The Trafalgar School at Downton

Knowledge Organiser

Year 7: Terms 5 and 6

Contents

Name……House……

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? New GCSE specifications mean that students have 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.	

Learning the knowledge in the organiser

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.
The best method to use when you are working on memorising things from your Knowledge Organiser is to self-quiz, using the Trafalgar Revision Method, below:

Really read and understand	Read the information 3 or more times and ask for help in understanding
Reduce the knowledge	Rewrite the information, making revision cards or mind maps
Remember	Reread and test that you can remember
Repeat	Repeat the process above until you can recall the information quickly and accurately. Only at this point have you acquired the knowledge!

How do I remember? Activating your memory

Students often say “I can’t remember” and the reason for this is that the information they are trying to remember and learn is not yet in their **long term memory**.

Your long term memory gets activated by repetition over a number of days. And so repeat the following process to embed knowledge in your long term memory.

Look	Read the information 3 or more times 
Cover	Now cover what you have just read up
Write	Now try and write down the information you have just read 
Check	Did you write down the information correctly? If you made mistakes, correct them with a different colour pen and repeat daily until you “just know it”.

Fortnightly Writing Challenge: TITLE

Methods to include:

Here you will find some challenges – these are skills that we would like you to include.

These will be colour coded and, if you click on them, they will take you to another slide explaining the technique and giving you some examples.

Here you will find details about the actual task.
You will need to read this carefully as it will provide clues about what you need to do in your writing lesson.

Every Week B, you will have a FWC ppt loaded to your google classroom. Your homework is to ensure that you practise the skills/methods ready for your writing lesson in Week A.

Here you will find an image. Sometimes, the image will be to illustrate or contextualise your task. For some tasks, the image will be part of the writing challenge.

Don't forget to plan writing!

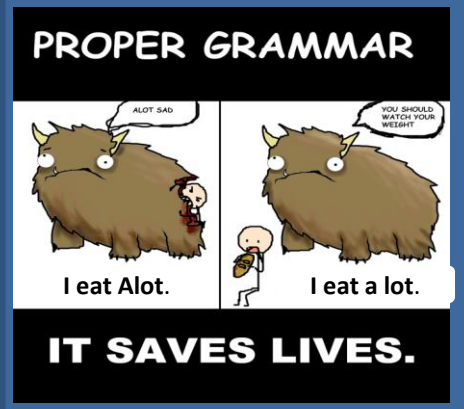
Here you will find information to help you during your writing session. There will be prompts so you do not forget the important things – full stops, capital letters, paragraphs etc

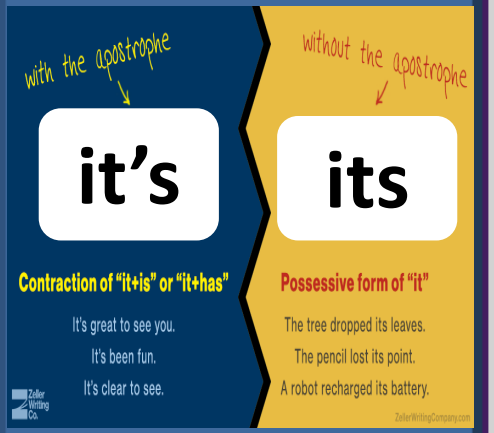
Homophones

- **there**: I'd love to go **there**.
  their: Is that **their** cat?
  they're (they are): **They're** late.
- **to**: I'm going **to** work.
  too: I've had **too** much to eat**!**
  two: I have **two** hands.
- **no**: We have **no** chance.
  know: How do you **know** that?
- **your**: What's **your** name?
  you're (you are): **You're** not alone.
- **new**: She has a **new** phone.
  knew: I already **knew** that.
- **which**: **Which** colour do you like?
  witch: She was a wicked **witch**.
- **of**: Please have a piece **of** pie.
  off: Get **off** the grass**!**
- **where**: **Where** are you going?
  wear: What should I **wear**?
  were (was): **Were** you joking?
- **our**: **I** want **our team to win!**
  are: When **are** you home?
- **here**: Please come back **here**.
- **hear**: Can you **hear** the birds?

Use *lie* to indicate the act of reclining: I am tired just watching the dog *lie* in the warm sunlight.
(to lie: lie(s), lay, lain, lying)

Use *lay* to indicate the placement of something: Please *lay* the paper on the table.
(to lay: lay(s), laid, laid, laying)





FORTNIGHTLY WRITING CHALLENGE

Language Methods to Practise in your Fortnightly Writing Challenge	
ALLITERATION:	**You'll never put a better bit of butter on your knife**
ANECDOTE:	**Talking to his children about the dangers of running in the house, a dad might include an anecdote about falling and breaking his arm.**
ANTITHESIS:	That's one small step for man, but a giant leap for mankind.
CHIASMUS:	**'Let us never negotiate out of fear, but let us never fear to negotiate.'**
EXPERTS:	'Group chat can often be a source of upset,' warned psychologist Dr Linda Pappadopolis.
EXTENDED METAPHOR:	*The Road Not Taken*, by Robert Frost, is one of the most famous examples of extended metaphor; in the poem, he compares life's journey to a forest path.
FORESHADOWING:	The witches in Macbeth are used to foreshadow that Macbeth is not innocent: 'Fair is foul and foul is fair', a line he echoes in his first appearance when he says 'so foul and fair a day I have not seen'.
IMPERATIVE VERBS:	Chill out! Do as I say! Don't eat the daisies! Please be quiet! Be quiet!
METAPHOR:	**'The sun in the west was a drop of burning gold that slid near and nearer the sill of the world.'**
MODAL VERB:	You must be home by midnight. You could be tired if you're any later. You should ring your uncle. E.g. mustn't, can, might, shouldn't, may, will
PATHETIC FALLACY	In *Macbeth*, the night the King is murdered 'has been unruly ... in th' air, strange screams of death .... Some say the Earth was feverous and did shake.'
SENSORY DESCRIPTION:	Wind swirled around the beach house, whistling loudly. **He felt the snowflakes melting on his skin, their liquid trickling down his neck, cold, wet, seeping into his clothes.**
SIMILE:	**Without warning, Lionel gave one of his tight little sneezes: it sounded like a bullet fired through a silencer.**
STATISTICS:	You have a 20% chance of surviving a 60mph crash if you don't wear a seatbelt!
SUPERLATIVE:	This is the **worst** day of my life but at least we're in the **finest** café in London.
ONOMATOPOEIA:	**The dog knocked over the vase with a crash!**
PERSONIFICATION:	**Dancing on the water, the sun shone endlessly.**
REPETITION:	**'As my grandfather went, arm over arm, his heart making sour little shudders against his ribs, he kept listening for a sound, the sound of the tiger, the sound of anything but his own feet and lungs.'**

FORTNIGHTLY WRITING CHALLENGE

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, 'don't expect me before 11.'

Mrs Smith replied, 'What time?'

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, excitement, anger, 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?'
'Oh! When are you going?'
'Ouch! That hurt.'

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.
Interesting, David's house does not have a garden, but Sarah'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 pillow — in a mighty clay oven.

Paul was scared – more scared 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

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.

effectively/fluently sequenced paragraphs

Privacy Matters

Make sure you set high privacy settings on 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.

....

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;

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.

Writing Forms 1

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.

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, a colour of burnt copper – and were battered and bruised through years of exposure to the elements.

Metaphor, simile, personification

sensory description

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

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

FORTNIGHTLY WRITING CHALLENGE

Writing a formal letter

Writing Forms 2

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 stude
Brinsley High School, a friendly and successfu ool where uniforms are not worn.

Of course, that students won't spend all morning choosing what to wear or beg p
for clothes th ere is another side to this case: uniforms breed uniformity. We c
culturally diverse nation a all dress the same, this encourages us to be the same. At Brinsley High, we are
encouraged to expre individuality, yet this seems to be in contradiction of the message enforced uniform se
us.

fluently sequenced paragraphs

fluently sequenced paragraphs

Furthermore, ...

Yours faithfully
Sherlock Holmes

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

Text for a Speech

'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'.

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 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!

sub-headings

Sample Check

introductory (overview) paragraph

Today, before he even steps out on to the Centre Court for his Wimbledo huge-hitting Pole Jerzy Janowicz, Murray wi ve been subject to several of these. He does time he pops to lavatory. The osmolari heck is conducted by one of his staff, its purpose to gaug the percenta ater and mi s in his urine, to show whether his body is correctly hydrated. The fact is, if Murray wins to y be thanks to the bloke who inspects his wee.

fluently sequenced paragraphs

fluently seq ed paragraphs

Daily Diet

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

Writing in the Essay Form

clear title

Zoos Should be Banned

effective introduction

In America, approximately 175 million people visit a zoo each year. That's half of America's population. Clearly this suggests that zoos remain popular places for people to visit for entertainment and to learn about wild animals. However, although some people are of the opinion that zoos can provide a source of educational entertainment and a sanctuary for endangered animals, I believe that the cruelty th mals suffer outweighs this benefit, and that they should be shut down!

effectively/fluently linked paragraphs to sequence a range of ideas

On the surface, z huge tourist attraction because they allow families to spend a day out in the sun, looking at animals, and eating overpriced junk food. But what most people don't know is that zoos are far more sinister than selling small bottles of water for £5.00. Statistics show that in all zoos, fifteen percent of animals die every year due to living in captivity. Obviously then, zoos must be an unsuitable environment for wild animals and should, therefore, be abolished. How can zoos justify their existence by claiming animals in captivity provide pe le with the experience of observing wildlife they wouldn't otherwise experience, when it s at a cost to their life?

...

a range of ideas (no room to reproduce the other two paragraphs here)

convincing conclusion

In conclusion, a zoos only purpose is to make as much money as possible owing thousands of people per day to gawk at animals and spend far too much money souvenirs and junk food. Zoos do not protect or help to repopulate animals, nor do they educate people on the specifics of these animals, and therefore should be abolished.

FORTNIGHTLY WRITING CHALLENGE

BEST FOR PLANNING NARRATIVES (STORIES).

HOW TO PREPARE AND PLAN EFFECTIVELY

Conclusion: To conclude, repeat RQ, Yes.

Yours Sincerely

Intro: My address right hand side, + date, school address left,
Dear Mr Curtis
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.

Counter: all look same so no prejudice/bullying over clothes,
Argument: no individualism, learning who we are
Reasons to: 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?

P2

F: Letter
A: Headmaster
P: Argue
change uniform

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

P1

P3

Counter: cost cheaper as not designer or from shops making huge profit
Argument: 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,
Reasons to: emotive language: force poorer families to go without, statistics

F = FORM
A = AUDIENCE
P = PURPOSE

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

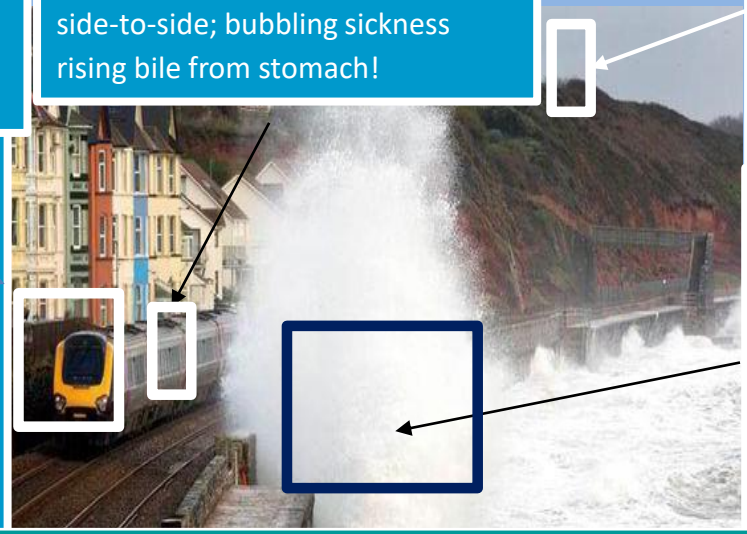
Best for planning descriptions from a picture: Boxing/framing sections of a picture forces you to focus your description on specific areas within the image, zooming in on specific detail and then out again to focus on another area. Each boxed area = a paragraph

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

zoom in on one carriage window, motion sick. Windows hit by spray that 'like a tamed cat' has 'turned savage' today. Passenger pitched side-to-side; bubbling sickness rising bile from stomach!

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

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?



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

1. **introduction: Here you will find everything you need to know about buying a goldfish. Follow this advice to**
2. **First of all, research fish needs and best fish breeds for starters**
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 …**

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 struc	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 cat' 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	… ;

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.

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 or paragraph 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.

Putting words
On paper to
Express in part,
Thoughts from me
Right to
Your heart

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

Terminology	Definition
Autobiography	The subject of the poem/book is the writer's own life.
Biography	The subject of the poem/book is the life of someone other than the writer.
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.
Fiction	Literature that describes imaginary events or people.
Non-fiction	Prose writing that is informative or factual (not made-up).
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.

YR 7 POETRY TERMS 5 & 6

Year 7 Poetry – Term 5 and 6

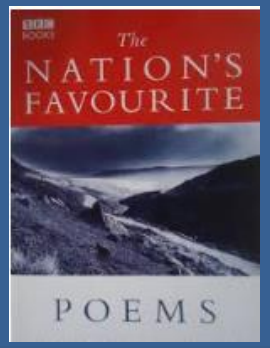
How to write a quotation

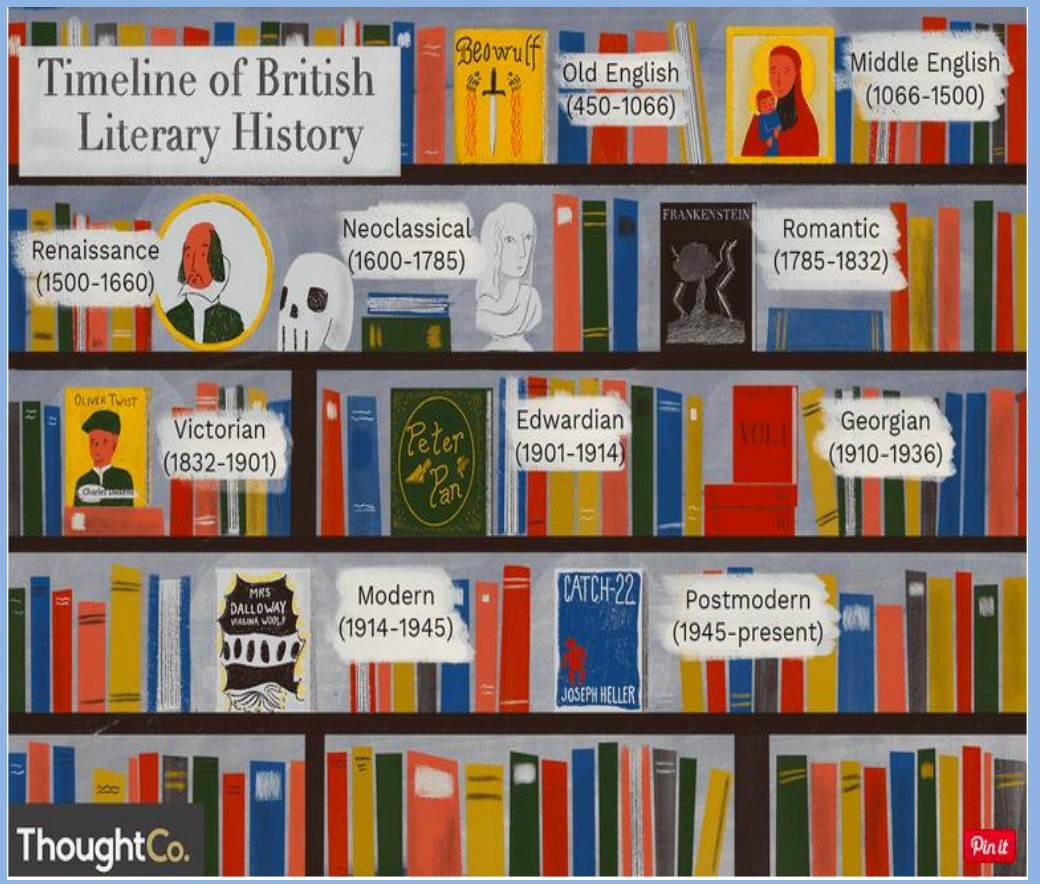
You will often need to use quotations in English. A quotation is a group of words taken from a piece of writing and reproduced in your work to support your ideas.

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 - Fractions

$\frac{3}{8}$

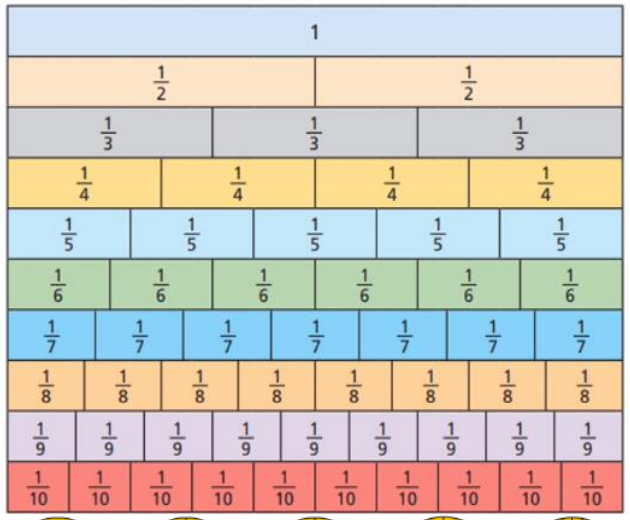
Numerator - how many equal parts are needed

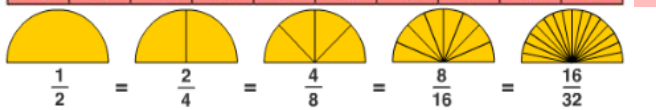
Denominator - how many equal parts are there in the whole

What do I need to be able to do?

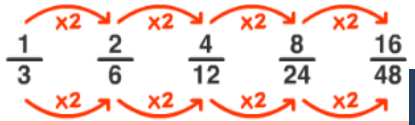
To determine and generate equivalent fractions
To write fractions in their simplest form
To convert between improper fractions and mixed numbers
To add and subtract fractions
To multiply and divide fractions
To find a fraction of an amount
To find a whole given a fractional amount

Equivalent Fractions





You can make equivalent fractions by multiplying or dividing the numerator and denominator by the same number.



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Simplifying Fractions

Simplifying a fraction means finding an equivalent fraction where the numbers are reduced as much as possible.

To simplify a fraction, we divide the numerator and denominator by the same number, a common factor.

You could do this in multiple steps:

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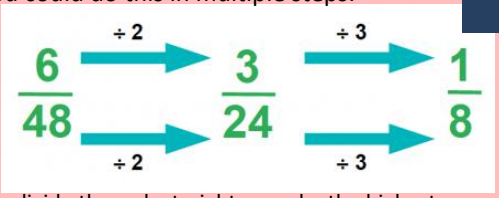
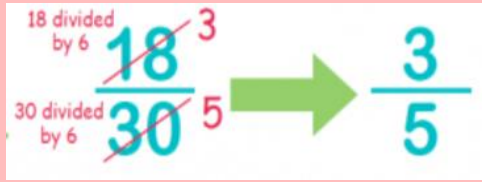
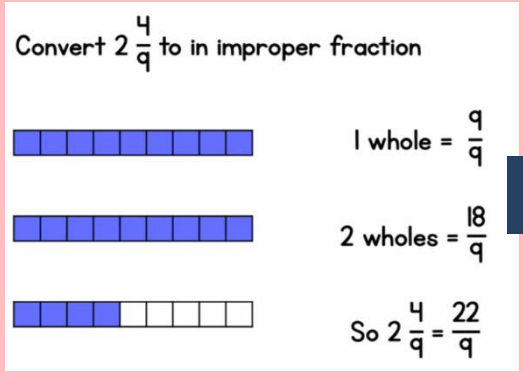


Or divide through straight away by the highest common factor:



Mixed Numbers and Improper Fractions

An **improper fraction** is a 'top heavy' fraction where the numerator is bigger than the denominator



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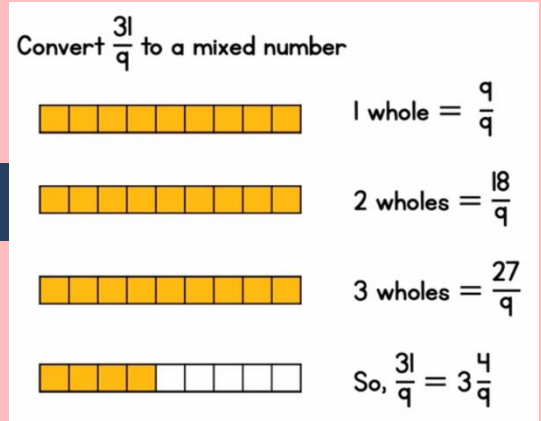

Or: Multiply the whole number by the denominator and add on the numerator.
2 x 9 + 4 = 22

Or: Ask yourself how many times the denominator fits into the numerator, with what remainder? 31 ÷ 9 = 3 with 4 remaining.

Keywords:

Numerator
Denominator
Whole
Equivalent
Simplify
Common Factor
Multiple
Convert
Mixed Number
Improper
Lowest Common Multiple
Reciprocal
Original

Adding and Subtracting Fractions

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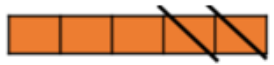
To add or subtract fractions you need to have common denominator.

You can only add or subtract the numerators when the denominators are the same.

$$\frac{2}{7}+\frac{3}{7}=\frac{5}{7}$$

$$\frac{5}{5}-\frac{2}{5}=\frac{3}{5}$$



$$\frac{7}{15}-\frac{2}{5}=\frac{7}{15}-\frac{6}{15}=\frac{1}{15}$$

(×3 above $\frac{2}{5}$, ×3 below $\frac{2}{5}$)

$$\frac{1}{4}+\frac{3}{10}=\frac{5}{20}+\frac{6}{20}$$

(×5 above $\frac{1}{4}$, ×5 below $\frac{1}{4}$, ×2 above $\frac{3}{10}$, ×2 below $\frac{3}{10}$)

When the denominators are different, find the lowest common multiple of the two numbers and re-write the fraction using this as the denominator. What ever you do to the denominator, you do to the numerator, to ensure the fractions are equivalent to the original.

Multiplying Fractions

To multiply fractions, you simply multiply the numerators, multiply the denominators and simplify if needed.

$$\frac{1}{4}\times\frac{2}{3}=\frac{1\times 2}{4\times 3}=\frac{2}{12}=\text{reduces to }\frac{1}{6}$$

$$1\frac{3}{4}\times 2\frac{1}{2}=?$$

$$\frac{7}{4}\times\frac{5}{2}=\frac{35}{8}=4\frac{3}{8}$$

1x4 + 3 = 7

2x2 + 1 = 5

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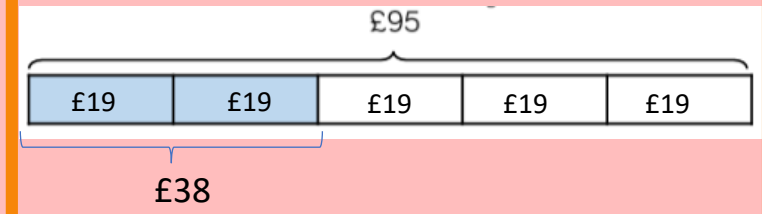
Fraction of an Amount

To work out $\frac{2}{5}$ of £95, you could use a bar model to help:



Or, without a diagram:

$\frac{1}{5}$ of £95 = £95 ÷ 5 = £19

So $\frac{2}{5}$ of £95 = 2 x £19 = £38

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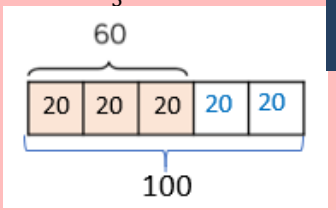
Finding a whole

If $\frac{3}{5}$ of a number is 60, what is the number?

Well, if $\frac{3}{5}$ is 60, then $\frac{1}{5}$ is 60 ÷ 3 = 20



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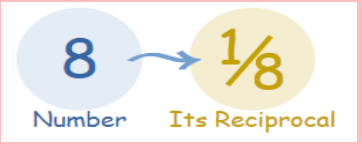
So the $\frac{5}{5}$ (a whole, which is the original number) must be 5 x 20 = 100

Dividing Fractions

Instead of dividing by a fraction, we multiply by the reciprocal. The product of a number and reciprocal is 1. So to get the reciprocal of a number, we divide 1 by the number. It is like 'flipping' the numerator and denominator.



To divide fractions:

1) Keep the first fraction the same.
2) Take the reciprocal of the second fraction.
3) Change the division sign to a multiplication sign and proceed to multiply the fractions.

$$\frac{2}{5}\div\frac{2}{3}=\frac{2}{5}\times\frac{3}{2}=\frac{2\times 3}{5\times 2}=\frac{6}{10}=\frac{3}{5}$$

take the reciprocal of the divisor

$$\frac{4}{7}\div 2=\frac{4}{7}\times\frac{1}{2}=\frac{4\times 1}{7\times 2}=\frac{4}{14}=\frac{2}{7}$$

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Year 7 Maths Term 6: Statistics

What do I need to be able to do?

- **Understand what is data and what are the different types of data**
- **What are the different ways of collecting and organising data?**
- **Understand what averages are and how to calculate the Mean, Median, Mode and Range**
- **Construct accurate statistical representations including Pictograms, Bar charts, Pie charts and Scatter graphs.**
- **How to interpret data from a table, graph and chart and make reasonable deductions**

Key words

Data

Discrete
Continuous
Primary
Secondary
Qualitative
Quantitative
Numerical
Primary
Secondary
Tally
Frequency
Class Intervals
Averages

Mean
Median
Mode
Range
Ascending
Correlation

What is Data and what are the different types of data?

Data – Information in the form of words, numbers or symbols collected together for reference or analysis.

If the data is **numerical** (in numbers) we call this **quantitative** data, think quantity like amount. Example: How many pets do you have? "4" the answer is quantitative.

If the data is in words we call this **qualitative** data, think quality like the quality of an essay. Example: What's your favourite food? "Curry" the answer is qualitative.

Quantitative data can be split into 2 types;
Discrete data is when the answer is counted. Example: How many computer games do you own? You count how many games you have "10 games" and your answer is specific and therefore discrete.

Continuous data is measured.
Example: What is your foot length?
You can never measure anything exactly, your answer might be different depending on the tool you use and the accuracy with which you measure. You might measure your foot with a ruler to be 18cm but in a shoe shop with more accurate tools might measure it as 186mm, therefore the answer is continuous.

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Collecting Data

Primary data – data you collect yourself. Questionnaires, surveys, observation, experiments, interviews etc.
Secondary data – Using data collected by someone else.
Research, books, internet, newspapers, articles, studies etc.

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Organising Data

Once the data has been collected it needs to be organised so it can be be analysed.
I ask 67 people what their favourite colour is, their responses can be organised in a **tally** chart like this one. Tallys are recorded in groups of 5. Adding the tally gives the **frequency**. Frequency is the total number of times an answer has been selected.

Colour	Tally	Frequency
Red	𝍸 𝍸 |||	13
Blue	𝍸 ||||	9
White	𝍸 𝍸 𝍸 𝍸 ||||	24
Black	𝍸 𝍸 ||	12
Other	𝍸 ||||	9

When there are many options the answers can be grouped into **class intervals**, or groupings. Grouped frequency table:

Number of magazines	Tally	Frequency
0 - 4	𝍸 |||	8
5 - 9	𝍸	5
10 - 14	𝍸 ||	7
15 - 19	|||	3
20 - 24	𝍸 ||||	9
25 - 29	|||	3
30 - 34		0
35 - 39	𝍸	5
40 - 44		0
45 - 49	|||	3
more than 49		0

Analysing Data

Average – A number that best represents a set of data. A calculated "central" value of a set of numbers. There are 4 mathematical averages, the best type of average to use depends on the data set.
Mean – The most common type of 'average' It is easy to calculate: **add up** all the numbers, then **divide by how many** numbers there are.

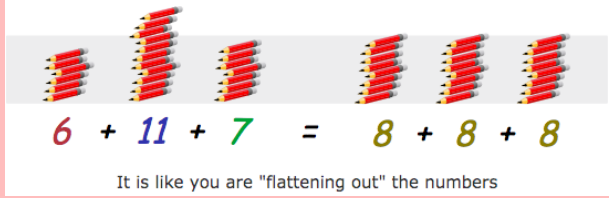
HegartyMaths clips 405 to 408

Example 1: What is the Mean of these numbers?

6, 11, 7

- Add the numbers: **6 + 11 + 7 = 24**
- Divide by *how many* numbers (there are 3 numbers): **24 / 3 = 8**

The Mean is 8



It is like you are "flattening out" the numbers

Mode – The ***"most common"*** or the appears most often. There can be more than one Mode.

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Example:

3, 7, 5, 13, 20, 23, 39, 23, 40, 23, 14, 12, 56, 23, 29

In order these numbers are:

3, 5, 7, 12, 13, 14, 20, **23, 23, 23, 23**, 29, 39, 40, 56

This makes it easy to see which numbers appear **most often**.

In this case the mode is **23**.

Range – The **difference** between the largest and smallest values in a data set.
Biggest – smallest = Range

HegartyMaths clip 409

Analysing Data

Median – The ***"middle"*** of a sorted list of numbers.

Step 1 – Put the numbers in **ascending** order (smallest to biggest)

Step 2 – Find the **middle** number. **count how many numbers, add 1 then divide by 2.**

$\frac{n+1}{2}$ n = how many numbers in the data set

Example 1: Calculate the median of 3, 13, 7, 5, 21, 23, 39, 23, 40, 23, 14, 12, 56, 23, 29

Step 1 – Order the numbers

3, 5, 7, 12, 13, 14, 21, 23, 23, 23, 23, 29, 39, 40, 56

Step 2 – There are 15 numbers

n =15 $\frac{n+1}{2}$ $\frac{15+1}{2}$ = 8th

The middle number is the 8th number:

3, 5, 7, 12, 13, 14, 21, **23**, 23, 23, 23, 29, 39, 40, 56

The Median is 23

If the data set has an even amount of numbers then the median is mid-point between the 2 middle numbers.

Example: Calculate the median of 5, 7, 3, 9,

Step 1: Order numbers 3, 5, 7, 9,

Step 2: n =4 $\frac{n+1}{2}$ $\frac{4+1}{2}$ = 2.5th

The median is half way between the 2nd and 3rd number. The median is 6.

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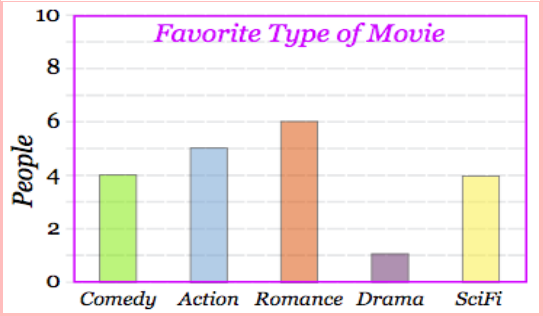
Presenting Data

The data has been collected, it has been sorted and now it can be presented.

Bar Chart:

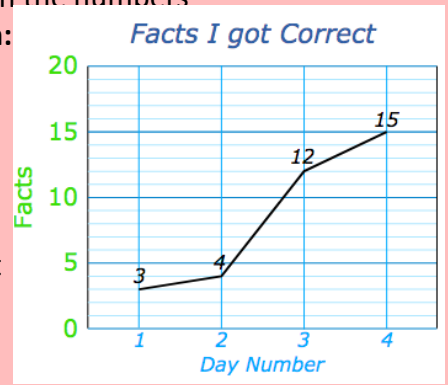
Table: Favorite Type of Movie				
Comedy	Action	Romance	Drama	SciFi
4	5	6	1	4



The perfect **Bar chart** must:

- Be drawn with a pencil and ruler
- Have a title
- Have spaces between the bars
- The axes must be labelled
- Have bars of equal width and equal sized spaces between the bars
- Have and even scale – equal sized space between the numbers

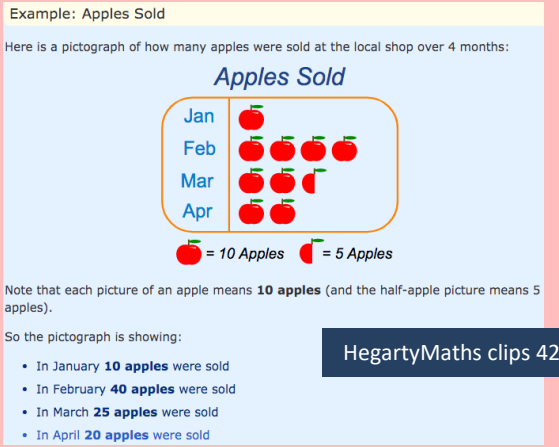
Line graph: Same as a bar chart but data points connected by straight lines.



Pictogram/pictograph – showing data using images. Each image represents a specific value.

The perfect **Pictogram** must:

- Have a title
- Have a key showing the value of the image
- Have images of an equal size and shape with equal distance between each image



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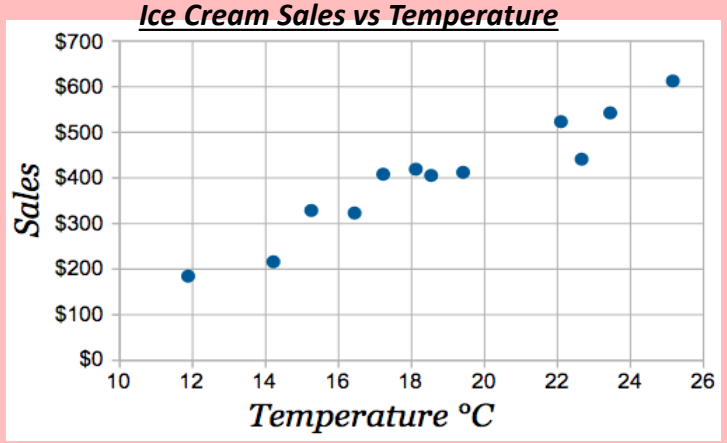
Scatter Graph – shows the relationship between two quantitative data sets**.**

Ice Cream Sales vs Temperature	
Temperature °C	Ice Cream Sales
14.2°	$215
16.4°	$325
11.9°	$185
15.2°	$332
18.5°	$406
22.1°	$522
19.4°	$412
25.1°	$614
23.4°	$544
18.1°	$421
22.6°	$445
17.2°	$408



This type of graph allows us to draw a conclusion about the relationship between two things, in this example we can say as the temperature increases, so does the number of ice creams sold. We call this a positive correlation as both values are increasing together.

There are others types of correlation/relationships:

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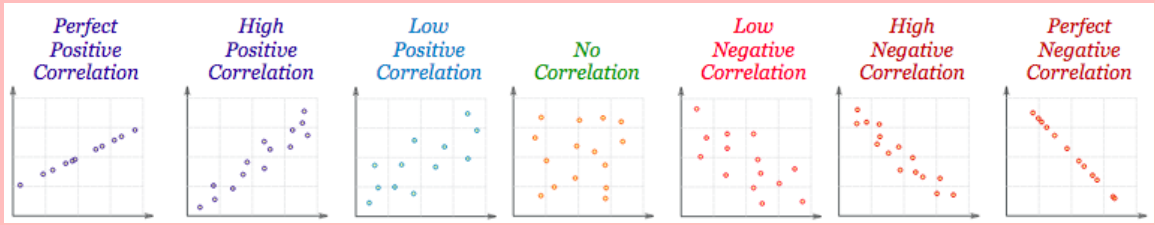

Year 7 Maths Term 6: Statistics

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Pie chart

Represents data in a way that shows the relative size of the category. A good way of displaying data if there are large differences between the categories but not accurate when interpreting the data.

Example: You survey your friends to find out their favorite genre of movie. The results are

Table: Favorite Type of Movie				
Comedy	Action	Romance	Drama	SciFi
4	5	6	1	4

Table: Favorite Type of Movie					
Comedy	Action	Romance	Drama	SciFi	TOTAL
4	5	6	1	4	20

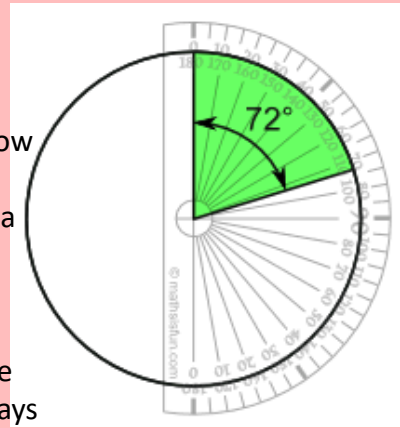
$\frac{360}{20} = 18°$

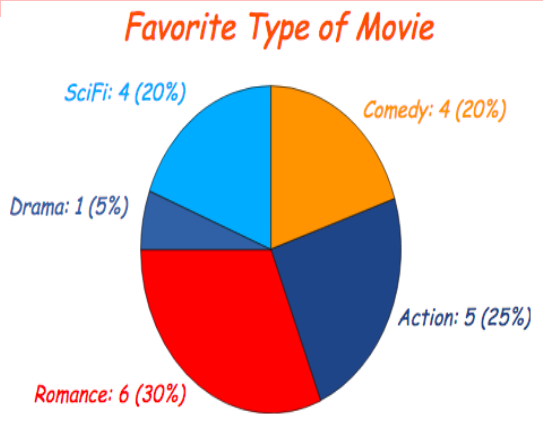
How to draw a pie chart:

1. Calculate the total frequency (add up all of the people in your survey)
2. There are 360º in a full circle, Divide 360 by the total frequency (the number of people in your survey) to calculate how many degrees each person is worth $\frac{360}{20} = 18°$
3. Multiply each frequency by the number of degrees per person to calculate the angle size of the sector (slice of the pie)

Table: Favourite Type of Movie					
Comedy	**Action**	**Romance**	**Drama**	**SciFi**	**Total**
4	**5**	**6**	**1**	**4**	**20**
4 x 18 = **72°**	5 x 18 = **90°**	6 x 18 = **108°**	1 x 18 = **18°**	4 x 18 = **72°**	20 x 18 = **360°**

4. Draw a circle using a compass and pencil
5. Draw a line from the centre of the circle to the edge, this is the base line
6. Line up a protractor with the base line, the centre of the circle positioned with the central cross of the protractor. Follow the base line to the edge of the protractor and counting up from zero, measure the angle of the first sector (slice). Make a mark, remove the protractor and draw a straight line to complete the first slice
7. Line up the protractor on the line you have just drawn and repeat the last step, this time measuring the slice to the angle of the next slice, repeat until complete. Remembering to always line up with the last line drawn.
8. Don't forget to add a title and Key.





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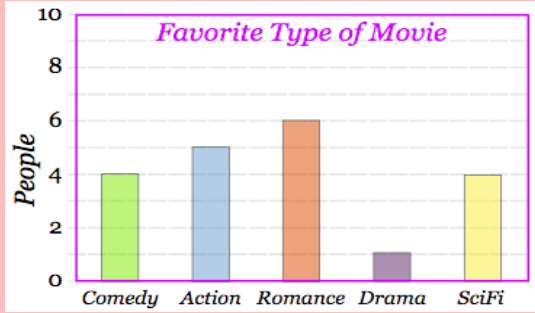
Interpreting Data

To interpret data is to analyse data and make deductions and infer relationships.

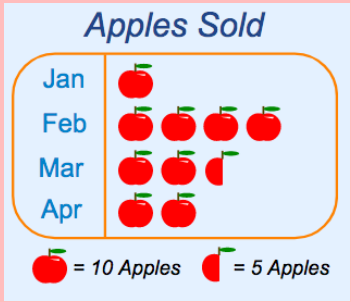
Examples:

Colour	Tally	Frequency
Red	𝍸 𝍸 |||	13
Blue	𝍸 ||||	9
White	𝍸 𝍸 𝍸 𝍸 ||||	24
Black	𝍸 𝍸 ||	12
Other	𝍸 ||||	9

By analysing this tally chart we can deduce that the most popular colour is white.



By analysing this bar chart we can deduce from the survey that the most popular genre of Movie is Romance and the least popular is Drama.



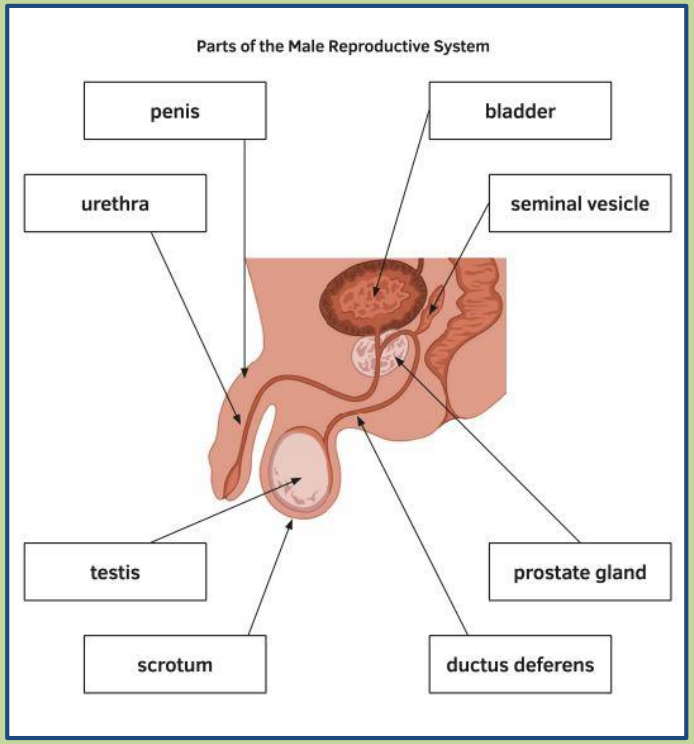
From this pictogram We can deduce that The most number of Apples were sold in February (40) and the least in January (10). The Range is 30.

The way in which the data is presented can show relationships and differences quickly and efficiently. Making analysis and interpretation easy depending on the type of graph/chart used.

KS3 Biology: Reproduction

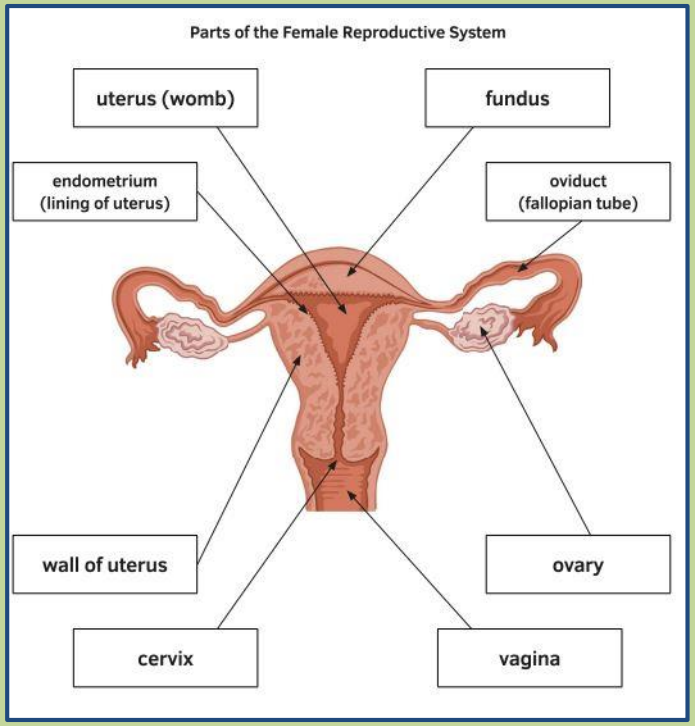
Key word	Definition
Ovary	Organ where egg cells develop in females
Oviduct	Egg tube connecting ovary to womb.
Uterus	Organ where baby develops (also called the womb)
Cervix	Ring of muscle at bottom of the uterus
Vagina	Tube going from outside to the uterus.
Testes	Organ producing sperm in males
Scrotum	Bag of skin containing testes in males
Sperm duct	Tube that carries sperm from the testes to the urethra
Fertilization	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

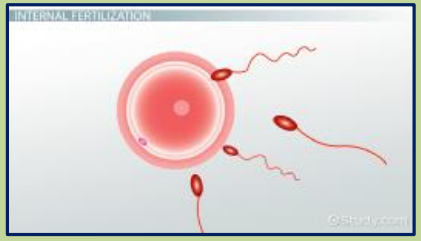


Sperm are produced in the testes, and travel through the urethra and penis during sexual intercourse. They collect useful lubricants at the seminal vesicle to become semen.

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.

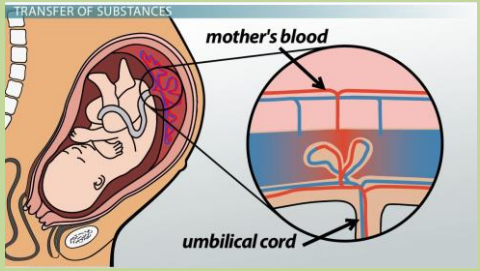
Gestation and Birth

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.

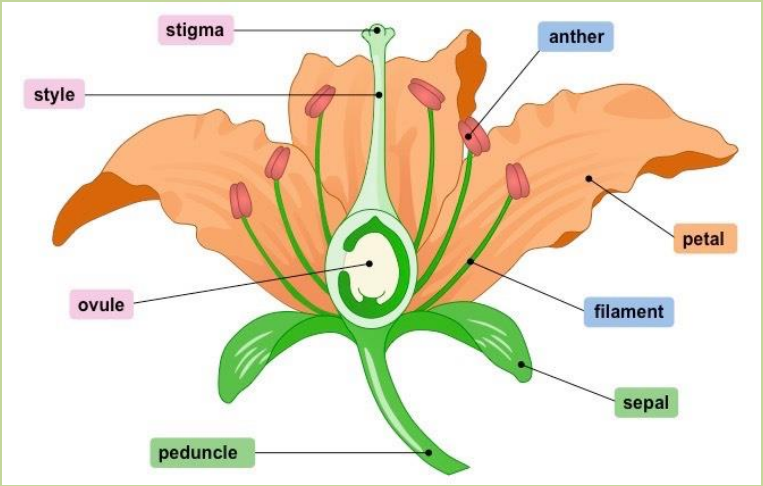
The Impact of lifestyle on the foetus



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

Structure of a Flower

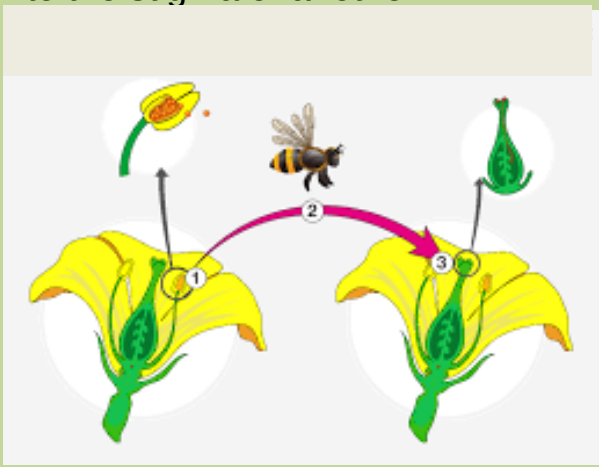
The flower is the reproductive organ of the plant.
The female part is the carpel, which consists of the stigma, style, ovary and ovule.
The male part is the stamen, which consists of the anther and filament.



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.

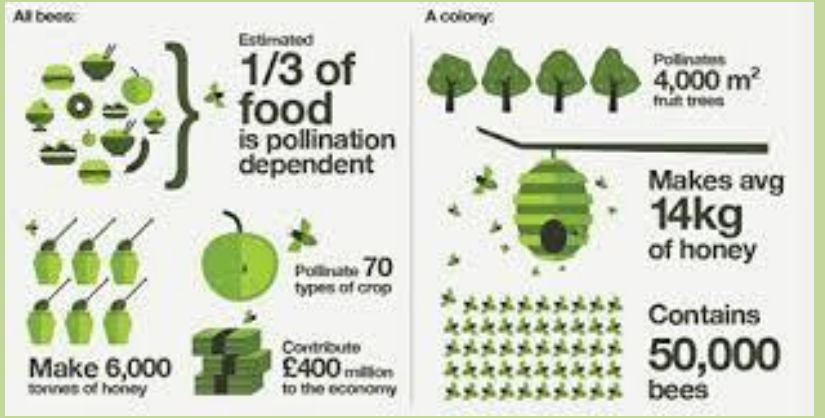


Pollination can be by wind or insect. Pollen grains have special shapes and designs depending on how they are transferred.

The importance of bees

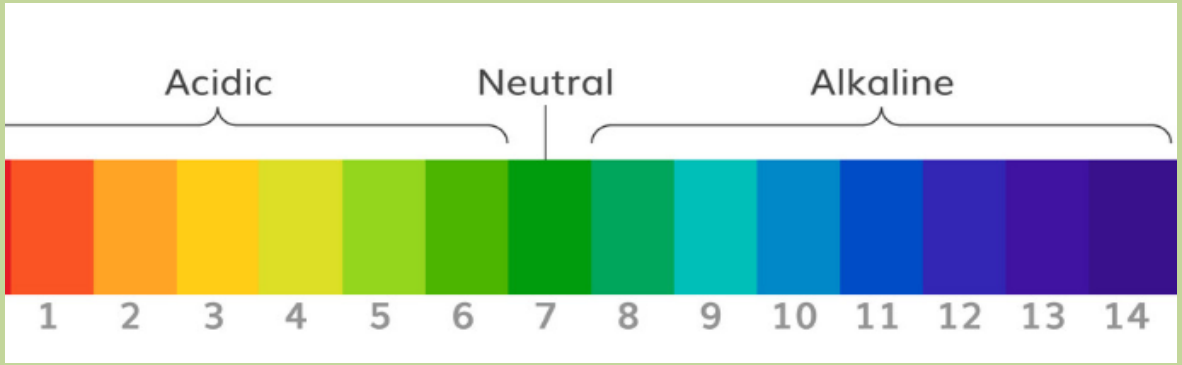
Bees pollinate the majority of the World's crops. Their numbers are declining due to destruction of habitats, over-use of pesticides, and diseases.

Uses of bees



KS3 Chemistry – Acids and alkalis

Strong acid Weak Acid Weak Alkali Strong Alkali



An acid is a substance with a pH of 6 or lower.

An alkali is a solution with a pH of 8 or higher.

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

Reactants Products

Acid + Alkali → salt + Water

Acid + metal → salt + Hydrogen

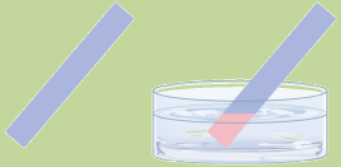
Acid + metal carbonate → salt + water +Carbon dioxide

<u>Neutralisation</u> is when an acid is added to an alkali to return its pH to neutral OR adding alkali added to acid to return the pH to neutral.

Keyword	Definition
Acid	An acid has a pH value of less than 7
Alkali	An alkali has a pH value of more than 7 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
Sodium hydroxide	An alkali that is often used in experiments, its formula is NaOH
Sulphuric acid	An acid that is often used in experiments, its formula is H_2SO_4
Universal Indicator	An indicator that changes colour to show the pH

KS3 Chemistry – Acids and alkalis

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.



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

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

Some acids can be dangerous. Hydrochloric Acid (HCl), Sulfuric Acid (H_2SO_4) and Nitric Acid (HNO_3) are acids which we use in the Science Lab. These acids can come as dilute or more concentrated.

Uses of acids/alkalis

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

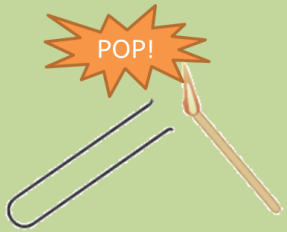
Acids and alkalis can be added to lakes and soils to neutralise them so that they are habitable. However some plants prefer to grow in acidic (such as blueberries or alkaline soils (lavender)

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.

Acid + Metal → Metal salt + Hydrogen

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



Further reading
https://www.bbc.co.uk/bitesize/guides/zyn3b9q/revision/1

https://www.bbc.co.uk/bitesize/guides/z89jq6f/revision/1

KS3 Physics: Current electricity and magnetism

Key word	Definition
Potential difference (voltage)	a measure of the energy given to the charge carriers in a circuit
Current	The movement of electrical charges (such as electrons moving through a wire)
Resistance	The opposition in an electrical component (such as a fuse or wire to the movement of electrical charge through it
magnet	A metal that attracts iron, cobalt and nickel
Electromagnet	a metal core made into a magnet by the passage of electric current through a coil surrounding it
Solenoid	cylindrical coil of wire acting as a magnet when carrying electric current
Static electricity	an imbalance of electric charges within or on the surface of a material. The charge remains until it is able to move away by means of an electric current

Introduction to circuits

Circuit Symbols

Symbol	Name
	Bulb
	Cell
	Battery
	Wire
	Motor
	Switch
	Buzzer
	Voltmeter
	Ammeter

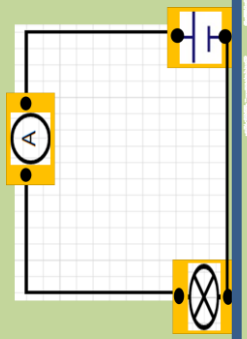
When looking at and drawing circuits we use symbols to represent common components that are used.

When talking about circuits we refer to three main factors. Current, potential difference (voltage) and resistance

Electric Current

Amps

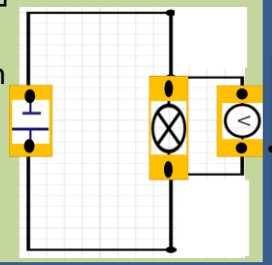
Is measured with a ammeter which can be used in series around the circuit. And is a measure of the amount of electric charge flowing through the circuit



Potential Difference

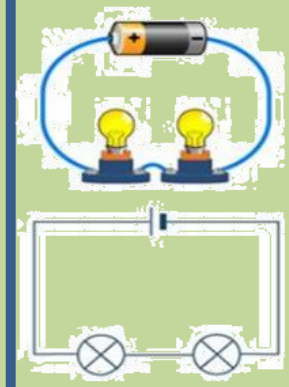
Volts

Is measured with a voltmeter . Potential difference is how much energy each charge has gained or lost across a component the voltmeter must be used in parallel to the circuit



Series and parallel circuits

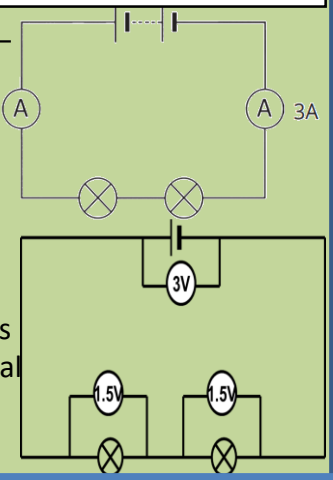
Series circuits



In a series circuit, the components are connected end to end in a loop as shown in the diagram. If one bulb breaks, none of the bulbs will be lit as the circuit is no longer complete.

Electric Current in series circuits

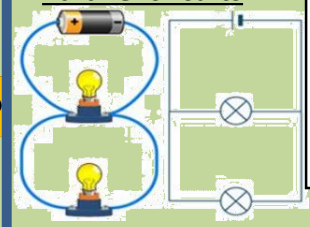
The current is the same everywhere in a series circuit. It doesn't matter where you put the ammeter, it will always show the same reading.



Potential difference in series circuits

In a series circuit, the voltage supplied by the battery is shared by the components. So, the sum of the potential difference across the components equals the battery voltage.

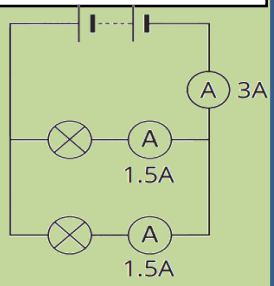
Parallel circuits

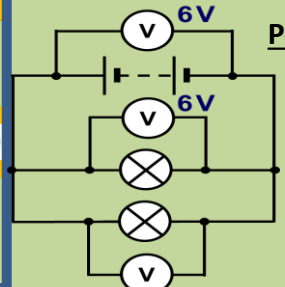


In a parallel circuit, the components are connected on separate branches. This gives the current several different paths to flow down. If one bulb stops working, the other bulbs will remain lit as the circuit is still complete

Electric Current in parallel circuits

In a parallel circuit, the current divides at the point where the circuit branches and then recombines to complete the circuit.



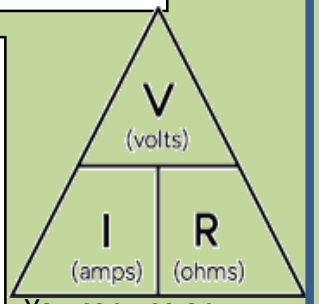


Potential difference in parallel circuits

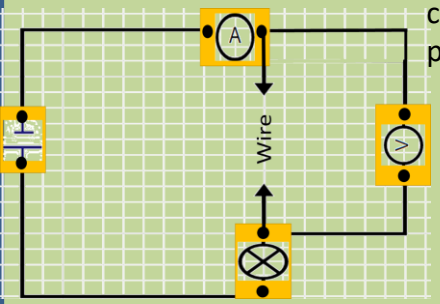
In a parallel circuit, the potential difference across each bulb is the same as the potential difference across the battery. This means that all the bulbs have the same brightness, and they are brighter than the same number of bulbs in a series circuit.

Resistance

Resistance is a measure of how hard it is for charges (electrons) to move in an electrical circuit.
Resistance is measured in ohms (Ω).
If there is high resistance there will be low current and low resistance will have a high Current.



You can use an ohmmeter to measure resistance **but** it can be calculated from the current and potential difference



You can test the resistance of different materials with this test circuit

Factors that can affect the resistance through a wire include:
- Temperature
- Thickness of wire
- Length of wire
Material of wire

Conductor

low resistance

Insulator

High resistance

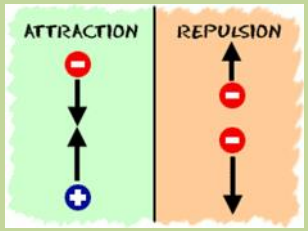
As the width of the wire increases, resistance decreases. This is because there is more space for the electrons to flow.

As the length of the wire increases, resistance increases because the electrons collide with more metal ions as they flow through the wire.

Static Electricity

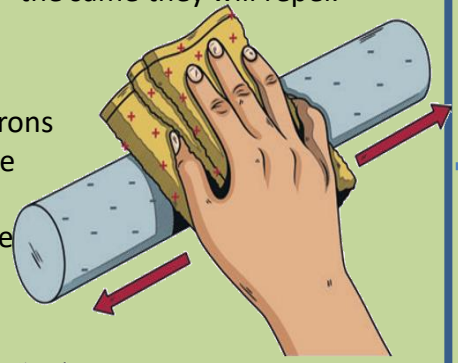
Static charge can build up when two insulating materials are rubbed together. Friction between the materials causes electrons to be transferred from one material to the other.

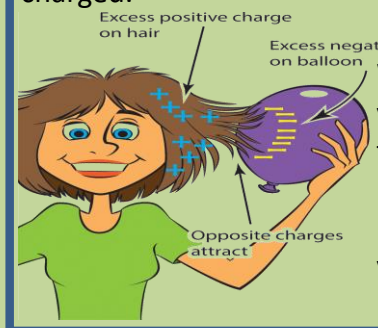
Electrons are negatively charged, so objects that lose electrons become positively charged overall, while objects that gain electrons become negatively charged overall.



If objects with different charges are near each other they will attract and if they are the same they will repel.

When a polythene strip is rubbed with a cloth, electrons move from the cloth to the strip. The strip becomes negatively charged and the cloth becomes positively charged.





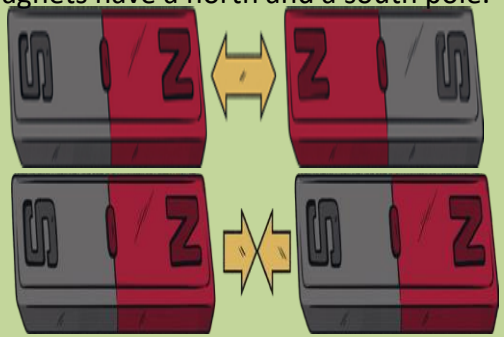
When you rub a balloon against your hair, electrons are transferred from your hair to the balloon. The balloon and your hair have opposite charges so your hair is attracted to the balloon, making it stand on end.

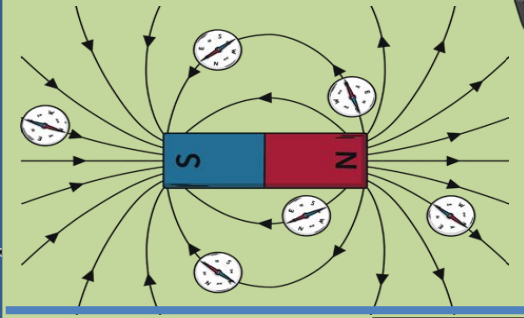
Magnetism

Magnetism is a non-contact force. That attracts or repels the 3 magnetic metals, these metals are Iron (Fe), cobalt (Co) and nickel (Ni). Steel is also magnetic because it contains iron. Magnets have a north and a south pole.

Like poles repel. This means that the two poles push each other away.

Opposite poles attract. This means that the magnets pull the poles towards each other

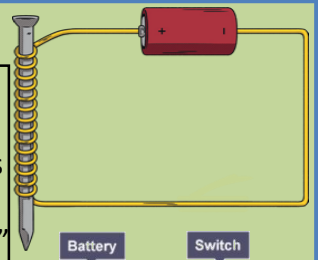




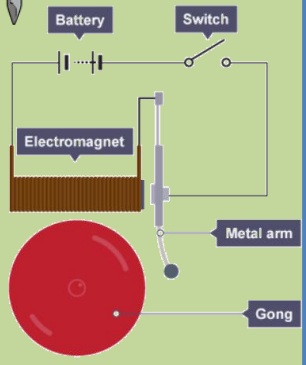
All magnets exert a magnetic field- this is the area where the magnet has an influence on currents and other magnets. It can be shown by placing compasses around the magnet and plotting where it points

Electromagnets

We can pass an electrical current through a wire, this creates a weak magnetic field. If we combine this with a metal core then we have a stronger field- we call this combination an electromagnet. They are useful because they have the ability to be turned "on and off"



Electromagnets can be made even stronger by:
- adding more coils
- increasing the current or voltage
- winding the coils closer together



Uses of electromagnets

There are many uses for electromagnets such as scrap metal sorters, speakers and electric bells. An example of how a bell uses an electromagnet is when the electromagnet is turned on it attracts the springy metal arm towards the bell. Here is hits the bell and makes a sound. This movement breaks the circuit and turns off the electromagnet. The arm moves away from the bell as it is not being attracted by the electromagnet. This cycle then repeats itself

KS3 Physics: Energy and changes in systems

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

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

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

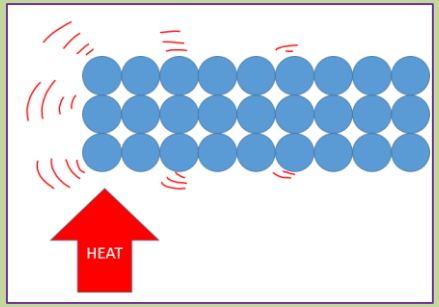
W = 15J

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)



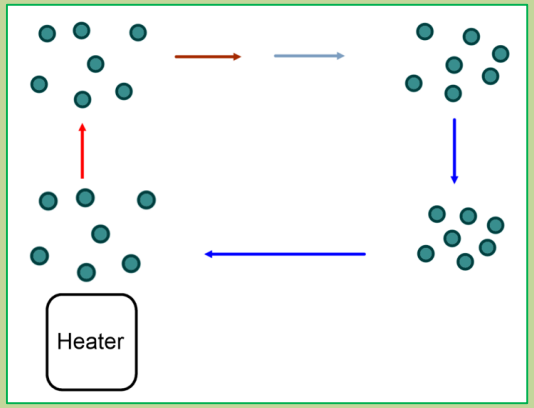
Conduction

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

Y7 CT Term 5&6 – Robust coding

Practical coding skills to develop readable, maintainable code.

The x4 Principles of Coding (levels 1-4)

- Variables
- Input / Output
- Loops (FOR / WHILE)
- Decisions (IF

The x4 Pro-Coder Rules (levels 5-9)

- Use variable/subroutine names that describe what they store/do
- Convert repeated instructions to loops
- Convert repeated functionality to subroutines
- Comment code

Code Kata 1

Kata 1

```
1  print("Hello World")
```

Kata 2

```
1  name = input("What is your name?")
2  print("Your name is", name)
```

Kata 3

```
1  myAge = int(input("What is your age?"))
2  print("You are ", myAge, " years old")
```

Kata 4

```
1  myAge = int(input("What is my age?"))
2  yourAge = int(input("What is your age?"))
3  print("I am", myAge, "and you are", yourAge)
```

Code Kata - Bonus

Kata 1

```
1  total = 0
2
3  for i in range(1, 10):
4    val = int(input("Enter a number"))
5    total = total + val
6
7  print("The total is", total)
```

Kata 2

```
1  import random
2  randNum = random.randint(1, 10)
3
4  guessed = False
5  while guessed == False:
6    val = int(input("Enter a number (1-10)"))
7    if val == randNum:
8      guessed = True
9    elif val < randNum:
10     print("Guess higher")
11   else:
12     print("Guess lower")
13
14 print("Guessed correctly")
```

Y7 CT Term 5&6 – Robust coding

Practical coding skills to develop readable, maintainable code.

Code Kata 2

Kata 1

```
costOfItem = int(input("Enter the cost of the item (£)"))
priceOfItem = int(input("Enter the price of item (£)"))
profitOfItem = priceOfItem - costOfItem
print("You will make £", profitOfItem, "profit on item")
```

Kata 2

```
firstname = input("What is your firstname?")
surname = input("What is your surname?")
fullname = firstname + " " + surname
print("Your full name is", fullname)
```

Kata 3

```
myAge = int(input("What is my age?"))
yourAge = int(input("What is your age?"))
if myAge > yourAge:
  print("I am older")
else:
  print("You are older or the same age")
```

Code Kata 2

```
def getNumber(message, minVal, maxVal):
  while True:
    try:
      val = int(input(message))

      if val < minVal:
        raise Exception
      if val > maxVal:
        raise Exception

      return val
    except:
      print("Invalid number")

def getString(message):
  while True:
    try:
      val = input(message)

      if val == "":
        raise Exception

      return val
    except:
      print("Invalid string")

#main
yourName = getString("What is your name?")
yourAge = getNumber("What is your age?", 1, 100)
print(yourName, "your age is", yourAge)
```

Term 5 - Medieval Castles

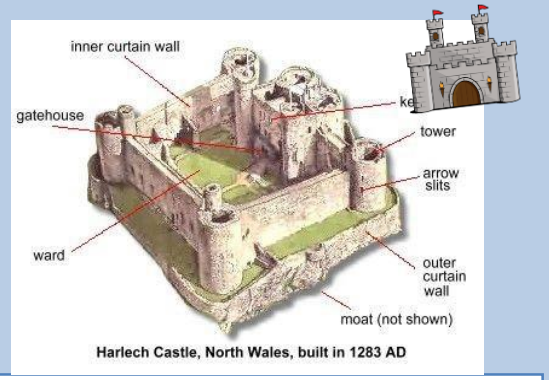
Motte - mound or 'clod of earth'
Bailey - enclosure.

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.



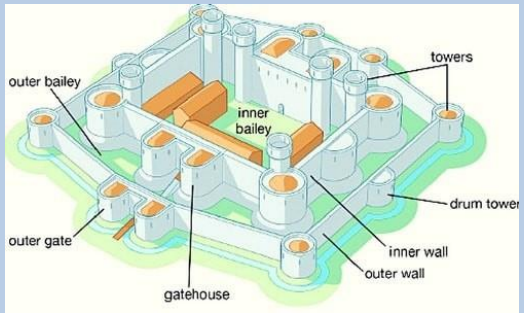
Harlech Castle, North Wales, built in 1283 AD

Stone Keep

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.

Castle Glossary

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

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 Bosworth

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.

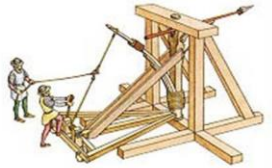
Attacking a Castle

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

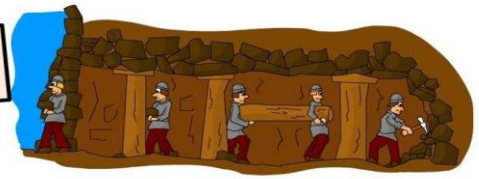


The next medieval weapon is the ballista. This ancient weapon was actually just a giant crossbow capable of firing enormous bolts that could pass through several men at once. It was not very effective and could not be used against walls.

Attacking a Castle

Mining under the castle

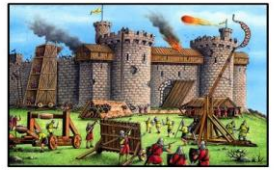
7



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.

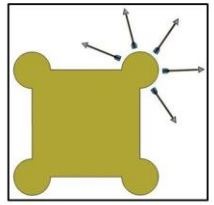
Castle Defences

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

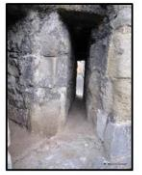



It was harder for attackers to make round towers collapse. Unlike square towers they had no corners, which collapsed if holes were dug underneath the foundations. Furthermore, the tower also allowed the soldiers inside the castle to fire in all directions along the front walls

Castle Defences

Arrow Loops



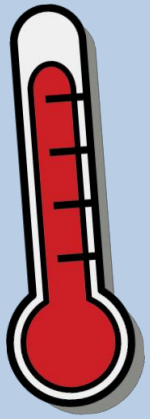


These provided a safer means of firing arrows on the attackers of the castle. They are found in many different styles on the curtain wall and towers of the castle.

Castle Defences

The Moat

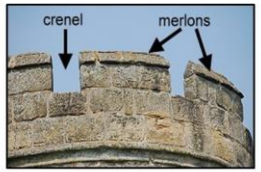

Attackers were easy to shoot whilst swimming or rowing across the moats filled with water. Moats reduced the risk of tunnelling under the castle.



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).

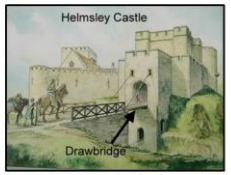
Castle Defences

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.

Term 6 - Native Americans

https://www.youtube.com/watch?v=_hJFi7SRH7Q

Introduction to Native Americans

Native Americans are the people that are **"native" to America**, i.e. were here before the European settlers in the 1400/1500's. Sometimes we call this group "Red Indians". This would be wrong though. This name came about because when Christopher Columbus landed in America in 1492 he thought he was in India. This is why the Caribbean area south of America is sometimes called the West Indies and we get the name Red Indianans.

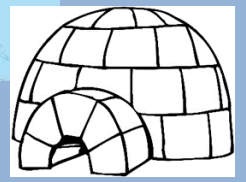
Native Americans were used in the 1930/40's in early **Hollywood movies**. At this time Hollywood was new and exciting and crowds flocked to the cinema to see films – no TVs at this time! To create exciting films Hollywood came up with the **Western or cowboy and Indian films**.

In these film native Americans were shown to be the **villains**: violent, primitive, savage killers, often attacking white cowboys, kidnapping and terrorising men and their families.

However how true is this portrayal of the feathered head dancing "Red Indian"?

This is something as historian we shall be finding out about - **Who were the Native American?**

Key Vocabulary
Native Americans
Western
Hollywood
Savage
Primitive
Vegetation
Tribes
Environment



Native American Tribes

The Native American tribes **stretched across American** from the very top – the sub-artic tribes to the south, just above Mexico. Because of the **geography and size** of America the tribes lived very **different lives**. This is because their **climate** determined their **environment**, which in turn determined the tribes **resources for shelter and food**.

The Sub-Artic Tribe was the furthest north. These Inuit tribes lived in igloos as there was little vegetation to use the build homes. With few animals due to the cold snowy climate, they hunted seals, whales and caribou (like a reindeer). They were unable to grow anything due to the climate – cold and snowy.

The North East Tribes differed as they lived in woodlands, surrounded by rivers / lakes (see map). For this reason their diet was made up of fish. They also collected wild berries and grew crops like corn and beans. As they lived in woodlands, they made wooden homes (see picture to left)

The Great Basin and South West Tribes lived in a very hot and dry climate. This, like the Artic tribes, was not good for farming and growing crops. This desert environment meant that wood was hard to collect for building. These tribes made a type of clay / mud that hardened and could be built into homes. This provided a cool shelter, that maybe a tent would not. These tribes hunted desert animals and collected wild plants that could survive hot climates.

The Plains Tribes lived in a fairly hot environment over large grassland areas. Again it was hot so little grew; they were able to eat berries and wild plants also. They mainly ate buffalo which roamed this area. The plains like the Arctic had huge areas to live. The Plains tribes lived in tents called tepees, this was because they could be put up and down. This was important for hunting buffalo, as tribes would move about to follow them.

Plains Tribes life

Women:
Women had very different roles to men. Men and women would marry, but men could take **more than one wife**. The first wife was the most senior and important wife of a man. Women were comfortable with this, though had little power to change it.
Women would be responsible for **domestic chores** – the home, food and children. Women would make the **tepees** by scraping, stretching, cutting and sewing the buffalo hide (back skin of the buffalo). Women were responsible for putting up and down the tepee as the tribes moved. They could do this in **15 minutes**, this showed their strength and skill at this.
Women also decorated clothes and materials with **beadwork**. Quality beadwork showed high status and importance. Beading was sewn using porcupine quills.

Food:
Tribes men would hunt Buffalo and the women would prepare and cook the food. The women and children would often also collect **berries, seeds and plants** to eat with the buffalo meat.
The meat was often cooked as a stew. This was cooked in a strong bag made from the lining of the **buffalo stomach**.
Dried buffalo was also mixed with cherries and fat into a paste mixture. This could be stored over the winter months.
Buffalo could also be **roasted** on sticks on **fires or boiled.**

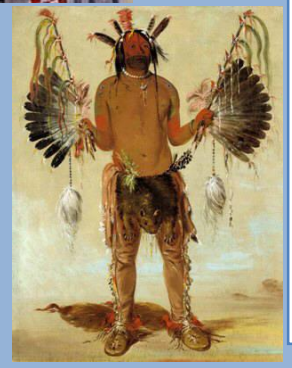
Key Vocabulary
Chief
Nobles
Shaman
Sioux
Tepee
Nomadic

Plains Tribes Tepees

The Plains Tribes lived in tepees. They were made with a **wooden frame** and covered with **buffalo hide** (skin of the back of the buffalo). There was a gap at the top for **smoke** to exit. Women would be responsible for making the hide – scrapping and stretching it and then sewing it together. It took **18-20 hides** to create a tepee.

The Plains tribes used tepees because they were **nomadic** which meant they moved around. They had to move around because they followed the buffalo – which they hunted for food and other resources.
Tepees were very good for this because they could be put up and down quickly and easily. Women could take them down in 15 minutes! They would also be **transported around easily** as the plains tribes people moved around. The design was also useful because the hole meant it allowed smoke to leave the tepee rather than getting too hot and dark.
However, the shelter had no separate rooms therefore all sleeping, eating and living was all done in the same area, this could be **unhygienic** and become dirty.

Chief (above)
Shaman (right)



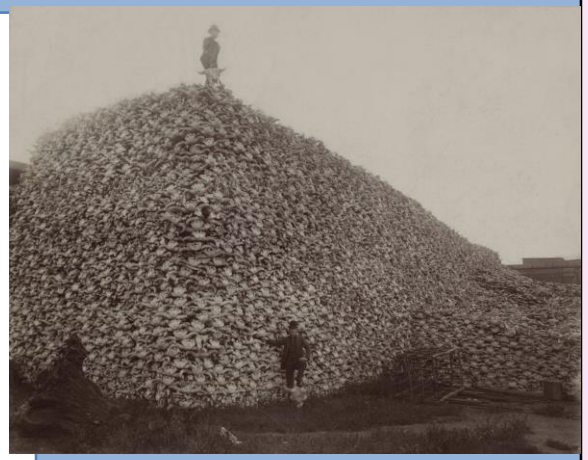
The structure and leadership of the tribes.
Each tribe would be lead by a **chief**. The chief would have to shown certain characteristics such as strength, bravery, generosity and wisdom. He would also need be from a wealthy family.
The chief would rule with a **council** – who were next important. They advised him and helped him rule. Under the council were the **nobles.** They were from very important families. The nobles could attend special feasts and they had much power and wealth.
The **shaman** (medicine man) was also important as these too. Some men were very good at dealing with spirits in the tribe, these men became known as shamans and they used medicine and the spirits to heal people. Men and women could become shamans. Shamans had special powers to connect to the spirits, they would dress up and perform dances and ceremonies to heal people. The shaman connected with the spirits to also tell the future and advise the tribe.
Below the Sharman were the **commoners** – these were the ordinary people in the tribe.
But at the bottom there were **slaves**. These were often prisoners of war or people who were kidnapped and were working off a debt owed. They were often slaves to the chief and nobles.

Plains Tribes –Hunting Buffalo

Hunting Buffalo:

- The buffalo wandered the Great Plains in vast herds.
- Bull buffalos (males) weighed more than one tonne and stood over 1.5 metres tall at the shoulders.
- The cows (females) were smaller but they had better meat.
- Buffalos ran **very fast and had a good sense of smell** but bad eyesight.
- Historians estimate that in 1800 there were about **60 million buffalo**.
- Plains performed a **Buffalo dance** to connect with the Buffalo spirits to bring a good hunt.
- The Plains tribes used to hunt the buffalo first **on foot and then using horses**. It was very **dangerous**. https://www.youtube.com/watch?v=h9kQtd4_WcU
- They used **every part of the buffalo, nothing was wasted**.
- The main parts of the Buffalo that were used were the hide for textiles – making clothes, tepees, rugs etc and the meat for eating.
- But there were many, many uses for the Buffalo and this is why Plains used every last part, for their way of living (*see diagram right*).

Key Vocabulary
Buffalo
Hide
Tepee
White settlers
Trade

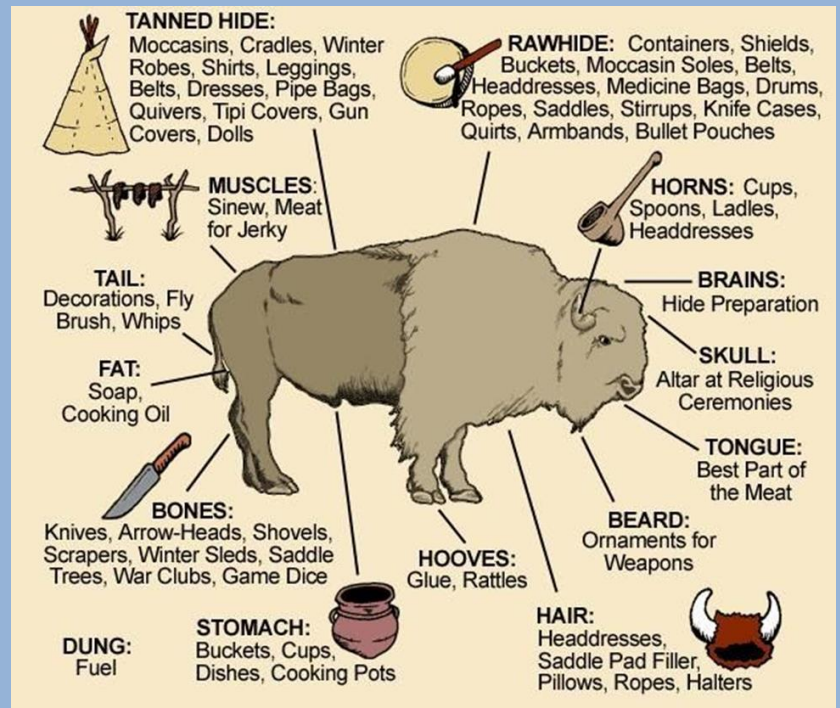


If you zoom in – this is a picture of **Buffalo skulls from the late 1800's**. It shows how so many more were hunted once white settlers arrived.

How did White settlers bring a change to Buffalo Hunting?

The Plains Americans began **killing many more buffalo** as they started to **trade** Buffalo with others: Mexicans from the 1700's and European settles from the late 1700/1800's. The Plains tribes traded Buffalo for **horses, guns and pots/pans**. This was a change for them only hunting what they needed.

Buffalo hunting changed again within the 1800's as white settlers hunted Buffalo themselves, when they realised they did not need to rely on the Plains to hunt Buffalo. **White professional hunters** hunted Buffalo for skins, however left the rest – what a waste! Some white settlers hunted for **sport**. This meant the Buffalo were being killed in the millions - from **1840 to 1885 the Buffalo numbers feel from 13 million to just 200!!!** Buffalos nearly became extinct. The other problem was while the white settlers hunted Buffalo there was little left for the Plains tribes who relied on this animal so much.



White settlers impact on Plains Tribes

- By **1865** Plains had be pushed off nearly **all their land**, apart from barren and mountainous areas. This meant that the plains were in areas that was hard to live and hunt, threatening their way of life.
- **Treaties** were made to keep the peace between the Plains and the US white government. For example…
- In **1851 the Sioux tribe** had given up 24 million acres. In return for annual payments and to build then brick homes. However, the Sioux tribe were not paid for their land, nor did they see houses built for them.
- Plains Tribes were keen to make treaties with the white men. This photo (right) was taken after such an agreement. However, after this the 4 leaders in the front of this photograph were **murdered** by white American troops who came and took over their land.
- The Plains tribes felt **betrayed** and did **not trust** the white government and leaders.
- Plains also felt angry that from **1850-60** the whites settlers started to develop the land by building **roads, towns, railways and started farming and mining** the land for minerals. This was destroying their sacred land.
- Some Plains tribes did not put up with this bad treatment and **attacked the whites** that threatened their land. They were unhappy that they had been forced off their land which had been theirs for generations! They attacked white men and their families; years of trading had provided them with horses and weapons.
- The White reaction was to take a strong stance and they build US forts along the trails (roads) to protect travellers, miners and railway builders.
- **Tension and conflict** between the 2 groups increased.

Key Vocabulary
Treaties
Sioux Tribe
Trails
White settlers
Custer
Sitting Bull
Battle of Little Bighorn

These coloured routes show how white men were moving across America taking tribal lands. It shows road and rail trials (routes)

Tension between the groups leads to war: 1870-1890

Another main reason whites wanted Plains land so much was the discovery of **GOLD**!!! Something that plains tribes were not aware of.

In 1872 more gold was discovered in the Plains territory and the white American government asked the Plains if the whites could mine the gold. The Plains tribes said no, but the government was unable to stop the white miners from mining the gold. The Plains killed these white miners.

By **1876** both sides were angry and prepared to fight. The Plains Sioux chief called **Sitting Bull** gathered **12,000 Plains Tribesmen**. The US army thought it would be an easy battle so sent **General Custer** (below) with **25o men**. The sides met at **Little Bighorn** Valley. Custer was shocked at the size and the Plains Tribes took down and killed Custer and all his men.

The US army was so embarrassed they put loads of men and money into attacking back. The Plains tribes were **hunted down and killed**.

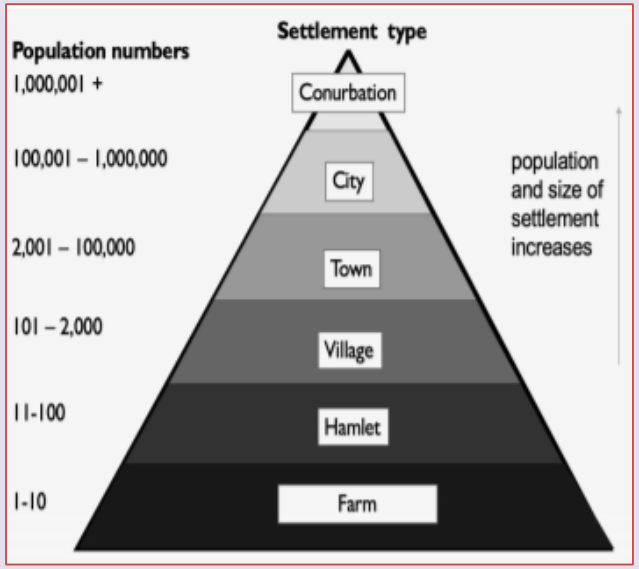
Fighting and tensions continued a little after this until about **1890** when the white government encouraged the Plains tribes to live **as the whites did** adopting farming and schooling. Land was divided up between them, Plains tribes people lived on **reservations**.

General Custer

Settlements – Term 5 Geography

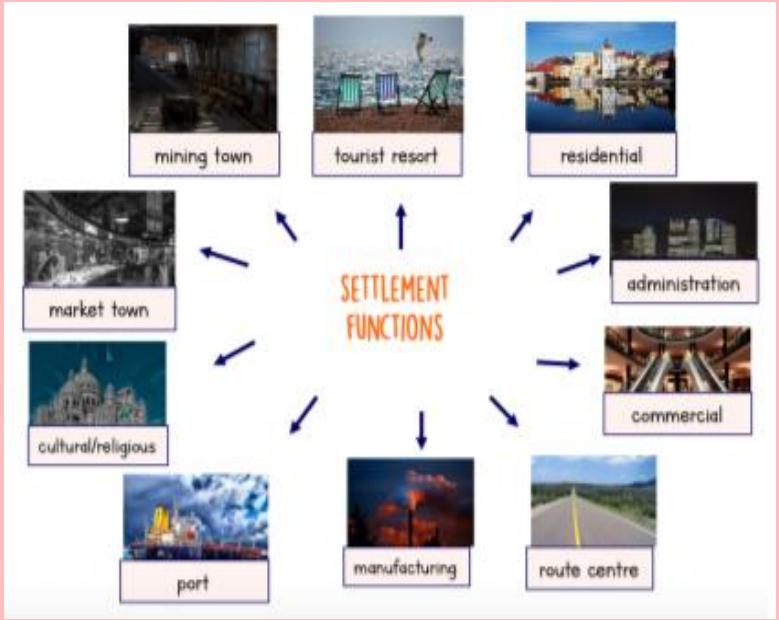
What is a settlement?

"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

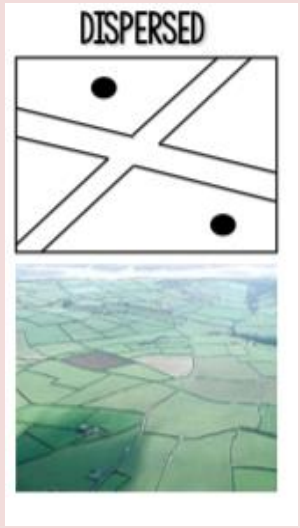
- **Site** is the land which a settlement is built on.
- **Situation** is where a settlement is located in relation to other surrounding, mainly human, features.

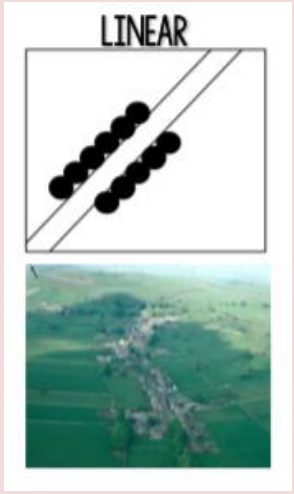
Some Settlement Advantages

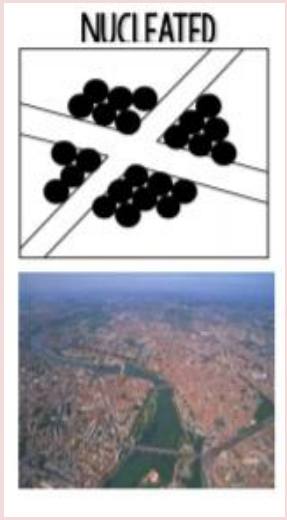
- **Bridging point** - Where a river was shallow enough to be crossed or narrow enough to easily build a bridge
- **Dry Point** - In especially wet areas, settlements were built on slightly raised land to avoid flooding
- **Nodal Point** - Where natural routes meet, such as several valleys or at the 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.







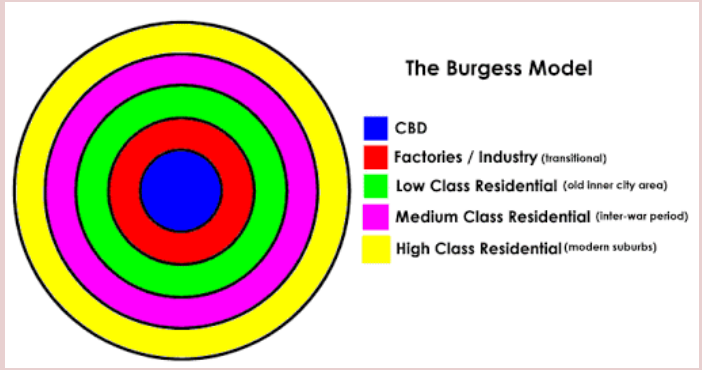
Types of settlement	Description
Hamlet	There is a very small group of homes. They are unlikely to be many other facilities.
Village	This is larger than a hamlet and contains more functions e.g a few shops, post office, doctors practice. Villages can vary in size
Town	This may contain tens of thousands 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

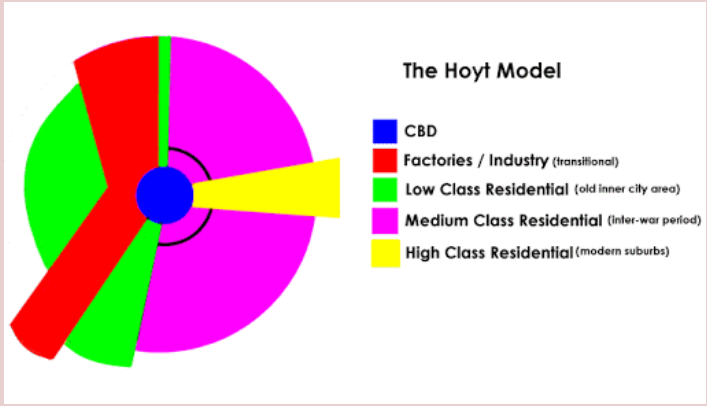


This model is based on the idea that land values are highest in the centre of a town or city.

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:

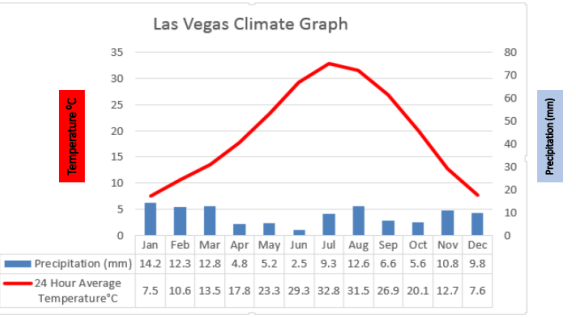
Burgess model, Hoyte Model, CBD, inner city, suburbs, terraced house, semi-detached house, detached house.

Where is Las Vegas ?

Las Vegas is the largest city in the U.S. state of Nevada.
It is located in the **Mojave Desert** of Southern Nevada

Causes of water shortages

Drought



Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Annual climate data	Value
Total annual precipitation	108 mm
Annual average Temperature	19.5 °C

Reduction in water from lake mead

- The Hoover Dam was built in 1935 creating Lake Mead as the largest artificial lake in the world.
- But the Nevada lake providing most of the water to lake Mead has lost 4 trillion gallons of water in the past 14 years.
- the effect of a drought that began in 2000 is starting to threaten the Las Vegas water supply due to the dramatic extent to which the reservoir has dried up

Hoover Dam

(white chalk lines show the original water height)

Las Vegas

- Las Vegas appears to be a green oasis set in a blazing desert, but environmentalists warn water supplies could run dry within the next 50 years; while urban areas develop on protected areas. There is a stark contrast between the lush city against a barren desert that stretches in all directions. Yet, this is a region in the grip of one of the worst droughts on record.
- Each day countless tourists walk the Strip, in awe of dancing fountains, tropical landscaping, pools and many water features.
- But this is one of "Sin City's" greatest myths, as local hotels only account for just 7% of the area's total water usage.

Quotes & Facts:

"The hotel casinos use only 30% of their water allocation on outdoor use, while 70% is used indoors in hotels and homes kitchens and that water is reclaimed and used again."

"Even though the Bellagio has the largest water feature on the Strip, it benefits from ground water. We are consuming less water than when it was functioning as a golf course."

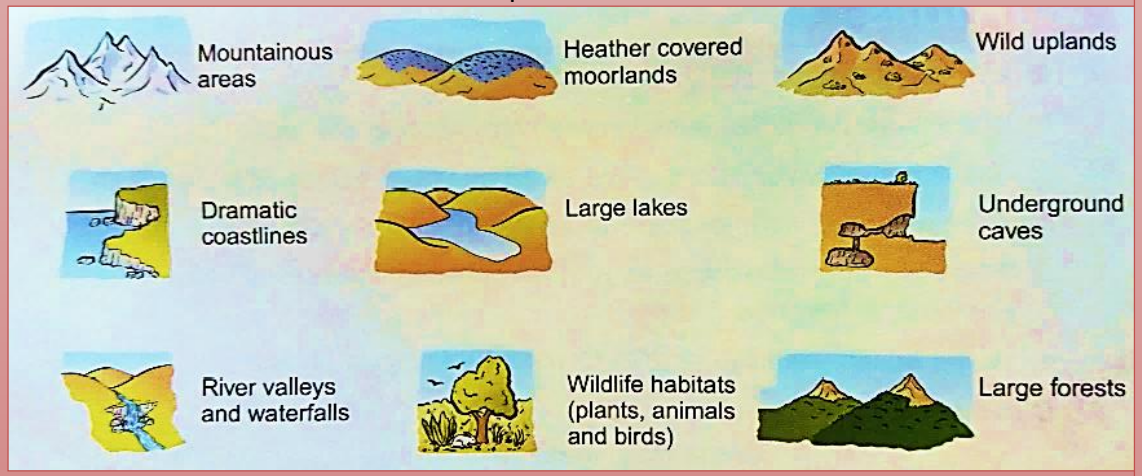
Water authorities estimate around 70% of residential water is used outdoors, washing the car and irrigating the lawns, and only 30% is used indoors.

" It seems there are too few of us that are willing to stand up and say we need to protect our environment "

Water Shortage Problems	Potential water shortage solutions
• Las Vegas consumes around 870 litres of water per person per day, and environmentalists worry Water Supplies could run dry within the next 50 years	• concept of 'xeriscaping' is being promoted to its residents. • Xeriscaping is the practice of designing landscapes to reduce or eliminate the need for irrigation. Therefore xeriscaped landscapes need little/no water beyond what the natural climate provides.
• Although Nevada has been banking excess water from the Colorado River in Arizona, environmentalists fear this is a short-term solution.	• A $5 billion 555km pipeline from central Nevada could be the answer to the future water needs of Las Vegas. • But farmers and residents in rural parts of the state are unwilling to share the precious resource and it is becoming a battle.
• "In 15-20 years from now, our current water supplies will be overtaxed and we will need to find an alternate source of water."	• Las Vegas could pay for desalination plants along the West Coast in exchange for the right to use California's or Mexico's share of the Colorado.
• Las Vegas, draws its water from the Colorado-fed Lake Mead, the nation's largest reservoir. During the past decade Mead's level has fallen more than 100 ft,and the basin is now just over half full.	• Southern Nevada Water Authority – placed mandatory water conservation measures such as outdoor watering restrictions and landscape watering assignments, as well as increases in water rates and water waste fees

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!

The Location of National Parks in the UK

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.

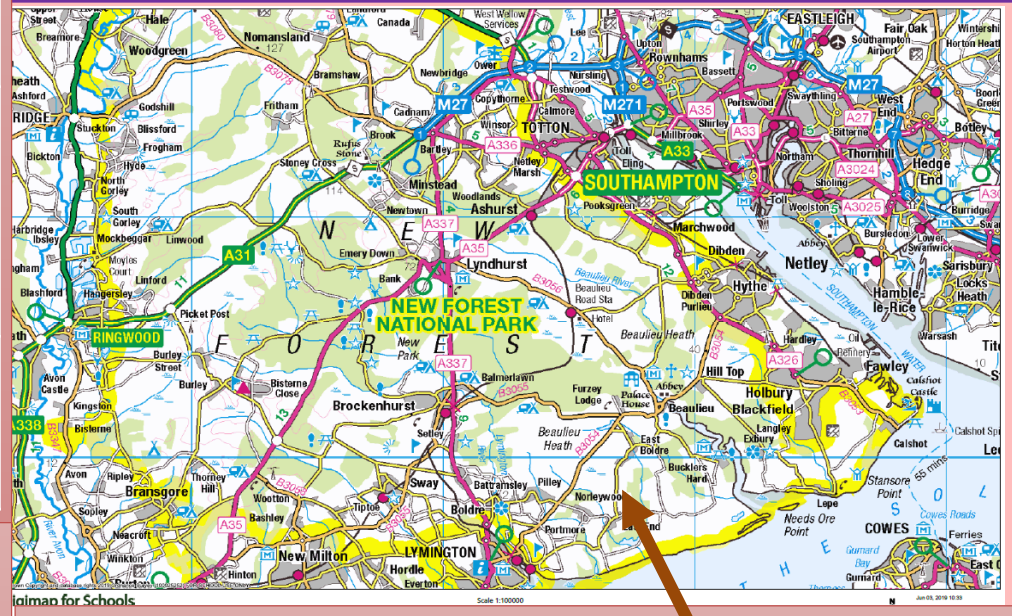
New Forest: Conservation measures

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)

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

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

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 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

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.
- https://www.youtube.com/watch?v=zsXQfCeMHs8

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

Dreidel

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 old food. 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 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.

Sedar Plate

Year 7 – BVT

Judaism
The Holocaust

How did the Holocaust happen?

Students often ask how did the Holocaust happen? The Holocaust was the result of gradual **discrimination** (treating Jewish people unfairly) and **persecution** (mistreatment often violence) of Jews in Nazi Germany. The following shows how Jews were treated over between 1933 to 1945.

In the early 1930's Hitler started to discriminate against Jews. In **1933 the Boycott of Jewish shops** meant that Germans were told not to shop in Jewish shops. This meant that Jewish businesses lost money. In **1933** Jews were not allowed to become doctors and lawyers and other well-paid professionals. In **1935 the Nuremberg laws** stated that Jews could not marry non- Jews. Jews were also **segregated** (separated) in society. Jews and Germans were not allowed to mix in schools, parks, restaurants and other social spaces. This was to keep the German population free from Jewish blood and to show Jews that they were inferior. Jews were also told to wear the yellow Star of David to identify themselves. In **1938** Jewish students and teachers were banned from going to school with German children.

Soon this discrimination turned into persecution. In **1938** an event called **"Kristallnacht"** (meaning the night of broken glass) happened. The Nazis went around and smashed up 200 Jewish Synagogues and businesses. 35 Jews were killed. If any Jews opposed the Nazis, they were sent to special prisons called Concentration camps.

In **1939** when the war broke out, Jews were gathered together and made to live in **Ghettos**. These were walled areas in cities that had basic housing and sanitation. They had a gate that was locked. The conditions in these ghettos were not nice, some died from these poor conditions.

Key vocabulary

Discrimination
Boycott
Persecution
Segregation
Nuremberg laws
Kristallnacht
Ghettos
Genocide
Concentration camp
Extermination camp
Final solution
liberated

Genocide and the Holocaust

In **1940** the Nazis started to round up Jews in Germany and Poland which Germany had occupied in the war. They were crowded into cattle train carriages – boxes with small air holes and sent to the **concentration or extermination camps.**

In **1942** Hitler decided he needed to exterminate (kill) the Jews. He called this his "**Final Solution**" to his Jewish problem. We call this the **Holocaust** - the mass killing of Jewish the people. When you kill lots of from one race it is called **genocide**.
When Jews arrived at the camps, they would be checked and divided into healthy and non-healthy, very young or old.

If Jews were healthy, they were kept for slave labour. This would be hard work and they were given very basic and awful living conditions and food. Many Jews became malnourished and could be beaten as punishments.

If Jews were not going to be beneficial for work, they would be killed. Between **1942-45** Jews were killed at the extermination camps. This started to be done by mass shootings. But this then this changed, and Jews were gassed. This was because they could kill more Jews and save the ammunition for soldiers fighting in WW2.

In **1944** the first camp was **liberated** (set free) by the allies. From this point onwards as the Germans started to lose the war, more camps were found by the allies and surviving Jews were set free.

Year 7 BVT

Judaism
The Holocaust

Teachings about discrimination:

All religions have teachings that **promote love and equality** do **not accept discrimination and prejudice**.
Here are a few:

Religion	Teaching
Christianity	*"Neither Jew nor Greek, slave nor free, male nor female, for you are all one in Jesus Christ"* Bible *"Let's not love with words but with actions"* Bible *"Love thy Neighbour"* Jesus *"Love your enemies and pray for those that persecute you"* Jesus
Islam	*"Respect and honour all human being irrespective of their religion…"* *Qur'an* *"Be you a man or woman, you are equal to the other"* Qur'an
Buddhism	*"Hatred will not cease by hatred but by love alone"* Dali Lama

James and Stephen Smith are two Christian brothers who work to show the wrongs of persecution of religious people:

James and Stephen Smith opened memorial centres in memory of the discrimination and genocide from the Holocaust and genocide in Rwanda. The **Holocaust museum is the only one in the UK, in Nottinghamshire**. These centres show and **teach** how religious persecution and discrimination is wrong. This educates people to the wrongs of discrimination and anti-Semitism.

The parable of the Good Samaritan

A certain man (who was Jewish) was going down from Jerusalem to Jericho, and he fell among robbers, who both stripped him and beat him, and departed, leaving him half dead. By chance a certain priest was going down that way. When he saw him, he passed by on the other side. In the same way a Levite (a priests assistant) also, when he came to the place, and saw him, passed by on the other side. But a certain Samaritan (Samaritans and Jews did not get along), as he travelled, came where he was. When he saw him, he was moved with compassion, came to him, and bound up his wounds, pouring on oil and wine. He set him on his own animal, and brought him to an inn, and took care of him.

Year 7 BVT

Judaism
The Holocaust

How were surviving Jews affected by the Holocaust?

Jews that survived the Holocaust were very lucky. But they didn't always feel that way. Many of them felt guilty. This was because they survived and many Jews and even their family members had not. This maybe especially hard if their children had been killed. These feelings of sadness and guilt would have had a mental strain on survivors. Additionally, many families wouldn't have been able to grieve as they may not have known for sure whether family members had been killed. Even if they knew for sure, they would not have held a funeral to say goodbye and would not have a grave to visit to connect to that person. They would always have the memories of the Holocaust with them for their lives, to deal with too.

Some Jews may have doubted their faith – as why would God treat his followers in this way? Why would he allow this to happen? Jews may lose their faith in God and want to seek revenge. Religion teaches forgiveness, but this would be too hard to forgive, surely?

Many Jews would have more immediate problems too. Many would have lost their homes and would have to find new shelter. They had lost all their money and possessions. They would not have jobs or a source of income. They would have to build this from the beginning again.

There were still some people in Poland and Germany who held on the Nazi ideas and did not like the Jews. Jews faced hatred and discrimination by these people.

Key vocabulary

Discrimination
Persecution
Genocide
Concentration camp
Extermination camp
Final solution
liberated

Holocaust Remembrance

Every year there is Holocaust remembrance day. This is important to mark for many reasons. Firstly, to remember the millions of Jews that were killed in this event and to make sure they are not forgotten. But more importantly, to learn from our past mistakes so we never repeat such an awful act.

One quote that shows this is **"The Holocaust is not only a tragedy of the Jewish people, but also a failure of humanity as a whole"**

There are many ways that Holocaust remembrance day is recognised. Below are some **clips to show this remembrance**. **Please watch each one**. *If there is a problem, you should search online for some Holocaust remembrance day clips.*

The clip below is a symbolic look at how to remember and never forget the journeys the Jewish people went on.
https://www.youtube.com/watch?v=-NeqH4QCI60

Below is a short film put together by the UN, showing an educational look at why the Holocaust should be remembered.
https://www.youtube.com/watch?v=eIxmyVk4Um8

Below is a short film put together of personal accounts of the Holocaust to remember this event.
https://www.youtube.com/watch?v=rIsQXmWQvYM

Holocaust Memorial Day poem

Auschwitz
By Charles N Whittaker (2014 Holocaust Memorial Day)

The semiquaver chugging of the train on the track
And the people on board who will never go back
And the terror in the eyes of all the young ones to go
With no one knowing as the train comes to slow

Those men at the station as the ramps drop down
Where humanity lost is the only crippled sound
Hope gone for those who stand behind the hard sharp wire
And the smoke in the towers rises just a little higher

And the blue ink stabs a little harder in the skin
Above the veins of despair where murder let it in
And the terror in the eyes of all those about to leave
Another train on the track no last minute reprieve

And the slow, cro...chet chugging of the train on the track;
And the people on board. Who will ne...ver go.
Back.

Holocaust Memorial Day 2020
Stand Together

SPANISH YEAR 7: ABOUT ME

¿ Dónde vas de vacaciones normalmente? = Where do you normally go on holiday?

normalmente *(normally)*
generalmente *(generally)*
cada año *(each year)*

me quedo en Inglaterra/ salisbury *(I stay in salisbury)*
voy de vacaciones a *(I go on holiday to)*

Italia *(Italy)*
Francia *(France)*
España *(Spain)*
Los Estados Unidos *(USA)*
Australia *(Australia)*

me gusta/n *(I like)*
prefiero *(I prefer)*
no me gusta/n *(I don't like*)
odio *(Ihate)*

pasar las vacaciones (spending the holidays)

en *(in)*
las montañas *(the mountains)*
el campo *(the countryside)*
la costa *(the coast)*
la ciudad *(the city)*

¿ Cómo vas normalmente? How do you normally get there?

voy *(i go)*
viajo *(i travel)* + en (by)
vamos *(we go)*
viajamos *(we travel)*

avión *(plane)*
coche *(car)*
tren *(train)*
barco *(boat)*
bici *(bike)*

¿dónde te alojas? = where do you stay?

me alojo en *(I stay)*
nos alojamos en *(we stay)*

un hotel *(a hotel)*
un camping *(a campsite)*
un airbnb *(an airbnb)*
un chalet *(a holiday home)*

porque es *(because it is)*

cómodo *(comfortable)*
facíl *(easy)*
guay *(great)*
barato *(cheap)*
relajante *(relaxing)*
animado *(lively)*

¿Qué haces durante tus vacaciones? What do you do on holiday?

para pasar el tiempo *(to pass the time)*
durante el día *(during the day)*

si hace buen/mal tiempo *(if it is nice/bad weather)*
si hace sol/viento/tormenta *(if it is sunny/windy/stormy)*
si llueve *(if it rains)*

bailo en la discoteca *(I dance i the disco)*
como en restaurantes *(I eat in restaurants)*
compro recuerdos *(I buy souvenirs)*
doy una vuelta en bici *(I go for a bike ride)*
me relajo *(I relax)*
visito los monumentos *(I visit mununents)*

hago/ practico … (*I do/ I practise…)*

el ciclismo *(cycling)*
el esquí *(skiing)*
el patinaje *(skating)*
la equitación *(horse riding)*
la natación *(swimming)*
la vela *(sailing)*
(practico) el idioma (the language)

juego … *(I play)*

al rugby *(rugby)*al baloncesto *(basketball)*
al fútbol *(football)*
al voleibol *(volleyball)*

¿ Dónde vas de vacaciones en el futuro?= Where are you going on holiday in the future?

este año *(this year)*
en el verano *(in the summer)*
durante las vacaciones escolares *(during the school holidays)*

voy a ir a *(I am going to go to)*
voy a viajar a *(I am going to travel to)*
vamos a ir a (we are going to go to)
vamos a viajar a (we are going to travel to)

España *(Spain)*
Alemania *(Germany)*
Suiza *(Switzerland)*
Grecia *(Greece)*
Los Estados Unidos *(USA)*
Australia *(Australia)*
Cuba *(Cuba)*

¿ Dónde te gustaría ir de vacaciones?= where would you like to go on holiday?

si gano la loteria *(if I win the lottery)*
cuando sea major *(when i am older)*

me gustaría ir a*(I would like to go to)*
iría a *(I would go to)*
viajaría a *(I would travel to)*

Year 7 – Term 5 and 6

ART TERMINOLOGY YOU SHOULD KNOW LEARN AND USE

Shape, form, space

Closed
Open
Distorted
Flat
Organic
Deep
Positive
Negative
Foreground
Background
Composition
Curvaceous
Elongated
Large
Small
2D 3D

Tone

Bright
Dark
Faded
Smooth
Harsh
Contrasting
Intense
Sombre
Grey
Strong
Powerful
Feint
Light
Medium
Dark
Dramatic
Large
Small

Pattern and Texture

Repeated
Uniform
Geometric
Random
Symmetrical
Soft
Irregular
Coarse Bold
Uneven
Bumpy
Rough
Smooth
Uneven
Spiky
Broken
Furry
Fine Flat
Grid

Line

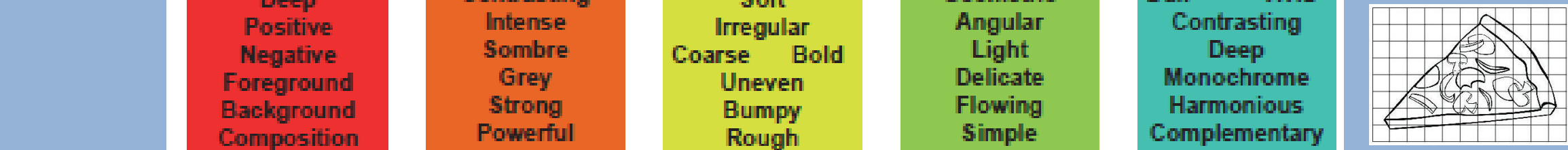
Fluent
Free Rough
Controlled
Powerful
Strong
Geometric
Angular
Light
Delicate
Flowing
Simple
Thick Thin
Horizontal
Broken
Interrupted
Rounded
Overlapping
Feint

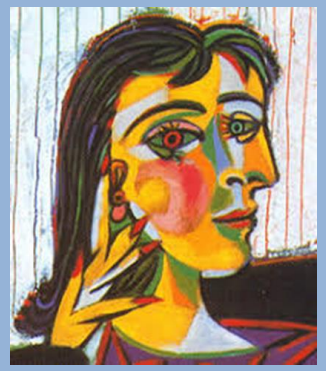
Colour

Bright Bold
Primary
Secondary
Tertiary
Radiant
Dull Vivid
Contrasting
Deep
Monochrome
Harmonious
Complementary
Natural
Earthy
Subtle
Pale
Cool Warm
Saturated
Luminous
Strong

Grid method:

to enlarge / reduce or reproduce an image by drawing a measured grid over an image





Cubism

Cubism was a revolutionary new approach to representing reality invented in around 1907–08 by artists Pablo Picasso and Georges Braque. They brought different views of subjects (usually objects or figures) together in the same picture, resulting in paintings that appear fragmented and abstracted.

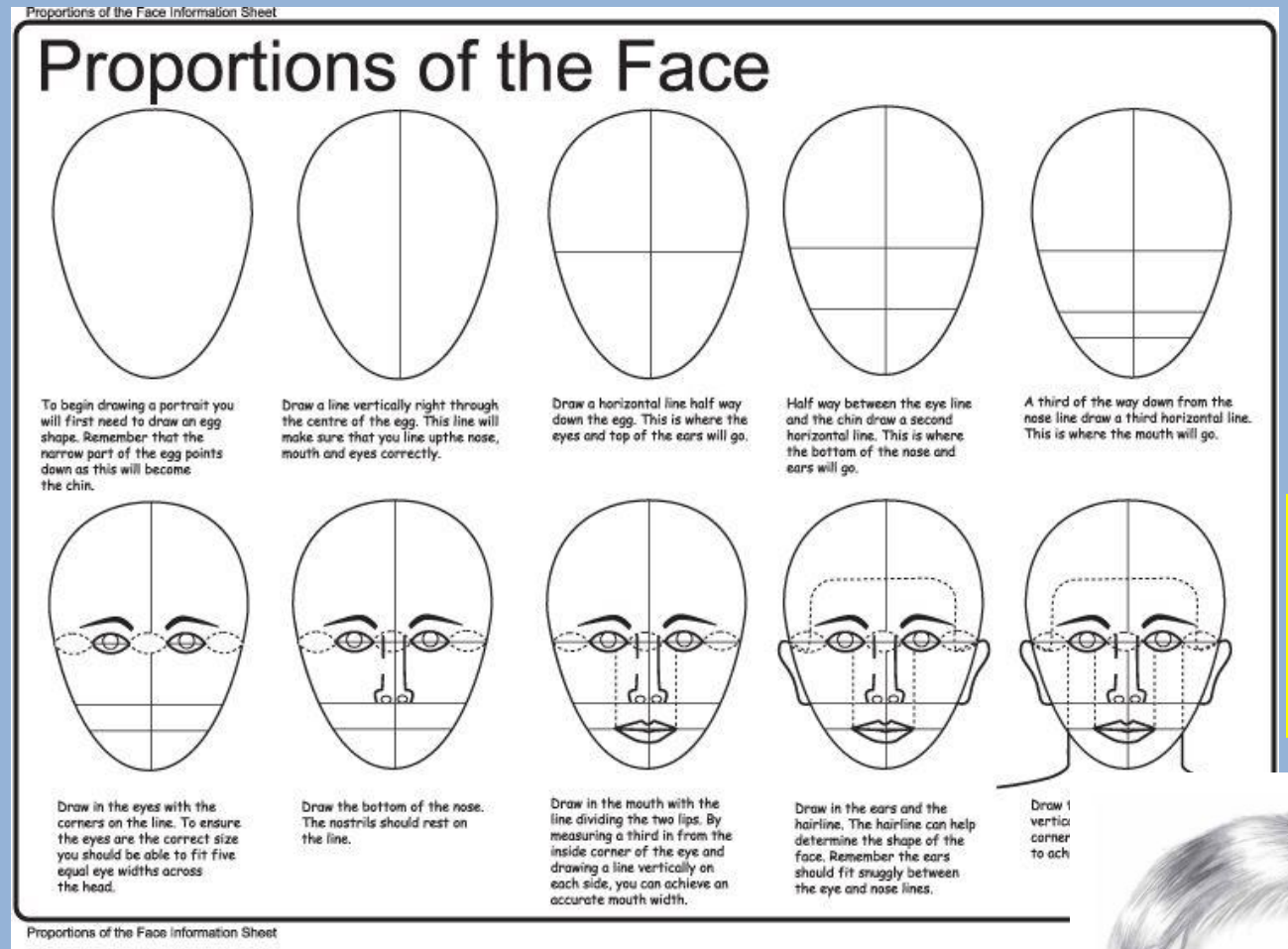
Basic, simple, solid, loud, quiet, bright, realistic, stylised, observed, busy, vibrant, strange, interesting, balanced, lively, negative, recognisable, abstract, tactile, meaningful, symbolic, depressing, unique, emotive, hidden, textural, dynamic, powerful, intentional, concealed, subtle.

Pop Art

Pop art is a style of art based on simple, bold images of everyday items, such as soup cans, painted in bright colours. Pop artists created pictures of consumer product labels and packaging, photos of celebrities, comic strips, and animals. Andy Warhol and Roy Lichtenstein are two artists who worked in this style.

Year 7 - Term 5

HUMAN FACE PROPORTIONS

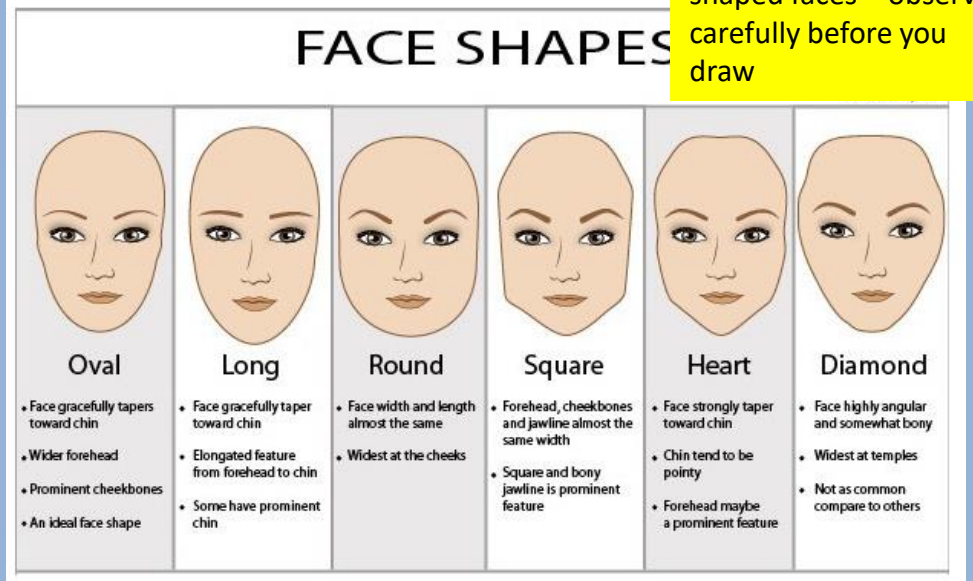


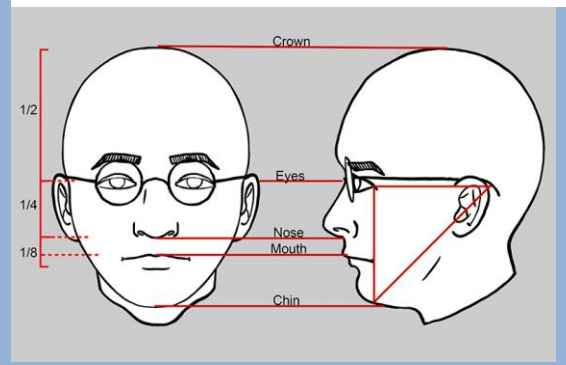
Leonardo da Vinci used proportions and light guidelines to ensure his drawings were accurate. Take a look at his work on-line – he is a famous artist and designer you need to know.


Sketch by Leonardo da Vinci

There are a lot of different on-line tutorials to assist you in drawing faces accurately. Take a look at some before you start drawing realistic faces.

Humans have different shaped faces – observe carefully before you draw





Drawing glasses can be more difficult – take a look on-line for how to draw these accurately

PORTRAITS - CUBISM – PABLO PICASSO

Cubism

Cubism was a revolutionary new approach to representing reality invented in around 1907–08 by artists Pablo Picasso and Georges Braque. They brought different views of subjects (usually objects or figures) together in the same picture, resulting in paintings that appear fragmented and abstracted. View these clips explaining this style:
https://www.tate.org.uk/art/art-terms/c/cubism

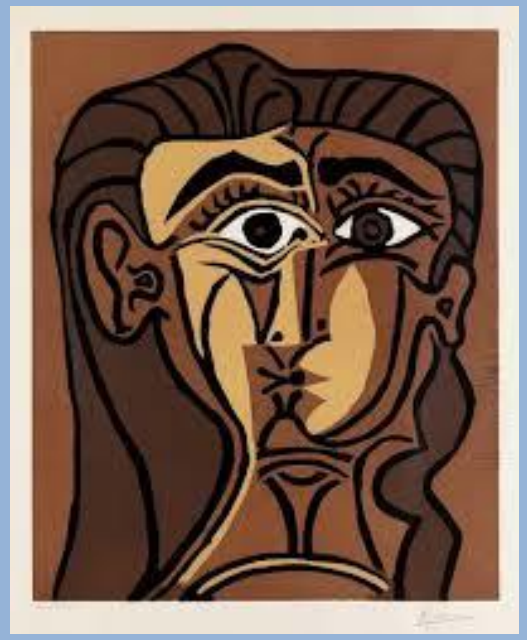
https://www.tate.org.uk/art/art-terms/c/cubism/all-about-cubism
There are additional practical activities linked to cubism on the Tate Gallery website.

There is a Cubism activity on the TFG Art section of our website.

Information on his life and work is contained here:

https://www.youtube.com/watch?v=33BCnqpS8NA&safe=active

https://www.youtube.com/watch?v=3KJZc7o-h2Y&safe=active



Year 7 – Term 6

PORTRAITS
POP ART - ROY LICHTENSTEIN

Lichtenstein is famous for his use of cartoon strips from American comic books, which were very popular the 1950s. He admired the skill of the comic book artist, who could create complex stories of love and war in cartoon form.

He was sometimes accused of copying comics exactly, but he said that he made changes to the pictures – right down to the tiniest placement of individual dots. He was also criticized for using very basic painting techniques.

View these clips explaining this style:

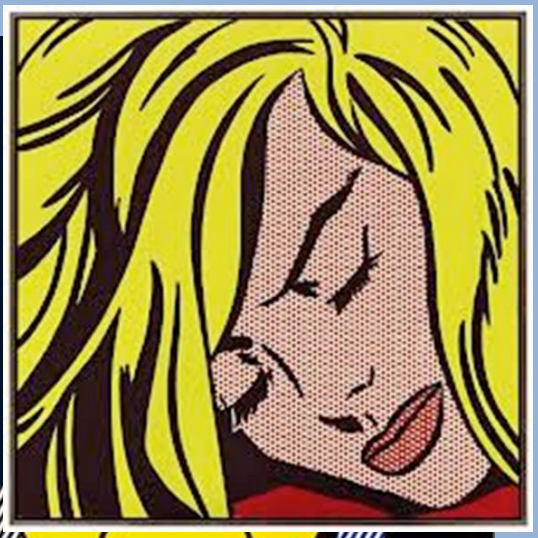
https://www.tate.org.uk/kids/explore/who-is/who-roy-lichtenstein

https://www.youtube.com/watch?v=gOsLpoa6c_4&safe=active

Conserving and how he produced one of his pieces of art:
https://www.youtube.com/watch?v=8zCzIyN2QW8&safe=active

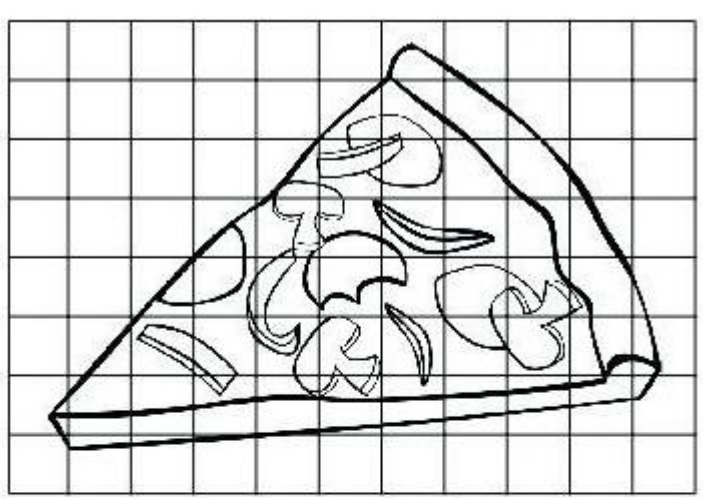
There is a Roy Lichtenstein activity on the TFG Art section of our website.

Lichtenstein chose colours carefully, to imitate the four colours of printers' inks. He also used Ben Day dots, a system invented to increase the range of colours available to newspaper printing.

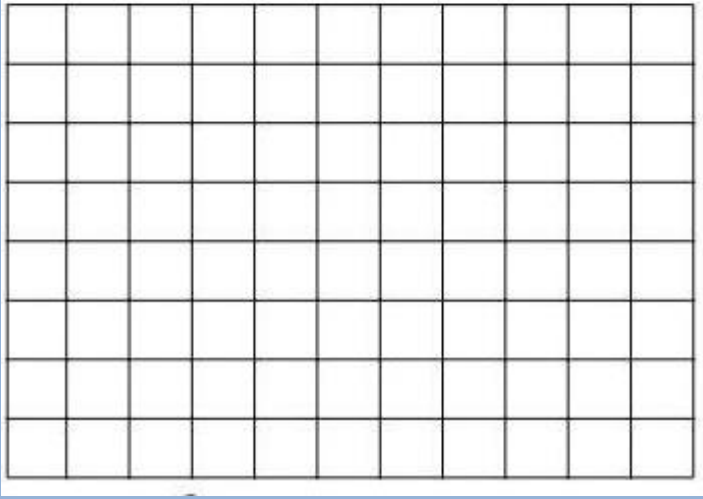


Enlarging and reducing using Grid Method

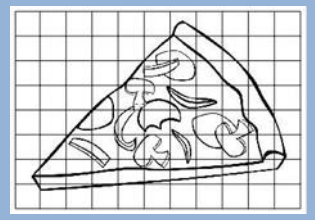
The grid method is an inexpensive, low-tech way to reproduce and/or enlarge an image that you want to paint or draw.

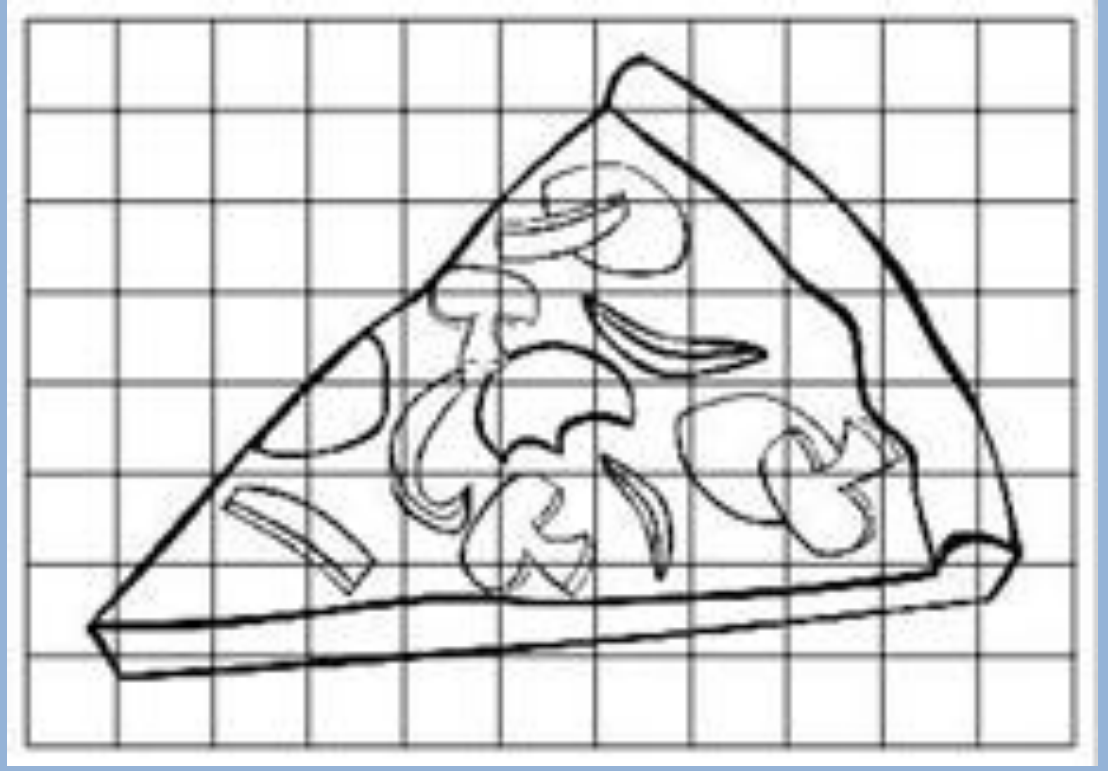


Stage 1
Draw an accurate grid over an image that you want to copy



Stage 2
Draw another accurate grid with either the same size squares or larger ones if you want it bigger then copy whatever is in each square accurately





You can enlarge or reduce an image to whatever size you want to using this method with accurate measuring and accurate copying!

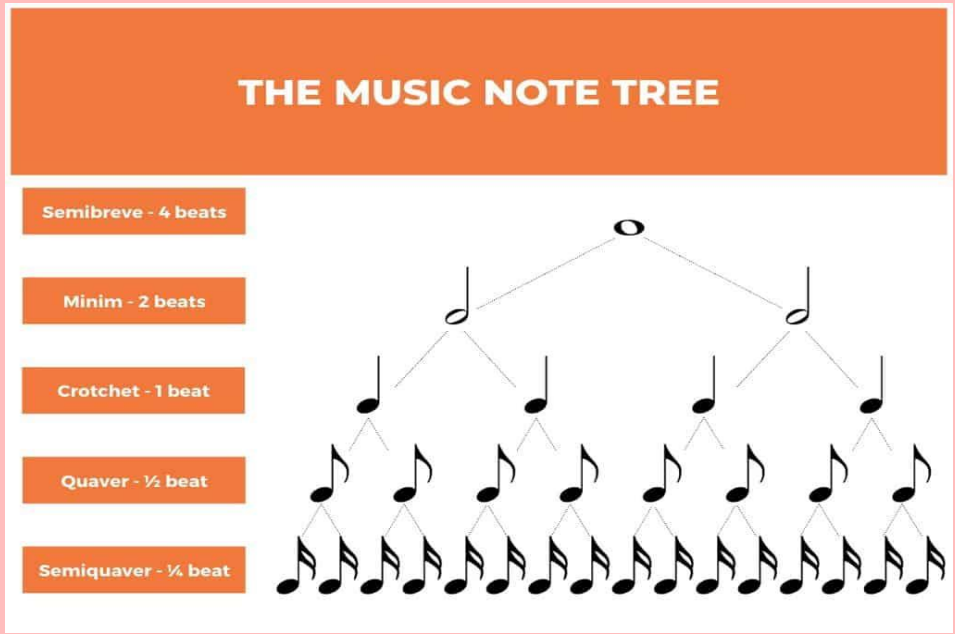
View this tutorial and others on-line to see the method:

- https://www.youtube.com/watch?v=CNFIuVws5EA&safe=active

Form and Structure

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

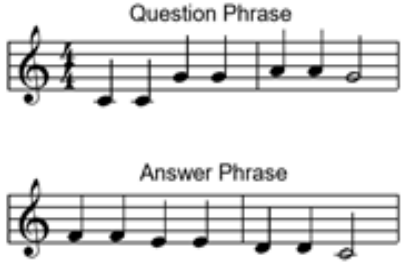
FORM/STRUCTURE – How a piece of music is organised into different sections or parts.
PHRASE – A short section of music, like a "musical sentence".
BINARY FORM (AB) – Describes music in two separate sections. The first section is labelled "A" and the second section labelled "B" – either or both sections 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**

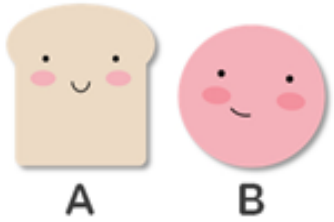
A. Question and Answer Phrases

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**.



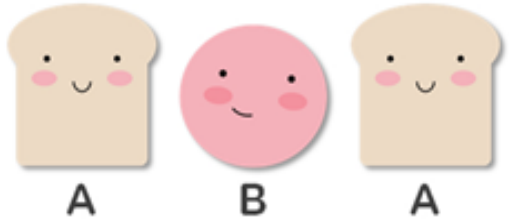
B. Binary Form

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

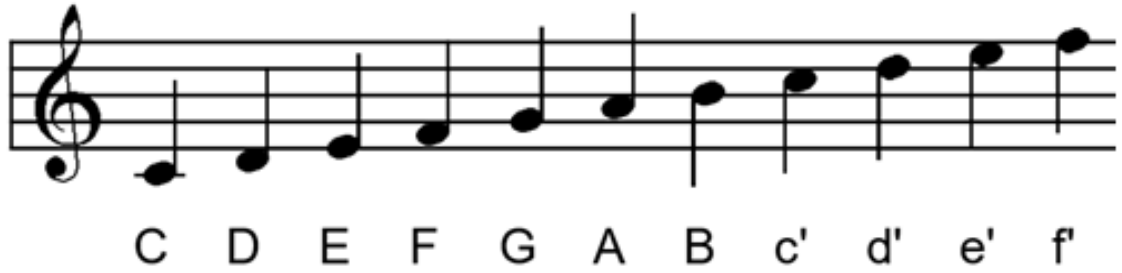
RONDO FORM (ABACADA…) describes music where a main **theme** or **melody** "A" keeps returning between different contrasting sections "B, C, D…" (called **episodes**)

E. Key Words

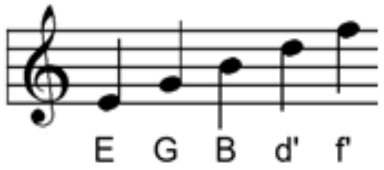
1. **FORM/STRUCTURE** – How a piece of music is organised into different sections or parts.
2. **PHRASE** – A short section of music, like a "musical sentence".
3. **PITCH** – The **highness** or **lowness** of a sound or musical note.
4. **MELODY/THEME** – The main **tune** of a piece of music. The 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

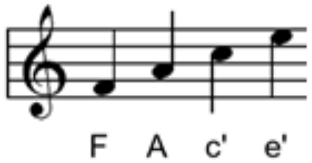
Treble Clef Pitch Notation



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

Modern Folk Artists

Bellowhead

Kate Rusby

Jim Moray

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)

Folk Music

A. History of Folk Music

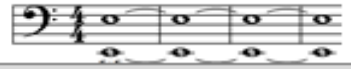
Folk Music is **TRADITIONAL** music **of the people** performed by the people themselves and played within their own communities. Folk Music was passed on **ORALLY** (through speech or song) from one generation to the next – the **ORAL TRADITION** (passed down by word of mouth), and many Folk Songs were 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

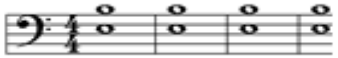
People from different countries and cultures have their own **FOLK MUSIC**. However, although it may sound different, **FOLK SONGS** are often include **WORK SONGS**, including **SEA SHANTIES**: songs sung at sea by sailors, the rhythm of these helped the sailors haul the ropes that hoisted the sails, 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

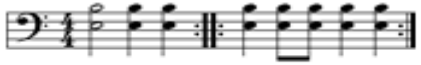
TONIC PEDAL - A (BASS) PEDAL (POINT/NOTE) is a note of long duration, often held in the bass part (lower down the keyboard) which uses the **TONIC** note, over which the melody line and chords will "fit" *e.g.*



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.*

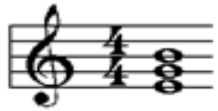


OSTINATO – A repeated musical pattern as an accompaniment, often using notes of the **CHORD** and rhythm patterns from the song *e.g.*

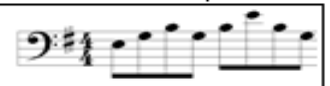


CHORDS – Many Folk Songs use **PRIMARY CHORDS** (**CHORD I**, **CHORD IV** and **CHORD V**) and sometimes the **SECONDARY CHORDS** of **CHORD III** and **CHORD VI** as a musical accompaniment. The notes of a **CHORD** can be performed in different ways to create different accompaniments:

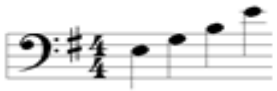
As a **TRIAD** (all three notes (**ROOT, THIRD, FIFTH**) performed together, the **ROOT** sometimes in the **BASS** part acting as **BASS LINE**).



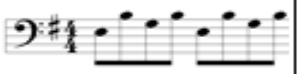
As a **BROKEN CHORD** - a way of playing the notes (**ROOT, THIRD, FIFTH**) of a chord separately ('broken' up) in a different order, ascending (going up) or descending (going down).



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**

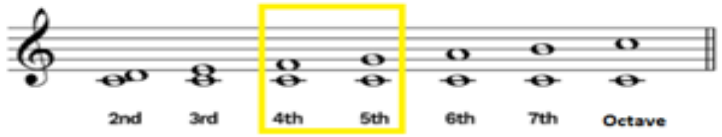


D. Harmony in Folk Music: Intervals

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).

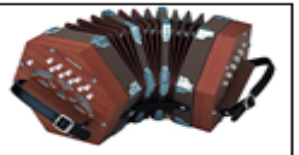
HARMONY – The effect produced by two or more pitched notes sounding together at the same time *e.g.*, a chord or triad creates harmony or a lead singer and backing singers singing different melodies or parts 'in harmony' (**COUNTER MELODY**)

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**

Year 7 Term 5

Drama

Year 7 – Term 5 and 6

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 ability 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.***

Key Ideas

There are certain elements that you must consider when writing a play. When writing a particular character, you should consider how you present your characters, paying close attention to:

Internal character – this includes; the character's personality, age, mood, thoughts & feelings.

External Character – 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:

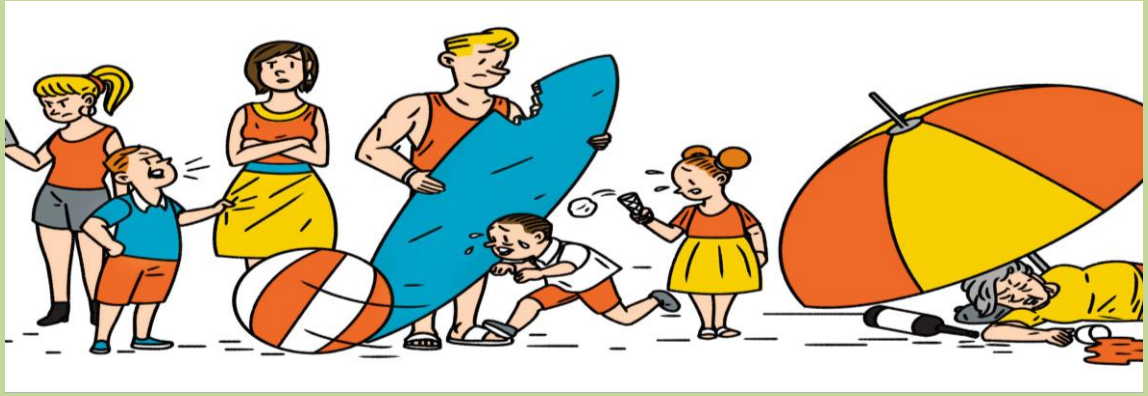
Cues – This is an indication to the actor that is their character's turn to speak.

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.

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 those things we include in ***Internal Characterisation*** & those we include as, ***External Characterisation.***



Key knowledge, Previous Learning, and Things to use- skills to remember

The 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.

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?

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.

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?

Ideas: What sort of things could go wrong?

People can forget things, like; passports, or money, or, suitcase or clothes, or keys, or the kids, or the dog, or grandma.

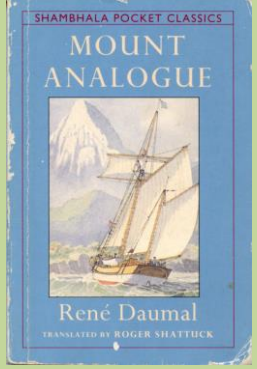
The car could get a puncture. It could roll downhill. Someone could lock the car keys in the car. They could go to the wrong train station/ airport/ country. Bags can get lost. People can get lost and so on and so on.

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…

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.***



Year 7 Term 6

Drama: Mount Analogue

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.

The Story Continued:

lense 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

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…

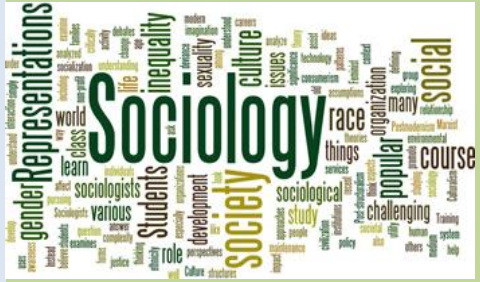
Zoology – The study of everything to do with animals.

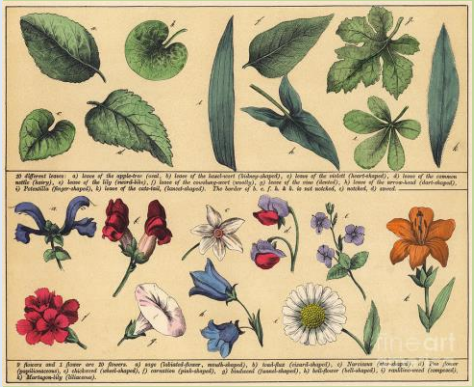
Botany - The study of everything to do with plants.

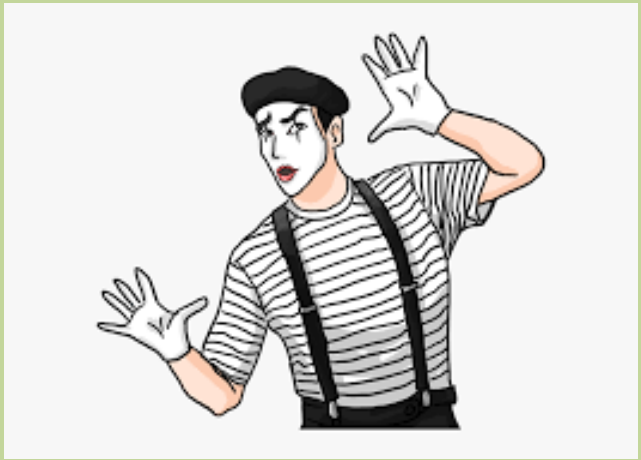
Anthropology – The scientific study of creatures like us- human beings! ***Anthropologists*** are scientists who study ancient people as well as modern people.

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







Key Parts of Knowledge to Draw On

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 practised 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.

Athletics

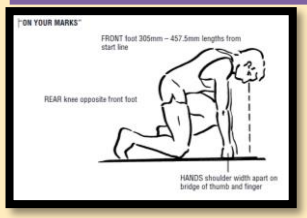
Unit Outcome:
To be able to perform the correct technique for a variety of Athletic Events

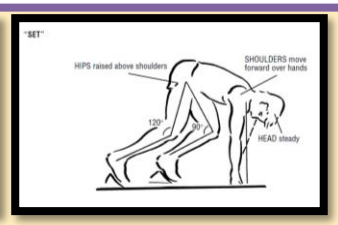
Success Criteria:
To set a Personal Best in each activity

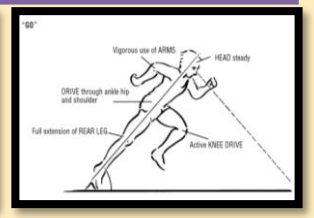
Sprint Start
Take your marks:
1. Focus eyes on where first stride will land.
2. Shoulders directly over hands.
3. Place the rear knee in line with front foot.
4. Hands make bridge between thumb and forefinger.
5. Hands are placed shoulder width apart.

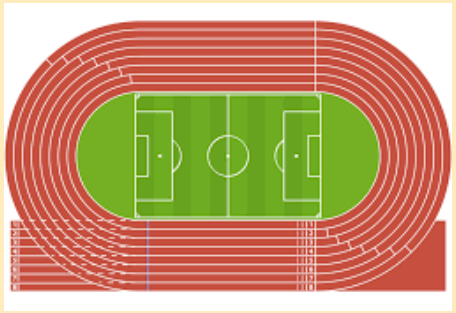
Set:
1. Shoulders move forward and up (needs strength!).
2. Hips move up higher than shoulders so making correct angles at knee joints (90° front knee, 120° rear knee).
3. Keep head in line with spine.

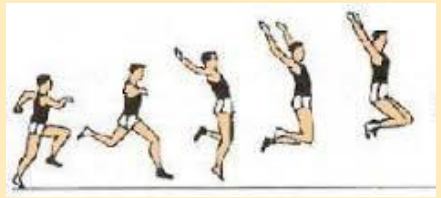
Go:
1. Vigorous arm action (fast elbows) to get legs moving.
2. Drive and extend – good line from toe to head.
3. Drive hard off blocks and drive head and shoulders out.











Athletic Events:
Track Events:
- 100m
- 200m
- 300m
- 400m
- 800m
- 1500m
- Hurdles
- Relay

Throwing Events:
- Discus
- Javelin
- Shot Putt

Jumping Events
- Long Jump
- Triple Jump
- High Jump

Key Vocabulary:
Track Events:
Take you marks
Set
Go
Pace
Sprint start

Throwing Events:
Grip
Stance
Preparation
Release
Follow through

Jumping Events:
Approach
Take off
Flight
Landing

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'

Cricket

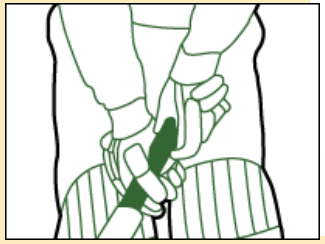
Unit Outcome:
To understand and experience the different batting, fielding and bowling techniques and skills.

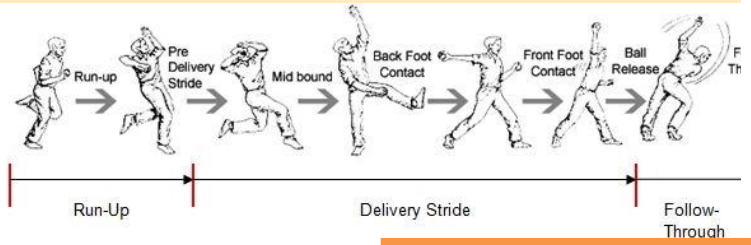
Success Criteria:
To demonstrate an ability to catch and use other fielding techniques effectively.

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.





Key Vocabulary:
- Wicket
- Boundary
- Batting
- Bowling
- Fielding
- Over
- Catch
- Crease
- Stumps
- Delivery
- Innings
- LBW (leg before wicket)
- Pace
- Line
- Length

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).

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

Fielding
Students will be able to select correct fielding techniques for different situations.

Overarm throw
Throwing the ball in quickly and accurately from the outfield is an important skill for every fielder to master.

It is a useful tool in preventing runs and getting batsmen run out

Step One
- You need to be in a side-on position, with your weight on your back foot.
- Your throwing hand should be positioned behind you with your throwing arm kept straight.

Step Two
- Point your non throwing arm.
- Your throwing arm comes through in an arc over the top of your shoulder.
- Your weight should

Catch
Catches win matches and the majority are taken in attacking field positions close to the bat such as the slips

Step One
- Feet shoulder width apart and balanced.
- Hands together, with fingers pointing down/up (depending on the height of the ball).

Step Two
- Arms should be above/in front of the body.
- Watch the ball into the softest part of relaxed hands
- Wrap fingers around the ball, drawing the hands towards the body.

Rounders

Skill	Description
Throwing	A technique to field the ball to the correct position at the correct pace and direction
Catching	The ability to get in the correct position to field the ball
Batting	A skill which allows the bat to contact the ball
Bowling	A technique to deliver the ball in the correct position for the batter to hit.
Match Play	A skill used to understand the basics of the game, the scoring, the rules and the player's positions.

Unit Outcome:
To know the main rules of the game to be able to play effectively.
To have a basic understanding of the key skills required for rounders.

Success Criteria:
To be able to perform some of the key skills applying the rules of the game.

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.

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).

Key Vocabulary:

Rules Vocabulary
- Obstruction
- No ball
- Backward hit
- Batting square
- Bowling square

Technique Vocabulary
- Stance
- Body position
- Follow through
- Mechanics of movement
- Balance
- Co-ordination
- Cushion

Tactics Vocabulary
- Batting order
- Bowling techniques
- Field placements

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.

Tennis

Unit Outcome:
To be able to demonstrate and explain how to perform the ready position, scoring, forehand and backhand ground strokes.

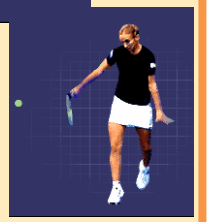
Success Criteria:
To coach another student in one tennis aspect.

Key Vocabulary:

Technique:
Ready position
- Stance
- Back swing
- Top Spin
- Racket
- Slice
- Pace
- Forehand
- Backhand

Shot Vocabulary
- Serve
- Groundstroke
- Slice
- Drop Shot
- Volley
- Smash



Ready Position
- Students are able to return to the ready position after every shot to allow them to choose which shot to play and when to attack and defend.
- It allows you to push off to the ball with maximum acceleration in as short a time as possible.
- It also starts the shot off technically - if your ready position is wrong then you have little chance with the rest of the shot.

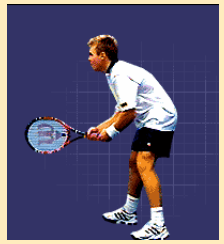
Step One
- Both hands need to start on the racquet, this allows quick grip changes and stronger, earlier body rotation for the shot.

Step Two
- Your feet need to be at least shoulder width apart with your head forwards into the court.
- Bend your knees slightly, this lowers your centre of gravity and stores energy in your muscles.

Step Three
- As your opponent strikes the ball try to bounce onto your toes for extra spring in your legs.
- The timing of this is crucial.
- It's difficult to master but if you get it right it will allow you to accelerate in any direction at maximum speed the moment you see the ball.

Step Four
- After hitting the ball return to the centre of the court and the ready position as soon as possible.






Forehand

Step One
- Starting from the ready position, and get to the ball as soon as possible.
- Prepare by turning both your hands towards the ball.

Step Two
- Look to bring the racquet head back in a loop.
- Think of a circular type movement as you lift it up as you bring it back then drop it lower as you start to accelerate forwards.

Step Three
- Start from the legs, then the hips, your shoulder, arm and finally your wrist.
- If timed right all these different muscle groups will combine to produce huge racquet head speed that will send the ball flying.

Step Four
- The forward swing of the racquet should be from low to high.
- You should be looking to make contact with the ball at around waist height.

Backhand

Step One
- From the ready position, twist your racquet into your preferred grip as you begin your backswing by turning your hips and shoulders.
- Step out towards the line of the ball, shifting your weight to the outside foot.

Step Two
- Hit through the ball as you bring most of your weight onto your front foot.
- Use your whole body - your legs, torso, and body weight should all be contributing to your shot.

Step Three
- Keep your weight on the front foot until after contact and remain balanced during the follow-through and recovery.
- Practice keeping your chin over your leading foot until a second or two after the ball has gone.

What hardwood, softwood and manufactured boards means
Some of the different types of hardwoods, softwoods and manufactured boards

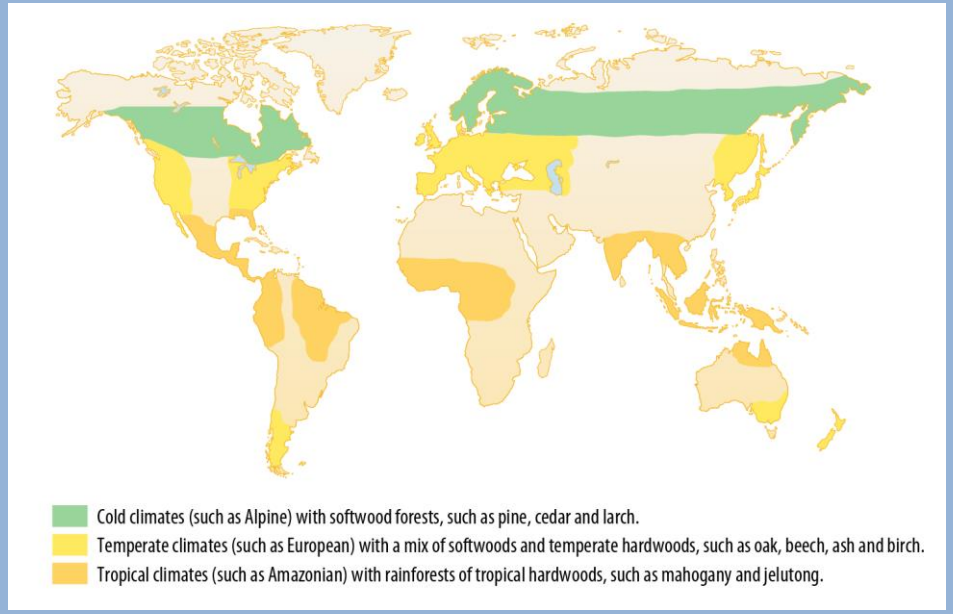
Timber is wood that has come from tree trunks and has been dried and cut into planks. Timber has been used as a building material for thousands of years to make homes, furniture and tools. Timber is still used a lot as trees grow naturally, their wood is easy to work with and it is relatively strong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



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.

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.

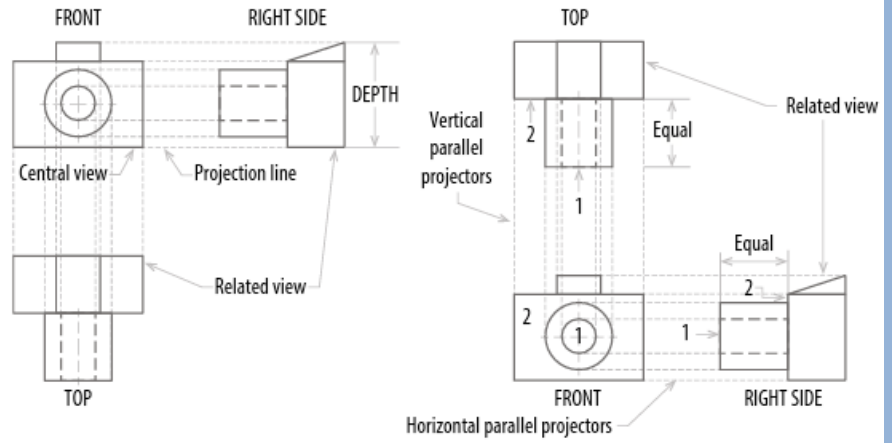
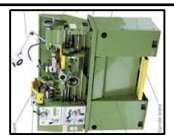
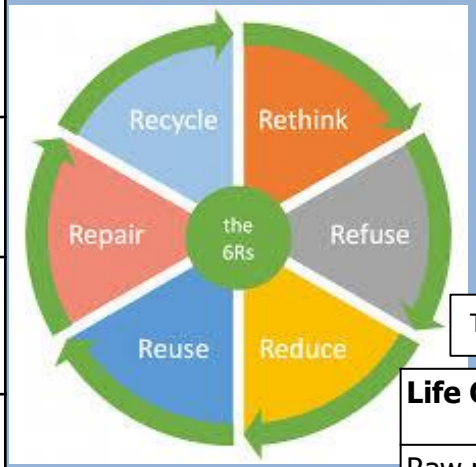
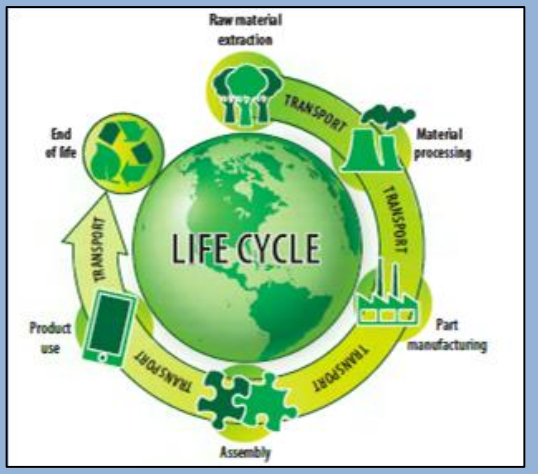


Figure 1.17.7 First and third angle projections for orthographic projection showing all sides of the product

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

The purpose of a range of hand tools used for working wood
The purpose of some of the machinery that can be used to work wood





The environmental impact of manufacturing and using products

Life Cycle Assessment	
Raw materials	Where have your materials originated from? For example certain plastics will have come from crude oil.
Timber processing	How were your raw materials made into the actual material that you used? For example, extrusion of PVC.
Manufacture	How did you shape/join/finish/ embellish your raw materials? For example CAM embroidery of designs.
Distribution	If you were to make this product on a larger scale, how would you distribute it to the retailers?
Product in use	Having observed your user interacting with your product, what impact could it have? For example, using batteries/mains/renewable sources of energy to power your product.
Repair and maintenance	Thinking ahead like Dyson does with its highly accelerated life test, how would your product be maintained or repaired? For example, does it have the ability to use rechargeable batteries that are easily accessible by the user so that the product can continue working?
Disposal	Thinking ahead, what would happen to your product at the end of its life? Could it be easily disassembled and sorted for recycling? Have you included recycling symbols to make this process easier for your user?

8 tips for eating well

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Enjoy a variety of foods using the Eatwell Guide to help you choose the right amounts from each group

1. Base your meals on starchy carbohydrates
Choose wholegrain high fibre varities where possible

2. Eat at least 5 portions of a variety of fruit and vegetables every day

3. Aim for at least two portions of sustainably sourced fish a week, one of which should be oily

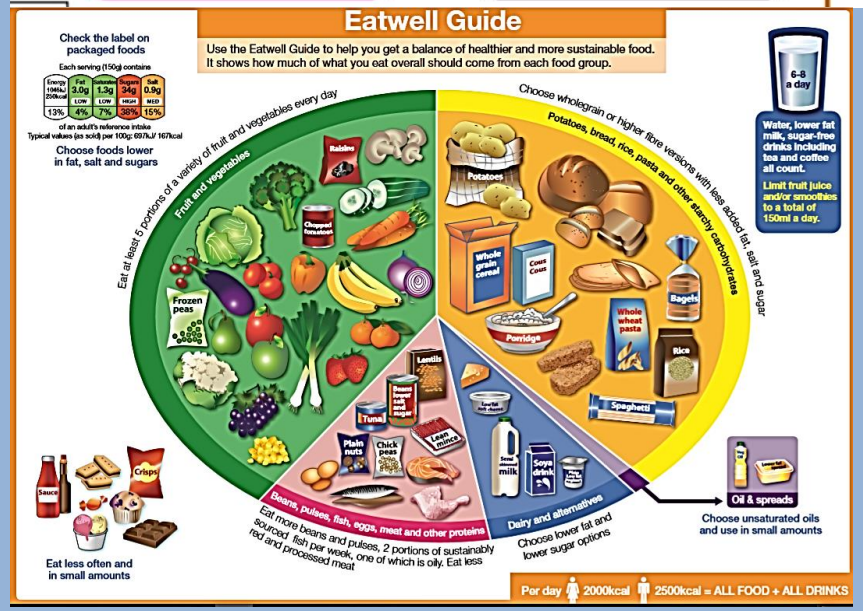
4. Cut down on saturated fat and sugar

5. Eat less than 6g (around 1 teaspoon) of salt each day

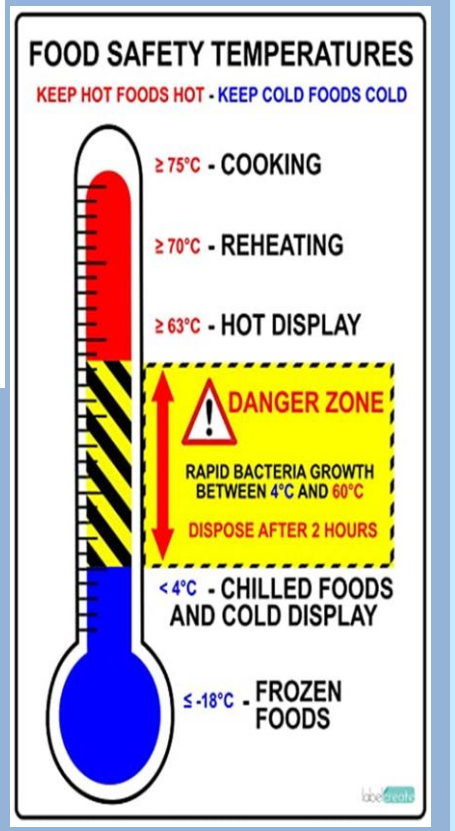
6. Get active and maintain a healthy weight

7. Keep hydrated and aim for 6-8 glasses of fluid each day

8. Don't skip breakfast



Food:
Term 1 and 2



Dairy and alternatives

- Dairy foods are a really important part of a healthy, balanced diet, as these foods are good sources of **protein**, vitamins and iodine and importantly **calcium**, which is needed for strong, healthy bones.
- We should choose lower fat and lower sugar options where possible – use **labels** to help!
- If purchasing **dairy alternatives**, be sure to choose unsweetened versions that are fortified with calcium and other vitamins if possible.
- Butters, creams and dairy ice-creams are not included in this group as they are high in saturated fat,

Choose lower fat and lower sugar options

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What counts?

Dairy	Dairy alternatives (calcium fortified)
• Milk • Cheese • Yogurt • Fromage frais • Quark • Cream cheese	• Soya drinks and soya yogurts • Nut milks (e.g. almond and hazelnut) • Oat, rice, quinoa or potato milk • Any other alternatives to the dairy options

How to make healthier choices:

Instead of cream or ice-cream, try low fat crème fraiche, fromage frais or low fat plain yogurt

Swap to 1% fat, skimmed or semi-skimmed milk, as opposed to whole

Grating cheese can help avoid using more than you need!

Did you know?

Calcium is found in the liquid part of the milk, and not the fat part. So reduced fat milks, like skimmed, provide just as much calcium as regular milks!

Top tip

Incorporating this food group into your diet is easy! You could:

- Try **low fat cream cheese** mixed with herbs or pesto as an accompaniment to dishes;
- Top fruit with **low fat plain yoghurt** and have as a desert or snack;
- Have a glass of **low fat milk** after exercising – you will benefit from rehydration and the protein content in the milk!

Why eat dairy foods?

These foods provide a range of nutrients:

- ✓ **Calcium** – for the development and maintenance of strong, healthy bones
- ✓ **Protein** – for growth and repair function.
- ✓ **Iodine** – important for healthy nerve and brain function, and healthy skin.
- ✓ **Vitamin B12** - for healthy red blood cells and nerve function.
- ✓ **Vitamin B2 (riboflavin)** – to help release energy from carbohydrate and protein.

This resource is designed for consumers who want to find out more about healthy eating. Last reviewed November 2016. Next review due November 2019.

Fruit and Vegetables

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We should be trying to eat at least **5 portions** of a variety of fruits and vegetables every day.

- Fruit and vegetables should make up just over a third of what we eat each day.
- They can provide fibre, and lots of essential vitamins and minerals.
- Eating lots of them may help you maintain a healthy weight – they are naturally low in calories and fat!
- Try and choose lots of different coloured fruits and veg – different kinds contain different combinations of important nutrients our bodies need to stay healthy.

What counts?	Example portion size
Fresh fruit and vegetables	80g
Frozen fruit and vegetables	80g
Canned fruit and vegetables	80g
Dried fruit	30g
100% unsweetened fruit and veg juice	150ml
Smoothies	150ml

Note: Dried fruit can stick to teeth which may lead to tooth decay, so it's best to keep dried fruit to mealtimes and not between meals.

Remember

Unsweetened 100% fruit or veg juice and smoothies, will only count as a maximum of **1 of your 5 A DAY**, no matter how much you have!

TOP TIP

If you don't like chopped vegetables, try grating carrots or courgettes into your food to add flavour and texture or make a tomato sauce with added vegetables and blend.

TOP TIP

Try a new fruit or vegetable each week to increase variety.

Why not pick **seasonal** fruits and vegetables which are often cheaper and taste the best.

Why eat these foods?

Different fruit and vegetables contain:

- ✓ **Vitamin C** - important for maintaining healthy body tissues.
- ✓ **Vitamin A** - important for maintenance of normal vision, skin and the immune system.
- ✓ **Folate** - important for normal and healthy blood formation.
- ✓ **Fibre** – helps to maintain a healthy gut.
- ✓ **Potassium** – helps to maintain a healthy blood pressure and is also important for the normal functioning of the nervous system.

Menu ideas to increase fruit and veg intake:

Breakfast ideas

Add a chopped banana and strawberries to your morning wholegrain cereal or porridge.

Enjoy a 150ml glass of unsweetened 100% fruit juice alongside your breakfast.

Lunch ideas

Sandwiches – add some cucumber, lettuce and tomato

Soup – add extra seasonal veg and blend into your soup

Baked potato – with your filling, why not have a side salad

Dinner ideas

You could try adding peas, carrots or spring onions through your mashed potatoes;

or, sprinkle some extra veg onto your pizza like sweetcorn, pineapple, pepper and/or mushrooms!

This resource is designed for consumers who want to find out more about healthy eating. Last reviewed October 2016. Next review due October 2019.

Oils and spreads

Choose unsaturated oils and use in small amounts

- A **small amount** of dietary fat is an essential part of the diet, provides us with essential fatty acids (those the body cannot make itself) and helps us to absorb the fat soluble vitamins A, D, E and K.
- Most of us need to cut down on saturated fat, as it can raise our blood cholesterol levels and increases risk of heart disease and stroke.
- Swapping saturated fats with unsaturated fats has been found to lower the levels of cholesterol in the blood and can lower the risk of heart disease and stroke.
- All **fat is high** in energy (calories) and therefore should be **limited** in the diet, to avoid consuming more calories than we need.

Swap oils high in saturated fat for oils high in polyunsaturated fat

Oils and fats high in **saturated fat**	Oils and fats high in **unsaturated fat**
Goose fat	Vegetable oil
Coconut oil	Rapeseed oil
Palm oil	Olive oil
Ghee	Sunflower oil

Consume these oils, and spreads made from these oils, in **small amounts.**

TOP TIP

Butter

Small amount low fat spread

Why eat these foods?
Unsaturated oils can provide:

✓ **Vitamin E** - contributes to the protection of cells from oxidative stress. Sunflower, olive and rapeseed oil are all high in vitamin E.

This resource is designed for consumers who want to find out more about healthy eating. Last reviewed December 2016. Next review December 2019.

Beans, pulses, fish, eggs, meat and other proteins

- This food group is a really important part of a healthy, balanced diet, as these foods are good sources of **protein**, and lots of essential **vitamins** and **minerals.**
- We should be trying to eat some more foods from this group, especially those that are plant-based sources of protein (beans and other pulses).

What counts?	
Beans and other pulses (e.g. kidney beans, chickpeas and lentils)	80g or 3 heaped tablespoons will count as a maximum of 1 of your 5 A DAY
Fish (white, oily and shellfish)	Aim for at least 2 portions per week (2 x 140g cooked weight), 1 of which should be oily
Meat, poultry and game	For **red and processed** meat, if eating more than 90g per day, try to cut down to no more than 70g* per day
Eggs and Nuts	
Vegetarian meat alternatives (e.g. tofu or mycoprotein)	

**70g is equivalent to a piece of steak about the size of a pack of cards, 3 average-sized rashers of bacon or slices of ham, or a quarter-pounder beef burger.*

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Did you know?

Oily fish is a good source of omega-3 fatty acids, which can help to keep your heart healthy!

TOP TIP

To cut down on fat intake:

- Go for lean cuts of meat & leaner mince
- Remove the skin from chicken
- Trim off visible white meat fat
- Grill or bake meat and fish, instead of frying
- Have a boiled instead of a fried egg
- Avoid meat and fish in batter, pastry or breadcrumbs

TOP TIP

Beans and other pulses are good alternatives to meat as they are inexpensive, but also naturally lower in fat and higher in protein, fibre, vitamins and minerals. We should be having more of these in our diets!

Why eat these foods?

These foods provide a range of nutrients:

- ✓ **Protein** – for growth and maintenance of normal muscles and maintenance of healthy bones.
- ✓ **Iron** – found in red meat. Contributes to the normal formation of red blood cells and transport of oxygen around the body.
- ✓ **Zinc** – found in meat. For maintenance of normal skin, hair, nails, vision and the immune system.
- ✓ **Vitamin B12** – found in meat and fish. For healthy red blood cells and nerve function.
- ✓ **Vitamin D** – found in oily fish. For healthy teeth, bones and muscles.
- ✓ **Omega-3 fatty acids** – found in oily fish. Helps to maintain normal and healthy heart function.

MEAL IDEAS

To enjoy your favourite red meat recipes and cut back on the saturated fat, why not use half the amount of red meat and bulk up your dishes, like curries, casseroles or stews, with lentils, beans or chickpeas?

Health & care

Potatoes, bread, rice, pasta and other starchy carbohydrates

- These should make up approximately just over one third of your total food intake.
- Base your meals on starchy foods such as bread, pasta, rice or potatoes.
- Choose wholegrain or high fibre varieties, or keep the skins on potatoes, as these contain more **fibre**, **vitamins** and **minerals**.

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What counts?

- Breakfast cereals, oats
- Wholemeal bread
- Potatoes, yams, plantain
- Brown rice, couscous, bulgur wheat, barley, rye, quinoa
- Pasta and noodles
- Pizza base

Why eat these foods?
Starchy foods can provide:

- ✓ **Fibre** – helps to maintain normal bowel function.
- ✓ **B Vitamins** – for example thiamine which helps the body use the energy from the carbohydrates we eat.
- ✓ **Iron** – required by red blood cells which transport oxygen around the body.
- ✓ **Calcium** – to help develop and maintain healthy bones and teeth.
- ✓ **Folate** – needed for the formation of healthy red blood cells and for the nervous system.

Menu ideas to increase starchy food intake:

Breakfast ideas
Wholegrain breakfast cereal, porridge or wholemeal toast with a piece of fruit.

Lunch ideas
Sandwiches made with wholegrain bread, vegetable soup and a brown roll, whole-wheat pasta salads or a baked potato.

Dinner ideas
Spaghetti bolognaise with whole-wheat pasta, stir fry with whole-wheat noodles, curry with brown rice.

Health & care information you can trust
The Information Standard

TOP TIP

Experiment with potatoes – try oven baked wedges with spices, new potatoes with herbs or stuffed potato skins.

TOP TIP **Read food labels**

Use **nutrition labels** to go for breads and cereal options that are lower in fat, salt and sugar.

Look for greens and ambers!

	Energy 1046kJ 250kcal	Fat 5g	Saturates 1.3g	Sugars 34g	Salt 0.9g
		LOW	LOW	HIGH	MED
	12.5%	7%	6.5%	38%	15%

Use the **ingredients label** to identify wholegrain products. Look for the word "whole" e.g. whole-wheat, wholemeal, whole oat.

Ingredients: Durum **whole-wheat** semolina

Foods high in saturated fat, salt and sugar

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- These foods are not needed as part of a healthy, balanced diet.
- If these foods are chosen to be included in the diet, they should only be eaten **infrequently** and in **small amounts**.
- Most people in the UK eat too much saturated fat salt and sugar, and need to cut down.

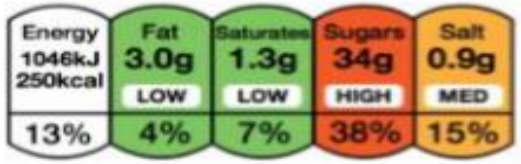
What counts?

- Chocolate
- Sweets
- Cakes and biscuits
- Puddings and pastries
- Jams, table sugar, syrups and honey
- Savoury snacks like crisps and pretzels
- Rich sauces and gravies
- Butter and ghee
- Cream and ice-cream
- Mayonnaise
- Fried foods including fried chips
- Sugar-containing soft drinks

Too much **saturated fat** can… … ***raise blood cholesterol*** *levels and increase risk of* ***heart disease*** *and* ***stroke.***

Too much **salt** can… *…raise your* ***blood pressure****, and increase risk of developing* ***heart disease*** *or having a* ***stroke.***

Too much **sugar** can… *…cause you to eat too many calories, increasing risk of weight gain, plus increase the risk of* ***tooth decay.***



Look at **food labels** – they can help you choose foods that are **lower** in saturated fat, salt and sugar, and avoid those that are **high**!

Recommendations for adults:

SALT *no more than* ***6g*** *each day*

SAT FAT *no more than* ***20g*** *each day*

FREE SUGARS* *no more than* ***30g*** *each day*

SALT *no more than* ***6g*** *each day*

SAT FAT *no more than* ***30g*** *each day*

FREE SUGARS* *no more than* ***30g*** *each day*

Top tips: How do I make healthier choices?

Swap cooking with butter or coconut /palm oil, for rapeseed or olive oil

Swap honey for mashed banana and a sprinkle of cinnamon in porridge

Swap cakes and pastries for fruit loaf/scones or even some fruit

Swap high fat savoury snacks for oatcakes or crackers/melba toast with some cottage cheese or hummus

To add flavour to your meals, try to replace salt with pepper, herbs and spices

*any sugars added to food or drinks, or found naturally in honey, syrups and unsweetened fruit

This resource is designed for consumers who want to find out more about healthy eating. Last reviewed November 2016. Next review due November 2019.

Health & care information you can trust

Year 7 Design Technology Knowledge Organiser - Product Design

Inclusive Design



Learning to design for others needs. Looking at the world through different eyes and answering a need through design.



Design which includes the needs of minority groups of people (e.g.. disabled) is regarded as not just socially desirable but a commercial opportunity for companies to make money

Adapting products to become more inclusive.

Products can keep the same function but with adapting the design slightly, can increase the amount of consumers able to use the product. This can be seen in the example below.


A Peeler:
The direction of the blade has been changed the handle has been made of a nonslip plastic and is wider so that it is easier to grip.

Two major trends have driven the growth of Inclusive Design are . . .

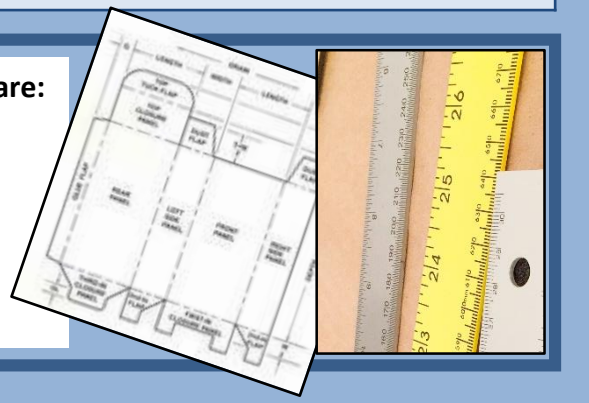
1. An aging population
2. To integrate disabled people into society.

KEY TERMS	DEFINITION
Inclusive	The design of mainstream products and/or services that are accessible to, and usable by, as many people as reasonably possible.
Adapt	Make (something) suitable for a new use or purpose; modify.
Needs	Something that is needed in order to live or succeed or be happy.
Consumer	A person who purchases goods and services for personal use.
Commercial Product	Making or intended to make a profit
Integrate	Bring (people or groups with particular characteristics or needs) into equal participation in or membership of a social group or institution.
Population	All the inhabitants of a particular place.
Society	People living together in a more or less ordered community.
Product	An article or substance that is manufactured or refined for sale.

Designing Skills:
When designing for others it is important to keep their needs in mind at all time. All designs start with a **Design Brief** (Task set). From this you will complete research into the areas of need. In this case the elderly **(Target audience)** and use this to guide you when problem solving through design. You should always have a variety of initial design ideas, for this project you will show at least 4 initial designs. You will then produce a neat, coloured and annotated Final design to show what you will create in 3D. (A Model).

Skills you will learn during this project are:

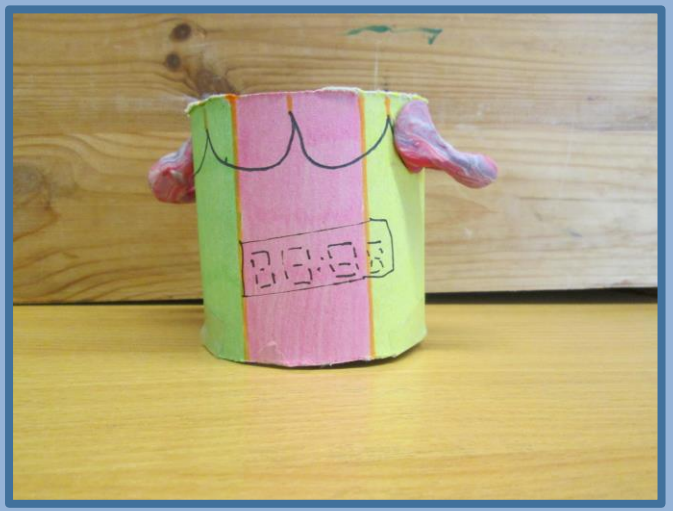
- Designing for someone else
- Measuring accurately
- Making NETs
- Thinking in 3Dimensions
- Cutting accurately and scoring
- Modelling



Step by Step instructions: How to make a saucepan base.

1. Get an A4 piece of card, Sellotape or compass, 30cm ruler and a sharp pencil.
2. In the corner of the paper draw around the inside and outside of the sellotape making sure you do not move it whilst doing this. (You could use a compass to draw your two circles if you do not have sellotape)
3. Measuring from the edge of the card making sure the 0cm is on the edge measure in 7cm and make a dot. Do this 3-4 times down the long side of the piece of card. Then Join the dots up so that you have a line down the page using your long ruler.
4. Cut down this line and keep the strip of card to one side
5. Now cut the circle out along the outside line
6. Cut small slits in from the edge of the circle to the inner line but no further. Do this all the way around the circle.
7. Fold the slits up.
8. Curl the long strip of card around to make a cylinder and measure that it fits inside the circular disk.
9. Stick the edge together and then put the circular disk into the cylinder shape from the top. Do this very carefully. Stick the folded tabs to the side of the cylinder with sellotape.

This will also be demonstrated during the lesson.



These are some examples of other students work for you to get an idea of what you will be creating.

EQUIPMENT

Always make sure you come to lesson with

- A Pencil
- 30cm ruler
- Black fine liner pen or biro.
- Colouring pencils
- Rubber and pencil sharpener
- Compass
- Small scissors
- Sellotape
- Pritstick glue

The resources highlighted in blue are due to not being able to share resources during the current situation as easily.

Safety Rules in Design Technology:

Although we do not work in a technology specific classroom these rules are for your safety and will show us that you can be responsible in all the different Technology rooms (Specialisms).

- Listen to each other and the teacher when being given instructions or explanations.
- Walk when moving around the classroom.
- Hold scissors correctly when moving around the classroom or passing them to another member of the class.
- Share equipment and resources fairly
- Do not shout out.
- Only have water in the classroom to drink and keep away from working area.
- Wash hands thoroughly before and after practical lessons.
- Tuck your chairs under when not in use.

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.

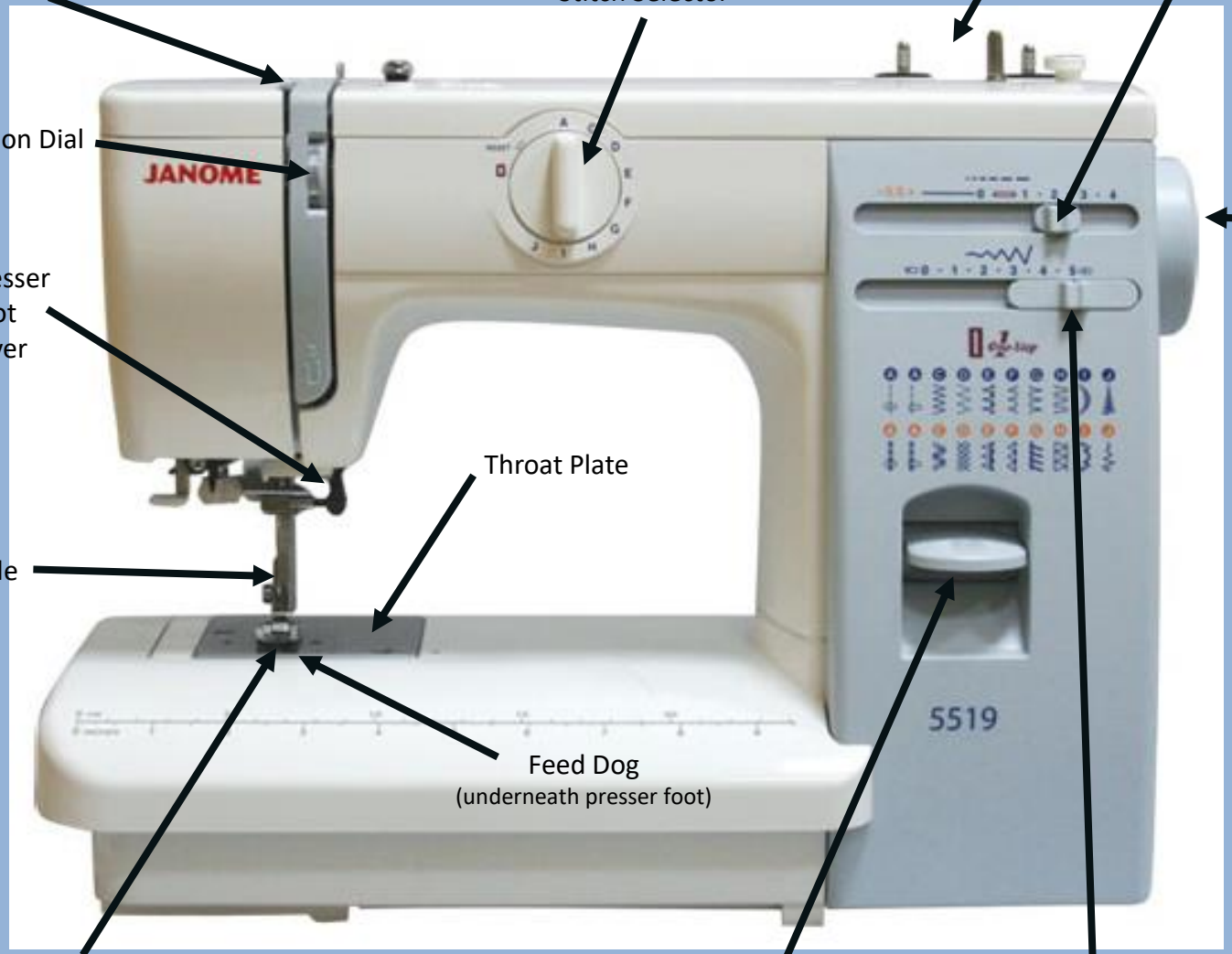
Hazard: any feature of a situation which may cause or damage.

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

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'

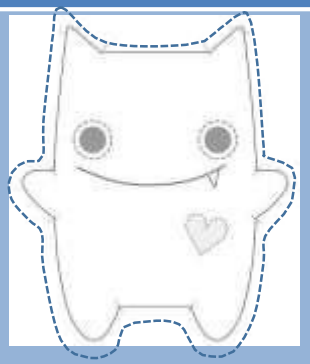
Foot Pedal and Lead

Hand sewing Needle		Used to hand sew fabric and creating embroidery designs. The ‘eye’ of the needle is where the thread is fed through.
Pins		Used to hold fabrics in place temporarily when sewing, with an ‘down/in/out’ motion.
Pin Magnet		Used to hold and store pins and needles safely.
Fabric Shears		Used to cut fabrics and threads only, **NOT** paper. Using these makes sure the fabric is cut ACCURATELY.
Embroidery Scissors		Used to trim threads and cut delicate work into fabrics.
Pinking Shears		Used to give a zigzag edge to fabric, instead of a straight edge, to stop the fabric from fraying.
Paper Scissors		Used to cut paper, cardboard and paper products.

Tape Measure		Used to measure fabrics and the human body to help make patterns accurate to the desired size.
Quick Unpick		This is used to unpick threads and stitches.
Aqua Pen		This is a water-erasable marking pen is especially useful for tracing markings to fabric, which must not be visible, once the sewing or embroidery has been finished.
Tailors Chalk		Used to trim threads and cut delicate work into fabrics.
Machining Thread		Used to sewing fabrics together, either by hand or with a sewing machine.
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.
Needle	A thin piece of metal with a point at one end and an 'eye' at the other for thread to attach – then used to sew.
Pins	A thin piece of metal with a flat and pointed end to temporarily join fabrics together.
Thread	A piece of spun polyester or cotton to sew with.
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.
Sewing Machine	An electrical product that is used to sew fabrics together securely. The machine can produce a range of stitches including straight & zig-zag.

Seam Allowance



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

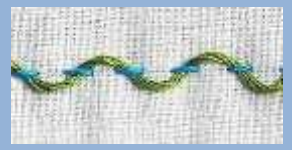
Sewing a seam right against the edge of two pieces of fabric can lead to fraying and may not hold in place. It is important to include a seam allowance that makes sure that the seam will be sturdy and not come away from the raw edge of the fabric.

Add seam allowance all the way around your design.

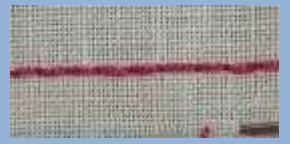
Seam allowances are also useful when making garments or products that may need to be altered, such as clothing.

Hand stitches

Straight stitch



Threaded running stitch



Back stitch

Cross stitch

Appliquè

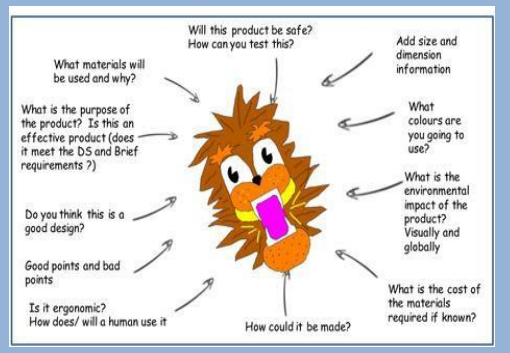
Applying one layer of shaped fabric to another. This can be done either by hand or by a sewing machine.

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.

Designing

Communicating your ideas with others.

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



Annotation

Additional explanation of your ideas.