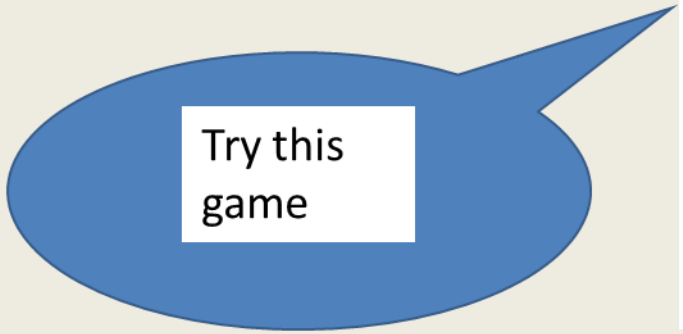
-re

Examples:

jouer = to play; manger = to eat; chanter = to sing

finir = to finish; choisir = to choose; bâtir = to build

attendre = to wait; vendre = to sell; dépendre = to depend



Follow the table below to see how they change their spelling (and sound!) to fit in a sentence. Notice how we take off the last two letters, and then add endings:

Infinitive Ending	Example Verb	Je	Tu	Il/Elle/On	Nous	Vous	Ils/Elles
-ER	Parler (to speak)	parle	parles	parle	parlons	parlez	parlent
-IR	Finir (to finish)	finis	finis	finit	finissons	finissez	finissent
-RE	Vendre (to sell)	vends	vends	vend	vendons	vendez	vendent

The **‘BIG FOUR’** irregular verbs in French. Learn these, and you will find thing a lot easier!

Pronoun	Avoir (to have)	Être (to be)	Faire (to do/make)	Aller (to go)
Je	**j’ai** (I have)	**je suis** (I am)	**je fais** (I do/make)	**je vais** (I go / I am going)
Tu	**tu as** (You have)	**tu es** (You are)	**tu fais** (You do/make)	**tu vas** (You go / You are going)
Il/Elle/On	**il/elle/on a** (He/She/One has)	**il/elle/on est** (He/She/One is)	**il/elle/on fait** (He/She/One does/makes)	**il/elle/on va** (He/She/One goes / is going)
Nous	**nous avons** (We have)	**nous sommes** (We are)	**nous faisons** (We do/make)	**nous allons** (We go / We are going)
Vous	**vous avez** (You have)	**vous êtes** (You are)	**vous faites** (You do/make)	**vous allez** (You go / You are going)
Ils/Elles	**ils/elles ont** (They have)	**ils/elles sont** (They are)	**ils/elles font** (They do/make)	**ils/elles vont** (They go / They are going)

Reflexive verbs

Reflexive verbs

You can find **reflexive verbs** in English too! *I wake (myself) up; I get (myself) dressed.*

In French, we add an extra **little** word (the equivalent of 'myself, yourself, himself …)

je **me** / tu **te** / il, elle **se** / nous **nous** / vous **vous** / ils, elles **se**

Watch me!

Pronoun	Reflexive Pronoun	Verb (Laver)	English Translation
Je	me	lave	I wash myself
Tu	te	laves	You wash yourself (informal)
Il/Elle/On	se	lave	He/She/One washes himself/herself/oneself
Nous	nous	lavons	We wash ourselves
Vous	vous	lavez	You wash yourself (formal) / You wash yourselves
Ils/Elles	se	lavent	They wash themselves

Do you want to go to the cinema?
French Term 6

#Term Learning: Making suggestions and arrangements to go out

Key Terminology	Definition
Infinitive phrase	**A phrase using an infinitive, eg: I would like to watch the rugby; Do you hope to go to France?**
24 hour / 12 hour clock	In France and many other countries in Europe, the **24h clock** is more widely used. So, 11 in the morning is **11h**, 1pm is **13h**, 4.30pm is **16.30** etc
Digital / analogue time	The time on your phone is shown **digitally**; the time on the clocks around the school is **analogue**
Near future tense	**When we talk about what we are going to do, we are using the near future tense.** **Next week, I am going to do all my homework and then we are going to see the new Bond movie!**

Making a suggestion, accepting and refusing – some examples

Video

Game

Heure (24h)	Heure (12h)
Minuit (00:00)	12:00 AM
Quatorze heures quinze (14:15)	2:15 PM
Seize heures trente (16:30)	4:30 PM
Dix-neuf heures quarante-cinq (19:45)	7:45 PM
Vingt-trois heures (23:00)	11:00 PM

What do you normally do at home?

Spanish Term 5

#Term Learning: Conjugation of verbs in the present tense

Key Terminology	Definition
Personal pronoun	The words I, you, he, she, we, you (plural) and they are all **personal pronouns**
Verb	A word which describes an action or state of having or being. To run, to go, to have, to be, to play …
Regular verb	A verb which has a **regular** and predictable conjugation. (I play, you play, he plays …)
Irregular verb	A verb which has a very **messy** (!) **conjugation (I am, you are, he is …)**
Reflexive verb	An action that you do to **yourself**, eg I get dressed (I dress myself)
Tense	**When** the action takes place
Infinitive	A verb with no tense; in English, it has the word 'to' in front of it. **To go, to sleep, to dance, to dream**
Conjugation	Changing the spelling / sound of a verb to match **who** is doing the action and **when** they are doing it. **Examples in English: I play, he plays, I played; I am, you are, I was**
Person	**Who is doing the action:** 1st person singular = I; 2nd person singular = you; 3rd person singular = she, he; 1st person plural = we; 2nd person plural = you(s); 3rd person plural = they

- Often, Spanish speakers only use the pronoun for EMPHASIS – they often don't bother with them!
- In South America, the you (plural) Ustedes is used; in Spain, vosotros or vosotras.

All **infinitive verbs** in Spanish will **end** in **two letters**:

-ar

-ir

-er

Examples:

jugar = to play; pintar = to paint; cantar = to sing

escribir = to write; subir = to go up; reir = to laugh

aprender = to learn; comer = to eat; beber = to drink

Follow the table below to see how they change their spelling (and sound!) to fit in a sentence. Notice how we take off the last two letters, and then add endings:

Pronoun	-AR Verb (Hablar)	English Translation	-ER Verb (Comer)	English Translation	-IR Verb (Vivir)	English Translation
Yo	hablo	I speak	como	I eat	vivo	I live
Tú	hablas	You speak (informal)	comes	You eat (informal)	vives	You live (informal)
Él/Ella	habla	He/She speaks	come	He/She eats	vive	He/She lives
Nosotros/as	hablamos	We speak	comemos	We eat	vivimos	We live
Vosotros/as	habláis	You all speak (informal)	coméis	You all eat (informal)	vivís	You all live (informal)
Ellos/Ellas	hablan	They speak	comen	They eat	viven	They live

The **‘BIG FIVE’** irregular verbs in Spanish. Learn these, and you will find thing a lot easier!

ESTAR

SINGULAR	PLURAL
Yo estoy	Nosotros (Nosotras) estamos
Tú estás	Vosotros (Vosotras) estáis
Usted (Ud.) está	Ustedes (Uds.) están
Él está	Ellos están
Ella está	Ellas están

TENER

SINGULAR	PLURAL
Yo tengo	Nosotros (Nosotras) tenemos
Tú tienes	Vosotros (Vosotras) tenéis
Usted (Ud.) tiene	Ustedes (Uds.) tienen
Él tiene	Ellos tienen
Ella tiene	Ellas tienen

SER

SINGULAR	PLURAL
Yo soy	Nosotros (Nosotras) somos
Tú eres	Vosotros (Vosotras) sois
Usted (Ud.) es	Ustedes (Uds.) son
Él es	Ellos son
Ella es	Ellas son

IR

SINGULAR	PLURAL
Yo voy	Nosotros (Nosotras) vamos
Tú vas	Vosotros (Vosotras) vais
Usted (Ud.) va	Ustedes (Uds.) van
Él va	Ellos van
Ella va	Ellas van

HACER II

PRESENT

hago

haces

hace

hacemos

hacéis

hacen

What do these sentences mean? Use the table to help.

Tengo un hermano = ?
Mi hermano va a Manchester = ?
Mi hermano es grande = ?
Manchester está en el norte = ?
Hacemos ciclismo = ?
Mi hermano tiene el pelo largo = ?
Mis padres van a Espana = ?
Las playas bonitas están en el sur =?
Hago mis deberes = ?

Over to you!

<u>Make up five simple</u> sentences of your own to practise these verbs

Reflexive verbs

Reflexive verbs

You can find **reflexive verbs** in English too! *I wake (myself) up; I get (myself) dressed.*

In Spanish we add an extra **little** word (the equivalent of 'myself, yourself, himself …)

yo **me**; tú **te**; él, ella **se**; nosotros **nos**; vosotros **os**; ellos, ellas **se**

Watch me!

English	Spanish (Reflexive Verb)
I wake up at 7 AM.	**Me** despierto a las 7 de la mañana.
You (informal) get up quickly.	**Te** levantas rápido.
He shaves every morning.	**Se** afeita todas las mañanas.
She brushes her hair.	**Se** cepilla el pelo.
We wash our hands before eating.	**Nos** lavamos las manos antes de comer.
You all (Spain) go to bed early.	**Os** acostáis temprano.
They get dressed for school.	**Se** visten para la escuela.

Do you want to go to the cinema?
Spanish Term 6

#Term Learning: Making suggestions and arrangements to go out

Key Terminology	Definition
Infinitive phrase	**A phrase using an infinitive, eg: I would like to watch the rugby; Do you hope to go to France?**
24 hour / 12 hour clock	In France and many other countries in Europe, the **24h clock** is more widely used. So, 11 in the morning is **11h**, 1pm is **13h**, 4.30pm is **16.30** etc
Digital / analogue time	The time on your phone is shown **digitally**; the time on the clocks around the school is **analogue**
Near future tense	**When we talk about what we are going to do, we are using the near future tense.** **Next week, I am going to do all my homework and then we are going to see the new Bond movie!**

Making a suggestion, accepting and refusing – some examples

LA HORA - THE TIME

Let's tell time. We are going to see one simple way of answering

¿Qué hora es?

Video

Game

Spanish (24-hour)	English (12-hour)
00:00 - Medianoche	12:00 AM - Midnight
06:30 - Seis y media	6:30 AM
09:15 - Nueve y cuarto	9:15 AM
12:45 - Doce y cuarenta y cinco	12:45 PM
15:00 - Tres en punto	3:00 PM
18:20 - Dieciocho y veinte	6:20 PM
21:10 - Veintiuna y diez	9:10 PM
23:55 - Veintitrés y cincuenta y cinco	11:55 PM

The Fundamentals of Art

TERM 5 and 6

LINE

A **LINE** is the path left by a moving point, eg. A pencil or a brush dipped in paint. A **LINE** can take many forms, eg.
Horizontal, diagonal or curved.
A **LINE** can be used to show contours, movements, feelings and expressions.


TONE

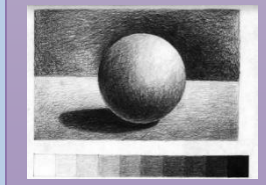
TONE means the lightness or darkness of something. This could be a shade or how dark or light a colour appears.



SHAPE/FORM

A **SHAPE** is an area enclosed by a **LINE**. It could be just an outline or it could be shaded in.
FORM is a three dimensional shape such as a sphere, cube or a cone.

Sculpture and 3D design are about creating **FORMS**




TEXTURE

TEXTURE is the surface quality of something, the way
something feels or looks like it feels.
There are two types of texture: **ACTUCAL TEXTURE** and **VISUAL TEXTURE**.
ACTUAL TEXTURE: really exists so you can feel it and touch it
VISUAL TEXTURE: created using different marks that represent actual **TEXTURE**



COLOUR

There are 3 primary **COLOURS**: RED, YELLOW, BLUE

By mixing any 2 **PRIMARY COLOURS** together you create **SECONDARY COLOURS**; ORANGE, GREEN, PURPLE


PATTERN

PATTERN is a design that is created by repeating **LINES**, **SHAPES**, **TONES** or **COLOURS.**

Patterns can be manmade or natural.


SENTENCE STARTERS

I can vary tone by…
- layering mark making
- using a range of pencils
- varying the pressure of my marks
- using an eraser to add highlights

My work is successful because…
I could develop my work further by…
My design was inspired by the work of…

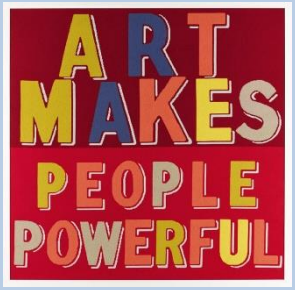


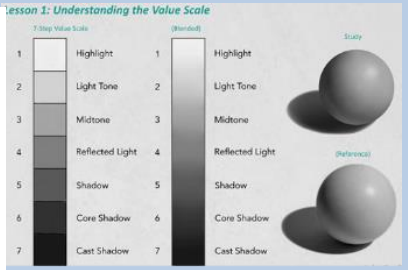
Artists you could research:
- Mark Hearld
- Brian Wildsmith
- David Hoickney – dachshund series
- Henri Rousseau
- Franz Marc

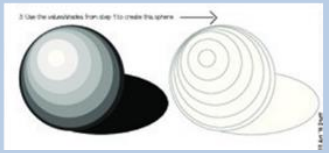
The Fundamentals of Art

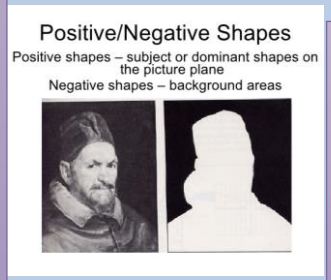
ESSENTIAL EQUIPMENT:
- PENCIL PACK (2B, 4B, 6B ETC)
- ERASER
- SHARPENER
- SKETCHBOOK

OPTIONAL EQUIPMENT:
- DRAWING PENS
- WATERCOLOUR SET
- WATERCOLOUR PENCILS
- PAINTBRUSHES

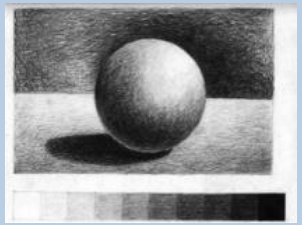








TALKING ABOUT ART:
- What are you looking at?
- How was it made?
- Who made it?
- How will it inspire your work?
- Do you like it or dislike it? Why?



Techniques you will explore:
- Observational drawing
- Experimental drawing
- Mono-printing
- Poly-printing
- Extending the frame
- Painting
- Collage
- Colour theory
- Photography

COLOUR	LINE	SHAPE/FORM/SPACE	PATTERN AND TEXTURE	TONE
BRIGHT	FLUENT	CLOSED	REPEATED	BRIGHT
BOLD	CONTINUOUS	OPEN	UNIFORM	DARK
VIBRANT	CONTROLLED	DISTORTED	GEOMETRIC	FADED
PRIMARY	LOOSE	FLAT	RANDOM	SMOOTH
SECONDARY	POWERFUL	ORGANIC	SYMMETRICAL	HARSH
TERTIARY	STRONG	POSITIVE	SOFT	CONTRASTING
RADIANT	ANGULAR	NEGATIVE	IRREGULAR	INTENSE
VIVID	FLOWING	FOREGROUND	UNEVEN	SOMBRE
DULL	LIGHT	BACKGROUND	ROUGH	STRONG
CONTRASTING	DELICATE	COMPOSITION	BROKEN	POWERFUL
COMPLIMENTARY	SIMPLE	ELONGATED	GRID	LIGHT
HARMONIOUS	THICK	LARGE	FLAT	MEDIUM
MONOCHROME	THIN	SMALL	WOVEN	DARK
NATUARL	BROKEN	2D	ORGANIC	LAYERED
SATURATED	OVERLAPPING	3D	SMOOTH	DEPTH
PASTEL	LAYERED	TWISTED	ABSTRACTED	DEVELOPED
COOL	MARK MAKING	JAGGED		SOFT
WARM				

ARTIST

ATTITUDE
Be positive and try your best!

RESPECT
Respect others, work and the room

THINK
Understand and demonstrate.

IMAGIINE
Be creative, use your imagination!

SPOTLESS
Tidy up after yourself.

TARGET
Follow directions.

MARK HEARLD

Mark Hearld is a contemporary British artist, printmaker, designer and ceramicist.
He has illustrated many books, exploring the British countryside.
He is inspired by wildlife, and the natural world around us.

Mark Hearld uses a range of media to create his pieces, including…

Mixed media
Oil pastel
Lino cut
Wood cut
Mono printing
Drawing
Painting
Collage
And much much more!

Wax Resist how to…

1. Draw out your design in oil pastel.
2. Make sure your lines don't have any paper showing through them.
3. Carefully layer your ink over your oil pastel and use water to spread out the colour.
4. Use tissue to dab up any excess ink.
5. Let your ink dry and watch the oil resist the ink!

1. Add design in oil pastel

2. Paint over with ink

3. Reveal your wax resist design!

How to make a successful artist analysis page

Neat but creative title

Student work in the style of the artist

Backgrounds add texture without being distracting

Information about the artist

Images of the artist's work

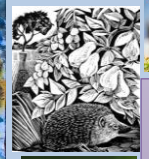
Added opinion of the work using key art specific language

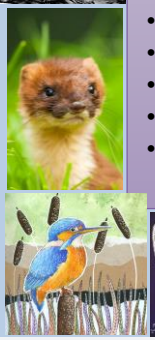
COLOUR

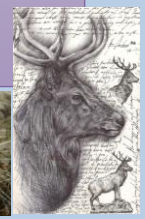
BRIGHT
BOLD
VIBRANT
PRIMARY
SECONDARY
TERTIARY
RADIANT
VIVID
DULL
CONTRASTING
COMPLIMENTARY
HARMONIOUS
MONOCHROME
NATUARL
SATURATED
PASTEL
COOL
WARM

Techniques you could potentially explore:

- Observational drawing
- Experimental drawing
- Mono-printing
- Poly-printing
- Painting
- Collage
- Colour theory
- Photography
- 3D
- Oil pastel
- Wax resist







MARK HEARLD

There are lots of different habitats in Britain, including:

Cliffs and beaches

Farmland

Estuaries and mudflats

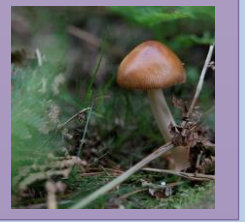
Heathland

Meadows and grasslands

Uplands, mountains and moors

Urban and suburban

Wetlands



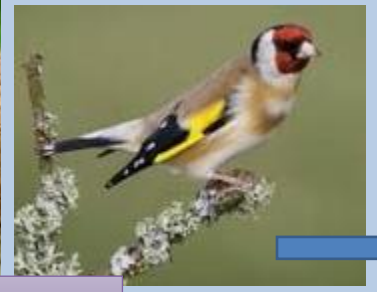
Woodlands

Natural Forms

Colour

Vibrant

Uneven



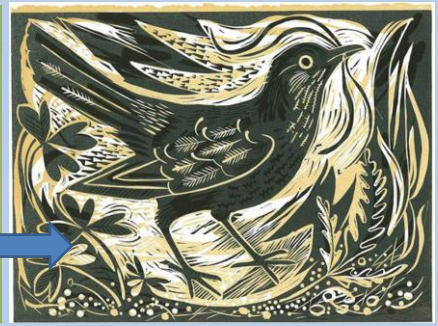
Organic

Mixed Media

Examples of British wildlife that inspires Mark Hearld

Overlapping

Mark making



Layered

Visual Texture

Sense of movement

How to research habitats...

Where do the animals live?

What do they eat?

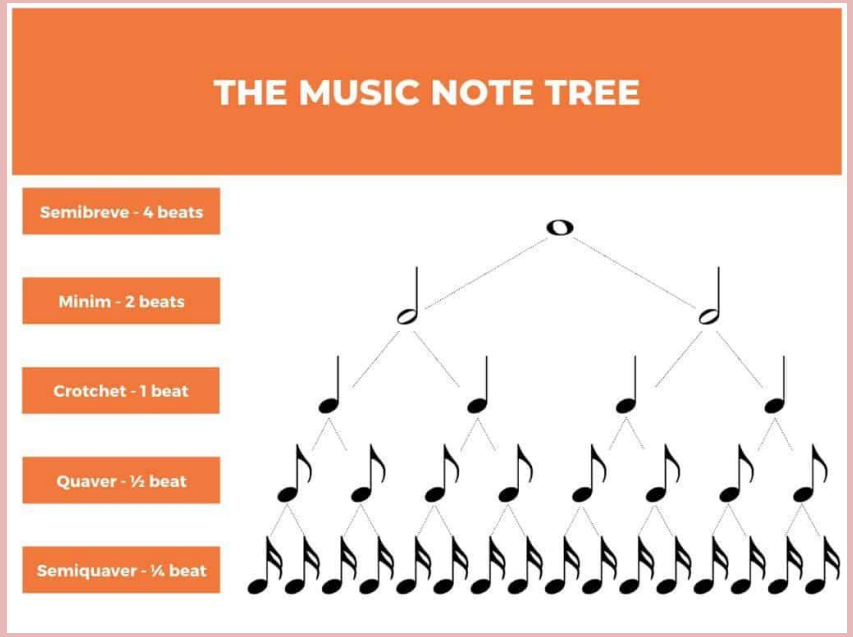
How are their fur/scales/feathers adapted to their climate?

How do they build their homes?

Where do they build their homes?

Module Learning Objectives

Understand what Form and Structure is in music.
Understand what Question and Answer, Binary, Ternary and Rondo Forms are in music.
Recognise the differences between music based on different Forms and Structures.
Know how to label or identify different sections within a complete piece of music.
Recognise that music with a recurring or repeated section provides familiarity to the listener.
Recognise why Form and Structure is important in music.



Language for Learning/Music Theory

FORM/STRUCTURE – How a piece of music is organised into different sections or parts.
PHRASE – A short section of music, like a "musical sentence".
BINARY FORM (AB) – Describes music in two separate sections. The first section is labelled "A" and the second section labelled "B" – either or both sections may be repeated. The "B" section **contrasts** musically in some way to the first "A" section.
TERNARY FORM (ABA) – Describes music in three sections. The first section can be labelled "A" and the second section "B". The "B" section **contrasts** in some way to the first "A" section which is then **REPEATED** after the "B" section again making a "musical sandwich".
RONDO FORM (ABACADA….) – Describes music where a main **THEME** or **MELODY** "A" keeps returning between different contrasting sections "B", "C", "D". etc called **EPISODES**.

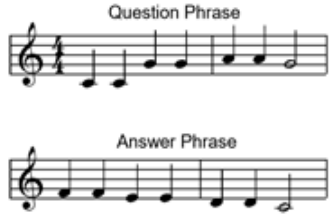
Additional Vocabulary to Research and Learn

- **Pitch**
- **Chord**
- **Dynamics**
- **Repetition**
- **Beat**
- **Ensemble**
- **Solo**
- **Key signature**
- **Time signature**
- **Treble Clef**
- **Bass Clef**
- **Harmony**
- **Sonority**
- **Drone**
- **Ostinato**
- **Solo**
- **Rhythm**
- **Tonality**

Form and Structure

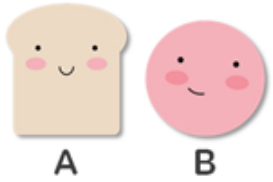
A. Question and Answer Phrases

Two short sections in a piece of music. The first **QUESTION PHRASE** is followed by the **ANSWER PHRASE** which in some way copies or answers the first – like a 'musical conversation'. The **MELODY** below shows the opening of "Twinkle Twinkle Little Star" - notice how the **QUESTION PHRASE** rises in **PITCH** and the **ANSWER PHRASE** descends in **PITCH**.



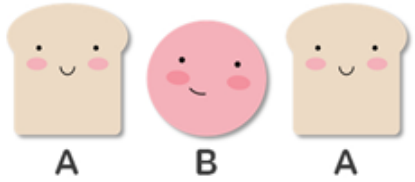
B. Binary Form

BINARY FORM (AB) describes music in two sections. The first section can be labelled "A" and the second section "B" (either or both sections may be repeated). The "B" section **contrasts** musically in some way to the first "A" section.



C. Ternary Form

TERNARY FORM (ABA) describes music in three sections. The first section can be labelled "A" and the second section "B" The "B" section **contrasts** in some way to the first "A" section which is then **repeated** after the "B" section again.



D. Rondo Form

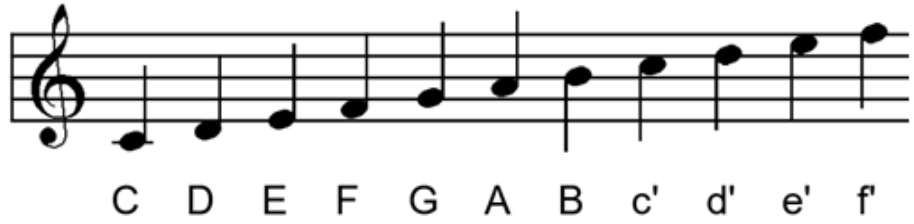
RONDO FORM (ABACADA…) describes music where a main **theme** or **melody** "A" keeps returning between different contrasting sections "B, C, D…" (called **episodes**)

E. Key Words

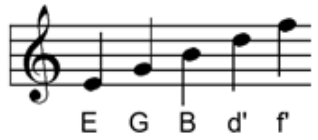
1. **FORM/STRUCTURE** – How a piece of music is organised into different sections or parts.
2. **PHRASE** – A short section of music, like a "musical sentence".
3. **PITCH** – The **highness** or **lowness** of a sound or musical note.
4. **MELODY/THEME** – The main **tune** of a piece of music. The melody or theme often varies in **pitch** and "good melodies" have an organised and recognisable shape.
5. **HARMONY** – Playing two or more notes at the same time. The "harmony part" in music is different to the melody part.
6. **DRONE** – A repeated note or notes of **long duration** played through the music. When two notes are used, they are often **five** notes apart (a **fifth**).
7. **OSTINATO** – A repeated musical pattern. An ostinato can be a repeated rhythm or a repeated melody and are usually short.

F. Music Theory

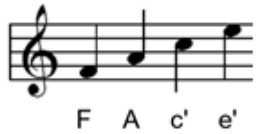
Treble Clef Pitch Notation



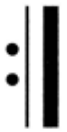
Treble Clef "Lines" Note Names



Treble Clef "Spaces" Note Names



Repeat Mark



Folk Music

#Learning Objectives

#How to use different forms of Musical Accompaniments to accompany traditional Folk Songs in different ways, showing an awareness of intervals and the Harmony created.

#Understand the different textural layers and form and structure of Folk Songs.

#Know some of the different instruments, timbres and sonorities often used in the performance of Folk Music.

#Understand and use the different musical information given on a lead sheet and available musical resources in creating an effective Musical Arrangement of a Folk Song.

Language for Learning/Music Theory

ACCOMPANIMENT – Music that accompanies either a lead singer or melody line.
DRONE – A form of musical accompaniment consisting of continuous sounding pitched note or notes (usually a fifth apart (5 notes)), often in the bass part.
HARMONY – The effect produced by two or mote pitched notes sounding together at the same time
BASS PEDAL - A note of long duration, often held in the bass part
INTRO – The introduction sets the mood of a song. It is often instrumental but can occasionally start with lyrics.
VERSES – Verses introduce the song theme. They are usually new lyrics for each verse which helps to develop the song's story, but the melody is the same in all verses.
CHORUS – All the choruses have the same lyrics each time with the same melody and music.

*Many folk songs are hundreds of years old and were passed down orally through several generations. Often songs were memorized as people couldn't read or write

*Folk songs are often related to national culture as people learn songs from the same country as their grandparents

*Folk songs often commemorate historical and other events so as can learn from the past by studying the lyrics

*Folk songs can evolve over time and lyrics to songs might be different in different regions so there are many versions. Often we don't even know who wrote the song in the first place. Most folk songs are anonymous

*Some folk songs originated from doing boring work such as planting, weaving and milling. Some are for entertainment and some for story and history-telling. Some are about war

*English folk songs are linked to sea-shanties (see Voice and Songs 2), Jigs, Hornpipes and Morris Dancing

*Ralph Vaughan-Williams (see English Composer 2) collected English folk songs

*In the 1960s, there was a revival of folk music and this is called contemporary folk music. Folk rock was also popular

Suggested Folk Songs

Cockles and Mussels (Irish)

Lavender's Blue (English dated around 1670)

Scarborough Fair (English dated around 1700. Simon and Garfunkel recorded a version in 1965)

Amazing Grace (An English hymn from 1779. This became popular in the 60s folk revival)

Skye Boat Song (Scottish dated late 1800s. Tom Jones and Rod Stewart recorded versions in the 60s)

Greensleeves (English dated late 1500s. It is popular belief that this was written by Henry VIII although it was more likely Elizabethan

Charlie is my Darling (Scottish)

The Tree in the Wood (English dated around 1900s)

The Ash Grove (Welsh 1800s)

The Cuckoo (English 1800s)

Modern Folk Artists

Bellowhead

Kate Rusby

Jim Moray

Folk Music

A. History of Folk Music

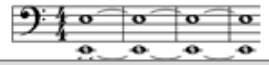
Folk Music is **TRADITIONAL** music **of the people** performed by the people themselves and played within their own communities. Folk Music was passed on **ORALLY** (through speech or song) from one generation to the next – the **ORAL TRADITION** (passed down by word of mouth), and many Folk Songs were not originally written down. The Industrial Revolution of the 18th and 19th Centuries destroyed communities so many of the traditional Folk Songs were lost. Attempts were made to collect these songs and *Cecil Sharp* published a 'written down' collection of English Folk Music in 1907 which had taken a lifetime to collect. During the 1950's a great **FOLK MUSIC REVIVAL** began and bands in the 1970's 'mixed together' Folk and Rock (**FOLK ROCK**) as a type of musical **FUSION** *e.g., Lindisfarne, Steeleye Span*. Other musicians created more modern and commercial **ARRANGEMENTS** of Folk Songs such as *Ralph McTell's "Streets of London"* in 1975. Folk Music influenced bands such as *The Beatles* and artists such as *Paul Simon* and modern-day groups such as *The Corrs* use traditional Folk Music in their songs.

B. Types of Folk Music

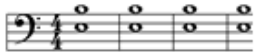
People from different countries and cultures have their own **FOLK MUSIC**. However, although it may sound different, **FOLK SONGS** are often include **WORK SONGS**, including **SEA SHANTIES**: songs sung at sea by sailors, the rhythm of these helped the sailors haul the ropes that hoisted the sails, and songs about **EVERYDAY LIFE, THE SEASONS, BATTLES AND WARS, SHEPHERD'S SONGS** and **LULLABIES** (cradle songs). People also sang Folk Songs to help them forget their aches and pains *e.g., shepherds sang about their sheep and lambs and the bitter weather to help keep their spirits high.* Folk Music can also be **INSTRUMENTAL**, often used for dancing, entertainment, celebration, and religious ceremonies. Dancing to Folk Music still happens such as **MORRIS DANCERS** or **MAYPOLE DANCING**.

C. Folk Song Accompaniments

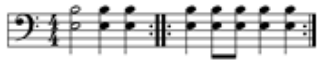
TONIC PEDAL - A (BASS) PEDAL (POINT/NOTE) is a note of long duration, often held in the bass part (lower down the keyboard) which uses the **TONIC** note, over which the melody line and chords will "fit" *e.g.*



DRONE - A form of musical accompaniment consisting of continuous sounding pitched notes, usually a **FIFTH** apart (5 notes), again, often in the bass part *e.g.*

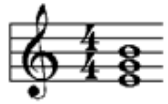


OSTINATO – A repeated musical pattern as an accompaniment, often using notes of the **CHORD** and rhythm patterns from the song *e.g.*

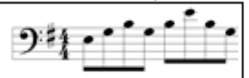


CHORDS – Many Folk Songs use **PRIMARY CHORDS** (**CHORD I**, **CHORD IV** and **CHORD V**) and sometimes the **SECONDARY CHORDS** of **CHORD III** and **CHORD VI** as a musical accompaniment. The notes of a **CHORD** can be performed in different ways to create different accompaniments:

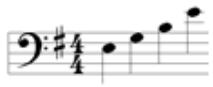
As a **TRIAD** (all three notes (**ROOT, THIRD, FIFTH**) performed together, the **ROOT** sometimes in the **BASS** part acting as **BASS LINE**).



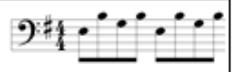
As a **BROKEN CHORD** - a way of playing the notes (**ROOT, THIRD, FIFTH**) of a chord separately ('broken' up) in a different order, ascending (going up) or descending (going down).



As an **ARPEGGIO** - playing the notes of a chord ascending or descending (**ROOT, THIRD, FIFTH**) in order, but separately.



As an **ALBERTI BASS** - a way of playing the notes of a chord in the order: lowest (**ROOT**), highest (**FIFTH**), middle (**THIRD**), highest (**FIFTH**), repeated several times as a bass line **ACCOMPANIMENT**

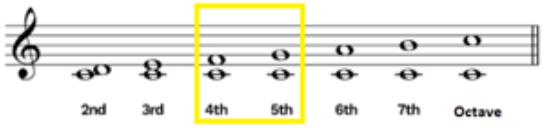


D. Harmony in Folk Music: Intervals

ACCOMPANIMENT – Music that accompanies either a lead singer or melody line. This can be instrumental performed by members of a Folk Band but also vocal often known as the "backing" provided by backing singers. (see C for different forms of accompaniments).

HARMONY – The effect produced by two or more pitched notes sounding together at the same time *e.g.*, a chord or triad creates harmony or a lead singer and backing singers singing different melodies or parts 'in harmony' (**COUNTER MELODY**)

INTERVAL – The distance between two musical notes. The intervals of a **FOURTH** and **FIFTH** are common in Folk Music.



F. Instruments, Timbres and Sonorities of Folk Music

Many **FOLK SONGS** are often performed **UNACCOMPANIED** (with no instrumental accompaniment) = **A CAPPELLA**. However, the following instruments are often used in Folk Music:

								
Penny/Tin Whistle	**Harmonica or Mouth Organ**	**Acoustic Guitar**	**Northumbrian Pipes**	**Accordion**	**"Fiddle" (Violin)**	**Mandolin**	**Banjo**	**Concertina**

Term 5

The Most Disastrous Family Holiday Ever. Ever!

Study Focus

In this scheme of work you will work with the idea of the mishaps and mistakes that can happen on a family holiday. You will use the **character** and **playwriting** skills that you learned earlier in the year. The aim is for you to extend your abilities in each of these skills and combine them to produce an extended play, in several scenes in several different settings in the comic genre (style). You will practise introducing characters through narration and remember that an actor ***plays*** a character It is best if you have a good time while you are working on this – it will help you get the light-hearted nature which is so helpful in this scheme of work. Good luck.

Things that you will learn in this topic…

- Ways to create depth and detail in the characters and plays that you write and devise.
- How to adapt a story into play format.
- Ideas about ***Internal*** & ***External Character.***
- How **contrast** (difference) in personality can make a character more interesting and life like.
- How **contrasts** between characters can make your story and a play more engaging, exciting & entertaining.
- How characters and their relationships can make a story and play funny and entertaining – how you can write in the ***comic genre.***

The Tasks that you may do in this topic

Writing your version of, The Most Disastrous Holiday Ever. Ever!!
Writing a character profile for each character.
Adapting your story into a play using ***Play Format***.
Enrolling your family members to read through your play with you.
Imagining and sketching the costumes that you would choose for each character.
Making a chart listing ***Internal Character*** & those we include as, ***External Character***

Key Ideas to learn & remember

One thing that you will consider when writing a play is the characters. When writing your characters you will need to think about what they are like AND how you present them
Internal Character – (what they are like inside) this includes; the character's personality, age, mood, thoughts & feelings.
External Character – (How we present them to audience) This is the way the actor shows the audience what the character is like. It includes; clothes / costume, facial expressions, gestures, accent, tone of voice, tempo rhythm (how quick / slow they talk and move). You must also consider what the characters do and how they do it, and how this is recorded in a script. Remember to include:
Cues – This is an indication to the actor that is their character's turn to speak.
Stage directions - These tell the actor how to say the line and what to do, for example (slowly and sadly whilst walking away) stage directions are written in brackets just like I have done.
Classic Play Structure- Remember that the beginning scenes of a play need to show the audience where the scene is set, what the weather is like, what the characters are like, what their relationships are like- who likes who, who irritates who etc.

Key knowledge to use and remember

The 6 Ingredients of a Play- (IOP)

Characters- the people in the play
Plot- The storyline- Your characters in this topic are all part of a family.
Setting- Where & when the scene is set. Your play story and play will change settings because the characters are going on a journey. Different scenes will have different settings.
Speech – The words that the characters say.
Theme – What the play is about- its meaning- its message
Genre – The style of the play. You are writing in the comic genre in this topic.

Play Format

This is the style of writing we use to write plays. It is the style that playwrights use (note the spelling). We don't use speech marks because everything is speech in a play, except for the stage directions which are put in brackets and usually written in italics. The character's name is usually written in bold and then the words that they say are written after with a colon separating them so it looks like this:

Brighton beach Tuesday evening. It is warm and sunny with a gentle breeze. The Postlethwaite family are enjoying a picnic. Carrie, the dog is snapping at wasps.
Dad: *(sternly)* Carrie! Sit! Leave the wasps.
Mum: She's only playing, Derek. Let her be.
Dad: it's not you who'll be paying the hospital bills if she gets stung and goes into an anaphylactic shock.
Rachel: (worried) Will Carrie die if she gets stung, mummy?
Mum: No darling, (*even more harshly than dad*) Carrie! Sit!
….You get the idea?

You can also use the margin in your books

Playwright (not 'playwrite')

Wright is a very old English word for a 'maker' – someone who makes things. A wheelwright is someone who makes wheels. So, a playwright is someone who ***makes***, or ***writes*** plays. Can you guess what a Plowright does?

Ideas: What could possibly go wrong?

People can forget things, like; passports, or money, or, suitcase or clothes, or keys, or the kids, or the dog, or grandma.
The car could get a puncture. It could roll downhill. Someone could lock the car keys in the car. They could go to the wrong train station/ airport/ country. Bags can get lost. People can get lost and so on and so on.

What can the characters be like?

Look to make the characters different - we say the characters have, ***contrasting attributes..***
Maybe their personalities clash… maybe some things irritate each other.
The characters should have a positive part of their personality and something not so useful like; they are always late, clumsy, forgetful, greedy, moody, sulky, loud, silent, stroppy, stressy…

Guidelines & notes

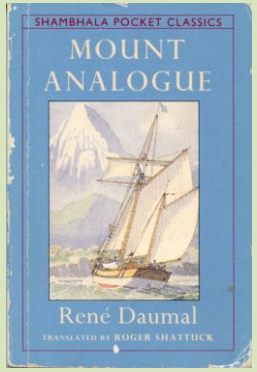
Remember that it is a **family holiday**- **not** a group of friends' holiday.
Make your characters have different personalities, moods, likes and dislikes.
Make your play a comedy so it is in the, ***comic genre.***
You do not need to tell jokes. Instead, make it funny through the different characters' actions, relationships, personalities, mistakes and changing moods.

Year 7 Term 6

Drama: Mount Analogue

Things that you will learn in this topic

- How to create greater depth and detail in your characters.
- How to keep a diary as your character.
- How to use interview techniques and ***hot- seating*** to create clarity and depth in your characters.
- How to work with others using ***PIPS*** and ***Physical Theatre to*** create the shape and movement of your own yacht sailing on an ocean.
- How to combine **emotion** and **mime technique** to devise and perform a powerful ***monologue.***



About the Book and Author

Rene Daumal began writing, ***Mount Analogue*** in 1939. The Second World War had started and Rene had learned that he was seriously ill with tuberculosis. It was a very difficult time. His wife was Jewish which meant they had to flee German occupied Paris and seek refuge in the Pyrenees mountains- an area that was still free. As refugees in wartime, life was incredibly hard for them. Rene did his best to complete the book but his failing health in such awful conditions prevented him in the last. He passed in 1944 leaving his book unfinished.

Rene Daumal was a man of great wisdom, generosity & courage. He was deeply interested in science, ancient languages, philosophy and religion. He was a creative, learned and spiritual man. We can learn much from his life as well as his books.

The Story:

Professor Sogol did some calculations to work out how much the world weighed- quite a task! He was puzzled, however, because the weight that he came up with didn't match the amount of land mass known to make up the Earth. Professor Sogol concluded that there must be some land missing- some land not yet discovered even though explorers had mapped the whole world. His calculations suggested that the missing part would be a mountain. He named it, *Mount Analogue* and even though it would be very difficult to find even if it existed and he wasn't sure it existed, he decided to organise an expedition to find it.

Professor Sogol knew that Mount Analogue would be a very special place and unlike anywhere else on Earth. It would take a very special crew to journey there. They would need to have specialist skills to find this land and knowledge to understand it. Men and women who were accomplished in the fields of zoology, botany, anthropology, languages, medicine, cartography, for example. As the Professor planned to voyage by sea on his yacht, the crew would also need to be fine sailors and navigators.

Navigating using a sextant

The Story Continued:

Professor Sogol thought that *Mount Analogue* must be so dense that it bends light, a bit like the way massive star's gravity bends light. This would be the reason that it had never been discovered, or that anyone who had found it, never returned. The journey would be a long one, perhaps a life time. The trip would require total commitment and a willingness to give up everything. Such an expedition would require those successful in gaining a place on the yacht to have many qualities; honesty, courage, resilience, kindness- perhaps you will think of some more.

Eventually, by rigorous interview, the Professor found all the suitable crew members. They set sail one fine morning, at first light on their trusty yacht which they called, ***'Impossible'.*** And so, their expedition to a place that may not exist, began…

Key Ideas and things from the story

Analogue – A thing (or person) seen as comparable to another. “An Interior analogue of an exterior world” is one example in the Oxford Dictionary. Analogy comes from the same source.

Expedition – A journey undertaken by a group of people with a particular purpose, especially that of exploration…

The Impossible – The name of the yacht they sail on to find Mount Analogue. Why would they call it, ***The Impossible*** ?

One for the Botanists

Homo erectus – an early human species. For the anthropologists

An example of cuneiform writing from ancient Mesopotamia. A linguist would be curious about this

An extract of the Mappa Mundy – one of the earliest maps in existence

An example of Hieroglyphic writing from ancient Egypt.

Some subjects and skills that are useful on the expedition

Have a think why people with these skills would be useful on an expedition to a land that may not exist and we know nothing about

Zoology – The study of everything to do with animals. We get the word zoo from the same place.

Botany - The study of everything to do with plants. A Botanist.

Anthropology – The scientific study of creatures like us- human beings! ***Anthropologists*** are scientists who study ancient people as well as modern people. **Homo Erectus** was an early type of human (about a million years ago). I wonder what might come after us.

Archaeology – The study of our human past from such things as ancient cities, tools, coins, jewellery. These things are usually buried through time. Archaeologists often have to carefully dig these up.

Linguistics – The scientific study of language and languages

Sociology – The study of society. ***Social scientists*** or ***sociologists*** study social relationships and social interaction- how people work and live together in groups including families.

Cartography – The study of maps and map making. A ***cartographer*** is someone who studies & makes maps.

Geology – **geologists** study the rocks from which the Earth is made and how they change over time.

Key Previous Knowledge and learning to Draw upon

As we enter the last two term of your first year in the school it is timely and useful to remember some things we have done & learned in our drama lessons

You will need to remember our work on **character**; how characters are made up of their personalities, backgrounds, attitudes, beliefs, thoughts and feelings. You will add a character's job, education and training to this list.You will also need to remember the ways that an actor shows their character to the audience once that they know what they are like (their personality etc.)

You will also need to remember the **mime** skills that you learned and practiced in terms 3 & 4. To **mime** something successfully an actor first needs to picture the object and then show its weight, shape, size, texture, temperature etc.

Freeze frames are also known as **Still Images** and when we make a Still Image we need to consider (think about) our-

Posture
Gestures
Body Language
Facial Expressions
Space
Levels

Do you know why these are SO important in a Freeze Frame ??
No ? ! ?
Well I'll tell you …
It's because there is no talking or moving in a freeze frame so those six things are the only way that the audience can understand what the characters are like and what is going on.

Remember that you are not the character. You are ***playing*** a character. You are you.

In these lessons, you will get to create and play a specialist role of your choice – an archaeologist, perhaps

Physical theatre term 4
You will use only your bodies and the stage blocks in to make your version of, ***The Impossible.***

Mime

Internal skill	External Skill
Picture	Show
Visualise	shape
Imagine	weight
See	temperature
	size
	texture
	function

You will use the story and your understanding of character to discover those things that are most important to you

A key task is to apply for a place on ***The Impossible*** for the voyage to discover, **Mount Analogue.**
You will need to invent and develop a character – one that will be suitable for such an expedition to a land, a very special land that may, or may not exist.

The skilled jobs Required

Zoologist
Botanist
Physicist
Geologist
Cartographer
Virologist
Archaeologist
Anthropologist
Herbologist
Horologist
Meteorologist
Generalpractitioner (GP)

Other skills and qualities needed

Patience
Bravery,
Gentleness
Sense of humour
Honesty
Quick witted
Perform well under pressure
Listens well
Good with details
Can see the bigger picture
Forgiving

House & street
Town or city
Country

13th February 1944

Dear Professor Sogol

My name is ..
I am ……. Years old. My birthday is …
I am single/ married (to..)
I have …. Children (names and ages and one sentence description)
I studied at …(choose from list)… university
I am currently working as a (.. Choose from list ..)
Apart from my work I am interested in … (hobbies, passions)
The reason that I want to go on this voyage/ expedition is …
The question I most want answered/ the thing I most want to know/learn is…
My best qualities are
The things that I most need to improve/ work on are …
The most important things to know about me are …

Yours sincerely

(your character's signature)

Some Universities to Choose from:

Oxford
Cambridge
Durham
Sterling
Bristol
The Sorbonne
Coimbra (Portugal)
Trinity College Dublin
Yale
Princeton
Berkley
MIT
Harvard

Analysis

Athletics

Resilience

Competition

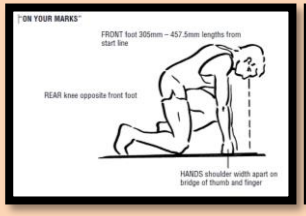
Performance Analysis:
- Using the success criteria for each event, identify the strengths and weaknesses in technique.
- Suggest what needs to improve and how it can be improved.

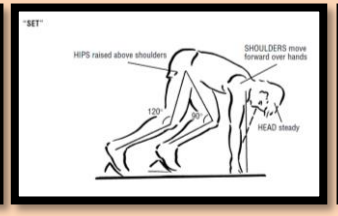
Sprint Start

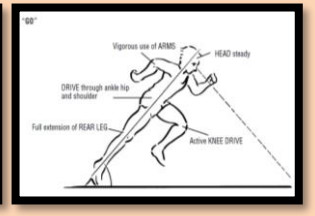
Take your marks:
1. Focus eyes on where first stride will land.
2. Shoulders directly over hands.
3. Place the rear knee in line with front foot.
4. Hands make bridge between thumb and forefinger.
5. Hands are placed shoulder width apart.

Set:
1. Shoulders move forward and up (needs strength!).
2. Hips move up higher than shoulders so making correct angles at knee joints (90° front knee, 120° rear knee).
3. Keep head in line with spine.

Go:
1. Vigorous arm action (fast elbows) to get legs moving.
2. Drive and extend – good line from toe to head.
3. Drive hard off blocks and drive head and shoulders out.







Implementation of the Academic Standards to the PE Environment:
- Arrive promptly and change within the allocated time.
- Always have the correct PE kit.
- Fully engaged throughout the lesson, striving to improve performance of skills and techniques at every opportunity.
- Motivated and contributes 100% effort.
- Can work independently to complete a warm-up, drills and competitive situations.
- Perseveres and doesn't give up, demonstrates resilience when practicing and applying skills to different situations/ game scenarios.

Long Jump

Approach:
- Start approach by stepping onto your take off foot
- Mark out your approach distance (11-15 running strides form the take off board)
- Good sprinting form – high knees and good leg drive
- Run fast at a speed you can take off from
- Stay relaxed as you get to the take off board

Take off:
- Drive your non-take off leg and both arms upwards at take off

Flight: Hang technique
- Extend your lead leg and bring it back to join trailing leg before pushing both legs out in front.

Landing:
- Push both legs forwards

Shot Put

Grip:
- Hold the shot at the base of your three middle fingers, supported by your thumb and little finger.
- The shot must be held on the shoulder close to the chin
- The elbow of your throwing arm should be kept high

Preparation:
- Chin, knee, toe all in line

Release:
- Push up through your legs, lifting your body upward, you're the arm should be 'last and fast'

Analysis

Cricket

Resilience

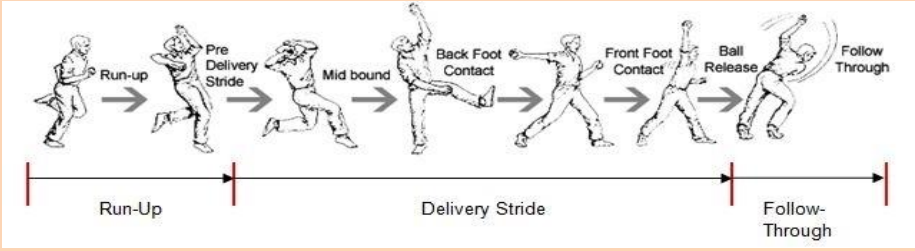
Competition

Performance Analysis:
- Using the success criteria for each of the skills of Cricket – Bowler, Batter, Fielder and Wicket Keeper.
- Identify the strengths and weaknesses in technique.
- Suggest what needs to improve and how it can be improved.

Bowling:
Students will be able to bowl over-arm with increasing accuracy at a slow to a medium pace.

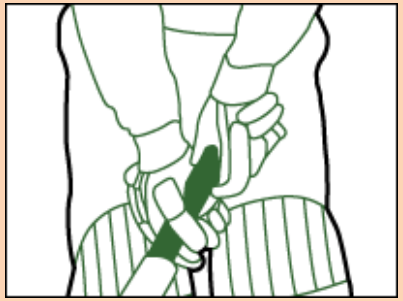
The bowler's job is to take as many wickets as possible.
- That job will be a lot easier if they have control of their line and length or their bowl, making the batsman's job of scoring runs that much more difficult.

- The batsman does not need to hit every single ball they face.
- The bowler must attempt the batsman into playing a stroke, increasing the chances of taking a wicket.



Implementation of the Academic Standards to the PE Environment:
- Arrive promptly and change within the allocated time.
- Always have the correct PE kit.
- Fully engaged throughout the lesson, striving to improve performance of skills and techniques at every opportunity.
- Motivated and contributes 100% effort.
- Can work independently to complete a warm-up, drills and competitive situations.
- Perseveres and doesn't give up, demonstrates resilience when practicing and applying skills to different situations/ game scenarios.

Batting: Grip
1. The grip principles are the same for right and left-handers.
2. For a right-hander the left hand should be at the top of the handle - vice versa for a left-hander.
3. Check both your hands are fairly close together on the bat, towards the top of the handle.
4. Form a "V" by pointing your thumb and forefinger down between outside edge and centre of back of bat.
5. The top hand rests comfortably on the inside of the front thigh (left thigh for a right hander).



Batting: Stance
1. Be comfortable and relaxed.
2. The feet should be approximately a foot length apart either side or on the crease
3. The weight of the batsman should be on the balls of their feet, with the knees slightly bent.
4. The batsman should be side on when the bowler is about to deliver
5. Some batsmen prefer to open their stance to help them see the ball clearer

Analysis

Rounders

Resilience

Competition

Performance Analysis:
- Using the success criteria for each role within Rounders – Fielder, Bowler and Batsperson.
- Identify the strengths and weaknesses in technique.
- Suggest what needs to improve and how it can be improved.

Batting technique

- Hold the bat high (in one hand).
- Have a strong grip on the handle.
- Make sure your wrist is strong.
- Keep your eye on the ball.
- Stand side on to the bowler.
- Swing through the ball.
- Stamp forwards into the move to gain power (transfer your weight from the back foot to the front foot as you move).

Scoring
- A rounder is scored by the batting team when a player hits the ball and runs around all 4 posts.
- A half rounder is scored if the batter hits the ball and runs to the second post.
- A half rounder can also be scored if the batter does not hit the ball but runs around all four posts.
- A half rounder can also be awarded by the official for two consecutive no balls and obstruction by a member of the fielding team.

Implementation of the Academic Standards to the PE Environment:
- Arrive promptly and change within the allocated time.
- Always have the correct PE kit.
- Fully engaged throughout the lesson, striving to improve performance of skills and techniques at every opportunity.
- Motivated and contributes 100% effort.
- Can work independently to complete a warm-up, drills and competitive situations.
- Perseveres and doesn't give up, demonstrates resilience when practicing and applying skills to different situations/ game scenarios.

Fielding

Overarm throwing
- Hold the ball between the fingers and thumb.
- Bring your throwing arm straight back over your shoulder.
- Let the ball roll off the tip of your two fingers and follow through.
- Point your non throwing arm at the player you are going to throw to.

Bowling Technique
- Hold the ball in your dominant hand, gripped in the fingers and held by the thumb.
- Step forwards into the move to gain power (transfer your weight from the back foot to the front foot as you move.
- Hold your bowling or throwing arm straight, like a swinging pendulum (swing from behind the body to the front of the body.
- Release the ball at waist height.
- Aim for the backstop's hands.

Analysis

Rounders

Resilience

Competition

Performance Analysis:
- Using the success criteria for each role within Rounders – Fielder, Bowler and Batsperson.
- Identify the strengths and weaknesses in technique.
- Suggest what needs to improve and how it can be improved.

Batting technique

- Hold the bat high (in one hand).
- Have a strong grip on the handle.
- Make sure your wrist is strong.
- Keep your eye on the ball.
- Stand side on to the bowler.
- Swing through the ball.
- Stamp forwards into the move to gain power (transfer your weight from the back foot to the front foot as you move).

Scoring
- A rounder is scored by the batting team when a player hits the ball and runs around all 4 posts.
- A half rounder is scored if the batter hits the ball and runs to the second post.
- A half rounder can also be scored if the batter does not hit the ball but runs around all four posts.
- A half rounder can also be awarded by the official for two consecutive no balls and obstruction by a member of the fielding team.

Implementation of the Academic Standards to the PE Environment:
- Arrive promptly and change within the allocated time.
- Always have the correct PE kit.
- Fully engaged throughout the lesson, striving to improve performance of skills and techniques at every opportunity.
- Motivated and contributes 100% effort.
- Can work independently to complete a warm-up, drills and competitive situations.
- Perseveres and doesn't give up, demonstrates resilience when practicing and applying skills to different situations/ game scenarios.

Fielding

Overarm throwing
- Hold the ball between the fingers and thumb.
- Bring your throwing arm straight back over your shoulder.
- Let the ball roll off the tip of your two fingers and follow through.
- Point your non throwing arm at the player you are going to throw to.

Bowling Technique
- Hold the ball in your dominant hand, gripped in the fingers and held by the thumb.
- Step forwards into the move to gain power (transfer your weight from the back foot to the front foot as you move.
- Hold your bowling or throwing arm straight, like a swinging pendulum (swing from behind the body to the front of the body.
- Release the ball at waist height.
- Aim for the backstop's hands.

Follow the Safety Rules in the Textiles Technology workroom to stay safe!

1. ***FOLLOW*** **instructions.**
2. **Put all bags and coats under the table.**
3. **Keep chairs tucked in.**
4. **Do NOT run in the Textiles workroom – WALK!**
5. **Use all equipment correctly and appropriately.**
6. **Put all equipment away in the correct place after you have used it.**
7. **Always make sure that you have been shown how to use equipment before using it.**
8. **Tie long hair back.**
9. **Carry scissors closed and by the blades.**
10. **A sewing machine is used by one person – don't try to use a sewing machine with someone else.**
11. **NEVER distract anyone who is using a sewing machine.**
12. **Turn sewing machines off when you have finished using them.**
13. **No food and drink in the Textiles workroom.**

Key Terms

Safety: taking care not to hurt or injure yourself or others.

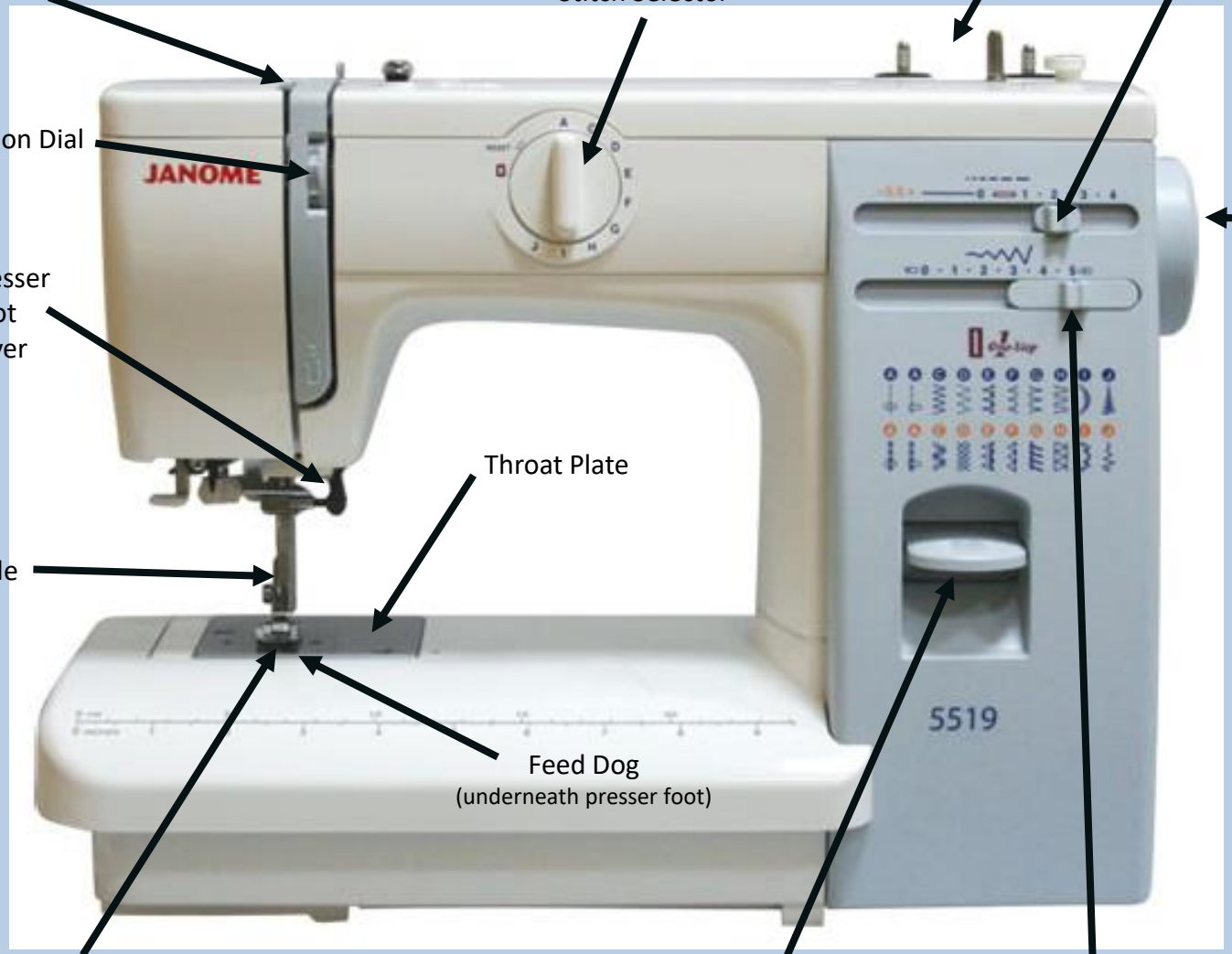
Hazard: any feature of a situation which may cause harm or injury.

Risk: the chance of a hazard causing harm or injury.

Risk Assessment: calculating how big a risk is by thinking about whether the harm or damage is likely to happen.

Risk Control: action taken to ensure that the harm or damage is less likely to happen.

SEWING MACHINE- the main parts.



Thread Take-Up hook

Stitch Selector

Spool Pins

Stitch Length Selector

Tension Dial

CAM Wheel

Presser Foot Lever

Throat Plate

Needle

Feed Dog
(underneath presser foot)

Presser Foot

Reverse Lever

Stitch Width Selector

Bobbin Compartment

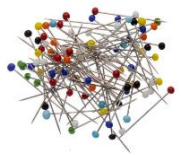
Bobbin

Bobbin Case

Bobbin Case Finger

Bobbin Case 'Latch'

Foot Pedal and Lead

Hand sewing Needle		Hand sewing needles are used with thread for sewing by hand. They have a point at one end - this is very ***sharp*** - and a hole at the other which is called an 'eye'; this is where the thread goes. Needles are ***sharp*** so you need to be careful when using them so you don't prick yourself!
Pins		They are also known as ***Dressmaker Pins***. They are used for holding fabrics together ***temporarily*** while sewing. They are also used for holding pattern templates onto fabric while you cut out. Pins are ***sharp*** so you need to be careful when using them so you don't prick yourself!
Pin Magnet		This might also be known as a ***Magnetic Pincushion***. This keeps the pins in one place. Pins should be put onto a pin magnet and not left on the table or near the sewing machine as they will get damaged.
Fabric Scissors		Sometimes called ***Fabric Shears***. We use these for cutting fabric. ***Only fabric***. They cut fabric accurately and they allow you to cut for longer periods of time without getting hand fatigue. Notice that the blades are longer and they have one large for 3 -4 fingers and a small hole just for your thumb.
Embroidery Scissors		We use these for cutting threads. They have short blades and can cut right to the tip. We use them by the sewing machine but they are also useful for cutting detail in fabric such as button holes. Not for use with paper!
Pinking Shears		These scissors feature a characteristic zig-zag edge. We use them to create a ravel-resistant edge on fabric; this means it will help prevent the fabric from ***fraying***. These scissors can also be used to give a decorative edge on craft projects.
Paper Scissors		We use these for cutting paper. ***Only paper and cardboard.*** Notice that the two holes are small and the blades are short.

Tape Measure		It is **long** and **flexible** and made from durable plastic or fabric. Most tape measures are marked with centimetres on one side and inches on the other. We use it to measure obviously but because it is long and flexible you can take body and other measurements easily.
Quick Unpick		Also known as a ***Seam Ripper*** and this really handy tool removes unwanted stitches quick and easily. It has a ***sharp point*** and ***cutting blade*** o be careful when using it. ***NEVER*** be afraid to make a mistake.
Aqua Pen		This is another tool used for marking fabric. It is also known as a ***Water Erasble Pen***. It's useful if you want to mark fine lines or trace a design or transfer complex pattern markings onto fabric. This pen makes bright blue marks which are easily removed with ***water***.
Tailors Chalk		This is used for ***marking fabric*** so you know where to cut out or alter a garment. It is often found in the shape of a triangle - the edge can mark fabric with precision. Tailor's chalk is easily removed.
Machining Thread		These are fine ***yarns*** of ***cotton***, ***nylon*** or ***polyester*** and are used for ***sewing by hand*** or ***by machine***. Threads come in different sized spools and in lots of colours to match the fabric you are sewing together.
Embroidery Thread		Comes with 6 threads intertwined that can be ‘split’ to reduce the thickness. Used to create ***decorative stitches*** on products.

Y7 Textiles Key Words	
Stitch	**Thread passes through fabric to keep it together.**
Seam	**Where two pieces of fabric join together by stitching.**
Seam allowance	**The area between the edge of your fabric and the line of stitching being used to join two or more pieces of material together.**

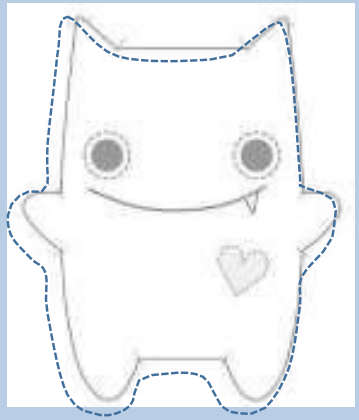
A **seam allowance** is the space between a stitching line and the edge of the fabric.

Sewing a seam right against the edge of two pieces of fabric can lead to fraying and may not hold in place. It is important to include a seam allowance that makes sure that the seam will be sturdy and not come away from the raw edge of the fabric.

Add **seam allowance** all the way around your design.

Seam allowances are also useful when making garments or products that may need to be altered, such as clothing.

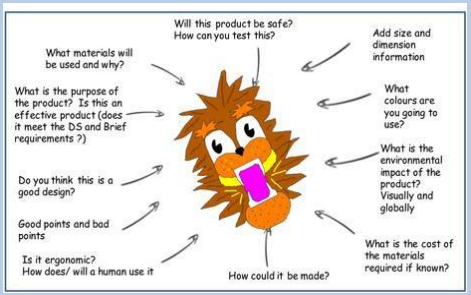
Seam Allowance



Designing

Communicating your ideas with others.

Carefully sketching our your ideas and neatly shading in your ideas to ensure your ideas are clear.



Annotation

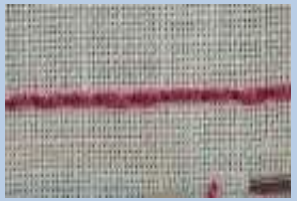
Adding short explanations to your design ideas to help explain your designs further.

The Design Process	
Design Brief	**A statement outlining what is to be designed and made.**
Research	**Sourcing information and inspiration to help with design work.**
Specification	**A list of design criteria.**
Design Ideas	**A range of potential solutions to the problem.**
Development	**Further improving an idea.**
Final Design Idea	**A presentation drawing of chosen idea.**
Manufacture	**Making the final outcome.**
Evaluation	**Reviewing strengths and weaknesses of final product and design work.**

Hand stitches

Straight stitch

Blanket stitch



Back stitch

Cross stitch

Appliquè

Applying one layer of shaped fabric to another. This can be done either by hand or by a sewing machine.

Reduce

Minimise the amount of materials you use, reduce the amount we need to buy and make long-lasting products .

Refuse

Don't use or buy a product if you don't need it or if its unsustainable or wasteful.

Repair

When a product breaks down, or doesn't function properly, try to fix it – it's better than throwing it away into landfill.

Rethink

Ask whether we can sustain our current way of life and the way we design and make. Can something be made in a different way?

Recycle

Take an existing product that has become waste and reprocess the material to use in a new product. This uses less energy than obtaining new materials.

Reuse

Take an existing product that has become waste and use the material or parts for another purpose, without processing it.

This symbol is called the **MOBIUS LOOP** or 'recycling symbol' and indicates that a product **can** be **recycled**, but not necessarily that it **has** been itself produced from **recycled** materials.

The **6 RS OF SUSTAINABILITY** are used to remind us of how we can improve the impact textile products have on society.

FAST FASHION' - inexpensive clothing produced rapidly by mass-market retailers in response to the latest trends.

The **6R's** are a way of helping you think about the reducing the impact of a new product on the **ENVIRONMENT** and **PEOPLE.**

Unwanted textile items will end up in **LANDFILL** – a place where unwanted materials are sent, which are then buried underground.

FLEECE fabric is made from **RECYCLED PLASTIC BOTTLES**. This makes a polyester yarn that can be woven or knitted into fabric to make clothing.

Design and Technology

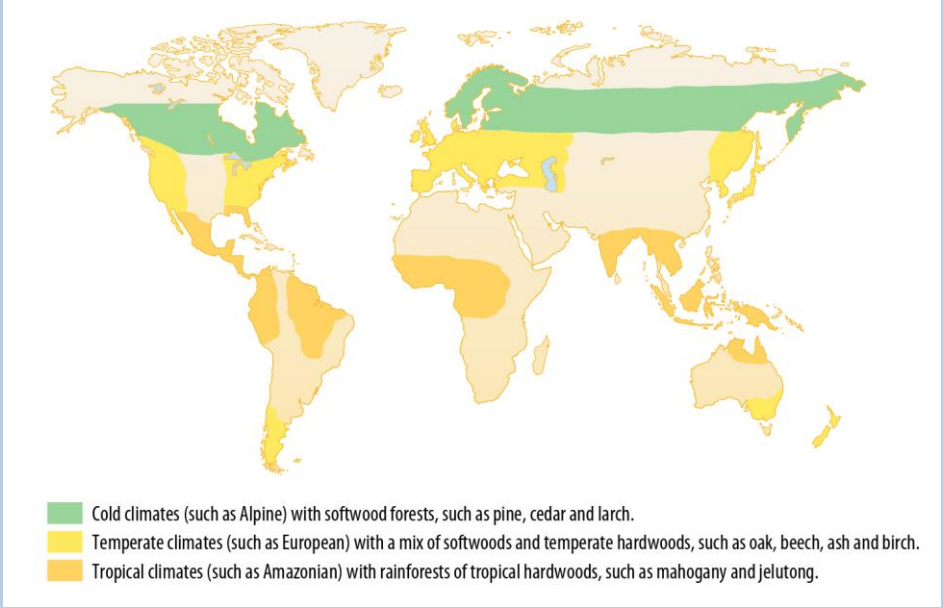
Timber is wood that has come from tree trunks and has been dried and cut into planks. Timber has been used as a building material for thousands of years to make homes, furniture and tools. Timber is still used a lot as trees grow naturally, their wood is easy to work with and it is relatively strong and lightweight.

Hardwood comes from a broad leaved tree whose seeds are enclosed in a fruit. They grow quite slowly, often taking over 100 years to be big enough to be used for timber.

Softwood comes from a tree with needle like leaves, and seeds in a cone, they are coniferous. Most softwood trees are evergreen, meaning they have leaves all year. They grow quite quickly, and can be used for timber after about 30 years. This means they can be grown commercially, which is why softwood is a lot cheaper than hardwood.

Hardwoods	Advantages	Disadvantages	Common uses
Oak	Strong and durable Has an attractive grain when well finished	Expensive, becoming rarer Harder to work than other woods Corrodes iron and steel	Building houses and boats, high quality furniture, wine and whisky barrels
Mahogany	Has a very attractive finish Quite easy to work with	Expensive, environmental problems with sourcing from tropical forests, oil in the wood can cause skin or breathing problems	High quality furniture, jewellery boxes and window frames
Beech	A tough wood Does not crack or splinter easily Hard	Expensive, not very resistant to moisture Not suitable for exterior use	Toys, cooking implements, solid wood and laminated furniture
Ash	Strong, tough and flexible Finishes well	Low resistance to rot and insect attack	Handles for tools, sports equipment and ladders
Balsa	Very lightweight Easy to cut	Much too soft and weak for most products	Model making, surfboard cores, buoyancy aids
Jelutong	Even close grain Easy to cut and shape	Soft and not very strong Not good for structural use	Model making, moulds for casting or vacuum forming
Birch	Regular even grain Easy to work	Low resistance to rot and insect attack	Veneers to make plywood and surface cheaper materials that are used for furniture or doors

Softwoods	Advantages	Disadvantages	Common uses
Pine	Very durable, easy to work, quite cheap as it grows quickly enough to be forested, reasonably strong and lightweight	Can warp, crack and splinter more than some other woods	House construction for roof joists and floorboards Furniture doors and interior woodwork
Cedar	Natural oils make it resistant to water and fungal growth	More expensive than pine and not as strong	Outdoor furniture, fences, sheds and boats
Larch	Tough, durable and resistant to water It can be used outside untreated and weathers to a silvery grey	Costs more than other softwoods	Small boats, yachts, exterior cladding on buildings



MDF

Plywood

FSC

PEFC

Chipboard

Manufactured timbers use natural timbers to make boards that have different properties to plain timber. Because of the size of a tree trunk timber is limited to fairly narrow planks. If you need large, thin sheets of wooden material you will need a manufactured board.

Boards	Advantages	Disadvantages	Common uses
Plywood	Flat and structurally sound, surface looks like real wood, resistant to warping, cracking and twisting	Quite expensive, edges can look rough, susceptible to water damage if using the wrong grade	Building and furniture panels that need some strength
MDF	Cheap (made from waste wood), smooth ungrained surface is good for painting or staining, easy to machine	Poor aesthetics, so needs coating, weak compared to real or plywood, tools blunt quickly due to glue content	Flat pack furniture, wall panels, display cabinets, storage units and kitchen units
Chipboard	Use waste materials so is cheap to produce	Poor structural strength, especially in damp conditions, surface is very rough so usually plastic coated	Desktops, kitchen worktops, cheap flat pack furniture

Properties

It is important to know the correct meaning of the words that describe a material's properties. Comparing materials helps to define each material's properties. For example, do not say oak is hard, because there are lots of harder materials. Say: oak is harder than pine.

Hardness is the ability of a material to withstand cutting and scratching. Timber is generally quite a soft material. It can easily be scratched and cut with metal tools, which are much harder than wood. Oak is quite hard for a wood. Balsa is very soft for a wood. This should not be confused with the classification of trees as hardwoods and softwoods.

Toughness is the ability of a material to withstand being hit. A tough material can be quite soft, and might bend or deform when hit, but not break. Timber is quite a tough material. If you hit it with a hammer it may dent, but not break.

Durability is the ability of a material to last a long time. Timber that has been dried out and is kept dry is durable. Oak beams in old buildings can be hundreds of years old. However, wood that is left wet can rot quite quickly and won't then be very durable. Some timbers contain natural oils that make them more durable outside. Timber can be treated with preservatives to make it more durable for outside use.

Elasticity is the ability to stretch and return to its original length or shape. Timber is not generally elastic, but some are more than others, yew is used to make archery bows for example.

Tensile strength is the ability to withstand pulling force, timbers tend to have a good tensile strength, often 3 or 4 times better than compressive strength.

Compressive strength is the ability to withstand a crushing force, the denser the timber the better its compressive strength.

Orthographic views

Orthographic projection is used to show the detail and measurements of the product clearly from a range of angles so that a stranger could use the drawing to work out the shape and dimensions for manufacture. A furniture designer would be a perfect example of someone who may use orthographic projection.

To create an orthographic projection, you draw the front view, side view and plan view of your product in 2D. You can either draw them out by hand or generate the views using various CAD programs from your CAD model. You can use first angle projection or third angle projection – although the views may appear the same, the order that they are laid out differ.

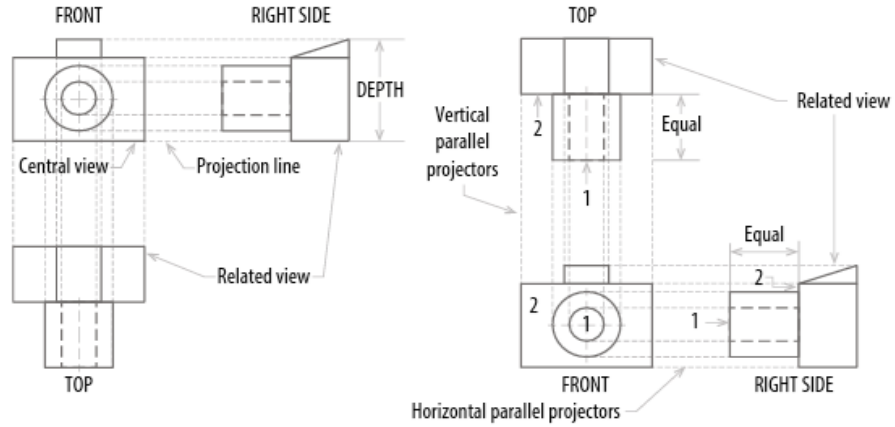
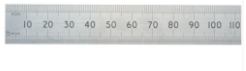
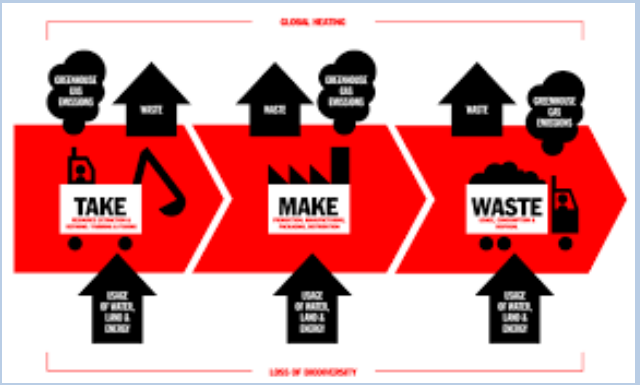
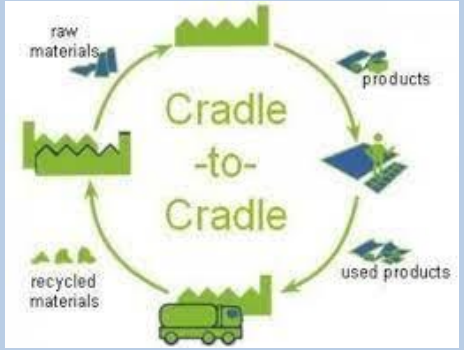


Figure 1.17.7 First and third angle projections for orthographic projection showing all sides of the product

Tools and equipment	
Try Square	
Steel rule	
Marking gauge	
Saws (tenon, hand, coping, scroll and jigsaw)	
Mallet	
Chisel	
Pillar drill	
Centre lathe	
Disc sander	





The environmental impact of manufacturing and using products

Life Cycle Assessment	
Raw materials	Where have your materials originated from? What is the environmental impacts of using them? Timber comes from trees, which are cut down…
Timber processing	How were the trees turned into the timber that you used? Trees are processed in a sawmill to turn them into timber, this has an impact on the environment…
Manufacture	How did you shape, join and finish the timber? Using tools, equipment and machinery all have an impact on the environment, some greater than others…
Distribution	If you were to make Funky Truck on a larger scale how would you distribute it to the retailers? Shipping raw materials and products around the planet uses a great amount of energy…
Product in use	Having observed your user playing with Funky Truck what environmental impact could it have? Is the product simple to use, does it require power?
Repair and maintenance	Is Funky Truck durable, does it require frequent servicing to keep it working? Will Funky Truck damage easily in normal use?
Disposal	Thinking ahead, what would happen to Funky Truck at the end of its life? Could it be easily disassembled and sorted for recycling? Have you include recycling symbols to make this process easier for your user? Are there any treatments that make disposal more difficult? Could the materials be upcycled?

Knowledge Organiser – Year 7 Food

Macro & Micro Nutrients

Carbs Protein Fats

What are Nutrients?
Nutrients are the building blocks that make up food and have specific and important roles to play in the body. Some nutrients provide energy while others are essential for growth and maintenance of the body.

Macro Nutrient	Role in the body	Food Example
Carbohydrate	The main source of energy for the body.	Bread, rice, pasta, potatoes
Protein	Provides the body with growth and repair.	Meat, poultry, beans, eggs, lentils, tofu, fish
Fat	Provides the body with insulation and a small amount protects vital organs. Provides essential fatty acids for the body.	Butter, oil, cheese, cream, nuts, oily fish, crisps

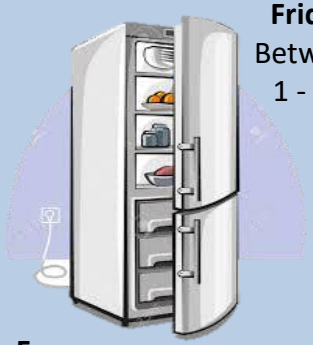
Vitamin	Role in the body	Food examples
A	Helps to keep the eyes healthy and strengthen the immune system.	Dark green leafy vegetables, carrots, liver
B	Helps to release the energy from the food we eat.	Bread, milk, cereals, fish, meat
C	Help with skin healing and healthy skin. Help with the absorption of Iron.	Fresh fruit, broccoli, tomatoes
D	Important for absorbing calcium and help with healthy bone structure.	Oily fish, eggs, butter, Sunshine

Vitamins -Help to keep our immune system up and help our body to stay healthy – they important for body maintenance.

Mineral	Role in the body	Food Examples
Calcium	Important for strong teeth and bones. It also helps with blood clotting.	Milk, yoghurt, soya, dark green leafy vegetables
Iron	Needed for red blood cells which help to transport oxygen around the body.	Nuts, whole grains, dark green leafy vegetables, meat, liver

Minerals- Help to keep our immune system up and help our body to stay healthy. Vitamins and minerals are Micronutrients.

Key Temperatures



Fridge
Between 1 - 5◦C

Freezer
Below -18◦C

Danger Zone
Bacteria multiply quickest between 5 - 63◦C

Cooking
Food should be cooked above 75◦C

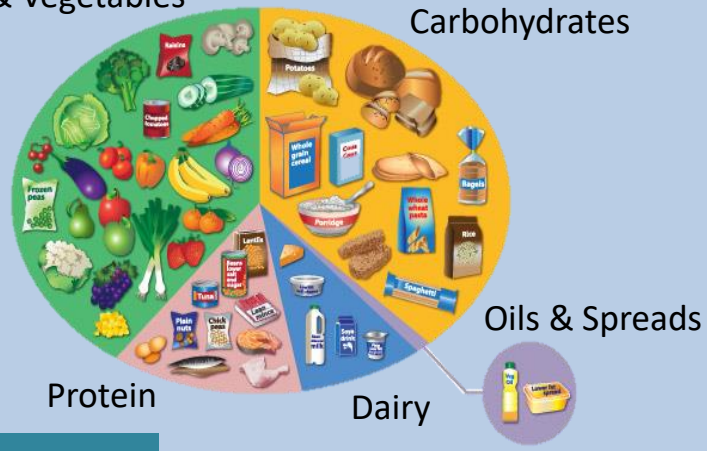
Knife Skills

Bridge Hold – Hand creates a bridge holding the food in between. The knife slices through the middle of the bridge. Used for cutting food in half.

Claw Grip – Fingers tucked under holding food. Knife comes down from flat knuckles to slice food. Used for slicing.

Knowledge Organiser – Year 7 Food

Eatwell Guide



The Cooker

8 Tips for healthy eating

1)Base your meals on starchy foods
2)Eat lots of fruit and veg
3)Eat more fish
4)Cut down on saturated fat and sugar
5)Eat less salt
6)Get active and be a healthy weight
7)Drink plenty of water
8)Don't skip breakfast

Weighing and Measuring

For good results in most recipes, **accurate** weighing and measuring is essential. When you are baking with flour, sugar and liquids, you must measure accurately or your cooking will be spoiled. If you weigh out too much sugar or too little raising agent, your cakes would not rise or you could spoil the taste and/or texture.
Food can be weighed in **Grams (g)** and there are **1000g** in a **Kilogram (kg)**. Liquid is measured in **Millilitres (ml)** or **litres.**





Equipment

Weighing scales, knife, chopping board, measuring spoons, saucepan, wooden spoon, tablespoon, teaspoon dessert spoon, mixing bowl, grater, pan-stand, baking tray, cooling rack, peeler, pastry brush, spatula.



Hygiene


Personal
Hair up – Reduces the risk of bacteria transferring to food through hair dropping in
Aprons on – Protects you from spillages and reduces risk of bacteria transferring to food from everyday clothing
Washing hands - regularly using hot soapy water to reduce the bacteria on your hands
Blue plasters – Blue plasters should be used to cover cuts and grazes as they will be easily seen if they accidentally fall into food.


Food – Understanding the 4 C's Concept
Cooking – thorough cooking kills bacteria so ensure food is cooked to 75°c to make sure all bacteria are killed – check this by using a food probe.
Cleaning – effective cleaning removes harmful bacteria and stops them spreading so ensure all work tops, utensils and equipment are cleaned thoroughly with hot soapy water.
Cooling – effective chilling prevents harmful bacteria multiplying so ensure all food is stored at the correct temperatures, ensure cooked food is cooled within 90 minutes.
Cross contamination – Good hygiene practice prevents Cross contamination so when raw food comes into contact with ready to eat food. For example raw meat juices spilling onto salad.



Wider thinking / further reading: www.foodafactoflife.org.uk www.grainchain.com

YEAR 7 GRAPHIC DESIGN

Graphic design is a craft where professionals create visual content to communicate messages.

What does a graphic designer do?

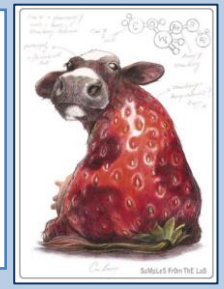
Graphic Designers create visual concepts to communicate information. They create everything from posters and billboards to packaging, logos and marketing materials. Graphic Designers use elements such as shapes, colours, typography, images and more to convey ideas to an audience.

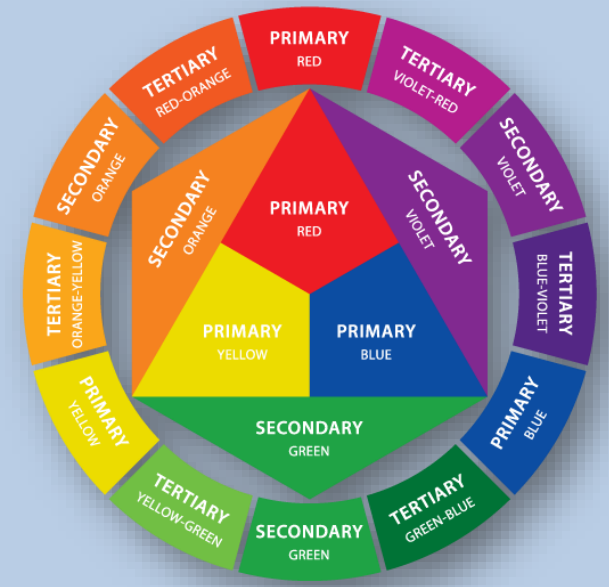
Graphic Designers:

- Freya Hartas
- Jon Burgerman
- Alexander Calder
- Abigail Burch

COLOUR THEORY

Colours can convey a message that give us an idea of how the product or company wants to be perceived. They can entice a certain type of customer and can make us think of different things.





CATERPILLAR — OPTIMISM, CLARITY, WARMTH

Fanta — FRIENDLY, CHEERFUL, CONFIDENCE

Coca-Cola — EXCITEMENT, YOUTHFUL, BOLD

Cadbury — CREATIVE, IMAGINATIVE, WISE, EXPENSIVE, ROYAL

facebook — TRUST, DEPENDABLE, STRENGTH

JOHN DEERE — PEACEFUL, GROWTH, HEALTH, NATURE, ENVIRONMENT

BALANCE, NEUTRAL, CALM

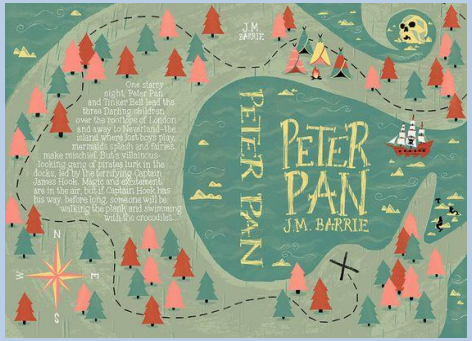
Complimentary colours are colours which are opposite to each other on the colour wheel. Examples of complementary colour combinations are: Red and green; yellow and purple; orange and blue; green and magenta. Complementary colour combos tend to be bold, which is why sports teams often use this formula for their colours.

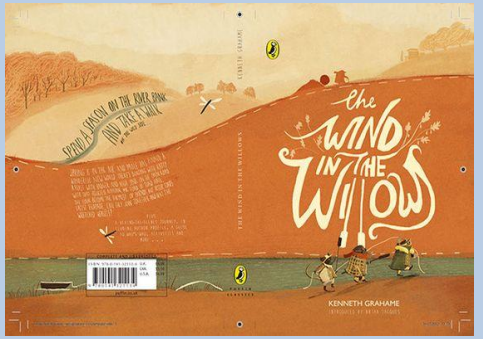
What do illustrators do to promote their work?

Illustrators and graphic designers include many processes into their practice to promote their work. For children's books illustrators, this could include designing shop windows/shop spaces which could include memorabilia linked to their children's books.

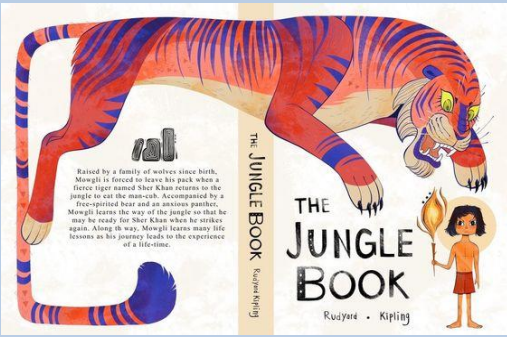
Promoting your own children's book design:

Making a book cover is a very important aspect in promoting your book. The book cover allows the target audience to have a glimpse into what the book might be about and most important who the illustrator/author is.





Merchandise:
Merchandise are goods that can be bought/sold by themselves or sold to promote books, fashion etc. Examples of merchandise are badges, t-shirts, bookmarks and posters.



Paper puppet characters:
Bringing our characters to life by making them **MOVE** by combining the technique of **PAPER-CUT** and **COLLAGE** using **WATERCOLOURS, OIL PASTELS & COLOURED PENCILS.**
These puppets are constructed using card and split pins.

Keith Haring

Andy Warhol

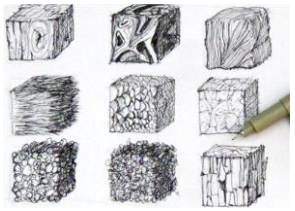
SHAPE

A **SHAPE** is an area enclosed by a **LINE**. It could be just an outline or it could be shaded in.
FORM is a three dimensional shape such as a sphere, cube or a cone.

Sculpture and 3D design are about creating **FORMS**

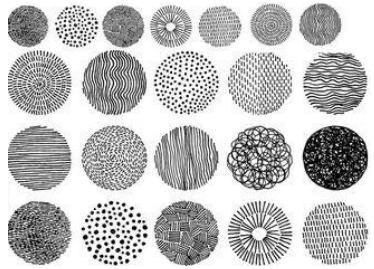
TEXTURE

TEXTURE is the surface quality of something, the way something feels or looks like it feels. There are two types of texture: **ACTUCAL TEXTURE** and **VISUAL TEXTURE**.
ACTUAL TEXTURE: really exists so you can feel it and touch it
VISUAL TEXTURE: created using
different marks that represent actual **TEXTURE**



LINE

A **LINE** is the path left by a moving point, eg. A pencil or a brush dipped in paint. A **LINE** can take many forms, eg. Horizontal, diagonal or curved.
A **LINE** can be used to show contours,
movements, feelings and expressions.



PATTERN

PATTERN is a design that is created by
repeating **LINES**, **SHAPES**, **TONES or COLOURS.**

Patterns can be manmade or natural