



The Trafalgar School at Downton

Knowledge Organiser

Year 8: Terms 1 and 2

2023/2024

Name.....House.....



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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.





WHAT WE EXPECT FROM YOU

BE ON **TIME** ●

BE **EQUIPPED** ●

PEN, PENCIL, RULER, KNOWLEDGE ORGANISER & EXERCISE BOOK (AS A MINIMUM)

LISTEN TO STAFF AND **ALWAYS**
COOPERATE ●

DO NOT INTERRUPT **LEARNING** TIME ●

COMPLETE **ALL WORK** SET
BEST WORK, FIRST TIME ●

SHOW **RESPECT** ●

WEAR UNIFORM **PROPERLY** AND
WITH **PRIDE** ●

MOBILE DEVICES/SMART
WATCHES TO BE IN **YONDR** CASE ●

Being Trafalgar

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

To help yourself you should:

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

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-quizz, 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”.





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



alliteration:

the repetition of a consonant sound to begin a series of words.



anecdote:

a short story to prove a point e.g. a dad, talking to his children about the dangers of running in the house, a dad might include an anecdote about falling in his home as a boy and breaking his arm.



antithesis:

putting two opposite ideas together to highlight contrasts.

emotive language:

words and phrases that are used to make the reader feel a particular emotion.

extended metaphor:

a version of metaphor that extends over the course of multiple lines, paragraphs, or stanzas of prose or poetry.



foreshadowing:

the writer hints at an event that will happen later in his story/poem/play/writing.

imperative verbs:

instructional/command words that give the action the speaker/writer wants you to do.

metaphor:

like a simile, but instead of using 'like' or 'as' it compares two things by suggesting that something is something else.

modal verbs:

help show the level of possibility, ability, obligation or permission of the main verb/action e.g. might, can, must, may ...

pathetic fallacy:



the projection of human emotions/mood onto non-human objects found in nature e.g. the weather.

sensory description:

employing the five senses in writing to evoke a mental image and/or sensation for the reader.

simile:

a comparison which finds similar characteristics in two objects and compares them, always by using the words 'like' or 'as'.

statistics:

factual data used in a persuasive way.

superlative:

an adjective or adverb that shows the highest or lowest degree of comparison e.g. best, worst, finest, most, etc.



onomatopoeia:

using words that sound like the noise they represent.



personification:

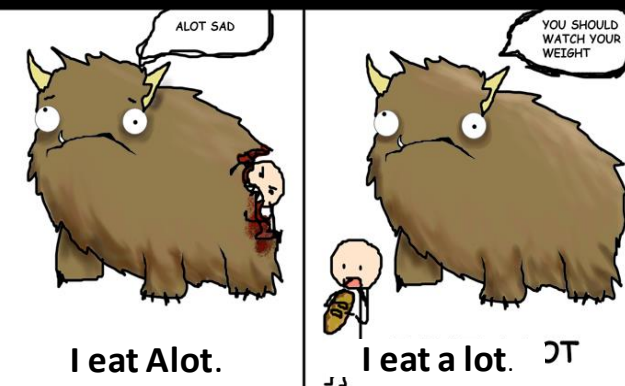
a type of figurative language that gives an object human characteristics (emotions, sensations, speech, physical movements).

rhetorical question:

a question asked for a purpose other than to obtain the information the question asks e.g. create a dramatic effect; emphasise a point; make you think about/eager to learn the answer.

COMMON MISTAKES

PROPER GRAMMAR



IT SAVES LIVES.

With the apostrophe

it's

Contraction of "it+is" or "it+has"

It's great to see you.

It's been fun.

It's clear to see.

without the apostrophe

its

Possessive form of "it"

The tree dropped its leaves.

The pencil lost its point.

A robot recharged its battery.

<p>Use fronted adverbials:</p> <p>Rather slowly, (manner) During the night, (time/temporal) Every minute or two, (frequency) At the end of the corridor, (spatial)</p> <p>Just beyond the stairwell on his left, he opened the door.</p>	<p>Use a range of sentence structures:</p> <p>The spotted green frog jumped into the pond. (simple)</p> <p>The spotted green frog jumped into the pond and he splashed water on me. (compound – coordinating conjunction: for, and, nor, but, or, yet, so)</p> <p>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.)</p> <p>When the hawk flew overhead, the spotted green frog jumped into the pond. (subordinate/dependent clause start)</p> <p>The frog, which had been lurking underwater, jumped on the lily pad. (embedded clause)</p>	<p>Use a tricolon (tripartite list):</p> <p>‘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.’</p> <p>Snap! Crackle! Pop! (Rice Krispies slogan)</p>	 <p>Use different sentence types:</p> <p>The wind is blowing. (declarative)</p> <p>Put your pen down. (imperative)</p> <p>Who do you trust most in the world? (interrogative)</p> <p>Pollution is killing us! (exclamation)</p>
<p>Use a two and then three word sentence:</p> <p>It hurt. I was dying!</p> <p>Snow fell. Flakes floated precariously.</p>		<p>Use a conditional sentence:</p> <p>When people smoke cigarettes, their health suffers.</p> <p>If I had cleaned the house, I could have gone to the cinema.</p>	<p>Use discourse markers to begin paragraphs and start/link some sentences:</p> <p>First of all, To begin with, Firstly,</p> <p>Therefore, Consequently, Hence, As a result,</p> <p>Furthermore, In addition, Additionally, Moreover,</p> <p>Meanwhile, Later that day, Seconds later, Subsequently, That afternoon,</p> <p>On the whole, Interestingly, Basically, In short, Broadly speaking,</p> <p>Alternatively, Conversely, Similarly, On the other hand, Despite this, Likewise, However,</p> <p>To conclude, Finally, In conclusion, Eventually, In the end,</p>
<p>Use anaphora:</p> <p>Now is the time for action. Now is the time to take up arms. Now is the time to fight for your country.</p>		<p>Use paired adjectives to describe a noun:</p> <p>Take a look at this bright red spider.</p> <p>Luckily, it isn't a wild, dangerous one.</p>	
<p>Use epiphora (epistrophe)</p> <p>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.</p>	<p>Use a past participle - 'ed' start: Glazed with barbecue sauce, the rack of ribs lay nestled next to a pile of sweet coleslaw.</p> <p>Use a present participle - 'ing' start: Whistling to himself, he walked down the road.</p>	<p>Use anadiplosis (yoked sentence):</p> <p>Building the new motorway would be disastrous, disastrous because many houses would need to be destroyed.</p> <p>‘Fear leads to anger. Anger leads to hate. Hate leads to suffering.’ Yoda, <i>Star Wars</i>.</p>	

PUNCTUATION PIT STOP



Full Stop

Full stops are used to:

1) mark the end of a sentence.

Carefully, he kicked the ball into the goal.

2) show when a word has been abbreviated.

Saint Peter's Road is on the High Street.

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

COMMAS

Commas are used to separate:

1) items in a list.

Bert, Ernie and Elmo are my three pet rats.

2) **dependent clauses and phrases.**

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

Quotation Marks

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

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

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

Question Mark

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

What is your favourite food?

How do you feel today?

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

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

Exclamation Mark

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

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

They're also used for most interjections:

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

'Oh! When are you going?'

Semi-colon

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

It was winter; the snow was falling heavily.

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

Colon

Colons are used to:

1) begin a list.

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

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

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

Apostrophe

An apostrophe is used to show:

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

does not → doesn't I am → I'm

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

Dash —

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

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

Brackets

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

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

Tigers are carnivores (meat eaters)!

Ellipsis

Ellipsis is used to:

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

I don't know ... I'm not sure.

2) build tension or show that something is unfinished.

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

PUNCTUATION PIT STOP



Writing the text for a Leaflet/Guide

Stay Safe and Sound Online

clear/apt/original title

subtitles

Manage your online reputation

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

Privacy Matters

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

Remember:

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

effectively/fluently sequenced paragraphs

bullet points

Writing Forms

Article

clear/apt/original title

Andy Murray's Appliance of Science

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.

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!

strapline

sub-headings

Sample Check

Today, before he even steps out on to the Centre Court for his Wimbledon semi-final, the 28-year-old, seven-foot, 180-lb, huge-hitting Pole Jerzy Janowicz, Murray will have been subject to several of these. He does not know it yet, but the time he pops to the lavatory. The osmolarity check is conducted by one of his staff, its purpose to gauge the percentage of water and minerals in his urine, to show whether his body is correctly hydrated. The fact is, if Murray wins today, it will be thanks to the bloke who inspects his wee.

introductory (overview) paragraph

fluently sequenced paragraphs

Daily Diet

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

Text for a Speech/Talk

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

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

a clear address to an audience

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

rhetorical indicators that an audience is being addressed throughout

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

Thank you.

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

Writing to Review

clear, engaging title

Feeling Icy About Frozen?

effective introduction

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

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

use topic specific language

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

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

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

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

Writing a formal letter

Writing Forms

221B Bakers Street
London
NW1 6XE

reader's address

35 Hibiscus Crescent
Andover
Hants
SP10 3WE

writer's address

20th February, 2020

date

Dear Sir or Madam

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

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

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

Furthermore, ...

fluent sequencing paragraphs

fluently sequenced paragraphs

Yours faithfully
Boris Johnson

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

Description of Place

spatial discourse markers

adjectives

Metaphor, simile, personification

sensory description

sensory description

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 patina of brown and copper – and were battered and bruised through years of exposure to the elements.

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.

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.

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 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.

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

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

“Kuno!”

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

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

His image faded.

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

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

Journey Description

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

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

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

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

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

Fail to Plan
Plan to Fail!

**Rising Action
(build towards conflict):**

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

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

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

- what events happen to solve the problem?

Exposition (Introduction):

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

Dénouement/Resolution (ending):

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

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

Yours
Sincerely

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

Counter reason:
old-fashioned
tradition, so easier to
continue
Argument reason:
other traditions -
burnt witches, slept
on straw, walked
barefoot – now
discontinued so ...

**Supporting
example:** anecdote,
use experts

P1

Form: Letter
Audience: Headmaster
Purpose: Argue change
uniform

P2

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

P3

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

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

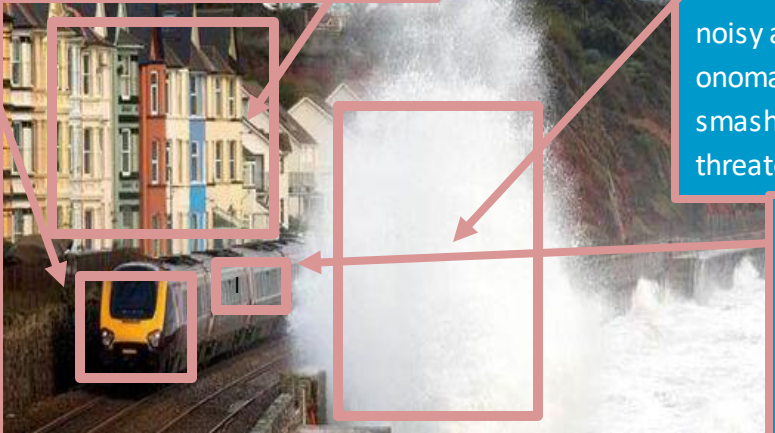
Personify train - a victim moving along railway line, past houses, towards destination - metaphor: caterpillar train sways and pitches precariously along the track to its daily destination. Snatching bites, the sea salt nips at its metal skin as it passes, gnawing at it, killing it. Rattles. Will it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

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

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

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

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

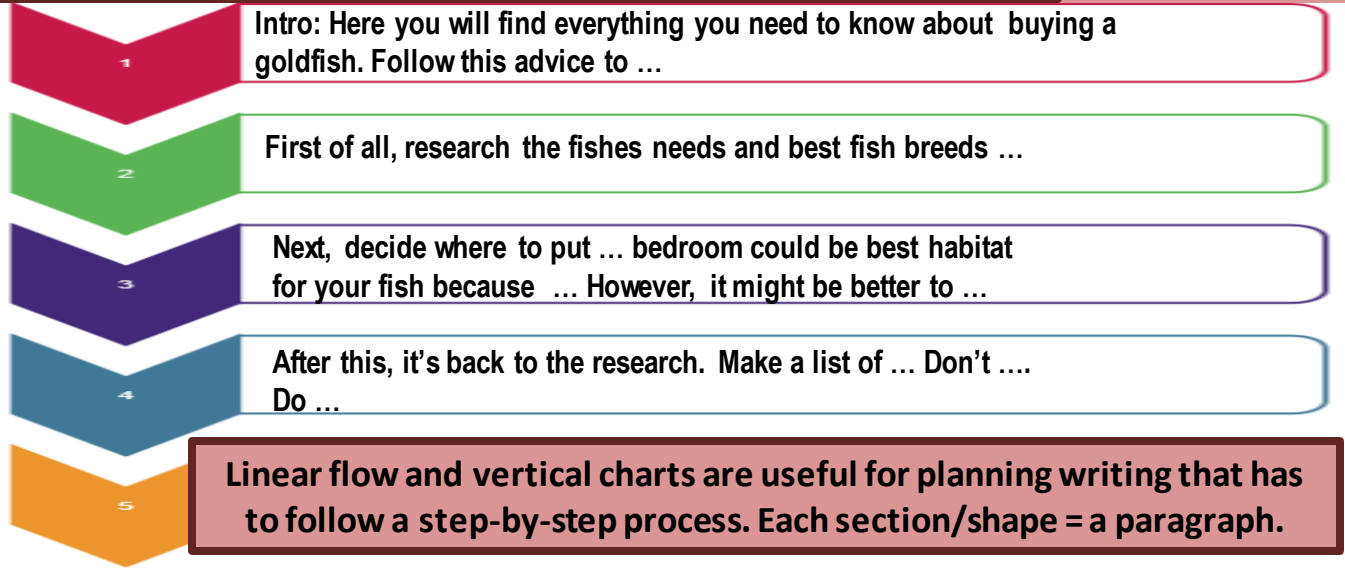


Plan describing pictures by boxing/framing parts of the image to help you to focus description on specific areas, zooming in on minute detail, and out again to another area. Each boxed area = a paragraph.

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

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

Fail to Plan
Plan to Fail!



Writing Purposes

Key Language/Structural methods

Chocolate Model!



Inform: tell the reader what they want/need to know.

- Use interesting facts details;
- use brackets to explain technical terms.

Interestingly, chocolate is actually made from the seeds of a cacao tree. After fermentation, the beans are dried, cleaned, and roasted. The shell is then removed to produce cacao nibs (**unadulterated chocolate in rough form**).

Explain: tell the reader how and why.

- Use connectives: 'as a result', 'because', 'so that', when;
- use sequence discourse markers: Eventually, Another, Furthermore.

Often, when in need of comfort or reassurance, or in stressful situations, people crave chocolate. Primarily, this is **because** dopamine is released into your brain **when** you eat chocolate, and **as a result** it can lower levels of anxiety ...

Describe: help the reader to picture it and imagine the experience.

- Use similes, metaphors, personification, interesting adjectives/verbs, sensory description.

Enticingly, the dome of dark chocolate, flecked sporadically with lime slivers, remained encased in its fluted carapace. Around the outside of it cleaved the diminutive remains of its neighbour: a praline long ago eaten! Velvety smooth, this solitary bead of ganache glistened, revelling in its escape, yet mourning its rejection.

Narrate: tell the reader a tale that will have them hanging on your every word.

- Use the mountain/pyramid structure;
- use some description;
- use a few lines of direct speech.



Suddenly, she was aware she had arrived at her destination! On the door in front of her, a scarlet square of shiny plastic printed with the words 'Chocolate Laboratory' stood out on its splintering wood. Why she was standing on this doorstep, though, and what, or who, had led her here in the first place?

Persuade: try to get the reader to do as you ask/agree with you.

- Use APE FOR REST: anecdote, personal pronouns, emotive language, fact, opinion, rhetorical questions, repetition, experts, statistics, triples.

One of the world's greatest comfort foods, Chocolate, is the unrivalled 'go-to' when life takes a bad turn, an easy gift to thrill just about everyone, and a tasty treat that will uplift even the most melancholy of moods.

Argue: present two sides, but ensure your side appears strongest so reader agrees with you.

- Use sequence discourse markers;
- use 'Some believe ..', 'However, most people would agree that';
- use APE FOR REST (above).

First of all, some believe that as chocolate is high in calories, it is bad for you. However, scientific experts have proven that chocolate, as it contains high levels of antioxidants, could lower cholesterol levels, improve mood and prevent memory decline!

Advise: help warn and guide reader, but reassure with carefully considered advice.

- Use imperative verbs (stop, do, don't, wait etc.), and modal verbs (if, could, might, should).
- use second person (you, your).

Most importantly, if you are feeling bored and craving chocolate, **don't** give in to your yearning. Instead, **you could go** for a walk, **run** errands, **call** a friend or **read** a book. If you can take your mind off food for a short time, the craving **may** pass.

most often

Mis spelled

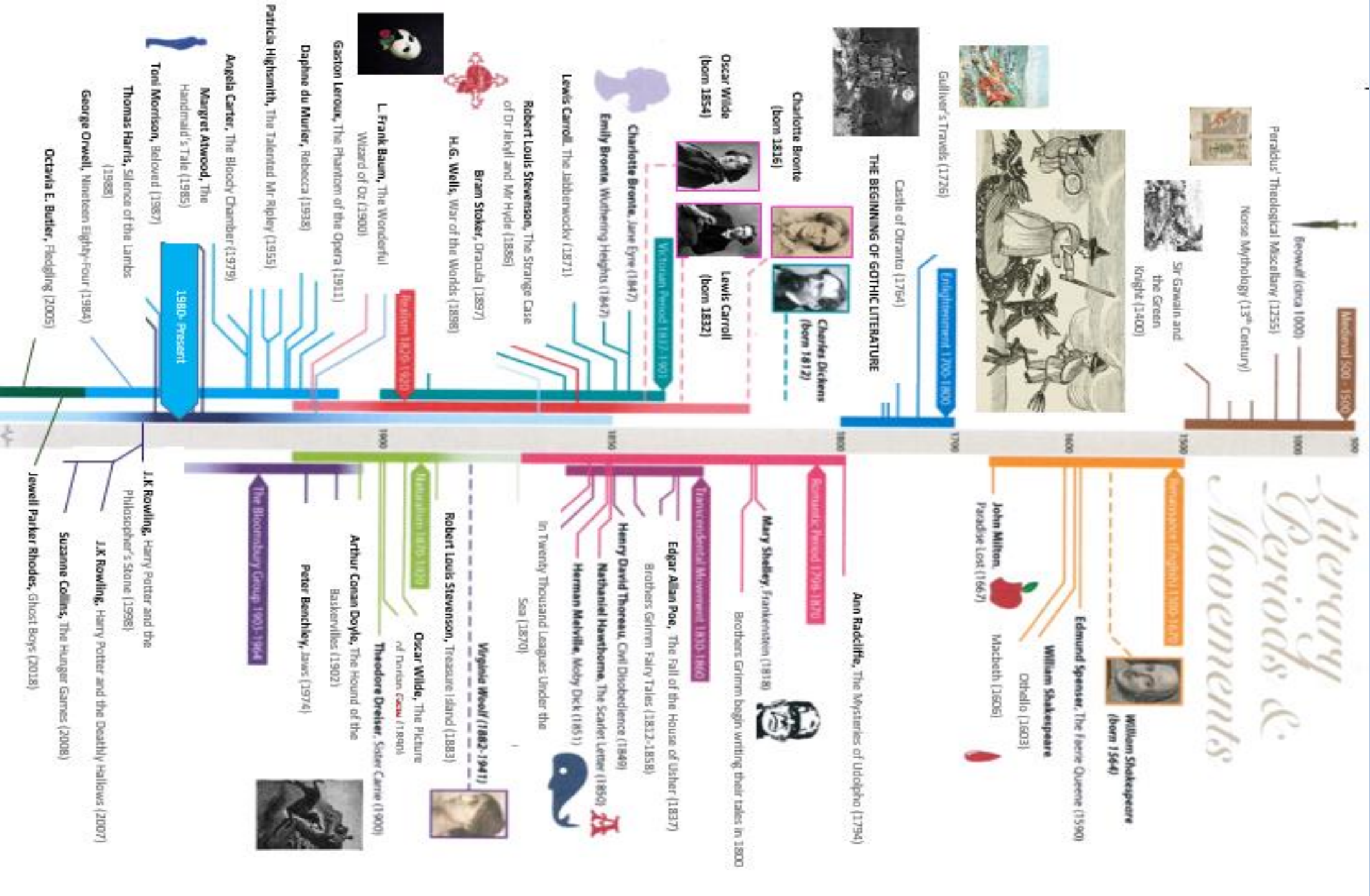
words

argument	fourth
because	friend
completely	height
conscience	intelligence
conscious	knowledge
disappear	lightning
existence	occasion

Term 1 & 2 SP/NoT words

endemic	essential
erroneous	exception
fastidious	favourite
furtive	friend
impeccable	illiterate
aggravate	irresistible
believe	negotiable
committee	seize

YEAR 8 LITERATURE ACROSS TIME: HOW HAS LITERATURE CHANGED THROUGH THE AGES WHEN FOCUSING IDEAS OF MONSTERS AND EVIL?



YEAR 8 MONSTERS AND EVIL- LITERATURE ACROSS

TIME: KEY TERMINOLOGY

Terminology	Definition
Characterisation	This is the aspects and traits of a character which distinguish it from another. Characters are constructed through features, traits and appearance.
Setting	The place or type of surroundings where an event or novel takes place
Atmosphere	This is the pervading tone or mood of a place, situation, or creative work. The choice of setting and character will often impact the atmosphere of a text.
Pathetic Fallacy	The representation of human feelings and emotions through the use of weather and seasons. The use of weather often adds to a specific tone or atmosphere of a text.
Personification	The attribution of a personal nature or human characteristic to something non human.
Semantic Field	A group of words which are semantically related (so they often mean similar things or surround a specific idea)
Simile	A figure of speech involving the comparison of one thing with another thing of a different kind- this will always be done using 'like' or 'as'
Metaphor	A figure of speech in which a word or phrase is applied to or compared to an object or action which it cannot literally be compared to.
Imagery	Visually descriptive or figurative language used within a text or literary work to create a clear image or idea.
Juxtaposition	Where two things are seen or placed close together in order to have contrasting effects.
Motif	When an idea or focus is dominant or recurring within an artistic work.

Literary technique	Definition	Example
Alliteration	When a sentence or phrase has many words or syllables that start with the same <u>sound</u> , 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 'hisssy' 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.	<u>Do you</u> like <u>blue</u> ? - using 'o', 'ou', 'ue' He <u>re</u> ceived <u>thre</u> e <u>e</u> mails 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?
Oxymoron	A figure of speech in which contradictory terms appear next to one another	'The work on my desk was an organised mess' 'He let all of his fears out in one silent scream'
Noun	A word used to identify any of a class of people, places or things	Common noun: tree, cat, wolf Proper noun: Mary Shelley, Dracula Abstract noun: fear, love, pain
Adjective	A word describing the attributes of a noun	Never in the delicious dream of a disordered brain could anything more savage, more appalling, more hellish be conceived than that dark form and savage face.
Adverb	A word or phrase which describes the way in which an action (verb) is done.	White-crested waves beat madly on the level sands and rushed quickly up the shelving cliffs.
Verb	A word used to describe an action, state or occurrence.	The snake's tail whipped across the floor again. Harry ducked. Something soft hit his face. The basilisk had swept the Sorting Hat into Harry's arms
Hyperbole	An exaggerated statement not meant to be taken literally, but used for emphasis or humour.	I have told you a <u>million</u> times.



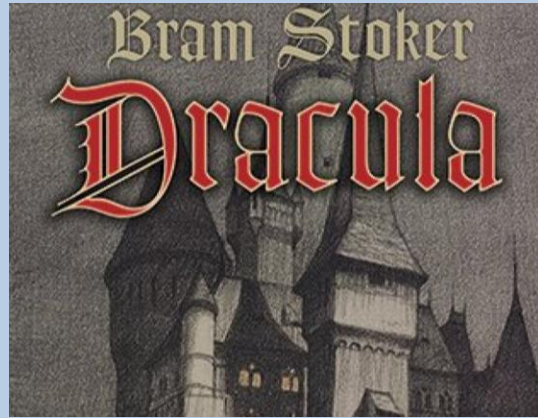
Written by an unknown author c. 700-750, Beowulf tells the tale of a Scandinavian hero who gains fame by vanquishing three different monsters: Grendel, his mother and a dragon. The tale inspired many writers!



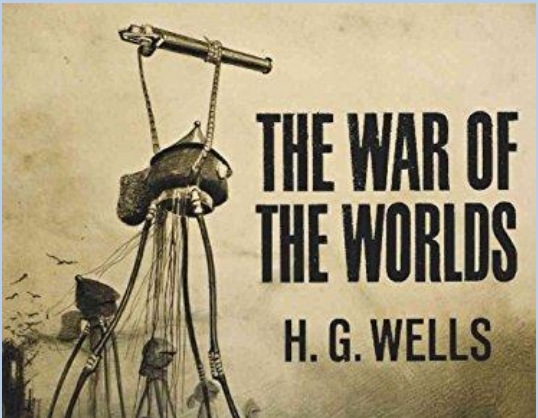
The Brothers Grimm are best known for their folklore tales following ideas of the 'evil stepmother' and evil in women- Disney have widely been inspired by their writing, although they leave out the gruesome truths!



Frankenstein, written in 1818 is perhaps the most famous 'Gothic novel', becoming the catalyst for the exploration of the unknown and other. Within her novel, Shelley explores the idea of what makes something evil.



Stoker's Dracula, written in 1897, was the novel which encouraged societies interest in vampires! Dracula, a blood thirsty vampire, holds many supernatural powers and uses these to commit evil deeds in order to gain power and control.



Written in 1898, War of the Worlds chronicles the events of a Martian invasion and therefore explores ideas of how aliens and science hold the potential of evil and destruction.



The Hound of the Baskervilles is one of the many Sherlock Holmes tales. Here, Holmes and Watson investigate the murder of a man which leads them to wonder whether they have discovered a murderous hound.



The Hunger Games explores a different kind of evil- the evil of those who hold power. Collins explores the misuse of government power as they use their position to control and murder their citizens.



Harry Potter explores a multitude of evil characters. From those who are inherently evil and those who are evil out of fear, Rowling explores ideas of what makes people evil and the role power seems to play in this.

Monsters and Evil in Literature

The themes and concepts of Monster Literature are rooted in 18th century Gothic literature. Most literature focusing on the appearance and existence of monsters emerged after the release of Mary Shelley’s Frankenstein.

Monsters and evil did, however, appear in literature a long time before this. Pre 18th century monsters normally link to some form on creature which is not human and links to ideas of ‘otherness’ or the Supernatural. We can see this when we study Beowulf and the Jabberwocky.

However, ideas of what monstrosity and evil are have somewhat evolved since the 19th century. Now, audiences and readers root for and seek out monsters that are represented in human form. This is because we are interested in the idea of nature vs nurture.

NATURE: This is what we think of as aspects of ourselves we genetically inherit- it is biology, we don’t control it!

NURTURE: This is generally taken as the influence of external and surrounding factors once we are born.

Gothic Conventions

Gothic literature is characterized by an environment of fear, the threat of the supernatural or unknown, and elements of mystery and horror.

Settings tend to be isolated or abandoned, and seem to be inescapable for the characters involved. In classic Gothic texts, setting consists of a castle or manor which is far away from any city or civilization.

Common **themes** and motifs of the Gothic include:

- Power
- Isolation
- Confinement
- Good vs evil
- Science
- Revenge
- Breaking social norms

Gothic villains or monsters often have links to the unknown and unexplainable. They tend to be seen as an outsider, or ‘other’ who does not fit in with social expectations and ideologies.

Many of the texts we look at take on most, if not all, of these conventions- even the modern texts we study are structured around the Gothic.

YEAR 8 MONSTERS AND EVIL- LITERATURE ACROSS TIME: HOW DO I ANNOTATE A TEXT?

Example Annotations- Dracula

Adjective suggests a harsh and controlling nature.

Motif repeated- silence and stillness might suggest a calm atmosphere but also increases tension.

Shortly before ten o'clock the **stillness** of the air grew quite **oppressive**, and the **silence** was so marked that the bleating of a sheep inland or the barking of a dog in the town was distinctly heard, and the band on the pier, with its lively

Triple used to emphasise the strange nature of the sound which has overtaken the silence.

Sudden shift in focus through use of short sentences immediately increases drama and sense of terror

French air, was like a discord in the great harmony of nature's **silence**. A little after midnight came a strange sound from over the sea, and high overhead the air began to carry a **strange, faint, hollow booming**.

Personification used to emphasise the aggression and threat of the sea. It seems as though the ocean wants to harm people.

Adjective suggests that nature is violent and volatile- it is therefore dangerous and could cause harm.

Then without warning the tempest broke. With a rapidity which, at the time, seemed incredible, and even afterwards is impossible to realize, the whole aspect of **nature at once became convulsed**. **The waves rose in growing fury**, each **overtopping its fellow**, till in a very few minutes the lately glassy sea was like a roaring and devouring monster. **White-crested waves beat madly on the level sands and rushed up the shelving cliffs**; others broke over the piers, and with their spume swept the lanterns of the lighthouses which rise from the end of either pier of Whitby Harbour. **The wind roared like thunder, and blew with such force that it was with**

Simile used to highlight idea of the power of the sea as it is being compared to a predator- the sea again shown to be seeking prey.

Use of simile reinforces idea of extreme power and violence of the sea. It is being compared to destructive weather forces.

Metaphor shows that death is working with the storm in order to grab those waiting below.

difficulty that even strong men kept their feet, or clung with grim **clasp** to the iron stanchions. It was found necessary to **clear the entire piers** from the mass of onlookers, or else the fatalities of the night would have been increased manifold. To add to the difficulties and dangers of the time, masses of **sea-fog** came drifting inland—**white, wet clouds**, which swept by in ghostly fashion, so dank and damp and cold that it needed but little effort of imagination to think that the spirits of those lost at sea were touching their living brethren with the **clammy hands of death**, and many a one shuddered as the wreaths of sea-mist swept by. At times the **mist** cleared, and the sea for some distance could be seen in the glare of the **lightning, which now came thick and fast**, followed by such sudden peals of **thunder** that the whole sky overhead seemed **trembling under the shock of the footsteps of the storm**.

Motif of fog and lack of vision gives impression of uncertainty and increases eerie atmosphere.

Pathetic fallacy of thunder and lightning used to create a sense of fear and terror which seems relentless.

Personification used here to show even the sky seems fearful of the events below. To describe the storm as having footsteps suggests it may be chasing a victim.

Year 8 Maths

Simplify

Simplify the given expression.



Simplify fully

Simplify the given expression. Answer must be given in its simplest form.



Factorise

Insert brackets by taking out common factors.



Factorise fully

Insert brackets by taking out **all** the common factors.



Expand

Remove brackets.



Expand and simplify

Remove brackets and then collect like terms.



Solve

Find the solution of an equation or inequality.



Solve algebraically

Find the solution of an equation or inequality; algebraic manipulation **must** be shown.



Prove

More formal than 'show', all steps must be present. In the case of a geometrical proof, reasons must be given.



Prove algebraically

Use algebra in the proof.



Draw

Produce an accurate drawing (unless a sketch is being drawn).



Draw a sketch of... Sketch

Produce a drawing that does not have to be drawn to scale or a graph that is drawn without working out each coordinate.



Change

Usually convert from one unit to another; either using known metric unit conversions or the use of a conversion graph.



Show

All working needed to get to a given answer **or** complete a diagram to show given information.



Command Words in Maths questions

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

TECHNICAL VOCABULARY

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

Calculate

A calculator and some working will be needed.



Find

Some working will be needed to get to the final answer.



Work out

Some working will be needed in order to get the answer.



Explain

Write a sentence or a mathematical statement to show how you got to your answer or reached your conclusion.



Describe

Write a sentence that gives the features of the situation.



Complete

Fill in missing values.

x	y
-1	-3
0	1
2	5

Give a reason

Must be clear and accurate reasons. If the reasons are geometrical then make sure you:

- ✓ provide a reason for each stage of working (if required)
- ✓ use correct geometric terminology.

Express

Re-write in another form, some working may be needed.



Justify

Show all working and/or give a written explanation.



Websites to help you with understanding and revision

SparxMaths.com

CorbettMaths.com

Trafalgar Maths Site

Maths Genie

Maths Bot



Ratio - is used to compare two or more amounts.

Jack has £160 and Gill has £240

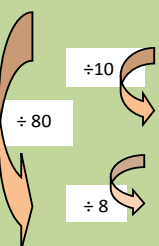
These amounts can be written as a ratio,

J : G or G : J

160 : 240 240 : 160

Simplifying a Ratio - you can simplify a ratio by eventually dividing the numbers by the HCF

J : G or G : J

 $\div 10$ 160 : 240 240 : 160

$\div 8$ 16 : 24 24 : 16

$\div 8$ 2 : 3 3 : 2

80 80 80 80 80

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Sharing an Amount in a Ratio

Sparx M525 Corbett video 270

Jack and Gill had £400 in total which they shared in the ratio 2:3

There are five parts (2+3 = 5)

To split this money evenly $400 \div 5 = 80$

Jack receives $2 \times 80 = £160$
Gill receives $3 \times 80 = £240$
 $£160 + £240 = £400$

Best Buys - using (the unit) ratio

Which is the best deal;

Sparx M681, M478 Corbett video 270

Five packets of sweets costing £2.45,

Six packets of sweets costing £3.00

Hint - Find the cost of one packet

or Seven packets of sweets costing £3.57?

Packets : Cost

5 : 2.45

$(\div 5)$ 1 : 0.49

49p a box

Packets : Cost

6 : 3.00

$(\div 5)$ 1 : 0.50

50p a box

Packets : Cost

7 : 3.57

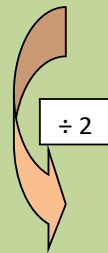
$(\div 5)$ 1 : 0.49

51p a box

The five packets option is the better deal at 49p per packet

Writing in the ratio 1 : n or n : 1

You need to divide both sides by the same number in order to get the correct side down to 1.

 $\div 2$ J : G | G : J

2 : 3 3 : 2

1 : 1.5 1 : 2/3

Gill gets £1.50 for every £1 that Jack gets

Jack gets $\approx 67p$ for every £1 that Gill gets

Sparx M543

Keywords

- Proportion:** a statement that links two ratios
- Variable:** a part that the value can be changed
- Axes:** horizontal and vertical lines that a graph is plotted around
- Approximation:** an estimate for a value
- Scale Factor:** the multiple that increases/ decreases a shape in size
- Currency:** the system of money used in a particular country
- Conversion:** the process of changing one variable to another
- Scale:** the comparison of something drawn to its actual size.

Conversion Graphs Compare two variables

This is always a straight line because as one variable increases so does the other at the same rate

Labelling of both axes is vital

To make conversions between units you need to find the point to compare - then find the associated point by using your graph. Using a ruler helps for accuracy. Showing your conversion lines help as a "check" for solutions

Conversion between currencies

£1 = 90 Rupees

For every £1 I have 90 Rupees

Currency is directly proportional

Currency can be converted using a conversion graph

Convert 630 Rupees into Pounds

£1 = 90 Rupees

£10 = 900 Rupees

£7 = 630 Rupees

630 ÷ 90 = 7

Understand Scale Factor

The two rectangles are similar.

3m 8m 4.5m ?m

$3 \times 15 = 4.5$

This is a multiplicative change

Use corresponding sides to calculate a scale factor

Missing length $8 \times 15 = 12m$

Scale factor can also be calculated by:

Bigger corresponding side

Smaller corresponding side

Small corresponding side \times SF Big corresponding side

Big corresponding side \div SF Small corresponding side

Draw and interpret scale diagrams

A picture of a car is drawn with a scale of 1:30

For every 1cm on my image is 30cm in real life

The car image is 10cm

Image : Real life

1cm : 30cm

10cm : 300cm

The car in real life is 210cm

Image : Real life

1cm : 30cm

7cm : 210cm

Ratio between similar shapes

Angles in similar shapes do not change. e.g. if a triangle gets bigger the angles can not go above 180°

The two rectangles are similar.

3m 8m 4.5m ?m

Corresponding sides

$3m : 4.5m$

$8m : 12m$

$1m : 1.5m$

Note: Simplify to the same ratio

Interpret maps with scale factors

1 cm : 250 m

Ratios need to be in the same units

1 cm : 250m

1 cm : 25000cm

250 x 100 = 25000

For every 1cm on my map is 25000cm in real life.



Combining Ratios

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The ratio of apples :bananas is 3:5, the ratio of bananas:carrots is 3:4. What is the ratio of apples to carrots?

A

:

B

:

C

3

:

5

3

:

4

9

:

15

:

20

Hint:
Use
common
multiples

x 3

x 5

So A:B:C is 9:15:20

and

A : C = 9 : 20

Proportion can compare the size of one part to the size of the whole.

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If a tutor group has 13 boys and 16 girls.

The proportion of boys is 13/29

The proportion of girls will 16/29

Multiplicative Reasoning is a way of comparing two things and applying this to a new situation.

15 mins

30/15 = 2

30 pages

? mins

x 2

210 pages

Find a Multiplicative link and use it to find missing quantities.

How many pages can this person read in 1 hour?

The symbol \propto means "is proportional to"

P
R
O
P
O
R
T
I
O
N

Direct Proportion A and B are directly proportional when as one gets larger the other gets proportionally larger.

The ratio between these two quantities is a constant.

As a rule of thumb you could apply two tests:

- If one quantity is zero, the other will be zero
- If one quantity doubles the other will also double ect

If the graph of the two quantities is drawn it will always be a straight line passing through the origin.

Inverse proportion A is inversely proportional to B when one quantity increases the other will decrease proportionally.

In Maths "inverse" means the opposite of an operation. The inverse operation of multiply is divide , and vice/versa

The inverse of A will be 1/A because $x \text{ by } A = \div 1/A$

Another way of describing "A is inversely proportional to B" is to say "A is directly proportional to 1/B"

Direct Proportion

Relation between quantities whose ratio is constant

b directly proportional to a

When $a = 4$, $b = 20$ (b is 5 times a)

$20 \div 4 = 5$

So $b = 5a$ (for any values a and b)

Sparx M472

Alternatively

$b \propto a$ "b is directly proportional to a"

$b = ka$ "k is a constant"

$20 = 4k$

$k = 5$

$b = 5a$

Find b when $a = 0.5$

$b = 5a$

$b = 5 \times 0.5$

$b = 2.5$

Find a when $b = 150$

$b = 5a$

$150 = 5a$

$150/5 = a$

$a = 30$

Inverse Proportion

Relation between quantities such that as one increases in proportion the other decreases

a and b are inversely proportional

When $a = 4$, $b = 5$

$4 \times 5 = 20$

So $a = 20/b$ or $b = 20/a$

"a is inversely proportional to b"

$a \propto 1/b$

$a = k/b$

$4 = k/5$

$20 = k$

$a = 20/b$

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Find a when $b = 0.1$

$a = 20/b$

$a = 20/0.1$

$a = 200$

What do I need to be able to do?

- Understanding what is Algebra and how do I use correct notation
- Recognise the difference between an expression, equation, formula and identity
- Simplifying Expressions
- Forming and solving equations
- Expanding and Factorising brackets
- Substitution
- Sequences
- Graphs

Key words

Data

- | | |
|--------------|------------|
| Algebra | Factors |
| Equation | Operations |
| Expression | Terms |
| Formula | Sequences |
| Identity | Graphs |
| Variable | |
| Coefficient | |
| Expand | |
| Factorise | |
| Substitution | |

What is Algebra and how do I use correct notation

Algebra – Is the use of letters to represent an unknown, we call this letter a **variable**.

For example, imagine this sum:

$\square - 2 = 4$

The empty box represents the unknown number in this sum. We replace this box with a letter, a variable. This is helpful when talking about the sum and when the problem contains more than one unknown.

Notation is the way in which we write things and present a sum. Using the correct notation in Algebra is important with multiple variables, it becomes even more important to be organised in the way we lay out the sum.

Sparx M813

Key rules:

- In algebra we don't use the multiplication sign as it is the same as the letter x. We instead remove the times sign and push the variables or **coefficients** and variables together. The **coefficient** is the number in front of the variable.
- The division symbol is also not used and the sum is written as a fraction.
- If there are multiple variables then it is best to organise the variables in alphabetical order and power order. For example: 6zxy is better written as 6xyz.

We group letters together $a + a + a$ means 3 lots of a $3 \times a$ $b + b$ means 2 lots of b $2 \times b$	We use indices/powers $a \times a = a^2$ (a squared) $b \times b \times b = b^3$ (b cubed)
We do not use multiplication signs $3 \times a = 3a$ $5 \times b = 5b$ $a \times b = ab$ $a \times b \times c = abc$	We write division using fraction notation $a \div 2$ is written as $\frac{a}{2}$ or $\frac{1}{2}a$ $b \div 3$ is written as $\frac{b}{3}$ or $\frac{1}{3}b$

Expression, Equation, Formula or Identity

Expression – An **expression** is formed of variables and numbers, combined with **operation** signs and brackets. Each part of an expression is called a **term**. In the expression $3n + 5$ the **terms** are $3n$ and 5 and the operation is +. An expression does NOT have an equals sign.

Equation – A mathematical statement showing that two expressions have equal value. The expressions are linked with the equals symbol =. For example, in the equation $5x + 4 = 29$ the = symbol shows that $5x + 4$ has the same value as 29 and therefore this equation can be solved to find the value of x.

Formula – An equation linking sets of variables. For example, the formula $v = u + at$, has 4 variables v , u , a and t related by the formula. If the values of three variables are known, the fourth value can be calculated. There are lots of formulas you will learn in Maths and Science and some you already know, eg. $S = D/T$, $A = L \times W$, $A = \frac{1}{2} B \times H$

Identity – When the expressions are said to be *identically equal*. The expressions are linked with the symbol \equiv . For example, $4(a + 1) \equiv 4a + 4$ is an identity, because the expressions $4(a + 1)$ and $4a + 4$ always have the same value, whatever value a takes and they are the same expression just written in a different way.

Example of each:

An Expression	An Equation
$4a + 7b$	$4a + 12 = 60$
A Formula	An Identity
$A = \pi r^2$	$(a + b)^2 = a^2 + 2ab + b^2$

Simplifying Expressions

When there are multiple variables then it is important to simplify so there are the least number of terms possible.

We simplify by **collecting like terms** together.

Like terms can be defined as *‘Terms with the same letter variables raised to the exact same powers’*

For example: **Sparx M795**

- 6m and 3m are like terms because they both have the variable m.
- 4xy and 5y are NOT like terms because they do not both have the same variables x and y.
- 3x² and 5x are NOT like terms because they have different powers.

e.g. $3a + 4b + 2a + 5b =$

$3a + 2a + 4b + 5b =$
 $5a + 9b$

e.g. $3x^2 + 2xy - 5x^2 - 6xy =$

$3x^2 - 5x^2 + 2xy - 6xy =$
 $- 2x^2 - 4xy$

Expanding

Expanding – Means removing the brackets. We do this by multiplying the term in front of the brackets by each of the terms inside the bracket.

Here is $x + 2$:

x	1	1
---	---	---

$3(x + 2)$ means 3 lots of $x + 2$ and would look like this:

x	1	1
x	1	1
x	1	1

Altogether this is $3x + 6$.
Algebraically, we would write:
 $3(x + 2) = 3x + 6$.

We have multiplied each term inside the bracket by 3.

$4(x + 3) = 4x + 12$ $4 \times x = 4x$
 $4 \times 3 = 12$

$5(2x + 4) = 10x + 20$ $5 \times 2x = 10x$
 $5 \times 4 = 20$

Watch out!
Be really careful with negatives!

$3(x - 3) = 3x - 9$ Remember: $- \times - = +$

$-3(x - 4) = -3x + 12$

Sometimes there are multiple brackets, so the question will ask you to **Expand & Simplify**:

Sparx M237

$5(x + 3) + 6(x - 4)$
 $5x + 15 + 6x - 24$
 $11x - 9$

Sometimes there are 2 or more brackets next to each other. This is called **expanding quadratics**. There are lots of different ways to do this, here are 3 methods using the example $(x + 3)(x + 4)$

The grid method
Set this out exactly like the grid method for multiplication:

	x	3	
x	$x \times x = x^2$	$3x$	x
4	$x \times 4 = 4x$	12	
	3 x 4 = 12	x x 3 = 3x	

Add up: $x^2 + 3x + 4x + 12$
Simplify: $x^2 + 7x + 12$

FOIL
This reminds you to multiply all of the terms.

$(x + 3)(x + 4)$

First: $x \times x = x^2$
Outside: $x \times 4 = 4x$
Inside: $3 \times x = 3x$
Last: $3 \times 4 = 12$

Add up: $x^2 + 3x + 4x + 12$
Simplify: $x^2 + 7x + 12$

Smiley face (or claw)
This is a more visual version of FOIL.

$(x + 3)(x + 4)$ Smiley face

$(x + 3)(x + 4)$ Claw

$x \times x = x^2$ $x \times 4 = 4x$
 $3 \times x = 3x$ $3 \times 4 = 12$

Add up: $x^2 + 3x + 4x + 12$
Simplify: $x^2 + 7x + 12$

Factorising

Factorising – Is the direct opposite of expanding, factorising is returning the brackets. With singles brackets we do this by finding the highest common factor and placing it outside of the bracket, the remaining factors go inside the bracket.

Expand
 $2(y + 3) \rightarrow 2y + 6$
Factor

Example:

$4x + 16$ Highest common factor of 4 and 16 is 4

$4x$ is $4 \times x$

16 is 4×4 Therefore $4x + 16 = 4(x + 4)$

Example: $4x + 6 =$

$= 4 \times x + 6$

$= 2 \times 2 \times x + 2 \times 3$

$= 2(2x + 3)$

Sparx M100 , M908

Factorising quadratics means factorising into double brackets. We do this by finding 2 numbers that add (sum) to make the middle term and multiply (product) to make the last term.

Example:

$x^2 + 7x + 12$

It is best to find the factors of 12 first, then the pair that adds to make positive 7.

Factors of 12:

- 1 x 12
- 2 x 6
- 3 x 4

Only one pair adds to also make 7.

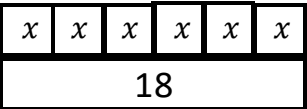
Answer: $(x + 3)(x + 4)$

Forming and Solving Equations

"I'm thinking of a number, I times it by 6 and get the answer 18. What number am I thinking of?"

A problem like this can be represented using algebra. Let the variable (our unknown number) be x

"times it by 6" is the same as $6 \times x$, which using correct notation we write as $6x$
"get the answer 18" is the same as $= 18$, which we write as $6x = 18$
 $6x = 18$ can now be solved.



To calculate the value of x we do the inverse. The opposite of multiplying by x is to divide by x
 $6 \times x = 18$
 $x = 18 \div 6$
 $x = 3$

Sparx M957

Doing the 'inverse' is a way of removing terms until x is left on its own as $x =$
The key thing to remember is we must always **"keep the balance"** and **what you do to one side of the equals must be done to the other**

In Balance

We want to remove the "-2"

$x - 2 = 4$

Out of Balance!

To remove it, do the opposite, in this case add 2

$x - 2 = 4$
 $+2$
 0

In Balance Again

Do it to both sides

$x - 2 = 4$
 $+2$
 0
 $+2$
 6

Solved!

$x = 6$

- The inverse of addition is subtraction
- The inverse of subtraction is addition
- The inverse of multiplication is division
- The inverse of division is multiplication

eg solve the equation $4x = 12.5$

x
 3.125

$\times 4$
 $\div 4$

$4x$
 12.5

The solution is $x = 3.125$

eg solve the equation $n + 8 = 3$

n
 -5

$+8$
 -8

$n + 8$
 3

The solution is $n = -5$

eg solve the equation $\frac{a}{3} = 7$

a
 21

$\div 3$
 $\times 3$

$\frac{a}{3}$
 7

The solution is $a = 21$

eg solve the equation $x - 4.7 = 0$

x
 4.7

-4.7
 $+4.7$

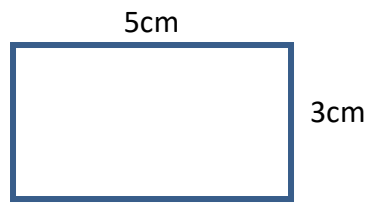
$x - 4.7$
 4.7

The solution is $x = 4.7$

Substitution

Substitution – To replace or 'substitute' the variable with a number and complete the sum. There have been many times you may have substituted before and not even realised this is what you were doing.

For example, to calculate the area of a rectangle you multiply the length with the width.



Area = Length x Width
 $A = L \times W$
Length (L) = 5cm
Width (W) = 3cm
 $A = 5 \times 3$
 $A = 15\text{cm}^2$

Real life substitution examples and formula's

Example 1: The formula to change degrees Celsius ($^{\circ}\text{C}$) to degrees Farenheit ($^{\circ}\text{F}$) is

Sparx M208 , M979

$F = \frac{9C}{5} + 32$

If the temperature is 21°C then we can calculate the temperature in $^{\circ}\text{F}$ by substituting $C = 21$ into the formula

$F = \frac{9 \times 21}{5} + 32$ $F = \frac{189}{5} + 32 = 69.8^{\circ}\text{F}$ $F = 69.8^{\circ}\text{F}$

Example 2: Cooking time for a turkey is 35 minutes per Kilogram plus an extra 20 minutes. We can create a formula for this:
Cooking Time (C) = $35 \times \text{Weight (W)} + 20$
 $C = 35W + 20$

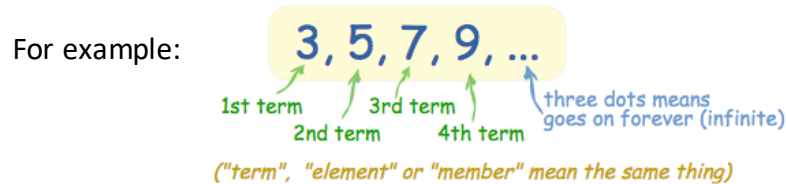
The cooking time for a turkey weighing 5kg would be:

$C = 35W + 20$ $C = 35 \times 5 + 20$
 $W = 5$ $C = 195 \text{ minutes}$ or 3hours 15minutes

Sequences

Sequences – A particular order in which related things follow each other. Sequences usually follow a pattern and when you discover the pattern you can determine the following things:

- The rule for the sequence – we call this the n^{th} term rule
- The next term in the sequence
- Any term in the sequence, the 100th term or the 511th term
- Whether a term appears in the sequence



This is an infinite sequence – It will go on forever.
The difference between each term is +2, we call this the **term to term rule**.



We can use the term to term rule to calculate the next few terms in the sequence
3, 5, 7, 9, 11, 13, 15,

Steps to calculate the n^{th} term rule:

1. Work out the difference between each term
2. What do you know that goes up in that difference? - the difference times table
3. Work out the difference between the times table and the original sequence and you have your n^{th} term rule

n (term in the sequence) – 1st, 2nd, 3rd, 4th, 5th,
Our given sequence 3, 5, 7, 9, 11, A difference of +2
2 times table (the sequence of $2n$) 2, 4, 6, 8, 10,
The difference between the sequence of $2n$ and our given sequence is +1
 n^{th} term rule for this sequence is $2n + 1$
Using **Substitution** and the **n^{th} term rule** we can now calculate **ANY** term in this sequence.

Sparx M991

Graphs

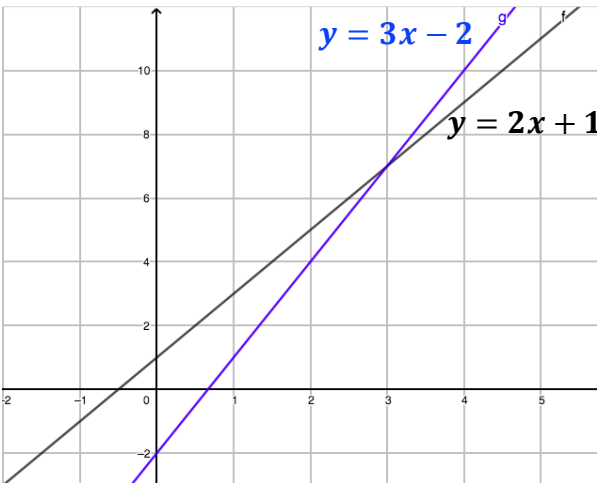
Sequences and **Graphs** have a lot in common. A **linear graph** is a visual representation of a sequence. We use **substitution** to calculate the coordinates of a graph when we are given the equation of a line.

For example: The sequence 3, 5, 7, 9, 11,

If the terms in the sequence are now labelled x instead of n , and the given sequence is labelled y then we can represent this in a table as:

x	1	2	3	4	5
y	3	5	7	9	11
Coordinates	(1, 3)	(2, 5)	(3, 7)	(4, 9)	(5, 11)

The n^{th} **term rule** of this sequence is $2n + 1$, replace n with x and we have the equation of this line. This is the line of $y = 2x + 1$
If we plot these points on a graph we get a straight line.
A **linear sequence** produces a **linear (straight line) graph**.
A **quadratic sequence** produces a **quadratic graph**.



Example: Draw the graph of $y = 3x - 2$

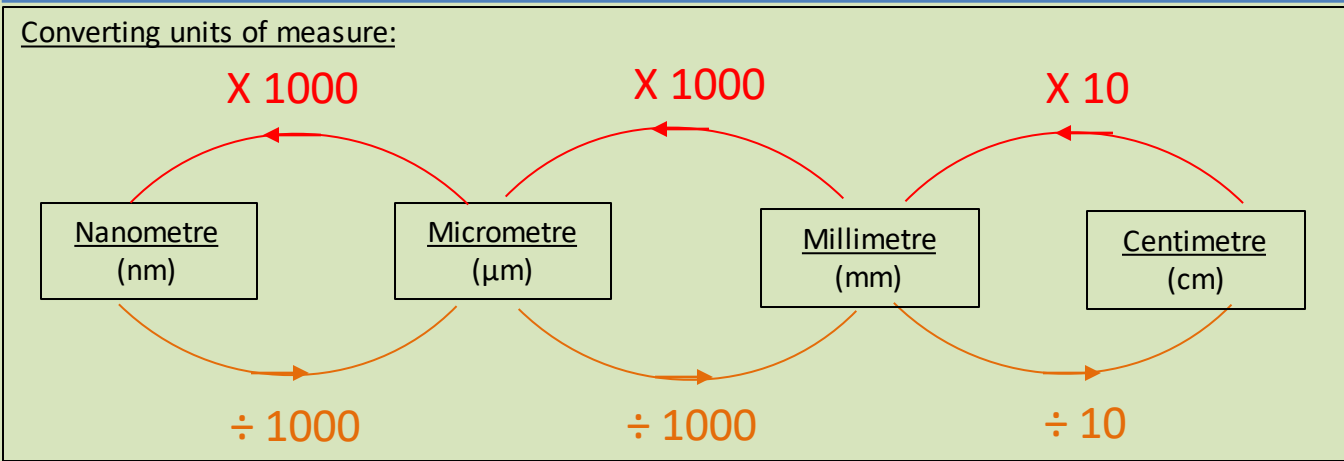
1. Select your values for x , you need a minimum of 3
2. Substitute your x values into the formula to calculate y
3. Plot your coordinates

$y = 3x - 2$ is the same as $y = 3 \times x - 2$

x	1	2	3	4
y	1	4	7	10
Coord	(1, 1)	(2, 4)	(3, 7)	(4, 10)

Science: Useful Information

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



Prefix	Number	Standard Form	e.g. metres
Giga	1,000,000,000	1×10^9	Gm
Mega	1,000,000	1×10^6	Mm
kilo	1,000	1×10^3	km
-----	1	1	m
milli	0.001	1×10^{-3}	mm
micro	0.000001	1×10^{-6}	μm
nano	0.000000001	1×10^{-9}	nm

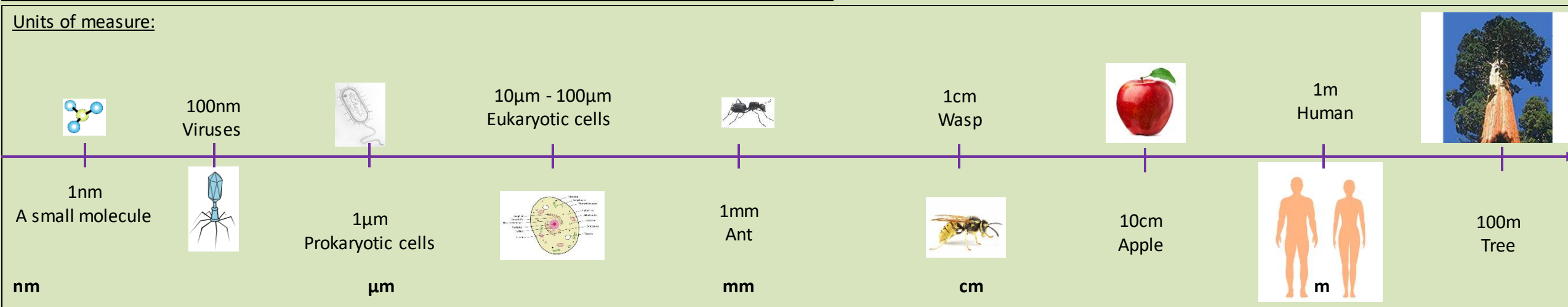
Variables:

Independent: the variable that is being **changed** during the experiment

Dependent: the variable **being tested** or **measured** during the experiment

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

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



KEY:

RELATIVE ATOMIC MASS

Atomic Symbol

name

ATOMIC (PROTON) NUMBER

The Periodic Table of Elements



1

2

3

4

5

6

7

0

1

H

hydrogen

1

4

He

helium

2

7

Li

lithium

3

9

Be

beryllium

4

23

Na

sodium

11

24

Mg

magnesium

12

11

B

boron

5

12

C

carbon

6

14

N

nitrogen

7

16

O

oxygen

8

19

F

fluorine

9

20

Ne

neon

10

39

K

potassium

19

40

Ca

calcium

20

45

Sc

scandium

21

48

Ti

titanium

22

51

V

vanadium

23

52

Cr

chromium

24

55

Mn

manganese

25

56

Fe

iron

26

59

Co

cobalt

27

59

Ni

nickel

28

63.5

Cu

copper

29

65

Zn

zinc

30

70

Ga

gallium

31

73

Ge

germanium

32

75

As

arsenic

33

79

Se

selenium

34

80

Br

bromine

35

84

Kr

krypton

36

85

Rb

rubidium

37

88

Sr

strontium

38

89

Y

yttrium

39

91

Zr

zirconium

40

93

Nb

niobium

41

96

Mo

molybdenum

42

[98]

Tc

technetium

43

101

Ru

ruthenium

44

103

Rh

rhodium

45

106

Pd

palladium

46

108

Ag

silver

47

112

Cd

cadmium

48

115

In

indium

49

119

Sn

tin

50

122

Sb

antimony

51

128

Te

tellurium

52

127

I

iodine

53

131

Xe

xenon

54

133

Cs

caesium

55

137

Ba

barium

56

139

La*

lanthanum

57

178

Hf

hafnium

72

181

Ta

tantalum

73

184

W

tungsten

74

186

Re

rhenium

75

190

Os

osmium

76

192

Ir

iridium

77

195

Pt

platinum

78

197

Au

gold

79

201

Hg

mercury

80

204

Tl

thallium

81

207

Pb

lead

82

209

Bi

bismuth

83

[209]

Po

polonium

84

[210]

At

astatine

85

[222]

Rn

radon

86

[223]

Fr

francium

87

[226]

Ra

radium

88

[227]

Ac*

actinium

89

[267]

Rf

rutherfordium

104

[270]

Db

dubnium

105

[269]

Sg

seaborgium

106

[270]

Bh

bohrium

107

[270]

Hs

hassium

108

[278]

Mt

meitnerium

109

[281]

Ds

darmstadtium

110

[281]

Rg

roentgenium

111

[285]

Cn

copernicium

112

[286]

Nh

nihonium

113

[289]

Fl

flerovium

114

[289]

Mc

moscovium

115

[293]

Lv

livermorium

116

[293]

Ts

tennessine

117

[294]

Og

oganeson

118

*the Lanthanides (atomic numbers 58-71) and the Actinides (atomic numbers 90-103) have been omitted. Relative atomic masses for Cu and Cl have not been rounded to the nearest whole number.

KS3 Science: Nutrition and digestion

Food group	Found in...	Function
Carbohydrate	Potatoes, pasta, rice, bread	Source of energy
Protein	Meat, fish, eggs, dairy, seeds, nuts	Builds and repairs tissues
Fats (lipids)	Cheese, nuts, oily fish, chips, cakes	Stores energy, insulate us, protects organs
Fibre	Fruit, veg, wholegrain cereals	Prevents constipation, improves health
Minerals	Dairy, veg, fish, meat, nuts	Enables body to work & stay healthy
Vitamins	Fruit, veg, milk, eggs	Same as minerals
Water	Cucumber, drinks	Needed in cells, tissues & organs

Keyword	Meaning
Nutrient	A substance that that is essential for the maintenance of life and for growth.
Carbohydrates	Group of molecules including sugars and starch.
Protein	Building block of cells, made of a long chain of amino acids.
Lipids	Another name for fats.
Enzyme	Biological catalysts, which means that they speed up chemical reactions.

Digestion is the break down of large insoluble molecules into small soluble molecules, so that they can be absorbed by the body.

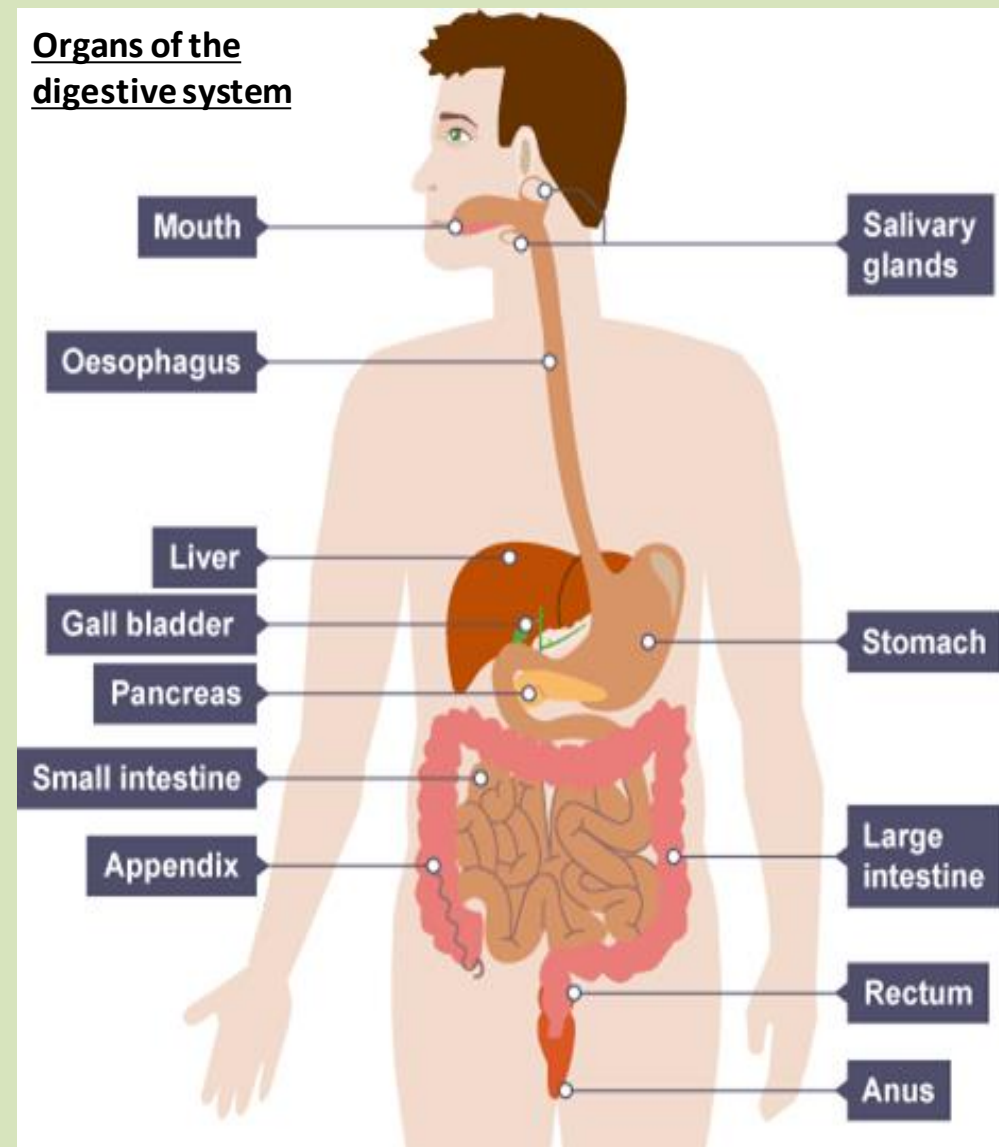
If the body does not get what it needs it suffers with deficiencies such as:

- Scurvy
- Obesity
- Rickets

Plants make **carbohydrates** in their leaves by photosynthesis and absorb **mineral nutrients and water** from the soil via their roots.

This is why they are called **producers**.

Organs of the digestive system

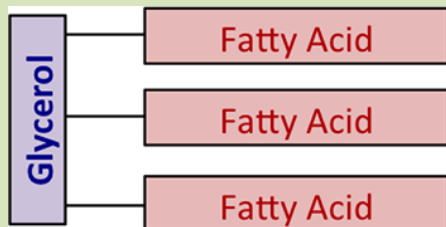


Bacteria play an important role in the human digestive system.

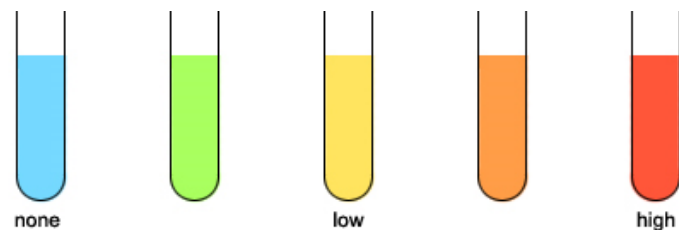
Imbalances in humans diet can lead to **obesity, starvation** and other **dietary deficiencies**

Food tests

- **Starch:** Add **iodine**, if starch is present it changes from red/brown to dark **blue/black**.
- **Protein:** Add **Biuret** reagents. If proteins are present, colour changes from blue to lilac.
- **Sugars:** Add **Benedict's** reagent and **heat**. If sugars are present, colour changes from blue, through colours to brick red.
- **Lipids:** Add **Sudan 3** reagent and mix. If lipids are present, colour changes from colourless to red.

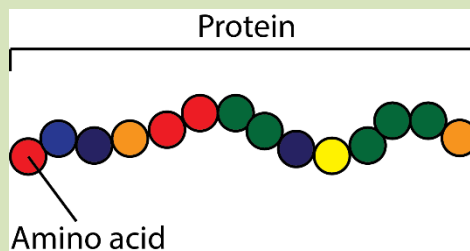
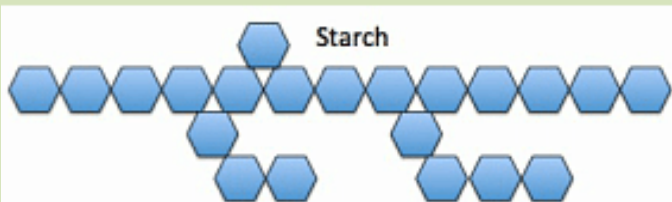


Benedict's Reagent



Enzymes are at work in the digestive system:

- **Carbohydrase** breaks down **Carbohydrates** into sugars.
- **Amylase** breaks down **Starch**, a carbohydrate into glucose.
- **Protease** breaks down **Proteins** into amino acids
- **Lipase** breaks down **Lipids** into fatty acids.



- Adaptations to the mouth are:
1. Teeth
 2. Salivary gland

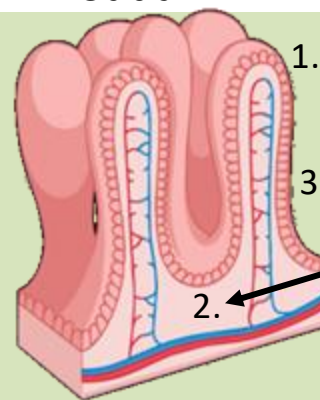
Adaptations to the stomach

Your **stomach** churns up the food and digestive juices together and contains three different types of tissue:

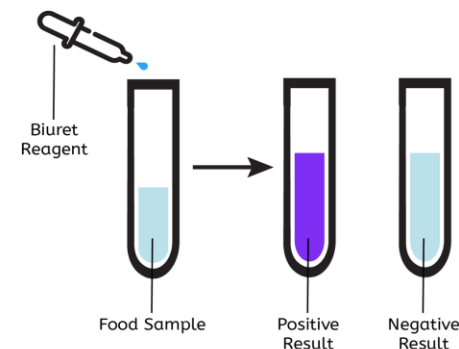
1. Muscular
2. Epithelial
3. Glandular: secretes acid to kill bacteria and provide the correct pH environment for protease to work.



Sudan III



Biuret Test for Protein



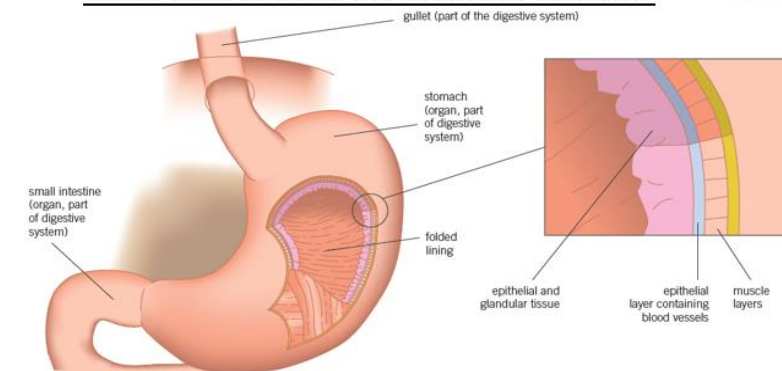
Iodine Solution

Adaptations to the small intestine

Your **small intestine** absorbs all of the required nutrients from your food. The inside of the small intestines is folded into **villi**.

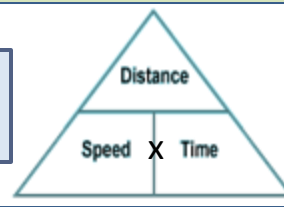
1. These **increase the surface area** enabling more nutrients to be absorbed.
2. There is a **good blood supply** so that there is a **constant concentration gradient**.
3. The cell walls are **one cell thick**, so there is a **short diffusion distance**.

What tissues does the stomach contain?



KS3 Physics: Speed and Motion

$$\text{speed (m/s)} = \frac{\text{distance (m)}}{\text{time (s)}}$$



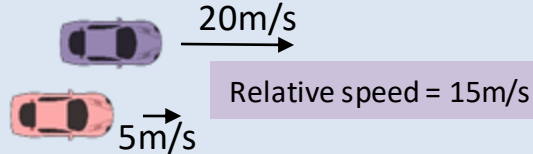
Car Safety Features:

Features to research:

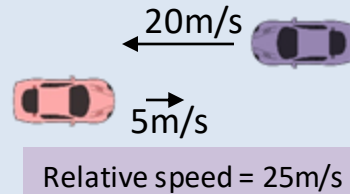
Seat belts
Air bags
Crumple zones
Child seats
Side impact protection (SIPs)
Electronic driver aids

Relative motion

For two objects moving in the same direction, the relative motion is the **difference** between their speeds.



For two objects moving towards each other, the relative motion (sometimes called the approach speed) is the two speeds **added** together.



Stopping distance

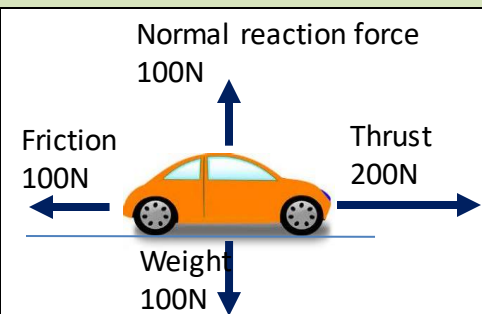
A car's **Stopping distance** is made up of **Thinking distance** (reaction time) and **braking distance** (the distance you travel once you have applied the brakes)



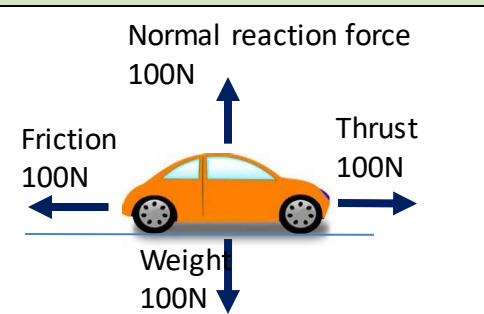
We can plot distance time graphs to interpret the motion of a vehicle/object/person:

Rules for forces and motion

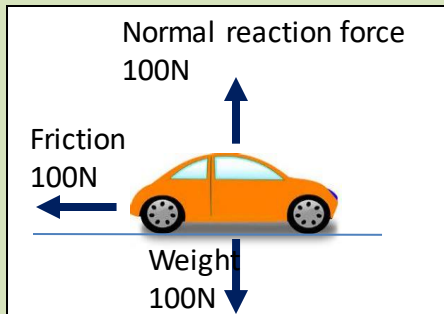
Balanced forces = The object is stationary or object moving at a constant speed
Unbalanced forces = The object is changing speed or changing direction or changing shape (Accelerating or decelerating)



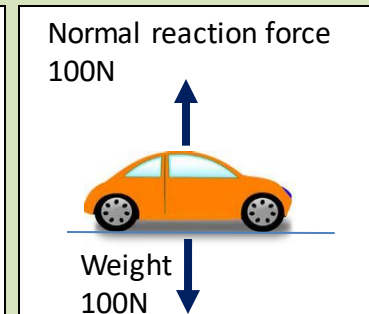
This car is accelerating as it has a larger thrust force than friction force (The resultant force is 100N →)



This car is travelling at a constant speed as it has an equal thrust force and friction force (The resultant force is zero)

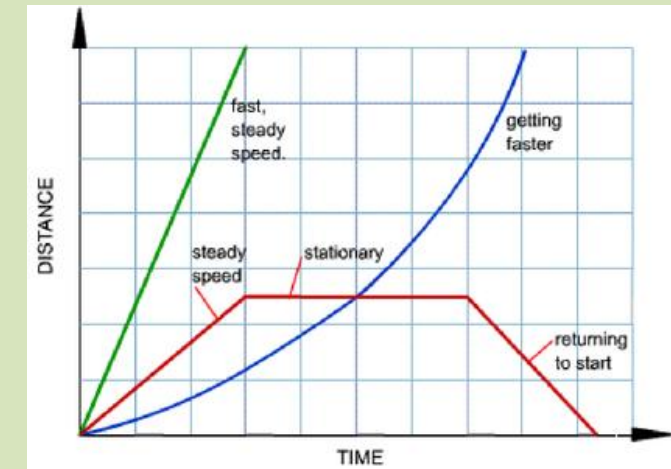


This car is decelerating as it has a larger friction force than thrust force (The resultant force is 100N ←)



This car is stationary as there is no friction or thrust forces (the resultant force is zero)

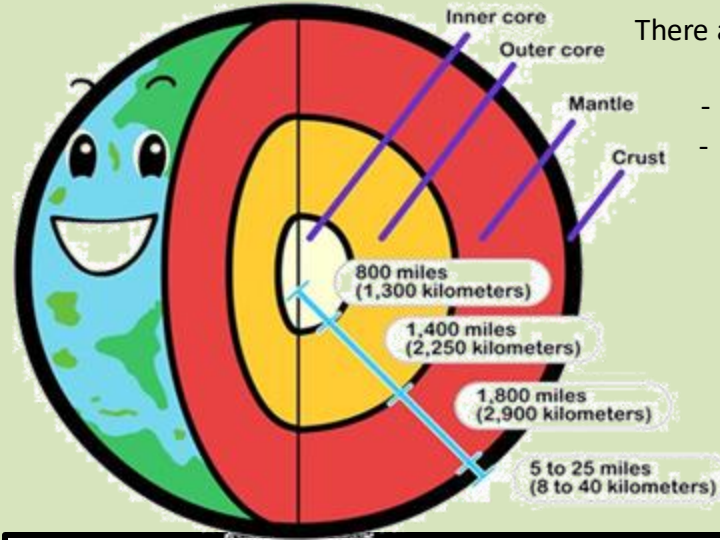
Distance time graphs



Straight line = constant speed
Horizontal straight line = stationary
Curved line = accelerating or decelerating

KS3 Chemistry : The Earth and atmosphere

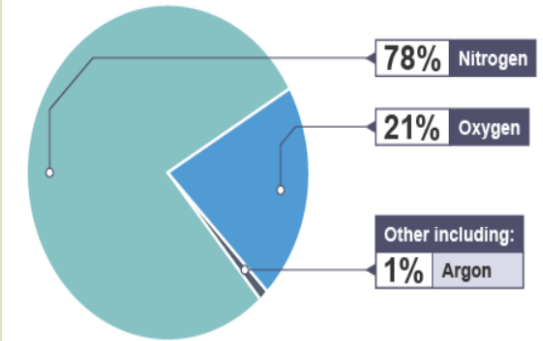
Core	Inner most layer of the Earth – made up of nickel
Mantle	The largest part of the Earth's layers – heat convects through this to contribute to tectonic plate movement
Crust	The outer most layer of the Earth. Tectonic plates are found here
Atmosphere	A mixture of gases that surround the planet and support life
Magma	Molten rock underground
Lava	Molten rock at the surface of the Earth
Igneous	Rocks that have been formed from the cooling of molten rock e.g. basalt, granite
Sedimentary	Rocks formed by small rock pieces being transported by rivers and laid down in layers e.g. limestone, sandstone
Metamorphic	Rock that is formed from another rock that is under high pressure and high temperature e.g. marble, slate
Renewable	A resource that can be replaced quickly e.g. wind
Finite	A resource that will eventually run out e.g. coal
Carbon Cycle	A series of processes where carbon is recycled around the environment



There are 4 main parts to the Earth's structure

- The inner core
- The outer core
- The mantle
- The crust

The Earth's atmosphere is the relatively thin layer of gases that surround the planet. It provides us with the oxygen we need to stay alive.

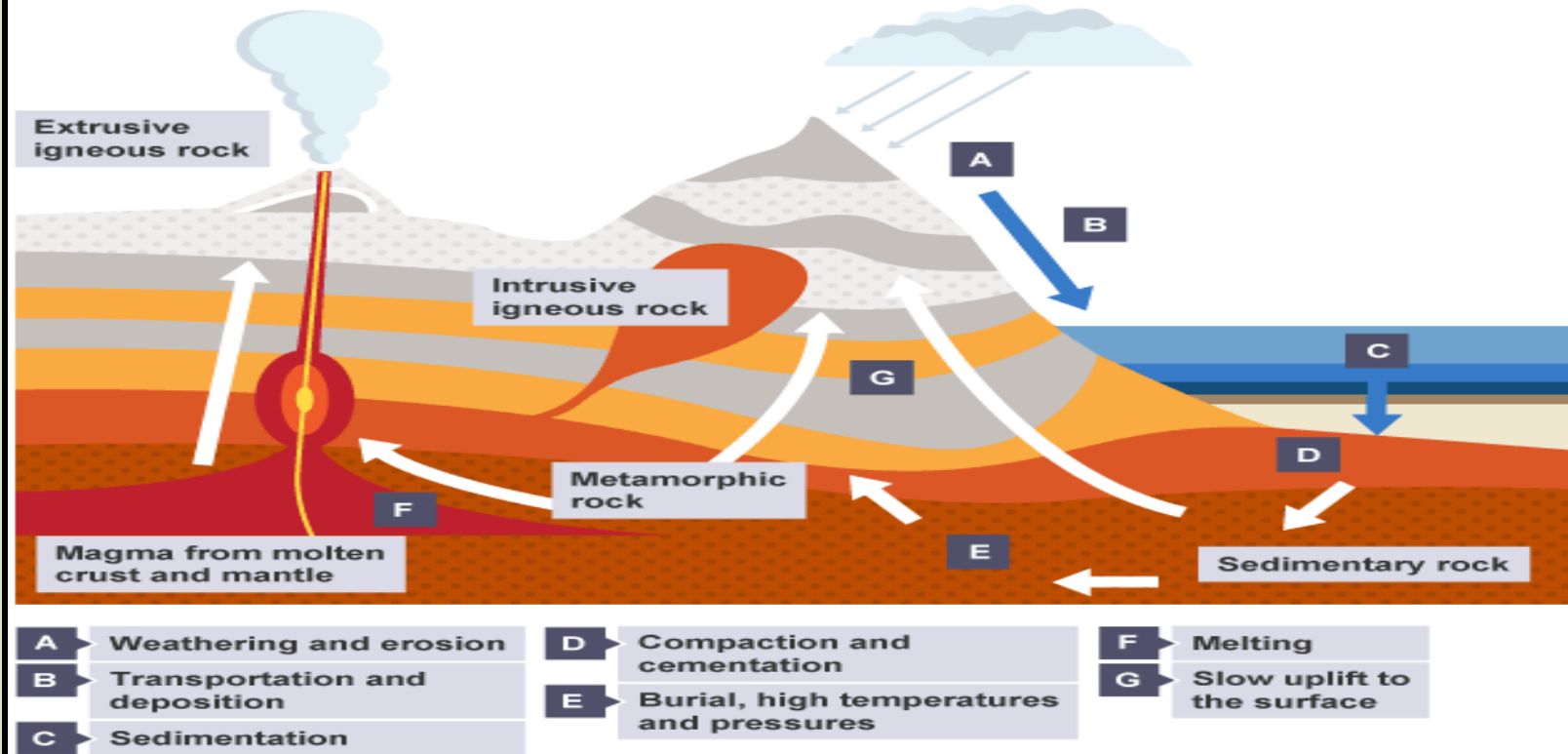


Carbon dioxide 0.04%

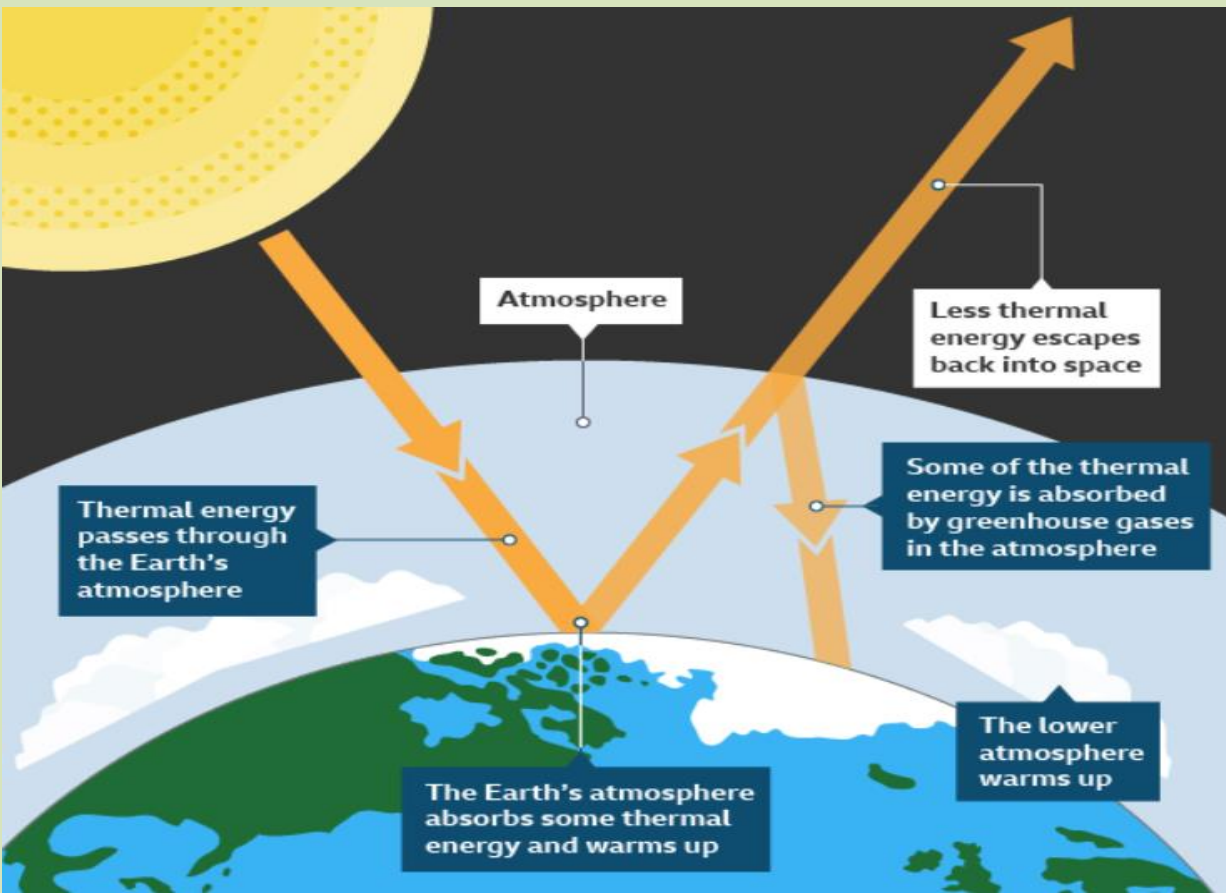
This pie chart shows the percentages of the main gases in dry air

The rock cycle

The processes in the rock cycle are summarised in this diagram:



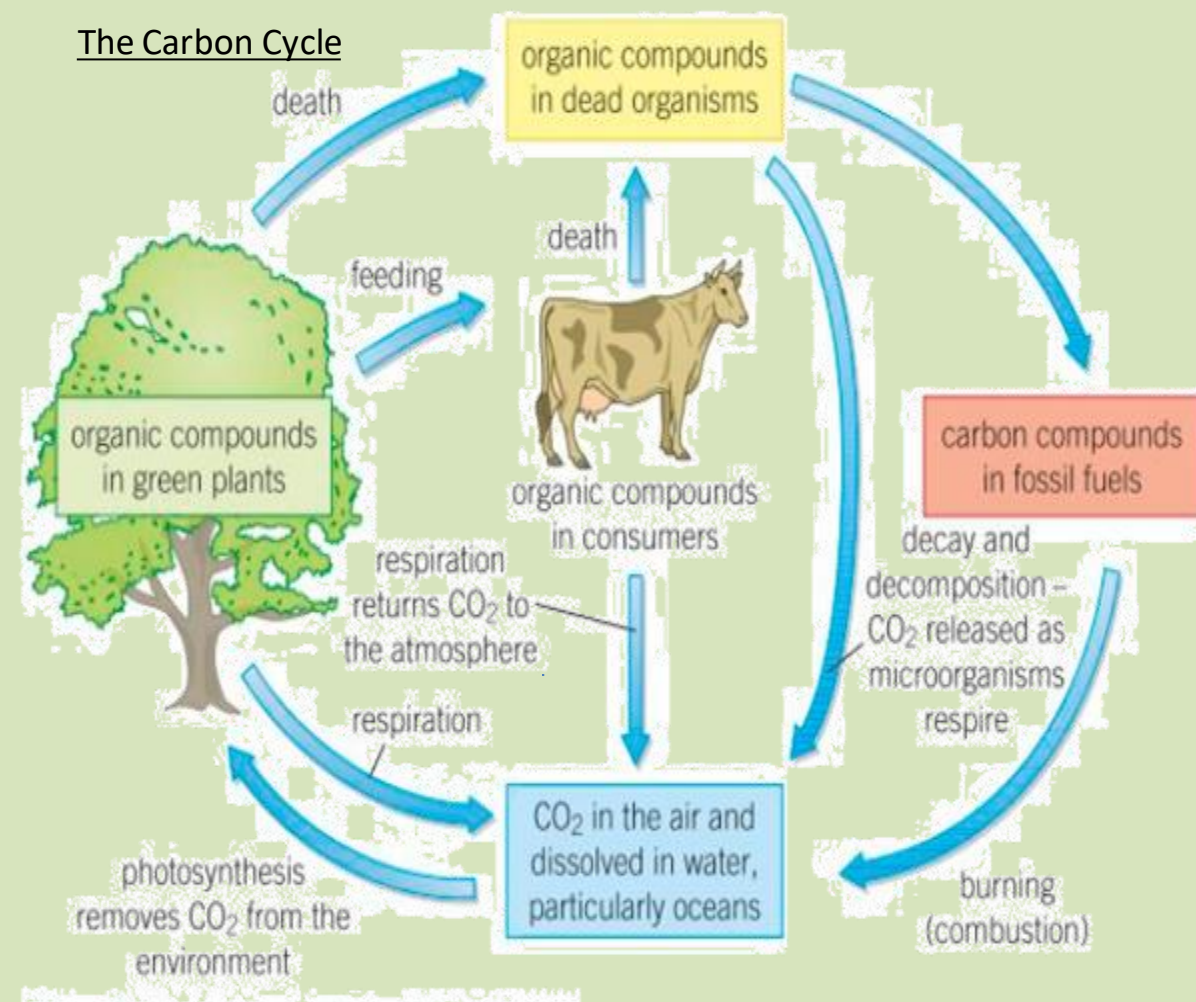
Since the industrial revolution the levels of greenhouse gases in the atmosphere have increased. This has led to the long wavelength radiation (such as infrared) being unable to escape. This heat has contributed to a global increase in temperature called global warming



Global warming has led to changes in the Earth's climate. Consequences of climate change due to global warming are:

- Ice caps melting and sea levels rising, causing flooding in coastal areas and loss of habitats
- Changes in weather patterns (increased droughts in some areas with increased rain in others) this affects wildlife and farming
- Increase in number and strength of storms

The Carbon Cycle



Ecosystems need materials to maintain its organisms. One of these materials is carbon. Plants take in CO₂ via photosynthesis. It is stored as glucose which is then transferred to animals that feed on the plants.

This is then stored in the animal's tissues or is exhaled as CO₂ from respiration. Once these organisms die the carbon in their remains (over thousands of years) is stored as fossil fuel which can be used for combustion. Burning of these fossil fuels releases the carbon as CO₂ which is taken in by plants as the cycle repeats itself

What is the Internet?

1.1

- A group of **Inter**-connected **Net**works

World Wide Web

- A collection of web pages
- Stored on computers all over the world
- Accessed via the Internet
- No central storage
- No owner
 - When might you use the Internet without using the Web?



1.2

Parts of a web address

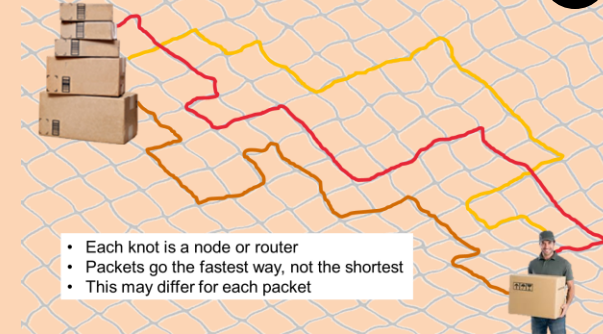
1.5

www.abc.co.uk/images/logo.jpg

- Hosted on the **WWW**
- Name of the **organisation**
- A **Company**
- **UK based**
- **Folder** location and **filename** on the site

Packet switching

1.8



URL (Uniform Resource Locator)

1.3

- A URL is a web address
- All web addresses are unique



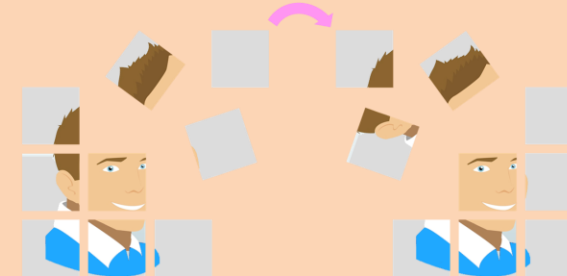
HTTP – HyperText Transfer Protocol

1.6

- A protocol is a set of rules
- HTTP defines the rules used by web browsers and servers to exchange information
- If everyone follows the same set of rules, everything works

Sending images as packets

1.9



Domain names

1.4

- Top Level Domains (TLDs)

.uk .fr .es .de .cz
.com .org .gov .edu

DNS (Domain Name Server)

1.7

- A DNS converts a web address or URL into the correct IP address for the computer that the web site sits on
- Remembering **www.google.co.uk** is easier than remembering **173.194.34.95**

IP Addressing

1.10

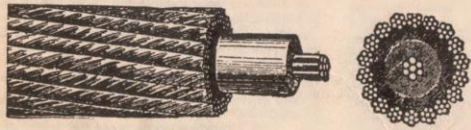
83.170.121.1

- Like every front door in the world, every computer in the world has a separate, unique address
- Data can be sent to these addresses to request or display a web page, for example

The history of connectivity

1.11

- The first cable, 2,500 miles long, was laid across the Atlantic in 1858, after many difficulties including storms and cable breakages
- For each mile of cable, 133 miles of copper and iron wire was needed
- Total weight was one ton per mile



Bandwidth

1.14

- The amount of data that can be carried at a time



What is broadband?

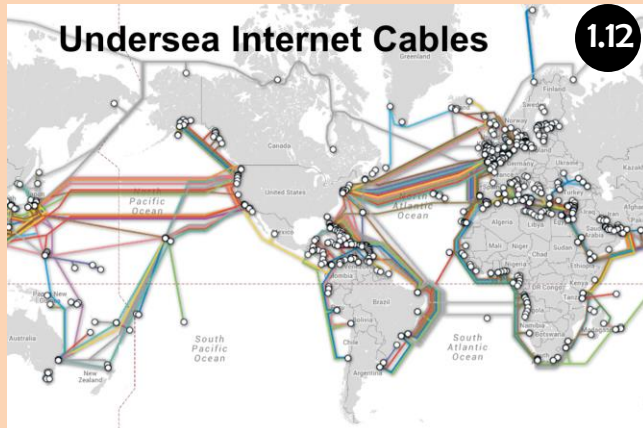
1.16

- A high-speed connection to the internet that has superseded the use of dial-up connections
- Fibre optic glass thread is used in modern cables, with up to 1,000 fibres in a single cable
 - Potential bandwidth can be many terabytes per second



Undersea Internet Cables

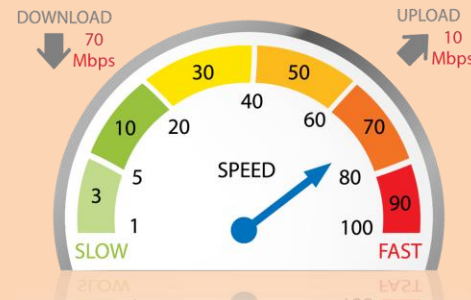
1.12



Connection Speeds

1.15

- Measured in Mbps (Megabits per Second)
- Run a speed test: www.speedtest.net



Wireless connectivity

1.17

- Must be close to a WiFi hotspot or router
- Slower than a wired connection
- Interference from walls and furniture
- Greater security risk
- No need to be physically connected
- Can connect mobile devices

Buffering

1.13

- Buffering occurs when a movie or music track plays faster than it downloads
- Your computer stores some of the file in a buffer until it can begin playing the whole thing

Wide Area Networks (WAN)

1.18

- Cover a large geographical area
- Use cables, telephone lines, satellites and radio waves to connect
- Examples include:
 - International banking systems and ATM machines
 - The Internet



Local Area Networks (LAN)

1.19

- Cover a small geographical area
- Usually operate on a single site or within a single institution
- Use cables and radio waves to connect
- Examples include:
 - Your school network
 - A home or small business network

Network Interface Card (NIC)

1.20

- Can be wired or wireless
- Essential to connect to a network
- Inside computers, tablets and mobile phones



Routers, hubs and switches

1.21



• Router

- Traffic policeman for data packets
- Sends them on their way in the best direction



• Hub

- Central, multi-plug adaptor for computers and printers in a network
- Enables communication between devices

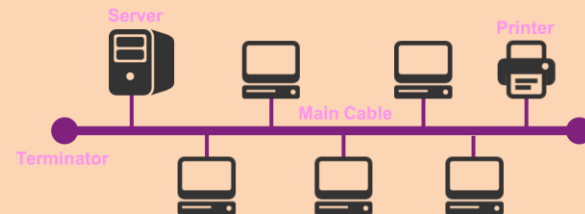


• Switch

- Smart multi-plug adaptor
- Reduces network traffic and increases speed

Bus network

1.22

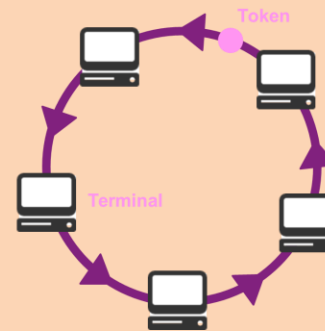


Bus network

- **Advantages:**
 - The simplest and cheapest to install and extend
 - Failure of one node does not affect the rest of the bus network
- **Disadvantages:**
 - If the main bus cable fails then the whole network will fail
 - Performance of the network slows down rapidly with more nodes or heavy network traffic

Ring network

1.23

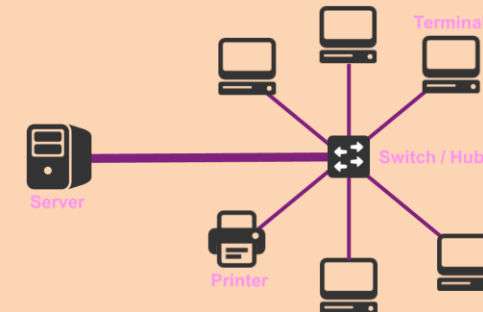


Ring network

- **Advantages:**
 - One-way system so not affected by heavy traffic
- **Disadvantages:**
 - Cable failure anywhere will affect the whole network
 - Need to 'break' the ring in order to add a new node
 - All nodes must be switched on

Star network

1.24

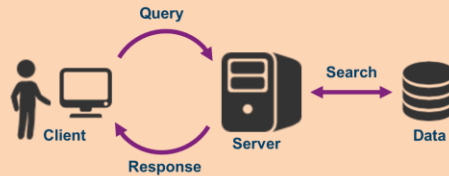


Star network

- **Advantages:**
 - Fastest performance
 - Easy to install and to expand with extra nodes
 - A failure in the minor cables will only affect one node
- **Disadvantages:**
 - Uses the most cable which makes it more expensive
 - An extra hub or switch further increases the cost

A client-server network 1.25

- The clients are the computers which people log on to in order to use the network
- The server is a powerful computer which provides services required by any of the clients



Peer-to-Peer (P2P) Networks 1.28

- An alternative to a client-server network
- There is no central server. Each computer holds its own applications and data
 - Commonly used in homes and small offices



Cloud computing: what is it? 1.31

- Software applications and data are held on the network of computers that make up the "Cloud"
- Typically accessed using a Web browser such as Chrome or Internet Explorer

Advantages of a client-server network 1.26

Data and applications are held centrally, so:

- All data can be backed up centrally rather than on each individual computer
- Anti-virus software can be kept up to date and run by the server
- Security is better because data is held in one location rather than all over the organisation
- Users can log in from any computer on the network

Advantages of P2P networks 1.29

- A printer or a scanner, for example, can be shared
- Each user can access data on another computer in the network
- A single router can provide access to the Internet for all users on the network
- Easier and less expensive to set up than a client-server network

Cloud Computing: how do I access it? 1.32

- If you have an email account such as Gmail or Hotmail, you are already using cloud computing!
- The software and storage for your account is not held on your computer – it's on the service provider's cloud
 - Usually, each application will have its own dedicated server

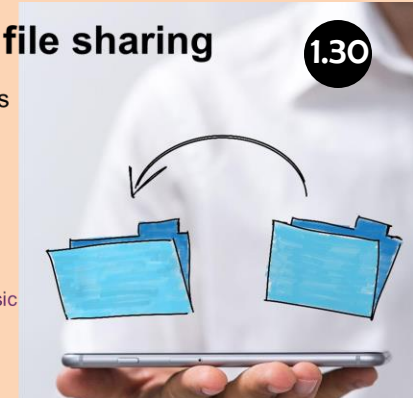
Disadvantages of a client-server network 1.27

- Expensive to install
- If the server goes down the whole network is out of action
- Server can be overloaded and be slow if too many clients are using it

Peer-to-peer file sharing 1.30

- File sharing websites use peer-to-peer networking over a Wide Area Network

- This can encourage illegal sharing of copyright protected material such as music and software



Cloud Computing applications 1.33

- Store your data, music and photos on the cloud. e.g. Google Drive, SkyDrive or Dropbox
- The applications are potentially limitless, from word processing or database software, business applications and online exams, to apps that you run on your smartphone



Online applications

1.34



Encryption

1.37

- Changing data so that it can no longer be understood without a decryption key

Decryption terminology

1.40

- Deciphering or decryption:** recovering plaintext from ciphertext
- Decryption algorithm:** performs decryption
 - Two inputs: **ciphertext** and **secret key**
- Secret key:** same key used for encryption and decryption

Caesar shift cipher

1.43

- The earliest known substitution cipher was invented by Julius Caesar
- Each letter is replaced by the letter three positions further on in the alphabet



Advantages of Cloud Computing

1.35

- You can access your data and applications from anywhere at any time
- You don't need a powerful computer with a huge hard drive – everything is stored and run on a remote computer
- Backing up data is no longer crucial – it is done by the service provider

Encryption terminology

1.38

- Plaintext: the original message to be encrypted
- Ciphertext: the encrypted message
- Encryption: the process of converting plaintext into ciphertext
- Encryption algorithm: the formula for encrypting the plaintext
 - Two inputs: **plaintext** and a **secret key**

Cryptanalysis

1.41

- The objective of cryptanalysis is to decode the ciphertext – typically by finding out the secret key
- There are two general approaches:
 - Brute-force attack**
 - Non-brute-force attack (cryptanalytic attack)**

Modern ciphers

1.44

- Modern ciphers are created using two very large prime numbers multiplied together
- The larger the prime number, the more difficult it is find the two numbers needed to break the code
 - The largest known prime number is $2^{57,885,161} - 1$, with 17,425,170 digits!

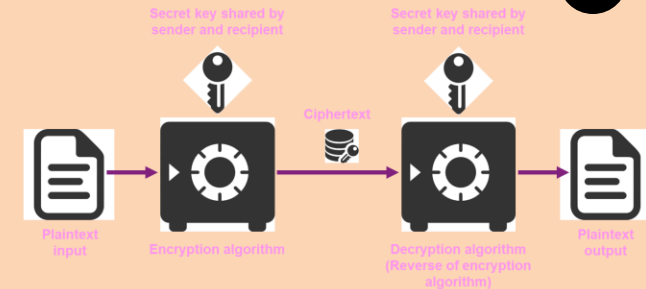
Disadvantages of Cloud Computing

1.36

- The idea of handing over important data to another company worries some people
- Sensitive data could be more vulnerable to hacking
- While you can usually store a limited amount of data for free, you have to pay to store more than the free allowance

Encryption and decryption

1.39



Brute-force attack

1.42

- Every possible key is tried
- On average, half of all possible keys need to be tried, so the longer the key, the more time it takes to find it

Key Size (bits)	Number of Alternative Keys	Time required at 10^9 decryptions/microsecond
32	$2^{32} = 4.3 \times 10^9$	2.15 milliseconds
56	$2^{56} = 7.2 \times 10^{16}$	10.01 hours
128	$2^{128} = 3.4 \times 10^{38}$	5.4×10^{18} years

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1. NETWORKS



2. GRAPHICS

Properties of a vector graphic

- Vector images comprise geometric shapes
- The properties of each shape are recorded:

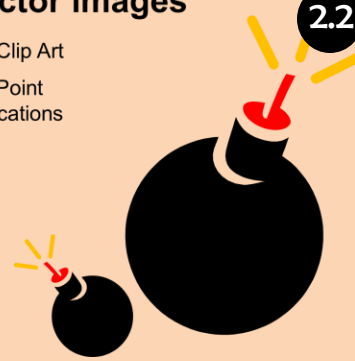
- **Shape type** (e.g. Circle)
- **Radius**
- **Centre point** (x,y)
- **Fill Colour**
- **Line Colour**



2.1

Simple vector images

- Often used as Clip Art
- Used in PowerPoint and other applications



2.2

Features of a vector graphic

- Vector graphics consist of shapes called objects
- You can edit each object separately to change the shape, colour, size and position
- Recording the properties of vector shapes doesn't take up much memory. This usually makes the file size of a vector graphic very small
- Vector graphics are scalable – you can change their size without any loss of quality

2.3

Complex vectors

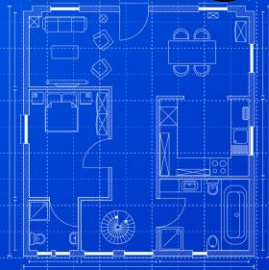
- Logos
- Animation
- Sign making
- Used for cartoon imagery
- General graphic design



2.4

Vectors are used in...

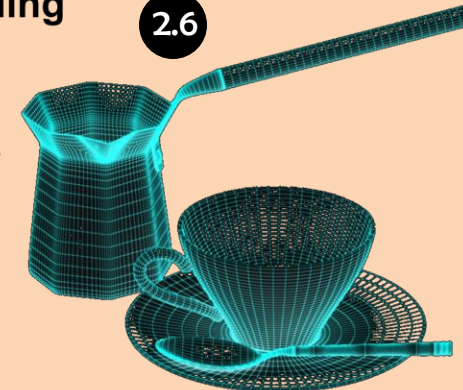
- Computer Aided Design
- Architectural Plans
- 3D Modelling
- Maps



2.5

3D Modelling

- Wireframe modelling
- Motion vectors
- Computer Generated Imagery (CGI)



2.6

Text

- Even text is vector based
- Each letter comprises several shapes, lines and curves



2.7

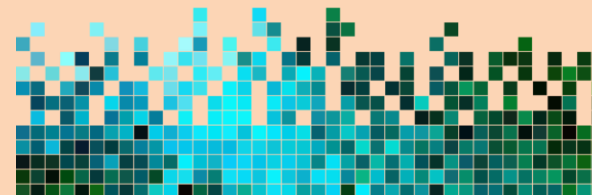
What are bitmap graphics?

- A **Bitmap** graphic is also known as a **Raster** graphic
- A bitmap graphic is composed of tiny squares, called **pixels**
- It is possible to **edit each individual pixel**
- The computer stores information about the **colour value of every pixel** in the image
- This can mean a **large file size**
- Resizing a Bitmap graphic causes it to **pixelate** and **lose quality**

2.8

Representing graphics

- Images are made up of **Pixels** (**P**icture **E**lements)
- Each pixel is set to one colour
- Together they look like an image
- Pixels become unidentifiable when they are small enough



2.9

Modern picture elements

2.10

- Pixels are arranged in a grid
- Each pixel is given a numeric value
- Each value represents one colour



Creating an image

2.11

- Each pixel is given a binary value
 - Each value represents a different colour
 - Using one bit per pixel allows only 2 values, 0 and 1
- 1 = White, 0 = Black

1	1	1	1	1	1	1	1	1
1	1	1	1	0	0	1	1	1
1	1	1	0	0	0	0	1	1
1	1	0	0	1	1	0	0	1
1	1	0	0	0	0	0	0	1
1	1	0	0	0	0	0	0	1
1	1	0	0	1	1	0	0	1
1	1	0	0	1	1	0	0	1
1	1	1	1	1	1	1	1	1

Creating an image

2.12

- More bits per pixel = more colour combinations
 - 1 bit = 2 Colours
 - 2 bits = 4 Colours
 - 3 bits = 8 Colours
 - 4 bits = 16 Colours
- How many bits per pixel required for 256 colours?

11	11	11	11	11	11	11	11	11
11	11	11	00	00	11	11	11	11
11	11	11	11	00	10	11	11	11
11	11	01	01	01	10	10	11	11
11	01	01	01	10	10	11	11	11
11	01	11	11	11	11	11	11	11
11	11	11	11	11	11	11	11	11
11	11	11	11	11	11	11	11	11
11	11	11	11	11	11	11	11	11

01 = ■ 10 = ■
00 = ■ 11 = ■

Bits and bytes

2.13

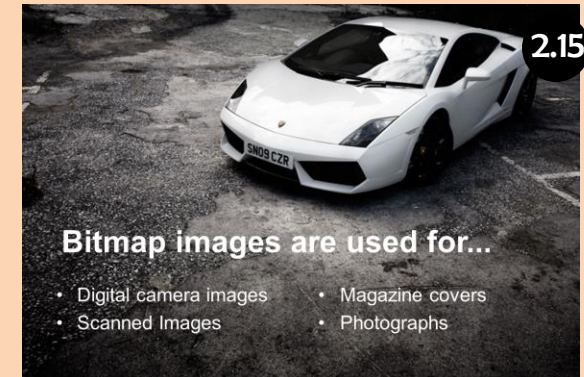
- 0 or a 1 = 1 Bit (Binary Digit)
- 8 Bits = 1 Byte
- 1000 Bytes = 1 Kilobyte (Kb)
- 1000 Kb = 1 Megabyte (Mb)
- 1000 Mb = 1 Gigabyte (Gb)

Colours vs file size

2.14

- How many bits in this picture?
- What if each pixel was one of 256 colours?
- How does the number of colours affect file size?

1	1	1	1	1	1	1	1	1
1	1	1	1	0	0	1	1	1
1	1	1	0	0	0	0	1	1
1	1	0	0	1	1	0	0	1
1	1	0	0	1	1	0	0	1
1	1	0	0	0	0	0	0	1
1	1	0	0	0	0	0	0	1
1	1	0	0	1	1	0	0	1
1	1	0	0	1	1	0	0	1
1	1	1	1	1	1	1	1	1



2.15

Bitmap images are used for...

- Digital camera images
- Magazine covers
- Scanned Images
- Photographs



2.16

Natural porcelain skin?

- Photo-editing can manipulate individual pixels using a Bitmap file format such as .jpg or .png

How a camera 'sees' an image

2.17

- Each tiny square on the sensor captures the average light value of the colours it 'sees'
- This is interpreted as a colour and becomes a pixel of solid colour



Bitmap or vector graphic?

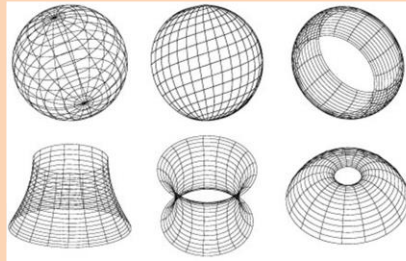
2.18

- Will the image need to be resized?
- Will the image need to be drawn to scale?
- Will the image need to be realistic?
- Are there any restrictions on file size?

Simple vector art

2.19

- Vector art comprises 2D or 3D geometric shapes



Exploding a vector image

2.20

- Ungroup the shapes
 - You can isolate individual elements and change their properties



Pixelation

2.21



Comparing

2.22

	Bitmap graphics	Vector graphics
Made up of	Coloured pixels	Objects
File size	Large	Small
Resizing	Lose quality	No loss of quality
Appearance	Real	Cartoon-like
File formats	.bmp .jpg .gif	.svg .wmf

Reviewing other graphics

2.23

What meaning do each of these convey?

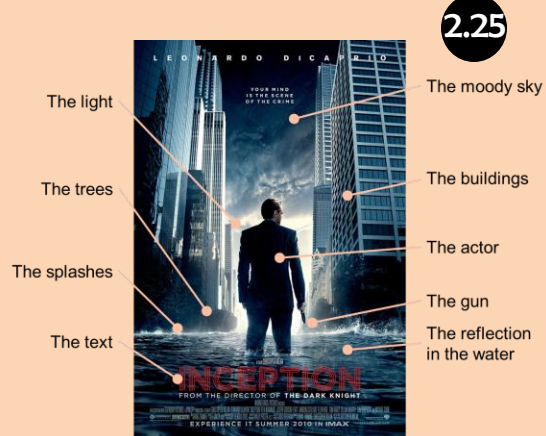
- Colours
- Font Style
- Font SIZE
- Number of different FONTS
- Image Objects



Font styles

2.24

- Keep them to a minimum
- Be consistent
- Serif and Sans Serif fonts



Reviewing a poster

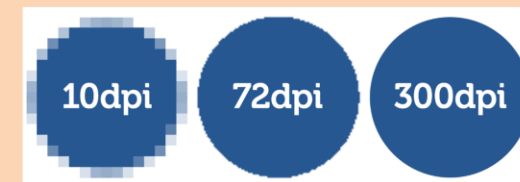
2.26

- What components does it have?
- Why has each of those components been selected?
- What messages are conveyed about the film?

Resolution (DPI – Dots per Inch)

2.27

- Not the size of the image...
- But the number of pixels in the image



2. GRAPHICS

Year 8 Computer Science – Autumn Term

Screen and print resolution

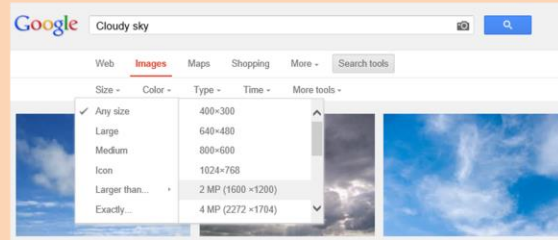
- Monitors display images at 72dpi
- Printers print images at over 300dpi
- Glossy magazine covers can print at 1200dpi

2.28

Searching for larger images

- Advanced search criteria can improve results

2.29



Cutting out a selection

- Select a part of an image
- Cut it out

2.30



Building a new image with layers



2.31

Changing contrast using an Adjustment Layer

- Use the Levels or Curves Tools

2.32



Feathering an edge

- Use the Eraser Tool and adjust the Opacity

2.33



Using layers to add depth

- Insert images or text in front of a background and behind a foreground image

2.34



Cropping an image

- Use the Crop Tool to trim the image

2.35



Layers

2.36



Saturation

2.37

- Adjust the amount of colour in the image



Brightness and contrast

2.38



Keeping it simple

2.39

- Less is often more



White space

2.40

- An area that doesn't have much detail:
 - Can be a powerful attention-grabber
 - Makes room for text to be overlaid and easily read against an area of plain background

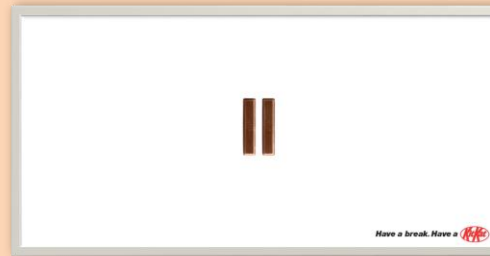
Text

2.43

- Bold text will 'POP' from the page
- Keep it to a minimum
- Be consistent

Power of white space

2.41



Use white space

2.42



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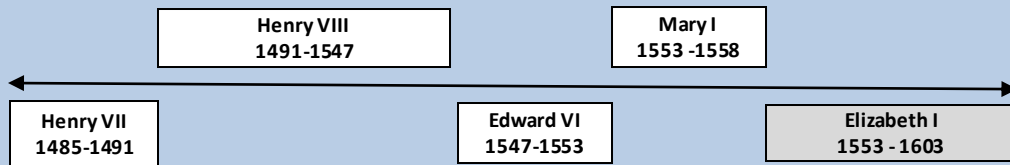
1. NETWORKS



2. GRAPHICS

Year 8 History Term 1

The Tudor Period



Elizabethan England - The period between 1558 and 1603, where Elizabeth I ruled England. The period is also called a '*Golden Age*' as it was a time of prosperity and success for England with defeat of the Spanish, the start of England's world empire and an explosion of culture e.g. Shakespeare's works.

Key Events

1588	Elizabeth is crowned Queen of England, after the death of her sister Mary I
1539	Elizabeth introduces her Religious Settlement to end conflict between the Protestants and Catholics. England stays Protestant but Catholic traditions were allowed. This still angers Catholics and the Pope
1568	Mary Queen of Scots flees to England from Scotland
1570	Pope Pious V issues a Papal Bull excommunicating (throwing out) Elizabeth from the Catholic Church as she continues to keep England Protestant.
1577 - 1580	Francis Drake completes the first circumnavigation (sailing around) of the world by ship, he is then knighted by Elizabeth on his ship the Golden Hind
1585	The war between England and Spain begins
1585	The first English colony in North America is set up by Sir Walter Raleigh, called Roanoke. It eventually fails with all people disappearing
1586	The Babington Plot. A plot by Anthony Babington, Catholics and Mary I to kill and replace Elizabeth is uncovered
1587	Mary Queen of Scots is executed after her role in the Babington Plot
1587	Sir Francis Drake launches an attack on the Spanish port of Cadiz
1588	Phillip II of Spain launches the Spanish Armada who are defeated by the English at the Battle of Gravelines
1599	Shakespeare builds the famous Globe theatre in London
1603	Elizabeth I dies

Key People

Mary Queen of Scots	Previous Queen of Scotland but was deposed, she came to England but was executed for plotting to kill her cousin Elizabeth I
Sir Walter Raleigh	A famous English explorer who set up the first English colony in North America at Roanoke and is rumored to have introduced the potato to England. Raleigh
William Shakespeare	England's most famous author, who staged his first play in 1590 and wrote over 38 plays including Romeo and Juliet.
Francis Drake	A seaman originally famous for being the first to circumnavigate the globe, he also was a privateer and enemy of the Spanish. Drake led the navy to defeat of the Spanish Armada in 1588
Pope Pious V	Catholic pope who excommunicated Elizabeth in 1570 for continuing the break with Rome and keeping England Protestant.
Phillip II of Spain	King of Spain, led the powerful Spanish Empire and a devoted Catholic. Wanted to invade England in revenge for the execution of Mary Queen of Scots and as England was a rival empire

Key Words

Empire	A group of countries ruled over by a single country
Religious Settlement	Actions taken by Elizabeth I to end the religious conflict between Catholic and Protestants in England by combining religious practices from both religions in the Act of Uniformity (1559)
Culture	Literature, Music, Architecture also called 'The Arts'
Privateer	A pirate who has been given allowance by the government to attack enemy ships. Elizabeth allowed Drake and Raleigh to attack the Spanish, this increased our power on the seas and made our economy stronger
Gloriana	Nickname given to Elizabeth I, suggesting she was immortal
Crescent Formation	The way the English ships sailed up the English Channel, the ships were in a curved line
The Spanish Armada	A fleet of 130 Spanish galleons (ships) that sailed to invade England in 1588 led by the Duke of Medina Sidonia
Tilbury	Location where Elizabeth gave her famous speech to her troops.
Fireships	Old ships loaded with burning material sailed at the enemy

Elizabeth came to power in 1558, inheriting problems with religion, poverty and foreign policy. Historians in the 1970s thought that, when Elizabeth came to the throne, the country was about to collapse. Elizabeth restored the stability and the status of the monarchy:

- She solved the religious tensions by following a 'middle way' which allowed Catholics and Puritans to keep their private beliefs as long as they went to the Church of England in public. However, she hunted, tortured and executed Catholic priests who came into England to undermine her power.
- She survived plots and rebellions, and executed Mary Queen of Scots in 1587 because she saw her as a threat to her throne.
- At the time women were seen as weak and inappropriate leaders of a nation. To combat this perception she tried to use her unmarried status as a way of strengthening her political control in England and abroad.
- Elizabeth encouraged the 'Gloriana' myth, and commissioned portraits which presented her as pure and powerful. Her reign was a time of art, music and literature.
- She defeated the Spanish Armada - a vast fleet of warships from the then world super power. By defeating Spain, England was on the way to being a world power by her death and one which had set up its first colony.

The darker side of Elizabeth I

- Elizabeth I is regarded by many as one of England's greatest monarchs, whose reign laid the foundations of England's greatness. But is this true?
- She could be as 'bloody' as Mary and executed many more people for religion than her father, Henry VIII. She established a network of spies and informers to ensure her safety.
- Far from encouraging Parliament, she bullied and controlled it, ran the government as she wished and even arrested an MP when he complained.
- The King of Spain raised a huge fleet of ships to invade England. It was known as the Armada. That the Armada was largely destroyed and failed to invade England was a triumph for Elizabeth – but it was also a very lucky escape.

Elizabeth's Problems

Religion

Mary Queen of Scots

Marriage

Succession

Money



The Spanish Armada



Overview of
Elizabeth's reign
here:



SCAN ME

You Tube

Defeat of the Spanish Armada

Philip's plan was to:

1. Gather a huge **Armada** of 130 ships in Spain, under the Duke of Medina Sidonia.
2. Sail to the Netherlands to pick up the Spanish army, led by the Duke of Parma.
3. Invade England.

However:

- In 1587, a year earlier, Drake attacked Cadiz and destroyed over 100 of Philip's fleet in the harbour.
- Philip assembled another fleet in 1588, but it was hastily provisioned and badly equipped.
- Medina Sidonia begged not to be put in charge.



The failure

The Armada set sail in May 1588:

- It was spotted almost immediately, and England was warned.
- From 20 to 27 July, the English fleet attacked the Armada as it sailed up the English Channel. The Armada sailed in a crescent formation, however, making it difficult to attack, and the English fleet did little damage.
- On 27 July, the Armada anchored in open seas off Calais. The English sent fireships, so the Armada cut their anchors to escape.
- On 28 July, the English attacked the Spanish fleet at the Battle of Gravelines. The English ships were easier to manoeuvre in the heavy waters of the North Sea. This decisive battle prevented the Spanish from landing in England.
- Philip's 'invincible' Spanish fleet fled north, chased by the English fleet. It had to return home by sailing round the north of Scotland and the west coast of Ireland, where many ships were sunk by storms.
- On 8 August, after the main danger was over, Elizabeth went to speak to the English troops at Tilbury. She said, *"I have but the body of a weak and feeble woman, but I have the heart and stomach of a king... and think foul scorn that any Prince in Europe should dare to invade the borders of my realm."*



Consequences of the Spanish Armada

Philip was temporarily halted.

But:

- The defeat did not harm his control over his empire which continued to grow after his death in 1598. Spain would remain a dominant 'super-power' for a further 100 years.
- He tried other armadas in 1596 and 1597. Both were destroyed by storms.

The English rejoiced – they took it as a sign that God was on their side, even celebrating a national day of Thanksgiving for its victory over Spain on the 24th November.

But:

- The English did not defeat Spain and the war dragged on.
- An English naval attack on Portugal in 1589 failed.
- In 1595 a small Spanish force raided Cornwall.

England was able to continue causing trouble for the Spanish Empire.

- English pirates continued to attack Spanish treasure ships.
- The Spanish believed that English slave traders illegally carried enslaved people to the West Indies.

But:

- The Roanoke colony disappeared, and was never seen or heard of again. England did not plant another colony in America until 1607.
- The Armada was **not** the beginning of an English empire in the **New World**.



Overview of
Armada's defeat:



SCAN ME



History – Term 2

The Stuarts

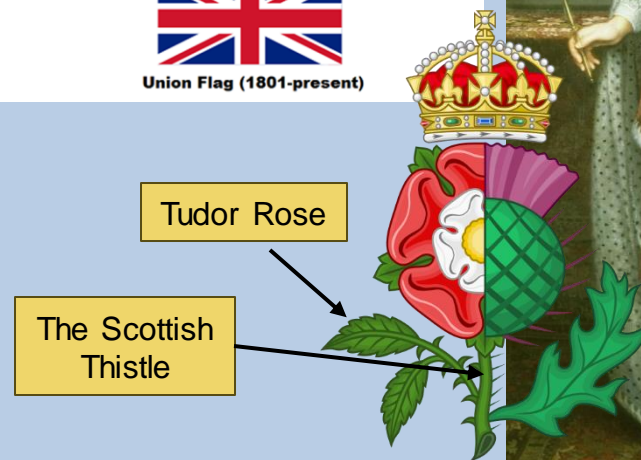
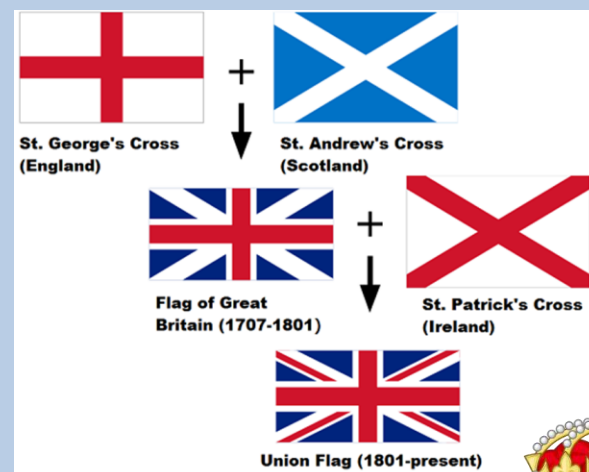


OVERVIEW

James I was king of England and Scotland following the death of Elizabeth I. The period ended with the death of Queen Anne who was succeeded by the Hanoverian, George I from the House of Hanover. James I was a Protestant and his reign is most famous for the Gunpowder Plot. His son, Charles I, led the country into Civil War and was executed in 1649. This was followed by the period known as the Commonwealth, where there was no monarch ruling the country. Instead, Oliver Cromwell was Lord Protector and famously banned 'merriment' at Christmas. The Restoration saw the Stuarts returned to the throne under the 'Merry Monarch' Charles II. This period is best known for the Great Plague and the Great Fire of London. In 1688 powerful Protestants in England overthrew James II and replaced him with his daughter and son-in-law, William and Mary of Orange, in the 'Glorious Revolution'. The final Stuart, Anne, had 17 pregnancies but left no heir.

Key Terms & People

Stuart	Name of the royal family who ruled over England & Scotland in 1603-1707. Replaced the Tudor family after Elizabeth I had no children.
James I (James VI of Scotland)	First Stuart King of England (1603-25). Replaced Elizabeth I. Mother was Mary of Scots, executed in 1587. Unlike his Catholic mother, James was a strong Protestant. Believed in the Divine Right of Kings.
Gunpowder Plot	A plot put together in 1605 by Catholics to blow up James I and Parliament. Many Catholics resented being taxed heavily.
Robert Catesby	Leader of the Gunpowder Plot. Sought the support of Spain to overthrow James I and the English government, who they saw as heretics. Previously arrested for rebellion against the crown.
Guy Fawkes	Caught red-handed in a cellar beneath the Houses of Parliament with 1,000kg of gunpowder. Hung, drawn & quartered as punishment.
Lord Monteagle	A Catholic MP. A mysterious letter was sent to him by the Gunpowder plotters, warning him to avoid going to Parliament on the day of the plot. Monteagle immediately informed Robert Cecil.
Robert Cecil	A Puritan and very anti-Catholic advisor to King James I. Son of William Cecil. Set up an anti-Catholic spy network in Europe. Possibly framed the Gunpowder plotters in order to punish Catholics severely.
Divine Right of Kings	Claimed kings were answerable only to God and it was sinful for their subjects to resist them. James I and his son Charles I believed in this.



James I's crest was designed to show the union between Scotland and England

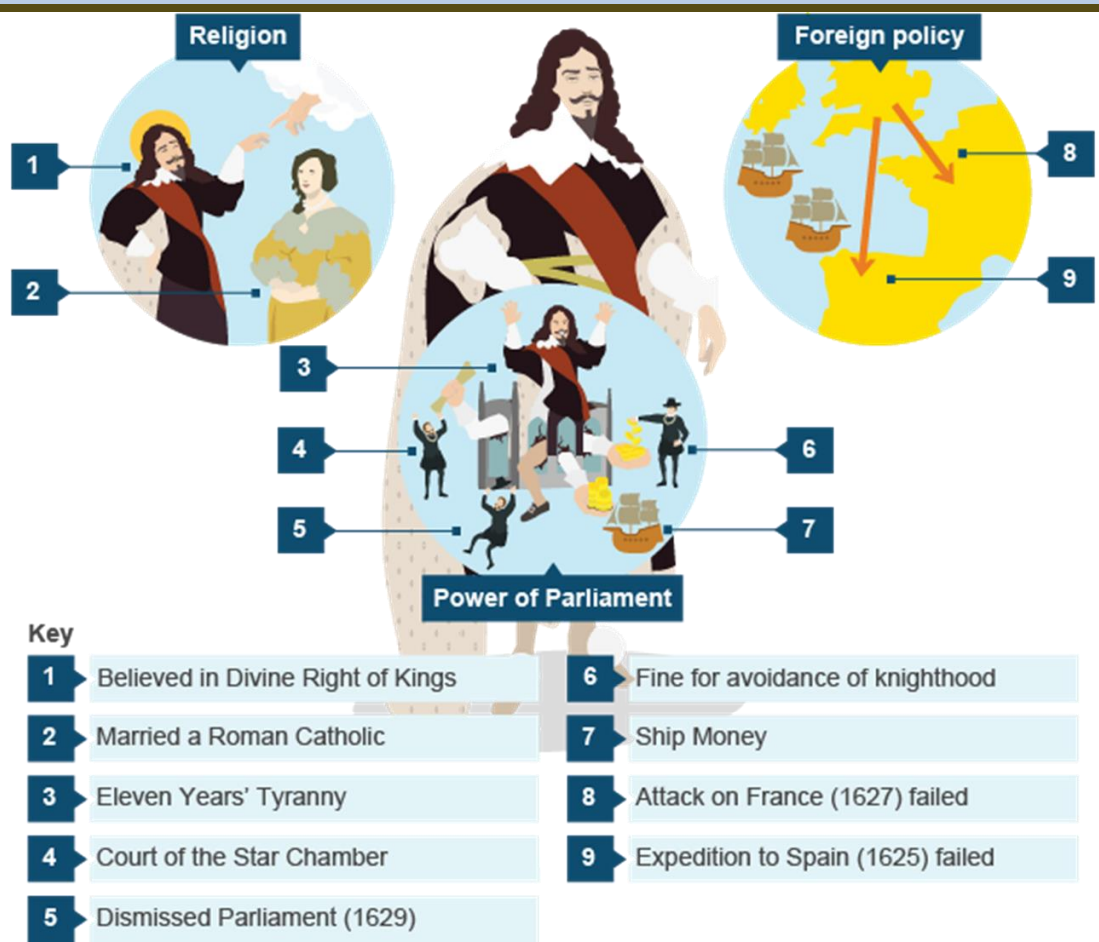
King Charles I



Overview of the Civil War:

<https://tinyurl.com/EnglishCivilW>

Problems of Charles I



Key words and names	
Civil War	Two sides fighting each other in the same country.
Charles I	Son of James I. Second Stuart monarch (1625-49). Married a French Catholic and charged taxes that Parliament thought were unfair, making him unpopular. He went to war with Parliament – and lost.
Henrietta Maria	Wife of Charles I. Unpopular for being Catholic...& for being French!
William Laud	Friend of Charles I, who made Laud Archbishop of Canterbury. Laud told off Puritans for being too strict and relaxed Puritan rules.
Ship money	A new tax issued by Charles I that was unfairly extended to inland counties of England in 1635. Many MPs thought the tax was illegal.
The Grand Remonstrance	A list of complaints presented to Charles I in 1641 by Parliament. The tone was anti-Catholic and opposed Laud's religious changes.
Impeach	To put a member of the Government on trial in Parliament.
Parliamentarians (AKA 'Roundheads')	The side in the English Civil War who thought Parliament should share power with the king. Formed the 'New Model Army' in 1645.
Oliver Cromwell	A Puritan MP who believed in Parliamentary government. He was a very effective Parliamentary leader in the English Civil War and became Lord Protector of England after Charles I was executed.
Royalists (AKA 'Cavaliers')	The side in the English Civil War (1642-49) who supported the King against Parliament. They lost.
Lord Protector	Title given to Oliver & Richard Cromwell, who ruled in place of a monarch after the civil war. In theory, Parliament now ruled, yet Oliver Cromwell became impatient & dismissed Parliament in 1653!
The Levellers	A political group wanting equal rights and the vote for all men. Cromwell crushed the Levellers by 1650.
Interregnum	Name given to the period 1649-1660, when there was no monarch.
Charles II	Son of Charles I. Restored Stuart monarchy to power in 1660 after Cromwell's 'Interregnum'. Known as the 'party king'. Ruled 1660-85
James II	Younger son of Charles I and brother of Charles II. A Catholic convert and therefore very unpopular, quickly facing rebellion. Got rid of Parliament in 1685, who soon plotted to overthrow him.
William (of Orange) & Mary	Mary was James II's daughter. She was Protestant and married to William of Orange (leader of the Protestant Dutch Republic).
The Glorious Revolution	William & Mary were crowned joint monarchs in 1689 to stop James II's Catholic rule. They accepted Parliament's 'Bill of Rights', restricting the monarch's power so that they share with Parliament.
Puritans	Strict Protestants who wanted a 'purified' Church
Restoration	Period where Charles II and Stuart family returned to the throne
New Model Army	Full time, professional army set up by Fairfax and Cromwell
Popish	Description of something appearing to look Roman Catholic

THE ENGLISH CIVIL WAR

Causes of the Civil War



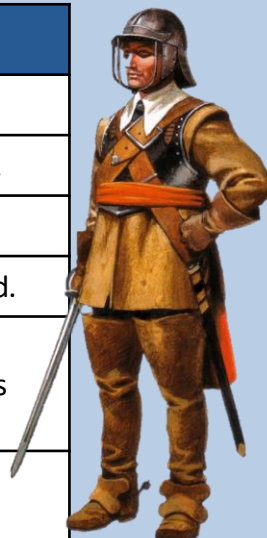
Royalist soldiers were also known as 'Cavaliers' from the Spanish *caballero* meaning gentleman.

Key Battles of the English Civil Wars

- **1642. The Battle of Edgehill** was a confused draw. Charles advanced as far as Turnham Green, five miles from London, but when 24,000 Londoners turned out to fight him, he turned back.
- **1643.** Charles tried another attack on London, but he was defeated at the **Battle of Newbury**.
- **1644.** Parliament made an alliance with the Scottish 'Covenanters' (Protestants), and Oliver Cromwell and his 'Ironsides' joined the Parliamentary cavalry. Cromwell defeated a Royalist army at **Marston Moor** by attacking them at teatime
- **1645.** Parliament reorganised its armies into the '**New Model Army**' led by Cromwell. Charles was decisively defeated at **Naseby**
- **1646,** Charles surrendered.
- **May 1648** Charles made a deal with the Scots and started a second civil war. After Cromwell had defeated Charles a second time – at the **Battle of Preston** in August **1648** – Parliament put him on trial for treason.

The Build-Up to War

1625	Charles I crowned King. Married Henrietta
1629	Parliament dissolved. Charles I rules alone. Ship money imposed.
1630s	Laudian reforms imposed on Church by Archbishop
1640	Scottish army invades to stop Laud's reform of Church in Scotland.
April 1640	Parliament recalls Parliament for the first time in 11 years, he demands money to fight the Scots, Parliament refuses so Charles dismisses them.
Nov 1640	Charles I forced to recall Parliament to fight the Scots
1641	Charles I submits to Parliament's demands including Laud impeachment, closure of Star Chamber and end of Ship Money.
1641	Grand Remonstrance; Parliament demands right to choose ministers.
Jan 1642	Charles attempts to arrest 5 MPs. Parliament takes control of army.
1642	Charles flees to Nottingham. Civil War begins



Parliamentarians were nicknamed 'Roundheads' due to their modern shorter hair styles



Charles I - King from 1625 to 1649



Oliver Cromwell - Leading Parliamentarian . Lord Protector 1653 –1658



Charles Stuart (II) - Son of Charles I. Became King in 1660.



Thomas Fairfax - Parliamentarian General and creator of New Model Army

Political Map of the World



Map of UK



What is a tourist?

A tourist is a person who travels to a place that is not their normal place from 1 day up to a year.

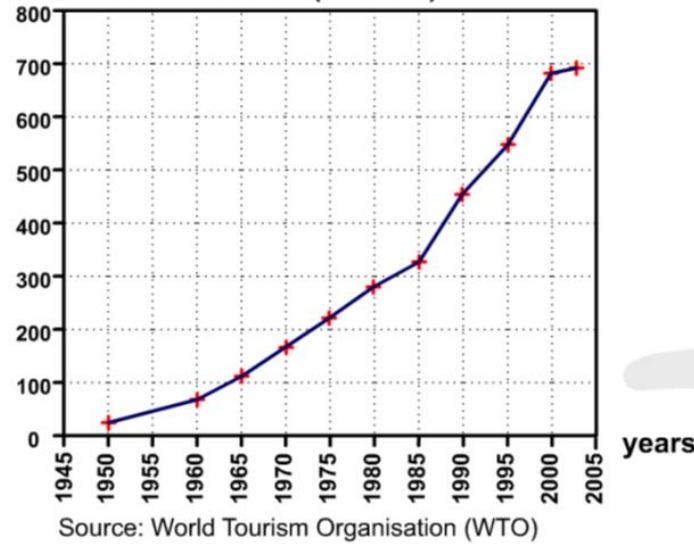
Most tourists are people on holiday but those that travel for business, leisure or other reasons are still tourists.

What is the tourist industry?

The tourist industry means all the activities that tourists take part in and the services that support them.

Tourists, hotels, airports, taxi drivers and ice cream sellers are all part of the tourism industry.

international tourist arrivals (millions)



How much has tourism grown?

Before 1950, tourist levels were relatively low. However, in the 1950s, it suddenly started to increase. If you look at the graph to the left which shows the number of international tourists every year, you can see that there are less than 100 million tourists in 1950, but by 2005, this number was almost at 700 million. As of 2015, more than 1 billion tourists travel every single year.

Continent/Region	%
Africa	4
North America	10
Asia & Pacific	25
Europe	50
Middle East	4
South America	7

Where do people visit?

This table shows what percentage of all tourists each area of the world gets. Europe is by far the most popular place to visit (with 50% of all visits) compared to Africa and the Middle East (both with only 4% of visitors). Europe receives the most tourists because it is very easy for people to travel between European countries. Also many European countries are considered HICs (high income countries) and are considered to be safer to travel. In contrast, many countries within some other regions have a smaller tourism industry, so it is harder for tourists to visit.

Why has tourism grown?

Tourism has grown so rapidly for variety of different reasons:

1. People have more time.
 - a. In many countries, people have paid annual holiday (normally around 4 weeks) where they are allowed to go on holiday and are paid for it.
 - b. As people are now living longer, we they have more time when they retire to explore.
2. People have more money.
 - a. Many people in the UK have well paid jobs and therefore have more money. They now have a higher disposable income (money left over from paying bills) to spend on going on holiday.
3. Better Transport.
 - a. Nowadays, with improved air travel and road networks it doesn't take too long to travel to different countries with desired environments.
 - b. Many people have cars and can just travel whenever they want with very little planning
4. Better technology.
 - a. People can now use the internet to search for and book holidays which saves time. Whereas, in the past people would have to go to a travel agents and they would have to organise it all for them.
5. Better tourism products.
 - a. People want to visit places were all their needs can be met. The introduction of places like Disneyland and all-inclusive holidays allowed for dream holidays to become reality.

Tourism Environments

Different characteristics can greatly influence the image of a tourist destination. People may decide to visit a place based on 2 main features:

1. Human (man-made) characteristics
 - a. These are features where people have built particular services which would have not naturally been there to encourage visitors. Think of big cities like New York or Las Vegas.
2. Physical (natural) characteristics
 - a. These are features which have naturally occurred and are normally big and distinctive. Examples of this could be the Grand Canyon or a big mountain.





Mass Tourism in Paradise – The Seychelles

Seychelles is a tropical island located to the east of Africa. It is north east of Madagascar and lies in the Indian Ocean. It is home to some of the most beautiful beaches, tropical rainforests and rare animals. Until recently, the people lived a subsistence lifestyle. However, as tourists started to arrive, their whole lifestyle and environment began to change.

Mass tourism is when large numbers of tourists visit the same destination. Holiday companies arrange charter flights to transport tourists. Many holidays include everything you will need from flights to food. These are called all-inclusive package holidays.

Positives of tourism	Negatives of tourism
Locals are able to use the profits of tourism to build better infrastructure such as a hospital.	Those people who have become much richer because of the tourism are now building the first super-hotel which can be seen for miles and required the deforestation of 3 hectares
The islanders now have enough money to buy some of their food rather than growing it themselves	With the recession, less people from Europe are travelling abroad
The scope for economic diversification and growth is limited on small islands: tourism could help reduce the countries debts.	Pleasure boats mean not all the tourists are on the islands at once... but they pollute the water and their anchors damage coral.
As the locals now receive more money, they can spend it on improving their own quality of life.	Tourism has become the main source of income in the region with many traditional skills and ways of life disappearing
	Many tourists do not respect what is around them and are selfish in their attitude towards the Seychelles, having high expectations of westernised facilities and hotels.



Extreme Tourism

What is extreme tourism?

- Often involves physically challenging activities often with an element of risk
- locations with dangerous landscapes (like mountains or deserts)
- often with a difficult climate and limited accessibility (extreme heat or cold).

Case Study – Antarctica

Antarctica is becoming increasingly popular for tourists to visit, especially as climate change is changing it – people want to visit it before its too late.

Why do people choose extreme holidays?

- Feel closer to a more natural world
- Creates an adrenaline rush because it has a perception of danger
- People enjoy taking a risk
- Provides a memorable experience
- People are looking for something different.
- Modern day transport makes it easier to get to
- Last chance before the environment changes.



Positives of tourism in Antarctica

Guidelines are in place to reduce environmental impact

Helps scientists to discover vital information about wildlife and climate change.

Preservation can be helped by increasing awareness of the unique environment

Negatives of tourism in Antarctica

Tourists need services to be provided for them such as toilets, equipment hire and shops, changing the natural environment.

Cruise ships have struck icebergs causing oil spills which damages the environment and poisons the wildlife

Too many vehicles on the ice may cause it to change shape and leave dents in the ice

Animals become stressed because of the crowds of people causing them to abandon eggs or their young

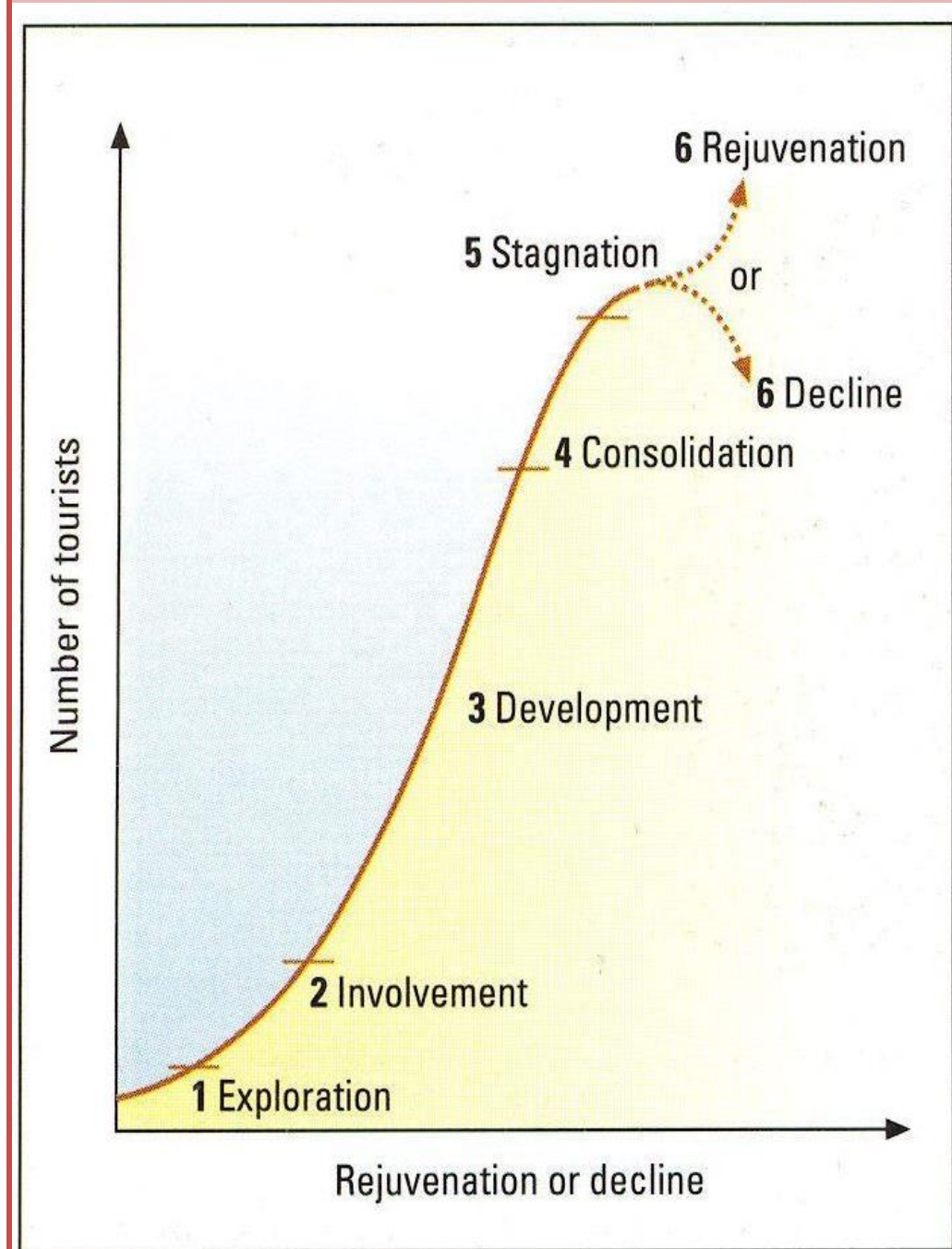
What is being done to preserve Antarctica?

- The IAATO have been set up to only allow a small number of tourists on land at one time.
- Ships are not allowed to use heavy oil so it is not too damaging if a spill occurs
- Tour companies and tourists can be fined for polluting the environment
- The treaty of Antarctica has been set up and agreed by many countries to stop anyone building on Antarctica, preserving its natural environment

Butler's Tourism Life Cycle Model

Butler proposed that most tourist resorts go through a six stage model and he called this the tourism life cycle model. It states that most tourist resorts start on a very small scale and get bigger and bigger until stagnation occurs. Within the 6 stages the following happens.

1. **EXPLORATION** - a few hardy and adventurous people looking for something that is special in terms of its culture or natural beauty. There may be no tourist services available and local people will not be involved in the tourist industry.
2. **INVOLVEMENT** - local people start to notice that there are increasing numbers of tourists visiting. They start businesses to provide accommodation, food, guides, and transport.
3. **DEVELOPMENT** - Big companies start to see the area as a tourist resort and therefore start to invest money in the region. They build large hotel complexes and sell package holidays. This makes the numbers of tourists increase and massively expands the number of job opportunities for locals.
4. **CONSOLIDATION** - The local economy is dominated by tourism and many local people will have jobs in tourism. The resort will still grow, but some of the older buildings will start to become unattractive and attract a lower quality client base.
5. **STAGNATION** - competition from other resorts, rowdiness and a loss of the original features (e.g. if it had a great beach but that is now crowded and full of rubbish) can cause the resort to stop growing. The number of people going levels off then starts to decline, threatening local businesses and services.
6. **DECLINE OR REJUVENATION?** - From the stagnation point onwards there are 2 basic possibilities: Decline can be slow or rapid, and regular visitors are replaced by people seeking a cheap break or day trippers. Rejuvenation involves a cash injection from either a private company or the government, to create a new attraction within the original resort to boost its popularity - such as the Surf Reef at Bournemouth.



Key words

Tourist - A tourist is a person who travels to a place that is not their normal place from 1 day up to a year.

Tourist industry - The tourist industry means all the activities that tourists take part in and the services that support them.

HIC – High Income Countries

LIC – Low income countries

Disposable income - income remaining after deduction of taxes and social security charges, available to be spent or saved as one wishes.

Human (man-made) characteristics - features where people have built particular services which would have not naturally been there to encourage visitors.

Physical (natural) characteristics - features which have naturally occurred and are normally big and distinctive.

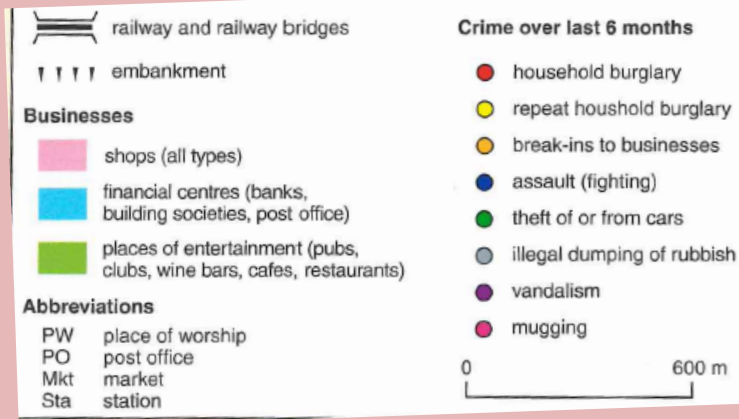
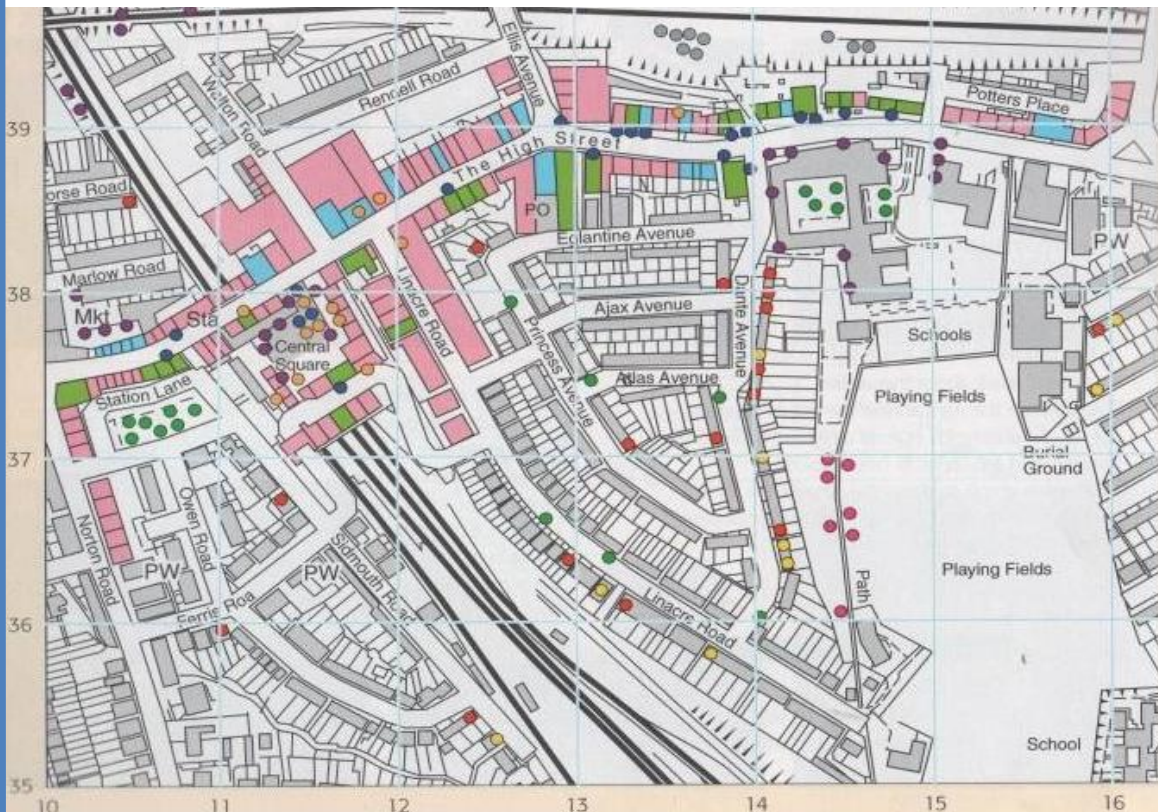
Mass tourism - when large numbers of tourists visit the same destination. Holiday companies arrange charter flights to transport tourists. Many holidays include everything you will need from flights to food. These are called all-inclusive package holidays

Extreme tourism – a niche type of tourism which normally involves visiting dangerous (environmentally or human) areas and taking part in often dangerous activities

Mapping Crime

Where is crime more likely to occur?

As well as the demographics of an area, crime can also be influenced by certain locations. Take a look at the map to the left and at the key below. Each coloured dot represents a different type of crime and each coloured square represents a different type of business, ranging from shops to places of entertainment. By looking at the map, we can see the groups of similar coloured dots tend to occur at very similar areas.



Who are the criminals and who are the victims?

When people think of criminals and victims, they tend to think of certain stereotypes. For example, if you think of a criminal, many people might think someone wearing black and white stripes with a bag of stolen goods; potentially carrying a weapon. Whereas, when someone thinks of a victim, they might think of an older person who they perceive as being more older and therefore more vulnerable. However, anyone can be a criminal and anyone can be a victim! Crime isn't based on looks, instead there are many different geographical reasons (such as location, situation and demographics) that actually influences crime.

Crime in different areas

Think of your local city and then think of your closest rural area. Many crimes that occur in these places are completely different partly because of the different opportunities available to commit crimes. In many urban areas, you might be likely to find more fraud and assault. Whereas, in a rural area, you might be more likely to find environmental crimes happening such as fly tipping where no one is around to see. Can you think any more crimes that are more likely to happen in your area?

Different types of crime

There are many different crimes that can be committed. Take a look at the list below. Later on, we will find out about where each of these crimes are likely to take place.

Murder - the unlawful premeditated killing of one human being by another.

Forgery - imitation of a document, signature, banknote, or work of art.

Vandalism - deliberate destruction of or damage to property

Burglary - illegal entry of a building with intent to commit a crime, especially theft

Armed Robbery - form of theft that involves using a weapon to perpetrate violence or intimidate a victim.

Domestic Violence - violent or aggressive behaviour at home

Fraud – Deceiving victims with the intention of personal or financial gain

Handling stolen goods – receiving or handling goods known to be from stolen sources

traffic offence - a violation of traffic regulations, such as breaking the speed limit

environmental crime - causing significant harm or risk to the environment and human health

Terrorism - the unlawful use of violence and intimidation, especially against civilians, in the pursuit of political aims

common assault - a person who causes another person to use unlawful violence on someone else

car theft – attempting to steal a motor vehicle

Mugging - an act of attacking and robbing someone in a public place

The demographics of burglary

Many people think that burglary is more likely to occur by what the house looks like and what you can see. However, burglary can be more closely linked to the demographics of an area (the general make up of a population). Take a look at the table the different factors which affect your chances of being burgled.

In contrast to popular belief, you are more at risk of your house being burgled if you are between the ages of 16-24 and not if you are older. This is because younger adults are more likely to be out during the day working and even more likely to be out socialising at night time. This means there is more chance of a burglar not getting caught. Whereas, older people above the age of 65 are more likely to be staying indoors, meaning if someone was to break in, there would be more chance of them being caught!

Factor that affects burglary rates	% chance
Aged 16- 24	15
Living in a run down area	12
Living in rented accommodation	10
Living in the inner city	9
Living on a council estate	8
Living in a flat	7
Living alongside a main (A) road	7
AVERAGE RISK OF BEING BURGLIED	5.6
Earning more than £35,000	5
Living in a property they own (not rent)	4
Living in a detached house	4
Household 65 or older	3
Living in rural areas	2

Geography and the use of GIS

In Geography, we use regularly use GIS to plot and analyse crime trends. GIS stands for Geographical Information Systems and is a way of showing virtually any data- as a form of map. More often than not, it involves lots of layers, each showing a different set of information. Quite simply, it means we can look at overall patterns and connections between all the factors. The Police use GIS to do this quite frequently to highlight certain crimes which happen in certain places. They have created a website we can see what crimes are happening at certain times of year (<https://www.police.uk/>). Why don't you check out the crime that happens in your home area or different areas of the UK.

Ways to reduce crime?

When people think of ways to reduce, they tend to think of extreme protection methods such as building massive walls and installing alarm systems. Of course, these can help reduce crime, but they can cost a lot of money and can often make the area look worse. However, there are other methods which might have more positive results in reducing crime and maintain a positive community.

Improving living standards in an area

Two of the biggest causes of crime are poverty (linked to unemployment) and boredom (lack of activities). By improving these methods we can prevent crimes from ever taking place.

If people do not have jobs, they cannot afford to live a decent standard of life and therefore crimes such as robbery, mugging and drug abuse increase. One strategy might involve reducing unemployment so that people can afford essentials. If an area does not have access to many facilities, people will get bored. If they are bored, crimes such as shop lifting and vandalism will increase. By improving access to green spaces (parks, forests, open areas) and facilities, people's quality of life can be improved meaning they might not even think of committing crimes in the first place.

Education and community support

One strategy that could be effective in reducing crime is by education of the public. This will help notify the public on what to do if there is a crime as well as increasing community support by encouraging neighbourhood to look out for one another through neighbourhood watch schemes. Further, another method is increasing the interaction between community liaisons and the public so that crime can be reported faster and people feel safer.

Design Out Crime

Designing out Crime in the Mole Valley is a different, more creative strategy by the council. The advice they give is structured under seven headings, corresponding to the attributes of sustainable communities:

- Access and movement: places with well-defined routes, spaces and entrances that provide for convenient movement without compromising security
- Structure: places that are structured so that different uses do not cause conflict
- Surveillance: places where all publicly accessible spaces are overlooked
- Ownership: places that promote a sense of ownership, respect and community
- Physical protection: places that include necessary, well designed security features
- Activity: places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times
- Management and maintenance: places that are designed with management and maintenance in mind, to discourage crime in the present and the future

Design Out Crime – key ideas

ACCESS AND MOVEMENT

The aim is to create networks of streets, paths and accesses which are pleasant to use, take people where they want to go and do not feel isolated from their surroundings. Developers also need to avoid creating easy escape routes from criminal activity. Street layouts should be well connected to increase opportunities for interaction between different users. They should not cause neighbouring areas to be segregated, for example by transport routes that are difficult to cross. It can be beneficial for routes for pedestrians, cyclists and vehicles to run alongside one another. This can provide opportunities for natural surveillance, e.g. Pedestrians and/or cyclists catered for alongside the carriageway with good mutual visibility. However, there may be cases where it is desirable to separate footpaths and cycle ways from motor traffic, for safety purposes or to encourage walking and cycling. In these cases, footpaths or cycleways should be carefully designed to provide good visibility and avoid potential hiding places or dark corners. Care should be taken to avoid sharp bends that restrict visibility. As far as practicable, pathways should be overlooked and under surveillance from surrounding properties. Subways, footbridges and underpasses can be isolated and intimidating spaces which should be avoided wherever possible. Where unavoidable, they should be designed with good visibility from surrounding land, to minimise the risk of criminal activity.

STRUCTURE

Minimise conflict between different uses and avoid creating “dead” spaces that are underused and ill cared for. Mixed use developments can increase natural surveillance and maximise the range of uses in towns in order to extend the time that people are present in the streets. A town centre residential population brings activity, natural surveillance and a sense of ownership, which is to be encouraged. However, care should be taken to ensure that the mixture of uses within a locality is compatible. For example, noisy uses can cause disturbance to residents. Windowless and blank walls can create spaces that are not overlooked and special care should be taken where the ends of buildings adjoin public spaces. Where possible, at least one window should be provided. Where are unavoidable, security can be enhanced by providing a buffer of private space. When well designed, cul-de-sacs can provide good mutual surveillance between properties and enable residents to develop a strong sense of ownership within their small group of houses. In those circumstances, strangers become noticeable, which can help to deter criminal activity. However, some cul-de-sac layouts involve networks of footpaths or ‘rat runs’ that are irregularly used and likely to foster criminal activity. The main access routes through a cul-de-sac estate may also lack natural surveillance, if all the properties front onto the cul-de-sac, rather than onto the main route. In all new developments, public access to the rear of buildings should be avoided wherever possible. Secluded footpaths or alleyways should not run along the rear of properties, where they could make it easy to gain illegitimate access to.

Car Parking

Car parks should be appropriately lit, with good natural surveillance from nearby dwellings, buildings and/or well used routes. Landscape planting should not obscure views of vehicles, create hiding places or form litter traps. Parking spaces should be arranged in straight rows to avoid blind spots, dead ends and recesses and support pillars should be as slim as possible. Within residential developments, the most secure option is to provide integral garages. Parking within the curtilage is the next most secure option. Where parking is on-street, vehicles are more vulnerable to opportunistic crime and vandalism. To minimise the risks, parking spaces should be as close as possible to the dwelling they serve.

Design Out Crime

SURVEILLANCE

Crime and anti-social behaviour are more likely to occur if the people involved are confident they will not be seen. Developers can help by making sure buildings and structures are designed to maximise natural surveillance. This helps to encourage positive interaction among legitimate users of space whilst limiting the number of escape routes for potential offenders. Buildings should provide “active frontages” in which windows and doors face onto streets, footpaths and public spaces. Room and window orientations should provide views to and from the street, with at least one habitable room fronting the street at ground floor level. Private rear gardens should be back to back wherever possible and avoid backing onto service roads or footpaths. Traditional streets, with all the houses facing the road, are the easiest way to provide an “active” frontage. Visibility is maintained when planting is kept at a height which does not obscure the view of the street. Entrances should be visible from windows within the dwelling so that visitors can be identified from within. Recessed doorways of greater than 600mm depth can create hiding places and should generally be avoided. Good external lighting can also help to promote natural surveillance.

ACTIVITY

Crime can be reduced where there is a high level of legitimate activity at different times of day and night. The level of activity increases the probability that crime will be observed or challenged. Good signage and points of interest, such as market stalls, places to sit or street art, can encourage people to use routes and spaces, increasing the general level of activity. Well-used public open spaces, incorporating seating, public art and clearly-defined pedestrian routes. Mixed use developments can be beneficial, by increasing the times at which people are likely to be present in the streets. Within solely residential areas, opportunities for surveillance throughout the day can be improved by providing a mix of house types, so that a mixture of workers, retired people and young families are more likely to be present. A sense of community spirit can also be encouraged, by allowing regular sightings of neighbours. When designing new parks, play areas and other public spaces, the layout should ensure that these are easily observed from nearby dwellings and streets and provide a safe access route for potential users.

LIGHTING

Well lit spaces can be a major factor in reducing the fear of crime and making places more usable. Lighting can help to increase legitimate activity after dark and can act as a deterrent to criminal activity. At the same time, great care has to be taken in the introduction of external lighting in rural or suburban locations, where the prevailing level of illumination may be low. Where lighting is introduced, it should be carefully designed, with regard to the character of the surroundings. Lighting should be focussed on the areas where it is genuinely required, avoiding glare or nuisance to neighbouring properties. Care is also needed to avoid creating dark patches, which can act as hiding places.

LANDSCAPING

The way that landscaping is designed can encourage, or discourage, levels of activity. Well designed street furniture and art can be effective in creating an attractive and more distinctive environment. Seats, bus stops, taxi ranks and bins should be positioned to encourage their use, and in positions that will not obscure views of users, encourage anti social behaviour or assist unauthorised entry. Trees and shrubs can be highly beneficial in creating attractive spaces. However, they can also create hiding spaces and reduce visibility. To avoid this, landscaped areas such as parks, footpaths and open spaces should be designed to maintain a good level of natural surveillance. Trees and other landscaping features should be positioned so that they do not create hiding spaces or obscure lighting.

Key Words

Crime - an action or omission which constitutes an offence and is punishable by law

Criminal - a person who has committed a crime.

Victim - a person harmed, injured, or killed as a result of a crime, accident, or other event or action.

Rural - characteristics of the countryside rather than the town.

Urban - characteristics of a town or city.

Demographics - statistical data relating to the population and particular groups within it.

Vulnerable - exposed to the possibility of being attacked or harmed, either physically or emotionally.

GIS – Geographic Information System

Prevention - the action of stopping something from happening or arising.

Protection - the action of protecting, or the state of being protected.

Unemployment – The state of being without a job.

Green spaces - an area of grass, trees, or other vegetation set apart for recreational or aesthetic purposes in an urban area.

Quality of life - the standard of health, comfort, and happiness experienced by an individual or group.

Standard of living - the degree of wealth and material comfort available to a person or community.

Early challenges to Religion

In **Medieval England** people had secure beliefs about religion: **Religion played an important part in peoples lives** because they believed God watched over them and things that happened to them – good or bad – was often a result of God. They believed that when they died God judged them on whether they would be sent to Heaven or Hell.

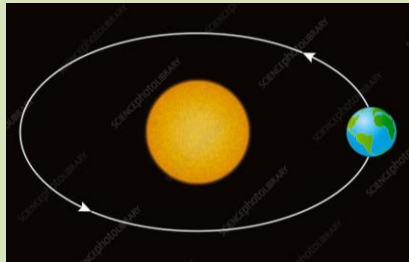
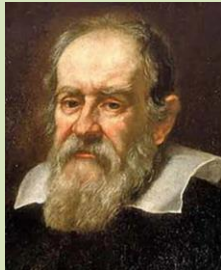
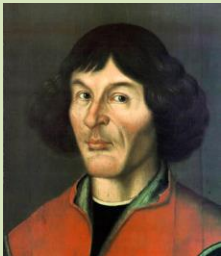
Religion created **huge power** for the Medieval Church. They were influential in everyone's daily lives. They also had huge influence in education and medicine. **No one dare challenge the Church**, otherwise you would be punished – by the King and also God!

Things changed though...

In the **1500's Nicolaus Copernicus** wrote a book explaining his theory that the Earth goes round the sun. The church had been telling people that the earth was God's centre and therefore the sun and moon circled around the earth.

In the **1600's** a man called **Galileo Galilei** used the invention of the telescope to prove Copernicus's theory. From his observations he wrote and published a book.

The church did not like challenges to what they had been telling people – it threatened their power and influence. Many people would argued if the church was wrong about this ... they could be wrong about other things. Both men were silenced by being arrested and their books banned. The church did soften to new scientific theories into the 1800's and re-published the work of Galilei.



Year 8 BVT

Our World

Key vocabulary

Charles Darwin

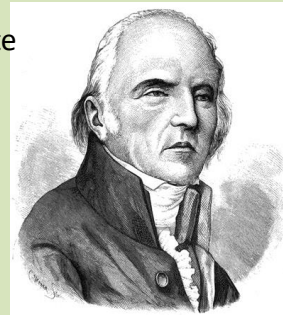
Theory of Evolution

Theory of Intellectual Design

In the **1800's we entered an age of science and technology and scientists** started to look at other ideas which had **previously been linked to religion...**

The most famous of these was **Charles Darwin** who looked into our human development

Jean-Baptiste Lamarck



Evolution

Before the theory of evolution, it was believed that our existence came from creation by God.

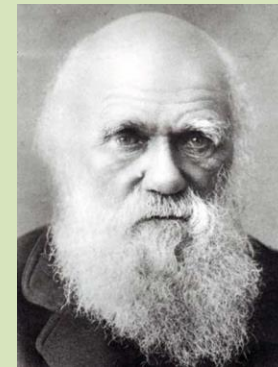
"God created man in his image" (Genesis)

Scientists in the 1800's came up with **Theories of Evolution**: **Jean-Baptiste Lamarck's** theory was that animals adapted due to their **behaviour**. E.g. a giraffe's neck has increased in length over centuries so it could reach for food higher up.

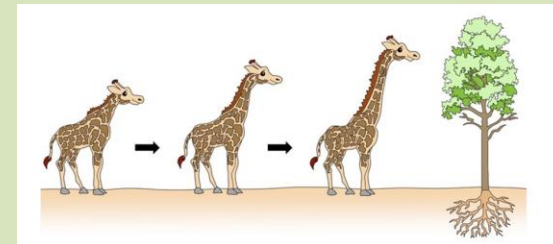
Charles Darwin's theory was that animals adapted due to their changing **environment**. E.g. an animal where its climate becomes colder, will adapt and develop thick fur.

Darwin's theory looked at adaption and evolution within ONE specie group, not the evolution of all life.

Darwin was a Christian, so did believe that God created life and animals. Darwin believed that God created animals – but **with the ability to adapt** themselves. He called this the **Theory of Intellectual Design**.



Charles Darwin



Creation Theories

Our World

It is important to know that all ideas about creation are theories.
Some have more evidence to back them up, but non are 100% proven.

Religious – God created the world

This is the religious belief held by Christians, Muslims and Jews.
They believe God created the world because he is omnipotent and all-Loving. God created the world for his love of mankind.

There are 2 different types of **religious believers** when it comes to creation:

Literalists:

- These religious people believe that God created the world in 6 days and rested on the seventh.
- They believe that each day God created a different aspect (see picture right). *“In the beginning was the Word and the Word was God”*
- They believe things literally as the bible tells us.

Non –literalists:

- They believe that God created the world, but are unsure how. They **DO NOT believe literally word for word in the bible.**
- They may believe that God did not take 6 days – but created the universe in **6 stages**. This is very important and comes from the idea that when the bible was translated to English, the word day was used, when actually what had been originally written was **“period of time”**. **This means that each stage – could have taken thousands... Millions of years.**
- They believe that it was the power of God that started the universe ... maybe they believe that God created the explosion at the start??
- What is important to Non-Literalists is WHY God created the world - for them because he **loves them**, NOT how he created it.

Key vocabulary

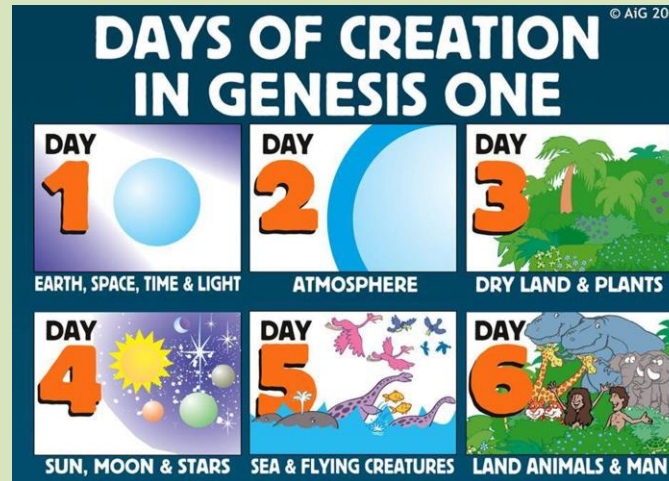
Creation

Literalist

Non-Literalist

Big Bang Theory

Buddhists believe there was no beginning and that the universe has always been in existence. This is similar to their belief of Samsara where life cycles around and around (reincarnation).



Can there be a
cross over
between religion
and science?



Big bang Theory

About **14 billion years ago**, an incredibly powerful explosion occurred, called a Big Bang. Scientists theorise that energy created this explosion, however where did the energy come from? There is always the unknown question – what came before this?

Within a millionth of a second after the explosion, neutrons and electrons were created. In the explosion, enormous heat was generated, but as the universe cooler down a little, elements like helium and hydrogen were created. From these elements, stars, galaxies, planets and solar systems were formed. As the universe continued to cool, on at least one planet (which we call earth) about 3 billion years ago, life began to develop.

Today scientists have found **background radiation**. Scientists believe that this radiation has existed since the big bang.



Environment and Animals

There are many ways that Our World has changed over the last 100 years, in particular how our environment has changed.

Is mankind killing our planet?



- There are **reasons** why how our planet has problems:
- Consumption and lifestyle mean that we are using harmful resources like fossil fuels and plastics at an alarming rate.
 - Some countries like China are increasing their CO2 emissions
 - Deforestation – harming our trees and oxygen levels
 - Running out of resources – using up resources too quickly e.g. coal and oil



Do humans mistreat animals?



Our World

Key vocabulary

- Global Warming
- Deforestation
- Stewardship
- Dominion
- Ummah
- Sewa

Animal Testing

- There are many appalling things about animal testing:
- ❑ Animals will endure pain when tested on
 - ❑ Some testing is for worthless gain e.g. cosmetic testing
 - ❑ Some testing for cosmetics could be done of human tissue samples rather than animals.
- However some people believe that animals testing has benefits too:
- ❑ Terminal disease drugs like cancer, can be tested on animals to preserve life for humans with life threatening diseases.
 - ❑ Procedures for transplants, e.g. heart, can be done by trainee doctors on animals in preparation for humans.

Religious Beliefs about Environment / Animals

Protecting environment and animals rights

- “The earth is the Lord’s and everything in it” Bible
- “The world is green and beautiful and Allah appointed us stewards over it” Qur’an
- Muslims believe in **Ummah** – which means community.
- God appointed humans with **dominion** (responsibility) to look after the world
- Religious believers believe in **Stewardship**– they should protect the environment and animals.
- Animal testing is cruel and does not show stewardship
- Pope John Paul wrote “We must abandon these factories of death” talking about animal testing labs
- Many religions are vegetarian

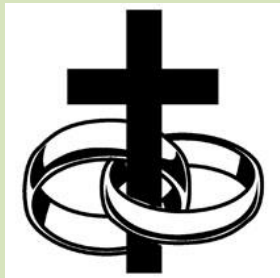
Humans are more important than animals

- God gave humans **dominion** (power) over animals.
- God created animals for humans to eat
- Animal experimentation can be used to help humans such as advances in medical procedure or cures for diseases.
- Sikhs believing **Sewa**– meaning service to other humans. For this reason they are pro animal testing for medical reasons to help other humans
- Humans life is sacred and should be preserved at whatever cost – therefore testing to preserve human life is acceptable.

BVT: Is marriage necessary?

Why do people get married?

- Love
- Commitment
- Devotion to God
- To have children – **Procreation**



Marriage Ceremonies



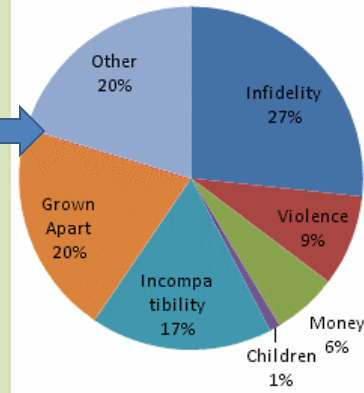
"Thou shall not commit adultery" 10 Commandments



Why do marriages break down?



Reasons for Divorce



Christianity

- Bride and Groom get married in church
- The Marriage is a bond between the couple and between them and God
- Marriage is a **sacrament** – an important part of being a Christian
- *"Man shall leave his mother and father and will join with his wife and become one flesh"*
- Christians will also get married to have a family, this is called **procreation**. *"Be fruitful and multiply"* Bible
- Christians cannot have sex outside of marriage, this is called **chastity**

Islam

- Many Muslims have arranged marriages
- A marriage ceremony / contract is called a **Nikkah**
- The wedding can last up to 5 days
- The wedding can happen in the home and / or a mosque
- A **dowry** is paid to the bride. This is a gift from the groom to his new wife
- Muslims will get married to join two families together.
- They will also get married to have a family, this is called **procreation**
- Muslims cannot have sex outside of marriage, this is called **chastity**

Religious beliefs about divorce



Catholics

- Catholics don't agree with divorce
- Marriage is a sacrament and marriage vows cannot be broken
- *"So they are no longer two but one flesh. What therefore God has joined together, let not man separate."* Matthews Gospel

Muslims

- Muslims do not encourage divorce as Muhammad said *"Marry and do not divorce"*
- But, divorce is acceptable as a last resort
- Counselling is given for 3 months to try to solve problems to avoid divorce
- If after counselling divorce is still wanted, then the man states "I divorce you 3 times", whereas a woman must seek approval at a Islamic council / Imam at their mosque
- Half the dowry must be returned by the wife to husband

Same Sex relationships

1967 – Homosexuality became legal in the UK
2014 – Same sex marriages became legal

Why should same sex couples be allowed to marry?

- So they can marry the person they love
- Equality of rights
- Inclusion within society

Why may some people object to homosexual marriages?

- Tradition
- Procreation – to create children or raise children
- Religion

Religion and scripture that is against same sex relationships

- Catholics are against same sex relationships. They believe the main reason for marriage is procreation
- Catholics are taught marriage is a bond between man and woman. *“You shall not lie with a male as with a woman; it is an abomination (disgrace/outrage)”* (Old Testament)
- *The Qur'an states sex should only be between and man and woman. “If your lusts on men in preference to women...We will rain down a shower of stones” from the Qur'an*

Religion and scripture that supports same sex relationships

- Many Christians are happy with homosexuality as God made humans in his image – shows equality amongst all.
- *“Neither Jew nor Greek, slave nor free, male nor female, for you are all one in Jesus Christ”*
- Quakers (Christians) see God as All Loving and therefore homosexuality is declaring your love. They have been marrying homosexuals in their places of worship for nearly a decade now.
- The Church of England will bless gay marriages.

Glossary – Key terms for this unit

Arranged marriage – In Muslim families the parents help the children to form a marriage union. Both parents AND CHILDREN will agree to the marriage.

Chastity – not having sex before marriage

Dowry – a gift given by a Muslim groom to his bride. It can be money, a house, jewellery...

Forced marriage – a marriage when parents FORCE their children to get married. It often involves teenage children / young adults. In England they are often forced to leave the country and marry someone older in a middle eastern culture. It is a CULTURAL marriage NOT religious.

Honour violence / abuse – when a family exerts violence and sometimes death onto one of their family members (often children) for dishonouring the family. Examples this could be for are: homosexuality, adultery, refusal of marriage

Nikkah – the name of the Muslim marriage contract / ceremony

Procreation – to have children

Sacrament – meaning sacred or special. In Christianity these are special key events in a Christians life

Intolerance

Countries where homosexual acts are illegal and in some cases punishable by death

- Death penalty under Shariah law, and implemented nationally or provincially
- Death penalty under Shariah law, but not known to be implemented
- Same-sex acts illegal



TERM 1 FRENCH – USING THE PAST TENSE TO DESCRIBE A HOLIDAY

KEY #LEARNING:

- How to talk about where **you went** on holiday
- How to talk about what **you did** on holiday
- How to talk about what the **weather was like** on holiday
- How to describe where **you stayed** on holiday



Key questions for this term:

Où es-tu allé en vacances? = Where did you go on holiday?

Qu'est-ce que tu as fait en vacances? = What did you do on holiday?

Quel temps a-t-il fait en vacances? = What was the weather like on holiday? *[What did the weather do on holiday?]*

Où as – tu logé en vacances? = Where did you stay on holiday?



Passé composé

The Perfect Tense

To make a past tense in **English**, you can start by saying '**I have, you have, he has, we have**' etc and then add a past tense word (called a *past participle*)
Eg – I have cooked, we have eaten, she has played, they have listened.

Notice in English, that last word often , but not always, ends in **-ed**.

In French, it is very similar– but a *little* more tricky!

There are 3 bits – the first 2 bits are...

Most of the time you are going to start with the verb '**to have**' ('avoir').
These are the first 2 bits you need.

j'ai = I have

nous avons = we have

tu as = you have

vous avez = you (plural) have

il, elle, on a = he / she / one has

ils, elles ont = they have

The third bit

This is the **past participle**. It will very often end in **é**, but not always!

écouté (listened), **joué** (played), **parlé** (spoken), **dansé** (danced), **acheté** (bought), **regardé** (watched), **visité** (visited), **mangé** (eaten)



The third bit

Sometimes, past participles end in different letters:
bu (drunk), **lu** (read), **connu** (known), **attendu** (waited), **fini** (finished), **choisi** (chosen), **fait** (done)

Saying that you went somewhere / went back / returned / arrived / left ...

For a **small number** of verbs – usually expressing movement - , we are going to use the verb '**être**' (=to be) to help make the past tense.

je suis= I am **nous sommes** = we are
tu as = you are **vous êtes** = you (plural) are
il, elle, on est = he / she / one is **ils, elles sont** = they are

The third bit

This is the **past participle**. It will very often end in **é**, but not always!

allé (went), **arrivé** (arrived), **rentré** (returned), **parti** (left) ...

Je suis allé a Paris = I went to Paris

Les hommes sont partis vendredi = The men left on Friday

Nous sommes arrivés à neuf heures = we arrived at 9 o'clock

Ma mère est allée en ville = My mum went to town

Elles sont rentrées en septembre = They went back in September

*Why the extra '**e**'...? Why the extra '**s**'?
Think about who 'did' the verb...*

The Perfect Tense

Key grammar

Je suis allé/e (<i>I went</i>) Nous sommes allé(e)s (<i>We went</i>) J'ai passé (<i>I spent</i>) Nous avons passé (<i>We spent</i>) trois jours (<i>3 days</i>) une semaine (<i>a week</i>) un mois (<i>a month</i>)	en France (<i>to France</i>) en Espagne (<i>to Spain</i>) en Allemagne (<i>to Germany</i>) en Irlande (<i>to Ireland</i>) au Portugal (<i>to Portugal</i>) aux Etats-Unis (<i>to the USA</i>)	J'ai voyagé (<i>I travelled</i>) Nous avons voyagé (<i>we travelled</i>) J' y suis allé(e) (<i>I went there</i>) Nous y sommes allé[e]s (<i>we went there</i>)	en avion (<i>by plane</i>) en bateau (<i>by boat</i>) en ferry (<i>by ferry</i>) en voiture (<i>by car</i>) en train (<i>by train</i>) à vélo (<i>by bike</i>)
Il a fait chaud / froid / beau / mauvais (<i>the weather [it] was hot / cold / lovely / bad</i>) Il a plu (<i>it rained</i>) Il a neigé (<i>it snowed</i>)	J'ai logé (<i>I stayed</i>) Nous avons logé (<i>we stayed</i>) Je suis resté(e) (<i>I stayed</i>) Nous sommes resté(e)(s) (<i>we stayed</i>)	dans un hotel / un gîte / un camping (<i>in a hotel / guest-house / on a campsite</i>)	au bord de la mer (<i>by the sea</i>) à la campagne (<i>in the countryside</i>) à la montagne (<i>in the mountains</i>) près d'un lac (<i>by a lake</i>) dans le nord / sud / est / ouest de... (<i>in the north, south, east, west of...</i>)
C'était (it was)	super / génial / fantastique / OK / barbant / nul (<i>super / great / fantastic / OK / boring / rubbish</i>)		

TERM 2 FRENCH – TALKING ABOUT FOOD!

<p>lundi, mardi, mercredi... (<i>on Monday, Tuesday, Wednesday...</i>)</p> <p>le premier jour (<i>on the first day</i>)</p> <p>le matin (<i>in the morning</i>)</p> <p>l'après-midi (<i>in the afternoon</i>)</p> <p>le soir (<i>in the evening</i>)</p> <p>d'abord (<i>first of all</i>)</p> <p>et puis (<i>and then</i>)</p> <p>après (<i>afterwards</i>)</p>	<p>j'ai / nous avons visité (<i>I / we visited</i>)</p> <p>j'ai acheté (<i>I bought</i>)</p> <p>j'ai mangé (<i>I ate</i>)</p> <p>j'ai regardé (<i>I watched</i>)</p> <p>j'ai joué (<i>I played</i>)</p> <p>j'ai écouté (<i>I listened</i>)</p> <p>j'ai fait (<i>I did</i>)</p> <p>j'ai vu (<i>I saw</i>)</p> <p>j'ai bu (<i>I drank</i>)</p> <p>j'ai lu (<i>I read</i>)</p> <p>j'ai fini (<i>I finished</i>)</p> <p>j'ai choisi (<i>I chose</i>)</p> <p>je suis allé(e) / nous sommes allé(e)s (<i>I went / we went</i>)</p>	<p>le centre-ville (<i>the town centre</i>)</p> <p>les monuments (<i>the sights</i>)</p> <p>les musées (<i>the museums</i>)</p> <p>des souvenirs (<i>some souvenirs</i>)</p> <p>des jouets (<i>some toys</i>)</p> <p>des vêtements (<i>some clothes</i>)</p> <p>des pâtes (<i>some pasta</i>)</p> <p>un film (<i>a film</i>)</p> <p>un livre (<i>a book</i>)</p> <p>un match de foot (<i>a football match</i>)</p> <p>de la natation (<i>some swimming</i>)</p> <p>du shopping (<i>some shopping</i>)</p> <p>des animaux (<i>some animals</i>)</p> <p>au golf (<i>[at] golf</i>)</p> <p>de la guitare (<i>[of] the guitar</i>)</p> <p>avec ma famille (<i>with my family</i>)</p>	<p>à / au / à la / aux (<i>to with a place, eg swimming pool, restaurant...</i>)</p> <p>en (<i>to with a country, eg France, Germany</i>)</p>
<p>Il y a eu / il y avait (<i>there was, were</i>)</p> <p>J'ai eu (<i>I had</i>)</p> <p>Nous avons eu (<i>we had</i>)</p>	<p>une piscine (<i>a swimming pool</i>)</p> <p>un cours de tennis (<i>a tennis court</i>)</p> <p>une grande chambre (<i>a big room</i>)</p> <p>avec balcon (<i>with a balcony</i>)</p> <p>avec vue de la mer (<i>with a view of the sea</i>)</p>	<p>je me suis bien amusé(e) (<i>I had a good time</i>)</p> <p>nous nous sommes bien amusé(e)s (<i>we had a good time</i>)</p>	

KEY #LEARNING:

How to talk about what **you like to eat and drink**

How to talk about **different meal times**

How to talk **politely ask for food** in a café

How to **politely buy something** at a shop / market

Key questions for this term:

Qu'est-ce que tu aimes manger / boire?

= What do you like to eat / drink?

Que prends-tu normalement au petit déj / à midi...? =

What do you normally have for breakfast / dinner...? Vous désirez? = What would you like ?

Partitive article

When we talk about food, we need to use the word for 'some' or 'any'. This is called the 'partitive article'. In English, we sometimes don't bother with it.

Look at the following sentences:

For my lunch, I normally have fish and chips

*For my lunch, I normally have **some** fish and chips*

Both of these make sense.

In French, we use the following words:

Masculine – **du**

Feminine – **de la**

Plural – **des**

Words starting with a vowel – **de l'**

Examples:

Nous mangeons du pain = we eat bread

J'aime boire de la limonade = I like to drink lemonade

Quelquefois, je prends des croissants au petit déj =

Sometimes I have croissants for breakfast

Ma soeur boit de l' eau = my sister drinks water

Quantities

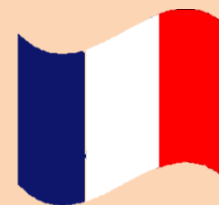
If we want to give the quantity of something, we use the word 'de'. It simply means 'of'.

Je voudrais un kilo de pommes

(I would like a kilo OF apples)

Je voudrais beaucoup de fleurs

(I would like lots OF flowers)



Different spellings for verbs

Here are some examples of how the verb **changes its spelling** when using 'you':

Tu aimes / vous aimez = you like

Tu as / vous avez = you have

Tu vas / vous allez = you go

Tu manges / vous mangez = you eat

Tu bois / vous buvez = you drink

Being polite!

We need to be careful when we use the word 'you' – are we talking to someone we know, someone we're familiar with (friends, family...)?

OR

Are we talking in a **formal** situation? Are we talking to an adult / a work colleague / someone we don't know?

We don't notice this in English – we simply use the word 'you'.

Look at these examples:

John, are **you** coming to the cinema tonight? (*Informal, talking to a friend*)

Excuse me, can **you** tell me the way to the cinema? (*Formal, talking to someone you haven't met before – being polite!*)




We have already met the word '**tu**'. We use this to talk to friends, family etc.

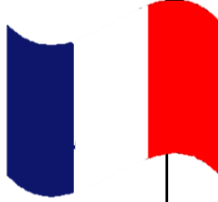
But if we are talking to adults, people who are older or people in **formal** situations (shops, work etc) we use '**vous**'. We will also use 'vous' if we are talking to more than one person (plural)

- Comment allez- **vous**? (How are you? – formal)
- Avez- **vous** des croissants? (Do you have any croissants? – formal)
- Pouvez- **vous** m'aider? (Can you help me? – formal)
- Est-ce que **vous** venez avec moi ce soir? (Are you coming with me this evening? – plural, talking to friends)
- Qu'est-ce que **vous** allez prendre? (What are you going to have? – plural, talking to friends in a restaurant)

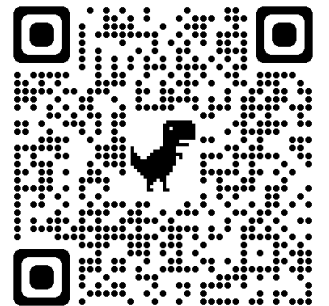
Notice that the spelling of the verb is different. In the present tense, it will usually end in '-ez'

Normalement (<i>normally</i>) Pendant la semaine (<i>during the week</i>) Le weekend (<i>at the weekend</i>) Le matin (<i>in the morning</i>) L'après-midi (<i>in the afternoon</i>) Le soir (<i>in the evening</i>) Avant d'aller au collège (<i>before going to school</i>)	Je mange (<i>I eat</i>) Je bois (<i>I drink</i>) J'aime manger (<i>I like to eat</i>) J'aime boire (<i>I like to drink</i>) Je prends (<i>I take / I have</i>) J'aime prendre (<i>I like to take / have</i>) Nous mangeons (<i>we eat</i>) Nous buvons (<i>we drink</i>)	Du toast / du pain grillé (<i>toast</i>) Du fromage (<i>cheese</i>) Du jambon (<i>ham</i>) Du pain (<i>bread</i>) Du beurre (<i>butter</i>) Du lait (<i>milk</i>) Du café (<i>coffee</i>) Du thé (<i>tea</i>) Du chocolat chaud (<i>hot chocolate</i>) De la confiture (<i>jam</i>) De la limonade (<i>lemonade</i>) De la pizza (<i>pizza</i>) Des pâtes (<i>pasta</i>) Des légumes (<i>vegetables</i>) Des céréales (<i>cereal</i>) De l'eau (<i>water</i>) Avec (<i>with</i>) Sans (<i>without</i>)	Je ne mange rien (<i>I eat nothing / I don't have anything</i>) Je ne bois rien (<i>I drink nothing / I don't drink anything</i>)
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<p>C'est... (<i>it is / they are</i>)</p> <p>Délicieux (<i>delicious</i>)</p> <p>Génial (<i>great</i>)</p> <p>Fantastique (<i>fantastic</i>)</p> <p>Super (<i>super</i>)</p> <p>Horrible (<i>horrible</i>)</p> <p>Dégoûtant (<i>disgusting</i>)</p> <p>Très (<i>very</i>)</p> <p>Trop (<i>too</i>)</p> <p>Un peu (<i>a little bit</i>)</p> <p>Sucré (<i>sweet</i>)</p> <p>Salé (<i>salty</i>)</p>	<p>Dans (<i>in</i>)...</p> <p>La salle à manger (<i>the dining room</i>)</p> <p>La cuisine (<i>the kitchen</i>)</p> <p>Le jardin (<i>the garden</i>)</p> <p>La cantine (<i>the school canteen</i>)</p> <p>Avec (<i>with</i>)</p> <p>Ma famille (<i>my family</i>)</p> <p>Mes amis (<i>my friends</i>)</p>		 <p>As-tu faim!?</p> <p>(Are you hungry!?)</p> <p>Tu aimes cuire?</p> <p>(Do you like to cook?)</p> 
<p>Vous désirez? (<i>What would you like?</i>)</p> <p>Je voudrais (<i>I would like</i>)</p> <p>J'aimerais (<i>I would like</i>)</p> <p>Donnez-moi (<i>give me</i>)</p>	<p>Un kilo (<i>a kilo</i>)</p> <p>Un demi-kilo (<i>half a kilo</i>)</p> <p>Un litre (<i>a liter</i>)</p> <p>Un pot (<i>a jar</i>)</p> <p>Un paquet (<i>a packet</i>)</p> <p>Une bouteille (<i>a bottle</i>)</p> <p>Une livre (<i>a pound</i>)</p> <p>Une tranche (<i>a slice</i>)</p> <p>Cinq cent grammes (<i>500 grams</i>)</p>	<p>De (<i>of</i>) ...</p> <p>Pommes de terre (<i>potatoes</i>)</p> <p>Carottes (<i>carrots</i>)</p> <p>Pommes (<i>apples</i>)</p> <p>Oranges (<i>oranges</i>)</p> <p>bananes (<i>bananas</i>)</p> <p>Poisson (<i>fish</i>)</p> <p>Vin rouge (<i>red wine</i>)</p>	<p>S'il vous plaît (<i>please</i>)</p>

<p>Vous désirez autre chose?</p> <p>(Would you like anything else)</p> <p>Et avec ça?</p> <p>(And with that?)</p> <p>C'est tout? (Is that all?)</p>	<p>Ça fait combien?</p> <p>(How much is that?)</p> 	<p>Ça fait... (<i>that is / comes to</i>)</p>	<p>Deux euros (<i>two euros</i>)</p> <p>Trois euros cinquante (<i>three euros fifty</i>)</p> <p>Voilà (<i>there you are</i>)</p> <p>Merci (<i>thanks</i>)</p> <p>Au revoir (<i>good bye</i>)</p>
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Watch this video. You can see and hear people ordering something to eat in Paris. Might make you hungry, though...!



TERM 1 SPANISH – USING THE PAST TENSE TO DESCRIBE A HOLIDAY

KEY #LEARNING:

How to talk about where **you went** on holiday

How to talk about what **you did** on holiday

How to talk about what the **weather was like** on holiday

How to describe where **you stayed** on holiday

Key questions for this term:

¿Adónde fuiste en vacaciones?= Where did you go on holiday?

¿Qué hiciste en las vacaciones?= What did you do on holiday?

¿Qué tiempo hizo en vacaciones?= What was the weather like on holiday? [*What did the weather do on holiday?*]

¿Dónde te quedaste de vacaciones?= Where did you stay on holiday?

Key grammar

The Preterite Tense



¿Cómo se conjuga?

1. Take your infinitive verb (with its -ar, -er or -ir ending)
2. Remove the the infinitive ending, leaving the 'stem'
3. Add the correct **preterite ending** to the verb stem

E.g. bailar → bail —bailé

¿Cómo se conjuga?

The preterite endings are ...

Person	-ar verbs	-er / -ir verbs
yo	é	í
tú	aste	iste
él/ ella/ Ud	ó	ió
nosotros/as	amos	imos
vosotros/as	asteis	isteis
ellos/ellas/ Uds	aron	ieron



Los irregulares clave

Some verbs are only *slightly* irregular, and only in one of their conjugations

Sacar (c-qu) - to remove		Jugar (g-gu) - to play		empezar(z-c) - to start	
saqué	sacamos	jugué	jugamos	empecé	empezamos
sacaste	sacasteis	jugaste	jugasteis	empezaste	empezasteis
sacó	sacaron	jugó	jugaron	empezó	empezaron

Other verbs are only *completely* irregular, in all of their conjugations

Hacer - to do		Tener - to have		Ser - to be	
hice	hicimos	tuve	tuvimos	fui	fuimos
hiciste	hicisteis	tuviste	tuvisteis	fuiste	fuisteis
hizo	hicieron	tuvo	tuvieron	fue	fueron
Estar - to be		Ir - to go		Poder - to be able to	
estuve	estuvimos	fui	fuimos	pude	podimos
estuviste	estuvisteis	fuiste	fuisteis	podiste	podisteis
estuvo	estuvieron	fue	fueron	pudo	podieron

<p>Fui(<i>I went</i>) Fuimos(<i>We went</i>)</p> <p>pasé (<i>I spent</i>) pasamos (<i>We spent</i>) tres días (<i>3 days</i>) una semana (<i>a week</i>) un mes (<i>a month</i>)</p>	<p>a Francia(<i>to France</i>) a España (<i>to Spain</i>) a Alemania(<i>to Germany</i>) a Irlanda (<i>to Ireland</i>) a Portugal (<i>to Portugal</i>) a los Estados Unidos(<i>to the USA</i>)</p>	<p>Viajé(<i>I travelled</i>) Viajamos(<i>we travelled</i>)</p> <p>Fui allí (<i>i went there</i>) Fuimos allí (<i>we went there</i>)</p>	<p>en avión (<i>by plane</i>) en barco (<i>by boat</i>) en ferry (<i>by ferry</i>) en coche (<i>by car</i>) en tren (<i>by train</i>) en bici (<i>by bike</i>)</p>	<p>lunes, martes, miércoles... (<i>on Monday, Tuesday, Wednesday...</i>) el primer día (<i>on the first day</i>) por la mañana (<i>in the morning</i>) por la tarde (<i>in the afternoon</i>) por la noche (<i>in the evening</i>) primero (<i>first of all</i>) entonces (<i>and then</i>) después (<i>afterwards</i>)</p>	<p>visité/ visitamos(<i>I / we visited</i>) compré(<i>I bought</i>) comí (<i>I ate</i>) ví (<i>I watched</i>) jugué (<i>I played</i>) escuché (<i>I listened</i>) hice (<i>I did</i>) miré (<i>I saw</i>) bebí (<i>I drank</i>) leí (<i>I read</i>) terminé (<i>I finished</i>) elegí (<i>I chose</i>) nadé (<i>I swam</i>)</p> <p>fui / fuimos (<i>I went / we went</i>)</p>	<p>la ciudad(<i>the town centre</i>) los monumentos (<i>the sights</i>) los museos(<i>the museums</i>) recuerdos (<i>some souvenirs</i>) juguetes (<i>some toys</i>) ropa (<i>some clothes</i>) pasta (<i>some pasta</i>) una película (<i>a film</i>) un libro (<i>a book</i>) un partido de fútbol (<i>a football match</i>) de compras(<i>some shopping</i>) animales (<i>some animals</i>) el golf (<i>[at] golf</i>) la guitarra (<i>[of] the guitar</i>) con mi familia(<i>with my family</i>)</p>	<p>al / a la / a los / a las (<i>to with a place, eg swimming pool, restaurant...depending on the gender of the noun</i>)</p> <p>en (<i>to with a country, eg France, Germany</i>)</p>
<p>Hizo calor / frío / buen tiempo / mal tiempo (<i>the weather [it] was hot / cold / lovely / bad</i>)</p>	<p>Me alojé(<i>I stayed</i>) Nos alojamos(<i>we stayed</i>)</p> <p>Me quedo(<i>I stayed</i>) Nos quedamos(<i>we stayed</i>)</p>	<p>en un hotel / un chalet / un camping (<i>in a hotel / guest-house / on a campsite</i>)</p>	<p>por el mar(<i>by the sea</i>) en el campo (<i>in the countryside</i>) en las montañas (<i>in the mountains</i>) cerca de un lago (<i>NEAR a lake</i>) en el norte/ sur / este / oeste de... (<i>in the north, south, east, west of...</i>)</p>	<p>había (<i>there was, were</i>) tenía (<i>I had</i>) teníamos(<i>we had</i>)</p>	<p>una piscina (<i>a swimming pool</i>) una pista de tenis (<i>a tennis court</i>) una habitación grande (<i>a big room</i>) con balcón (<i>with a balcony</i>) con vista del mar (<i>with a view of the sea</i>)</p>	<p>me divertí (<i>I had a good time</i>) nos divertimos (<i>we had a good time</i>)</p>	
<p>fue (it was)</p>	<p>estupendo / guay/ fantástico / regular / aburrido / terrible (<i>super / great / fantastic / OK / boring / rubbish</i>)</p>						



TERM 2 SPANISH – TALKING ABOUT FOOD!

Key grammar



KEY #LEARNING:

How to talk about what **you like to eat and drink**

How to talk about **different meal times**

How to talk **politely ask for food** in a café

How to **politely buy something** at a shop / market

Key questions for this term:

¿Qué te gusta comer / beber?

= **What do you like to eat / drink?**

¿Qué tomas normalmente para el desayuno / almuerzo

...? =

What do you normally have for breakfast / dinner...? =

¿Qué desea? = What would you like ?

Partitive article

When we talk about food, we need to use the word for ‘**some**’ or ‘**any**’. This is called the ‘partitive article’. In English, we sometimes don’t bother with it.

Look at the following sentences:

For my lunch, I normally have fish and chips

*For my lunch, I normally have **some** fish and chips*

Both of these make sense.

In Spanish, we use the following words:

Masculine Plural – **unos**

Feminine Plural – **unas**

Examples:

Me gustaría unos legumbres

Me gustaría unas zanahorias

Quantities

If we want to give the quantity of something, we use the word ‘**de**’.

It simply means ‘**of**’.





Me gustaría un kilo de manzanas

(I would like a kilo OF apples)

Me gustaría un litro de agua

(I would like a litre OF water)

Normalmente (<i>normally</i>) Durante la semana (<i>during the week</i>) El fin de semana (<i>at the weekend</i>) Por la mañana (<i>in the morning</i>) Por la tarde (<i>in the afternoon</i>) Por la noche (<i>in the evening</i>) Antes de ir al colegio (<i>before going to school</i>)	como(<i>I eat</i>) bebo (<i>I drink</i>) me gusta comer (<i>I like to eat</i>) me gusta beber (<i>I like to drink</i>) tomo (<i>I take / I have</i>) me gusta tomar (<i>I like to take / have</i>) comemos (<i>we eat</i>) bebemos(<i>we drink</i>)	pan tostada (<i>toast</i>) queso(<i>cheese</i>) jamón (<i>ham</i>) pan (<i>bread</i>) mantequilla (<i>butter</i>) leche (<i>milk</i>) café (<i>coffee</i>) té (<i>tea</i>) chocolate caliente (<i>hot chocolate</i>)	mermelada (<i>jam</i>) limonada (<i>lemonade</i>) pizza (<i>pizza</i>) pasta (<i>pasta</i>) legumbres(<i>vegetables</i>) cereales (<i>cereal</i>) agua (<i>water</i>) con (<i>with</i>) sin (<i>without</i>)	No como nada (<i>I eat nothing / I don't have anything</i>) No bebo nada (<i>I drink nothing / I don't drink anything</i>)
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<p>Es/son (<i>it is / they are</i>)</p> <p>delicioso/a (<i>delicious</i>) guay (<i>great</i>) fantástico (<i>fantastic</i>) estupendo (<i>super</i>)</p> <p>horrible (<i>horrible</i>) asco (<i>disgusting</i>)</p> <p>muy (<i>very</i>) demasiado (<i>too</i>) un poco (<i>a little bit</i>)</p> <p>dulce (<i>sweet</i>) salado (<i>salty</i>)</p>	<p>en (<i>in</i>)...</p> <p>el comedor (<i>the dining room</i>) la cocina (<i>the kitchen</i>) le jardín (<i>the garden</i>) la cantina (<i>the school canteen</i>)</p> <p>con (<i>with</i>)</p> <p>mi familia (<i>my family</i>) mis amigos (<i>my friends</i>)</p>	<div>   <div> <p>¿Tienes hambre!? (Are you hungry!?)</p> <p>¿Te gusta cocinar? (Do you like to cook?)</p> </div> </div>		<p>¿Algo más? (Would you like anything else) ¿Con esto/esta? (And with that?) ¿Es todo? (Is that all?)</p>	<p>¿Cuánto cuesta? (How much is that?)</p>	<p>Cuesta...(that is / comes to)</p>	<p>Dos euros (<i>two euros</i>) Tres euros cincuenta (<i>three euros fifty</i>)</p> <p>Toma (<i>there you are</i>)</p> <p>Gracias (<i>thanks</i>) Au revoir (<i>good bye</i>)</p>
<p>¿Qué desea? (<i>What would you like?</i>) Me gustaría (<i>I would like</i>) Quisiera (<i>I would like</i>) dame (<i>give me</i>)</p>	<p>Un kilo (<i>a kilo</i>) Un medio-kilo (<i>half a kilo</i>) Un litro (<i>a liter</i>) Un frasco (<i>a jar</i>) Un paquete (<i>a packet</i>) Una botella (<i>a bottle</i>) Una libra (<i>a pound</i>) Una rebanada (<i>a slice</i>) Quinientos gramos (<i>500 grams</i>)</p>	<p>de (<i>of</i>) ...</p> <p>patatas(<i>potatoes</i>) zanahorias (<i>carrots</i>) manzanas (<i>apples</i>) naranjas (<i>oranges</i>) plátanos (<i>bananas</i>) pescado(<i>fish</i>) Vino tinto (<i>red wine</i>)</p>	<p>Por favor(<i>please</i>)</p>	<div> <p>Watch this video of people ordering food in a Mexico City. How much can you understand! Don't worry if you don't get too much – enjoy looking at all the lovely food!</p> <div>   </div> </div>			

The Fundamentals of Art

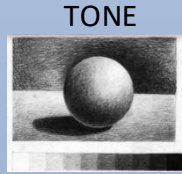
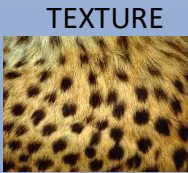
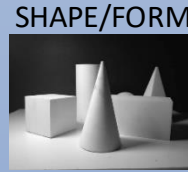
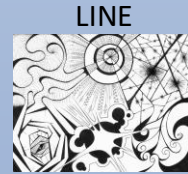
ESSENTIAL EQUIPMENT:

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

OPTIONAL EQUIPMENT:

- DRAWING PENS
- WATERCOLOUR SET
- WATERCOLOUR PENCILS
- PAINTBRUSHES

THE FORMAL ELEMENTS:



SENTENCE STARTERS

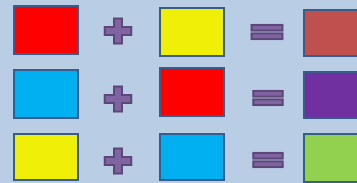
I can vary tone by...

- layering mark making
- using a range of pencils
- varying the pressure of my marks
- using an eraser to add highlights

My work is successful because...

I could develop my work further by...

My design was inspired by the work of...



A
R
T
I
S
T

ATTITUDE

Be positive and try your best!

RESPECT

Respect others, work and the room

THINK

Understand and demonstrate.

IMAGINE

Be creative, use your imagination!

SPOTLESS

Tidy up after yourself.

TARGET

Follow directions.

MARK MAKING AND ARCHITECTURE

PERSPECTIVE
TWO POINT
PERSPECTIVE
ONE POINT
PERSPECTIVE
PARALLEL
HORIZONTAL
VANISHING POINT
DISTANCE
SPACE
DIRECTION
MOVEMENT
LINEAR
OVERLAPPING
LAYERING

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

LINE
FLUENT
CONTINUOUS
CONTROLLED
LOOSE
POWERFUL
STRONG
ANGULAR
FLOWING
LIGHT
DELICATE
SIMPLE
THICK
THIN
BROKEN
OVERLAPPING
LAYERED
MARK MAKING

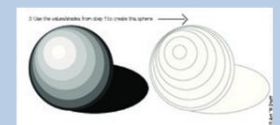
SHAPE/Form/SPACE
CLOSED
OPEN
DISTORTED
FLAT
ORGANIC
POSITIVE
NEGATIVE
FOREGROUND
BACKGROUND
COMPOSITION
ELONGATED
LARGE
SMALL
2D
3D
TWISTED
JAGGED

PATTERN AND
TEXTURE
REPEATED
UNIFORM
GEOMETRIC
RANDOM
SYMMETRICAL
SOFT
IRREGULAR
UNEVEN
ROUGH
BROKEN
GRID
FLAT
WOVEN
ORGANIC
SMOOTH
ABSTRACTED

TONE
BRIGHT
DARK
FADED
SMOOTH
HARSH
CONTRASTING
INTENSE
SOMBRE
STRONG
POWERFUL
LIGHT
MEDIUM
DARK
LAYERED
DEPTH
DEVELOPED
SOFT

TAKING ABOUT ART:

- What are you looking at?
- How was it made?
- Who made it?
- How will it inspire your work?
- Do you like it/dislike it? Why?



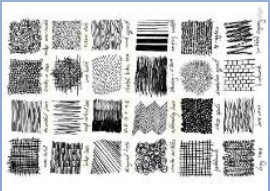
PERSPECTIVE AND ARCHITECTURE

KEY FORMAL ELEMENTS LINKED TO ARCHITECTURE

A **LINE** is the path left by a moving point, eg. A pencil or a brush dipped in paint. A **LINE** can take many forms, eg.

Horizontal, diagonal or curved.

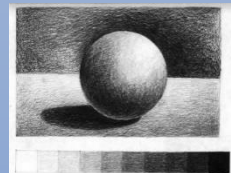
A **LINE** can be used to show contours, movements, feelings and expressions.



A **SHAPE** is an area enclosed by a **LINE**. It could be just an outline or it could be shaded in.

FORM is a three dimensional shape such as a sphere, cube or a cone.

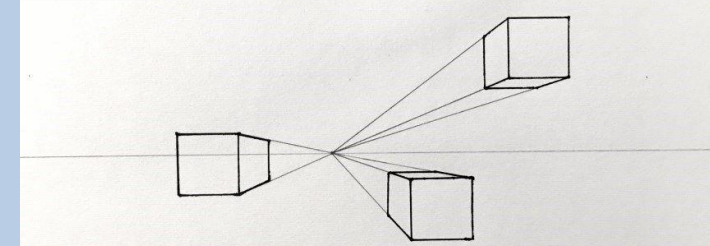
Sculpture and 3D design are about creating **FORMS**



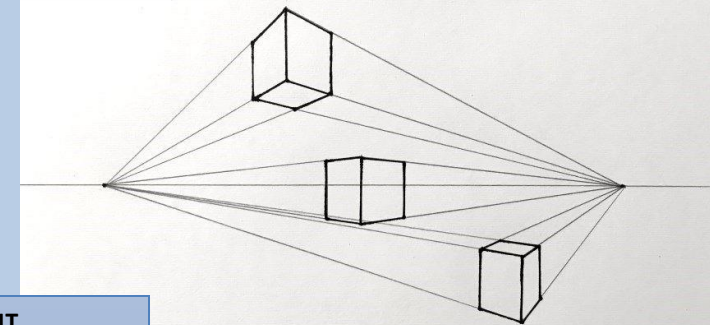
TERM 1 and 2



1-Point Perspective



2-Point Perspective

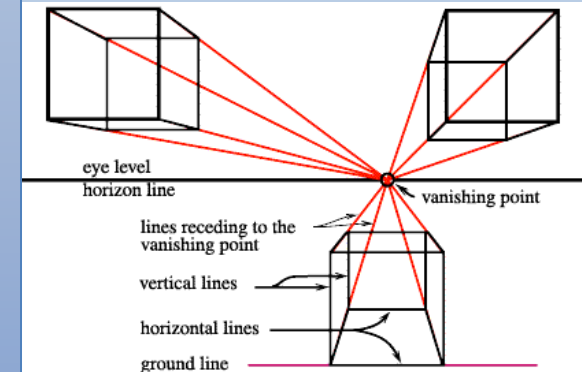


Jon Measures:

- British mixed media artist based in Los Angeles.
- Measures is a graphic designer, illustrator and teacher.
- Measure's work often combines lots of view points of cities and urban landscapes.
- He creates mixed media work, using; paint, photography, digital editing, spray paint and collage.
- His work layers images together which in turn is a metaphor for the many layers and elements of city living.
- Measures includes buildings, roads, signs, lights, all manner of objects found in cities within his work.
- A lot of Measure's work focuses on the themes of; belonging, home, community.

ONE POINT PERSPECTIVE:

A drawing that uses **one point perspective** contains only one **vanishing point** on the **horizon line**. Using this type of **perspective** you could create a drawing of a road, railway, hallways, or building.



TWO POINT PERSPECTIVE:

Two point perspective allows you to view the object or images so that you are looking at one corner with two sets of **parallel lines** moving away from you. Every set of **parallel line** has its own **vanishing point**, hence **two point perspective**.

Artists you could research:

- Jon Measures
- Ptolemy Dean
- Zaha Hadid
- Denise Scott Brown
- John Piper

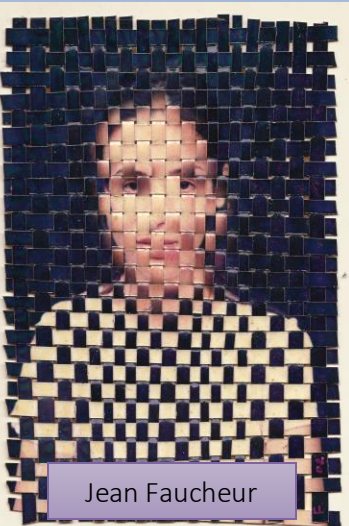
PERSPECTIVE AND ARCHITECTURE



MANUAL MANIPULATION

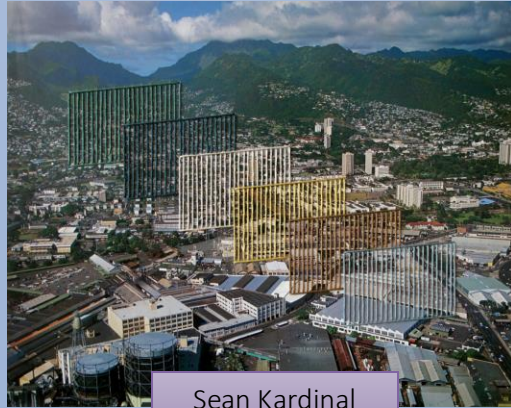
Manual manipulation is when you use various techniques and media by hand to alter or edit photos and art work .

WEAVING

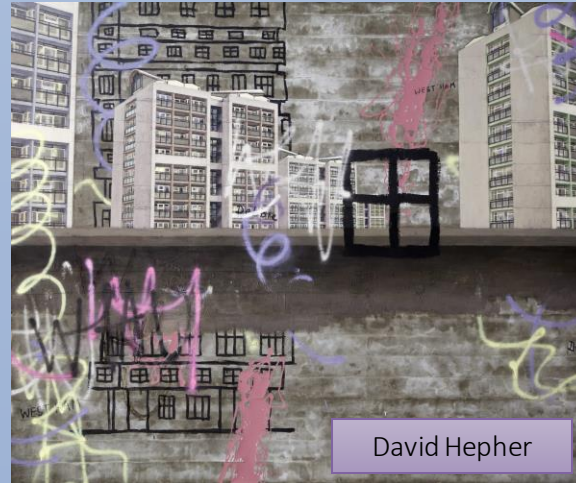


Jean Faucheur

STITCH

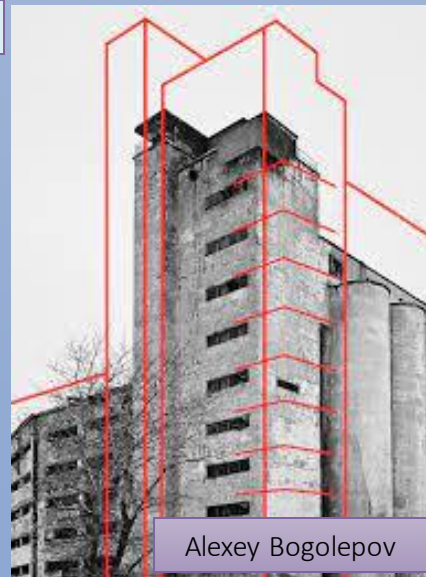


Sean Kardinal



David Hephher

DRAWING



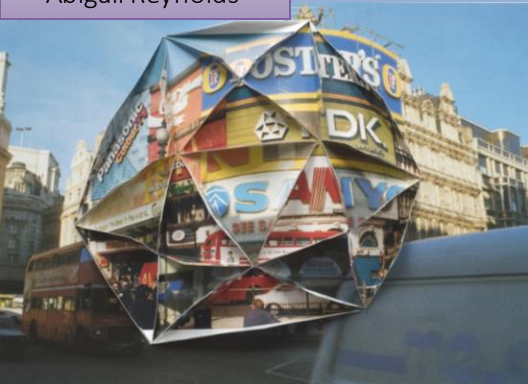
Alexey Bogolepov

3D RELIEF

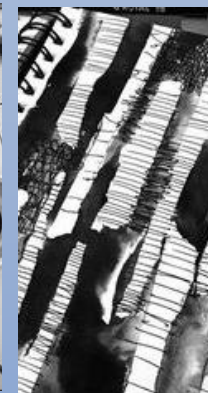
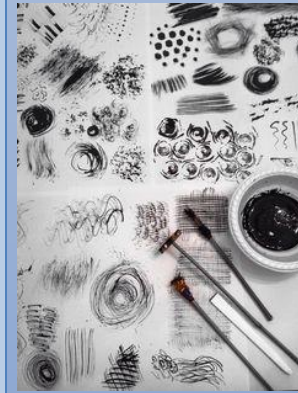


Lucas Simoes

Abigail Reynolds



Mark making is an important element to building depth of detail, tone and texture.



Turning your Jon Measures inspired designs into 3D outcomes.

- Layering mark making
- Layering textures
- Mixed media
- Paint, ink, pencil, pen, photography
- Manual manipulation



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

Typography is the art of arranging letters and text in a visual, creative, clear and legible manner. Typography is the art of font, using appearance and structure to convey a message whilst still being visually engaging and interesting.

The 'golden rule' of typography is that it should link well to your brand. This can include elements such as; design of letters, shape of letters, subject matter or imagery used next to or with letters.

LINE

A **LINE** is the mark left by a drawing point, e.g. a pencil or a brush dipped in paint. A **LINE** can take many forms: it is horizontal, diagonal or curved. A **LINE** can be used to show **Contours, Rhythms, Flowing and Extension.**

tone

Tone means the appearance or darkness of something. This could be a **SHADE** or **hue** or **SAT** or **VALUE** or **intensity**.

SHAPE & FORM

A **SHAPE** is an area enclosed by a **LINE**. It could be just an outline or a **SHAPED** or **FORMED**. **SHAPE** is a **2D** **dimensional** **SHAPE** such as a square, cube or a cone. **Sculpture** and **3D** **SHAPE** are about creating **Form**.

Pattern

A **PATTERN** is a design that is created by repeating the same **SHAPE** or **FORM** or **intensity** or **texture** or **color** or **value** or **texture** or **color**, such as the markings on animal fur.

FORMAL ELEMENTS

TEXTURE

Texture is the surface quality of something, the way something feels or looks like it feels. There are many types of texture: **Actual Texture** and **Visual Texture**.

Actual Texture - really exists so you can feel or touch it

Visual Texture - created using different marks to represent actual texture

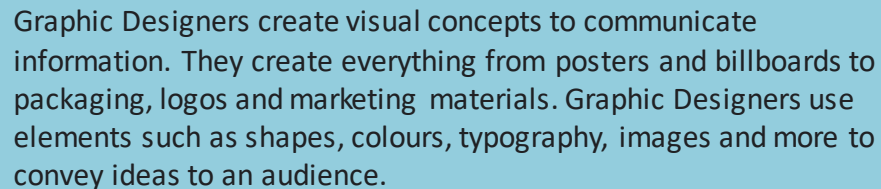
COLOUR

There are 7 Primary Colours: **RED, ORANGE, YELLOW, GREEN, BLUE, VIOLET** and **PURPLE**.

By mixing any two **Primary Colours** together we get **Secondary Colours**: **CYAN, MAGENTA** and **PURPLE**.

KEY WORDS & TERMS

- Line
- Tone
- Shape
- Form
- Texture
- Colour
- Pattern
- Shade
- Light
- Dark
- Pressure
- Natural Pattern
- Manmade Pattern
- Geometric Shape
- Organic Shape
- Actual Texture
- Visual Texture
- Design
- 2D Design
- 3D Design
- Primary Colours
- Secondary Colours
- Mix
- Blend



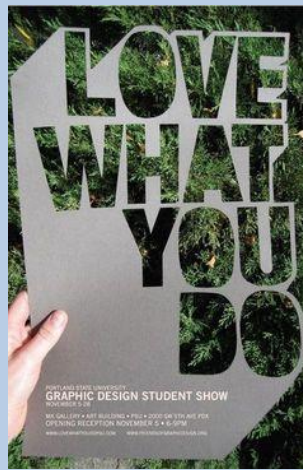
BOOKS & PUBLICATIONS

Making a model allows designers to visualise and test how a product looks and performs in 3D and is a great way of checking a product's viability .

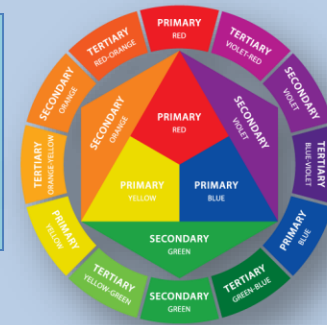


Graphic design is a craft where professionals create visual content to communicate messages

Mood boards are used to inspire us creatively. Mood boards comparing colour combinations are a fantastic way to gain a visual understanding of colours which compliment each other.

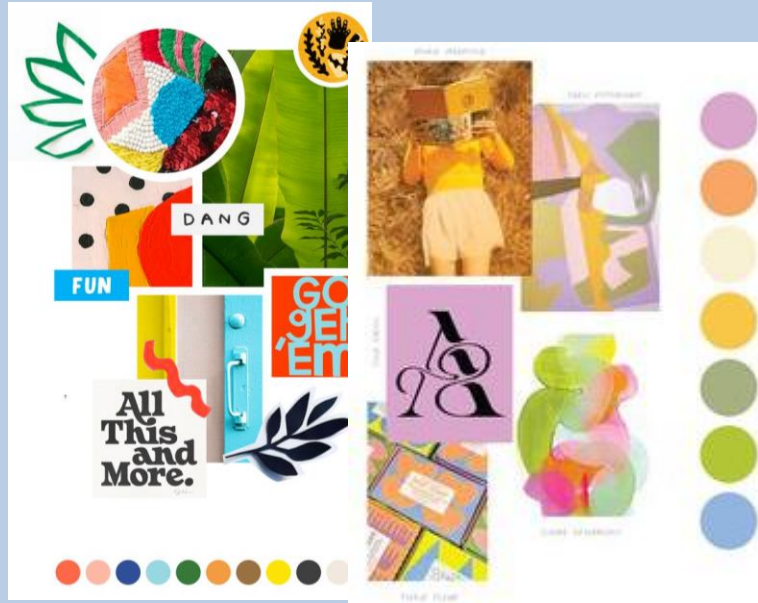


Alphabetica is the art of the alphabet. Often created using lots of varying techniques, materials and styles. It's a good way to start exploring how to create clear and engaging typography.



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

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



- Colour swatches/blocks which explore colour themes
- Inspirational imagery
- Your own text, photos to support ideas
- Your own sketches to support ideas
- A theme as a starting point

Labelling is when you show what something is for example a logo.

Annotation is when you explain why the logo looks like it does and reasons for your design choices.

An opportunity to explore possible solutions that meet the design brief that has been set and the specification. Initial drawings do not need to be perfect and can be quick 'concept' sketches. Annotation should be added to explain your ideas in detail and depth.

Typography as we know it, was invented in the 11th century in China by Bi Sheng. He designed movable type for ceramics (clay) and made his lettering from wood to impress into the clay. In the 15th Century Johannes Gutenberg created the first typography to be used on a printing press. This was designed to mimic the calligraphy and handwriting of manuscripts written by monks. Since then, typography has been used for all written text, including books, online articles, magazines, advertising, art and propaganda. Typography is communication!

Reading Music

Lined note: Every Green Bus Drives Fast

FACE

Space notes:

High pitched notes

Right hand
melody on
the piano

Notes altogether

Mnemonic

Lined
notes

Green Buses Drive Fast Always

Space
notes

All Cows Eat Grass

Low pitched notes

Left hand
accompaniment
and harmony on
the piano

Finger Numbers - Hands on - How to play the Keyboard

[illegible]

Legato – smooth; Staccato – short and detached



Hooks and Riffs

A. Key Words

HOOK – A ‘musical hook’ is usually the ‘catchy bit’ of the song that you will remember. It is often short and used and repeated in different places throughout the piece. HOOKS can either be a:

MELODIC HOOK – a HOOK based on the instruments and the singers

RHYTHMIC HOOK – a HOOK based on the patterns in the drums and bass parts or a

VERBAL/LYRICAL HOOK – a HOOK based on the rhyming and/or repeated words of the chorus.

RIFF – A repeated musical pattern often used in the introduction and instrumental breaks in a song or piece of music. RIFFS can be rhythmic, melodic or lyrical, short and repeated.

OSTINATO – A repeated musical pattern. The same meaning as the word RIFF but used when describing repeated musical patterns in “classical” and some “World” music.

BASS LINE – The lowest pitched part of the music often played on bass instruments such as the bass guitar or double bass. RIFFS are often used in BASS LINES.

MELODY – The main “tune” of a song or piece of music, played higher in pitch than the BASS LINE and it may also contain RIFFS or HOOKS. In “Classical Music”, the melody line is often performed “with” an OSTINATO pattern below.

Exploring Repeated Musical Patterns

Year 8 Music



B. Famous Hooks, Riffs and Ostinatos

Bass Line Riff from “Sweet Dreams” – The Eurythmics



Riff from “Word Up” – Cameo



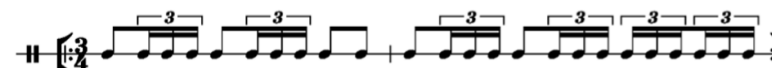
Rhythmic Riff from “We Will Rock You” – Queen



Vocal and Melodic Hook from “We Will Rock You” – Queen



Rhythmic Ostinato from “Bolero” – Ravel



Bass Line Ostinato from “Habanera” from ‘Carmen’ - Bizet



Ostinato from 2nd Movement of Symphony No.101 (The Clock) - Haydn



C. Music Theory

REPEAT SYMBOL – A musical symbol used in staff notation consisting of two vertical dots followed by double bar lines



showing the performer should go back to either the start of the piece or to the corresponding sign facing the other way and repeat that section of music.

TREBLE CLEF – A musical symbol showing that notes are to be performed at a higher pitch. Also called the G clef since it indicates that the second line up is the note G.



BASS CLEF – A musical symbol showing that notes are to be performed at a lower pitch. The BASS LINE part is



often written using the BASS CLEF. Also called the F clef since it indicates that the fourth line up is the note F.

Module Learning Objectives

- #To recognise the stylistic conventions of reggae music
- #How chords contribute to the texture of a song
- #To recognise the key features of a reggae bass line
- #To understand syncopation and how it is used in reggae music
- #To identify the different layers that make up reggae music
- #To Understand the key themes and style of reggae lyrics

Language for Learning/Music Theory

BAR – A division of music.

BASS LINE – The lowest texture in reggae

CALYPSO – A style of Afro-Caribbean music

CHORD – Group of two or more pitched notes.

OFF BEATS – A term applied to rhythms that emphasise the weak beats of a bar.

REGGAE – National music of Jamaica

RESTS – A space of silence played between notes

SYNCOPIATION – A way of changing a rhythm

TEXTURE- Layers of sound combined to make music.

Year 8 Music

Reading Music

Treble Clef Notes



Mnemonic
Lined notes: Every Green Bus Drives Fast
FACE

Line Notes
E G B D F


Space Notes
F A C E

Space notes:
High pitched notes
Right hand melody on the piano

Notes altogether



Bass Clef Notes



Mnemonic
Lined notes: Green Buses Drive Fast Always
All Cows Eat Grass

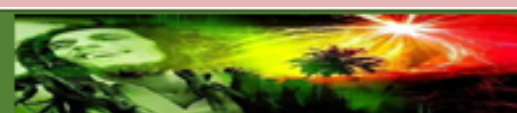
Space notes
Low pitched notes
Left hand accompaniment and harmony on the piano

Finger Numbers - Hands on - How to play the Keyboard



Offbeat!

Exploring Reggae and Syncopation



Offbeat!

Exploring Reggae and Syncopation

A. How did Reggae develop?

REGGAE is one of the traditional musical styles from JAMAICA. It developed from :



Reggae was first heard in the UK in the 1950's when immigrants began to settle. During the 1960's, people began importing singles from Jamaica to sell in UK shops. Now, Reggae is known as the national music of Jamaica.

B. Where is Jamaica?



C. What are Reggae Songs About?

Reggae is closely associated with **RASTAFARIANISM** (a religious movement worshipping Haile Selassie as the Messiah and that black people are the chosen people and will eventually return to their African homeland). The **LYRICS** of Reggae songs are strongly influenced by Rastafarianism and are often political including themes such as **LOVE, BROTHERHOOD, PEACE, POVERTY, ANTI-RACISM, OPTIMISM** and **FREEDOM**.

D. Offbeat Rhythms & Syncopation

OFFBEAT RHYTHMS – Rhythms that emphasise or stress the **WEAK BEATS OF A BAR**. In music that is in 4/4 time, the first beat of the bar is the strongest, the third the next strongest and the second and fourth are weaker. Emphasising the second and fourth beats of the bar gives a “missing beat feel” to the rhythm and makes the music sound **OFFBEAT**, often emphasised by the **BASS DRUM** or a **RIM SHOT** (hitting the edge of a **SNARE DRUM**) in much Reggae music.

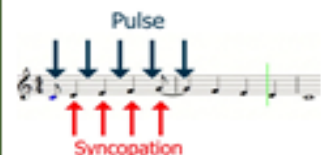
ONBEAT RHYTHM GRID

Pulse Beat	1	2	3	4	1	2	3	4
“Onbeat” rhythms (strong beats)	♩	♩	♩	♩	♩	♩	♩	♩

OFFBEAT RHYTHM GRID

Pulse Beat	1	2	3	4	1	2	3	4
“Offbeat” rhythms (weak beats)	♩	♩	♩	♩	♩	♩	♩	♩

SYNCOPATION – A way of changing a rhythm by making some notes a bit early, often so they cross over the main beat of the music giving the music a further **OFFBEAT** feel – another common feature of Reggae music.



E. Musical Features of Reggae

OFFBEAT RHYTHMS AND CHORDS (see D)
SYNCOPATED RHYTHMS AND MELODIES (see D)
SUNG LYRICS (see C)
LEAD SINGER often with **BACKING SINGERS** sometimes singing in **CALL AND RESPONSE** (see F3) accompanied by a Reggae band which often features: **BRASS INSTRUMENTS** and **SAXOPHONES, ELECTRIC GUITARS, BASS GUITAR, KEYBOARDS, DRUMS AND PERCUSSION INSTRUMENTS. VOCAL AND INSTRUMENTAL IMPROVISATIONS** (see F2)
MELODIC RIFFS (see F5)
SLOW, RELAXED (“chilled!”) **TEMPO**
4/4 METRE/TIME SIGNATURE
 Most Reggae songs are structured in **VERSE AND CHORUS/POPULAR SONG FORM**.
SIMPLE HARMONIES (see F4)



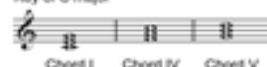
LYRICS (MELODY)
 SYNCOPATED RHYTHMS
 RIFFS
 OFFBEAT CHORDS
 BASS LINE RIFFS

THICK TEXTURAL LAYERS (see F9)
 “The Reggae Trifle” is an example of how many Reggae songs are “layered”.

F. Reggae Key Words

- MELODY** – The main ‘tune’ of a piece of music, often sung by the **LEAD SINGER**.
- IMPROVISATION** – Previously unprepared performance.
- CALL AND RESPONSE** – Similar to a “Question and Answer” often the call sung by the lead singer and answered by the backing singers or instruments (the response) – musical dialogue.
- SIMPLE HARMONIES** – using a limited number of **CHORDS**, mainly **PRIMARY TRIADS** such as the **TONIC, DOMINANT** and **SUBDOMINANT** chords.

Key of C major



- RIFF** – A repeated musical pattern. Often the **BASS GUITAR** plays repeated **MELODIC BASS RIFFS** in Reggae songs.
- BASS/BASS LINE** – The lowest pitched part of a piece of music often played by the **BASS GUITAR** in Reggae which plays an important role.
- CHORD** – 2 or more notes played together in **HARMONY**.
- RHYTHM** – A series of long and short sounds.
- TEXTURE** – Layers of sound combined to make music.

G. Who was Bob Marley?

BOB MARLEY was a famous reggae singer, **SONGWRITER**, and musician who first became famous in his band The Wailers, and later as a **SOLO ARTIST**. He was born Nesta Robert Marley on February 6th, 1945 in Nine Mile, Saint Ann, Jamaica. Although he grew up in poverty, he surrounded himself with music and met some of the future members of The Wailers. Bob Marley became involved in the Rastafarian movement and this influenced his music style greatly. Bob Marley and The Wailers worked with several famous musicians before



becoming famous on their own. His career flourished and he became a cultural icon. He was the first international superstar to have been born in poverty in a Third-World country.

Term 1 & 2- In these first two terms, up until Christmas, we learn about some of the most important ideas and skills in drama – these include some essential ideas that we use in theatre studies at GCSE, A Level and beyond.

There are 3 study areas

1) The ***Walking on Ice Exercise*** where we learn the **2 Truths** and the idea of ***Internal & External Character***.

2) ***An Adventure Underground*** - Studying a play and acting out selected scenes.

Here we learn and practise, **interpretation, analysis** and how to rehearse a play in the **Traverse**

3) **Storytelling** – Part 1- Here, we learn & practise writing and acting in the **Storytelling Genre** and all the techniques that it involves

Internal and External acting technique

The Truth of
Everyday Reality
The Truth of
the
Imagination

The Walking on Ice Exercise

This task builds on your learning of mime technique in Y 7. You will work in a pair and take it in turns to act out a scene and to give meaningful feedback as an informed audience member.

The Walking on Ice exercise can teach me...

That for artists, including theatre artists there are two truths- firstly the **truth of our Everyday Reality** where a chair is a chair and a person is a person and a floor is a floor. Secondly, for artists, there is another truth to consider and that is the **Truth of our Imagination**

The Completing the Communication Exercise

Students or groups work in pairs taking turns to perform and to watch and give feedback. The ones receiving feedback always repeats back to the observer what they understand SO THAT the observer can check that they have properly understood and the communication is complete

An Adventure Underground Textual studies

This is a written play. We read through it together and discuss the many environmental and philosophical themes that it raises. Later on we work practically on selected scenes and rehearse them for performance with the audience on two sides.

Appreciating & Interpreting a written Play

An Adventure Underground

Things that you will learn in this topic

- What we mean by **character interpretation** and how to interpret characters in a play text.
- How to apply your understanding of ***The Ingredients of a Play*** (Y7 T1) to your study and practical exploration of a play text.
- How to **identify** key **themes** and meaning in a play text.
- How to **summarise plot**.
- How to answer examination type questions in writing.
- How to use vocal skills to **communicate character**.
- How to play exaggerated and fantasy characters.
- How to extend your vocal & physical range.
- What we mean by **blocking** as a rehearsal technique.
- What is **Traverse Staging**
- How to block and act out (stage) a play in **the traverse**
- How to **sustain a role**.
- What we mean by, **analysis & evaluation**.

An Adventure Underground

This short play runs about 40 minutes in performance

An Adventure Underground

Five very different children chase a wicked sweet shop keeper who has stolen one of their teddy bears and disappeared down an old well. The children discover a whole hidden underground world and encounter some truly fabulous and magical creatures in their pursuit of justice. A pursuit that leads them to some very important lessons and some very useful changes.

First read through

This is when the cast of a play get together for the first time to explore the play and try out their interpretation of their characters

The Two Truths in Drama

For most people one truth, the **Truth of our Everyday Reality** is enough. For artists, including theatre artists there is a second truth, the **Truth of the Imagination**. As children we are expert and familiar with this truth of make – believe. As we get older we can lose this ability or find it difficult to make-believe. Many plays explore this dilemma- Peter Pan is perhaps the most famous.

Themes of the play

If you think, you will remember that, **THEME** is one of the Ingredients of a Play. You may recall that the theme of a play is what the play is about- its meaning, message, the issues that it explores. Well, An Adventure Underground, explores a great many issues that concern us today.

Goodworm speaks in detail about the ways in which the Topplings (that's us, people, homo sapiens) are ruining the Earth. He laments the way that we are taking so much from the planet and giving almost nothing useful back in return.

The play also explores the idea of change. What we might want to change in ourselves and indeed whether it is possible to change. The five children all discover ways to add to their character so that they become more complete, fully rounded and happy young people.

Things that you can learn from studying this play

- What we mean by **character interpretation** and how to interpret characters in a play text.
- How to apply your understanding of **The Ingredients of a Play** (Y7 T1) to your study and practical exploration of a play text.
- How to **identify** key **themes** and meaning in a play text.
- How to **summarise plot**.
- How to answer examination type questions in writing.
- How to use a range of vocal skills to **interpret** and **communicate character**.
- How to play exaggerated and fantasy characters.
- Extend your vocal & physical range.
- What we mean by **blocking** in rehearsal and other **rehearsal techniques**.
- How to **sustain a role**.

The Characters

5 Children:

Ellie

Bella

Scarlet

Simon

Charlie

The Sweet Shop Keeper

Goodworm

Spell Beetle

The Setting

It is not made clear which part of the country the play is set in. The year is hard to work out too. In some ways it is slightly old fashioned – in others it is very modern. We could say that it is, 'timeless' in this sense. The majority of the action takes place far underground in a vast and strange subterranean kingdom partly dug out by the Sweet Shop Keeper.

Genre

Adventure and
magical. Almost
fairytale

Speech

The play has two writing styles; **dialogue** and **narration**. Some of the language in the narrative passages is rich and theatrical.

Plot

A wicked Sweet Shopkeeper emerges from an old well and steals Charlie's Teddy Bear, Edward. The children decide that they must go after her to retrieve Edward. At the bottom of the well they discover a secret underground kingdom. In their pursuit they discover just how powerful and wicked the sweet shopkeeper has become. Fortunately they meet some kind and wonderful creatures who do their best to help the children in their quest.

Rehearsal techniques and ways of staging a play: Two new ideas to consider

Rehearsal techniques

The creative team – actors, directors, designers work out their plan for a play in the rehearsal process. It is where they make the play ready for performance. It involves working out the moves, ways to say lines and character relationships. There are technical rehearsals where the focus is on getting the lighting changes and sound cues worked out and cued and learned. Directors use a variety of rehearsal techniques to assist their actors. **Blocking** is a typical rehearsal technique. We will learn and practise others in future topics.

Blocking in rehearsal

In theatre we use this word for at least three things. In year 7 you saw how it could mean not **blocking** your partner's ideas while improvising. You will also have heard me tell students to not stand in front of another actor on stage and block them from being seen by the audience. Here we will use it to mean, the way we position and move actors (and set) on the stage when we are rehearsing scenes from the play. When blocking a play it is important to consider 2 things

- i) Why does the actor/character make the move.
- ii) li) how does it look is it aesthetically pleasing – remember aesthetics from Year 7?

Blocking can include the actors gestures etc. too.

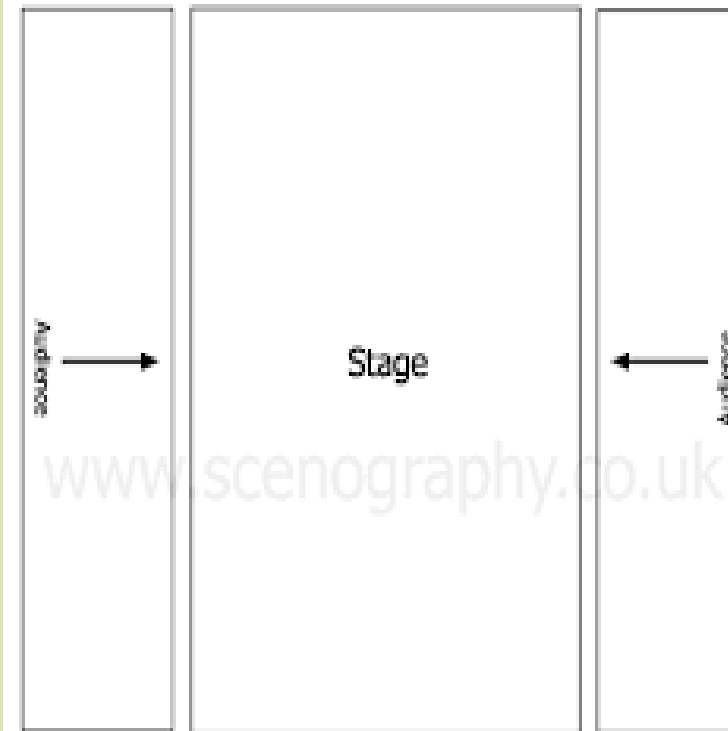
Ground Plans

These are the different ways that a stage and auditorium can be laid out. Up till now you have naturally had the audience on one end when you have performed your drama work. In fact, this is called, End – On staging. There are several other ways of arranging the audience in relation to the stage and they have a significant impact on the actor audience relationship and present different challenges to actors and directors

Traverse Staging – Audience on 2 sides

You will find out some of the challenges that

Traverse staging presents when you get the chance to stage the opening introductory scene of, **An Adventure Underground**



Traverse

Experienced directors and many actors enjoy the challenge of staging & performing a play with the **audience on two sides**. Audiences too can enjoy being able to see themselves across the stage. It gives me the sense that we are all in it together- the actors and audience all collaborating in the performance

Things to assist your study in this scheme

Four key intellectual skills to learn and practise

Analysis

This is the skill of breaking things down into the things that they are made from so that you can see how they work and fit together. Analysing a script will look at the character and dialogue and plot etc. because that is what it is made from (The Ingredients of a Play- remember?). Analysing a performance of a play will also include looking at voice, actions, costume, set etc. There is no judgement in analysis.

Evaluation

This is always a judgement. Evaluation is the skill of **identifying what is effective** in a script or performance and what **might be improved**. You have an **Evaluative Vocabulary** list so you can choose more useful and specific words than, 'good' and 'bad'.

Interpretation

The ways that we **work out** what a character or someone is like. We base many of our ideas on what a character says and the way that they say it (the dialogue), and on what they do and the way that they do it (stage directions).

Communication

The various ways that you make your thoughts, ideas or your character's thoughts, feelings and personality clear to others- your audience or reader. We communicate through speaking, acting and writing in drama.

Remember to use **Evaluative Vocabulary (EV)** when you are evaluating in class and when you are doing written evaluations at home.

Here's the list again with a few additions now that you are more experienced.

Intelligent Imaginative Creative
Skilful Exciting Informative
Dull Inspiring Clear Unclear
Muddled Confused Misguided
Shallow Compelling Moving
Heart - Wrenching Pedestrian
Emotionally - Draining Spirited
Believable Credible Convincing
Powerful Entertaining Riveting
Gripping Captivating Engaging
vapid vacuous Harrowing

Using your voice and body to show the fantastic characters in, *An Adventure Underground*

New ideas in voice and body

Tempo rhythm in voice & movement

This is the speed and manner in which a character speaks and moves. A fast, erratic voice and movement can show someone is flustered or over excited. A slow, measured voice and movement can show a character is confident, assured and reassuring to the audience. It is an important idea when interpreting and communicating a character. Goodworm speaks in a very slow, measured voice with extended pauses.

Four key Theatre Disciplines to remember

Devising – planning & making your play

Characterisation- choosing what your character is like & how you will 'play' them

Improvisation – making it up as we go along.

Mime – creating an illusion that something is there

The actor's use of body (Physical Skills)

Facial Expression (FE) - This can show a character's thoughts, feelings and mood.

Posture- This is a word to describe the way we sit or stand. A poor posture could show laziness or 'attitude'. An upright posture can show the character is interested & engaged.

Gesture- We make gestures with our hands and head mostly. Gestures can 'say,' 'everything is okay' or, a pointed index finger at someone can show that the character is telling that person off.

Body Language (BL) - In life, we are often unaware of the way our body is 'talking'. For example, we may not be aware that our fidgeting shows we are nervous or our folded arms show that we are feeling a bit defensive. Drama students have to be aware of what their body is saying to make sure it is showing what their character is like and what they are feeling at the time.

The actor's use of voice (vocal skills)

Tone - The tone of the actor's voice can show what the character is like (their character & personality) it can show their attitude, mood, thoughts and feelings.

Pitch - This is how high or low the voice is. A high pitch can show that the character is excited, for example.

Accent- A character's accent depends on which part of the country, or which part of the world they are from. Accent can also show their background; if they are from a wealthy or underprivileged family, for example.

Volume- This is how loud or quiet the voice is. A loud voice can show confidence. A quiet voice can show that the character is timid, or considerate.

Storytelling: Part I

Things that you will study in this scheme

Study Focus

Term 2 & Term 3

These terms we have an in depth study of one particular **genre** of performance. (You may remember from Y7 that, **genre** is one of the **Ingredients of a play**.) The **genre** that we will study and practise is, **Storytelling**. It is a fashionable style of performance with both screen writers and playwrights. It is a style greatly appreciated by the leading examination boards so, we take time now, in year 8 to explore the theory behind it and develop the practical skills for you to perform effectively in this genre.

You will see how this particular style of performance consists of a combination of two separate genres; **Narrative** and **Dramatic** (see below). You will explore the ways in which you can improve the quality of the stories that you write by including a range of **Literary Devices** (see below). You will then work to combine this new knowledge with the vocal skills that you practised in our last scheme (**An Adventure Underground**) and the extensive work that you did on **mime** in terms 3 and 6 of year 7. You will develop a story from one of your typical mornings, making use of the **Literary Devices** to devise and perform a solo piece / monologue. You will further develop your storytelling skills in a fictional duologue that you devise collaboratively.

Some of you will notice that I have used the word spectator as well as, audience on the diagram opposite.

Ground Plan of stage positions. **End – On staging.**

You may remember in our last work we experimented with having the audience on two sides of our stage. We called it, **Traverse staging**. At this moment in our studies, It is useful for us to take a little more thoughtful look at the way we usually stage plays because we are going to be dividing the stage into separate parts so that each part can represent a different time and place with the audience on one end- You may remember, I called this, **End – On staging**.

Up stage Right (**USR**)

Up Stage (**US**)

Up Stage Left (**USL**)

Stage Right (**SR**)

Stage (**CS**)

Stage Left (**SL**)

(**DSR**)

Down Stage (**DS**)

Down stage left (**DSL**)

Audience

Auditorium

Spectators

Stage left and **right** are from **the point of view of the actor looking out at the audience**. Once upon a time the stage went up at the back so that the audience could see the actors who were 'higher up'-so the back was called 'Up stage'. What do you think DSR stands for?

Split stage- composite staging

This is where the stage is divided into different parts and each part represents a different setting (time & place). We use the idea quite a bit at GCSE. You will use the idea of split staging when you prepare and perform, *An Accidental death*. The actor stage left will be in one time and place eg Coventry Road, Birmingham, 4.02 am. And the actor stage right will be in a different time and place eg Weaver's cottage, Nottingham 7.09 am

Split focus

This is never a good thing. It is where more than one important thing is going on, on- stage and the audience doesn't know what to look at and listen to- their focus is split.

Four key processes and the Learning cycle

Devising

Planning and making.

Rehearse.

Going over things- a scene, a speech, an entrance so that everyone knows it off by heart. We rehearse a play to try out ideas, see if they work, learn and remember what we are doing until we are ready to perform it for an audience. We will begin to use different rehearsal techniques in Year 8. You will notice that we used the idea of, 'blocking a scene in our earlier work on *'An Adventure..'*

Perform.

Sharing our work with an audience.

Evaluate

After a performance of our own work or a play we have watched, we reflect on what worked, what didn't work, were our ideas understood, did our intentions come across a thorough evaluation informs us and others how to improve the drama work next time in the next devising process. You will get to evaluate a class performance in this Scheme of Work.

The idea of the 4th wall in theatre

The 4th wall in drama is an invisible wall that separates the actors from the audience.

What it means to keep, or observe, the 4th wall

In most performances the actors pretend that the audience is not there and instead they concentrate on picturing the scene that the character is in. This is called keeping the 4th wall.

What it means to break the 4th wall

Breaking the 4th wall is when an actor speaks directly to the audience and acknowledges that they are there.

Monologue

From mono, meaning one- a speech for one person.

Duologue

From duo, meaning two – a speech for two actors/ characters.

Cue

This is the word we use to mean when it is an actor's turn to speak or move. There are **visual cues** and **verbal cues**. Verbal cues are essential when actors cannot see each other or are looking away from each other.

The actor's use of body

Facial Expression (FE) - This can show a character's thoughts, feelings and mood.

Posture- This is a word to describe the way we sit or stand. A poor posture could show laziness or 'attitude'. An upright posture can show the character is interested & engaged.

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Body Language (BL) - In life, we are often unaware of the way our body is 'talking'. For example, we may not be aware that our fidgeting shows we are nervous or our folded arms show that we are feeling a bit defensive. Drama students have to be aware of what their body is saying to make sure it is showing what their character is like and what they are feeling at the time.

Tempo rhythm in movement

This is the speed and manner in which a character acts and moves. A fast, erratic movement can show someone is flustered or over excited. A slow, measured gesture or movement can show a character is confident, assured and reassuring to the audience. It is an important idea when interpreting and communicating a character.

What do all of these different facial expressions say'?



Internal & External Mime Technique

Internal technique

Picturing

Seeing

Imaging

Focusing

Concentrating

External technique

Shape

Size

weight

Texture

Temperature

Function

Taste

Smell

Value

Fragility

Internal & External Character

Internal character

Personality

Feelings

Thoughts

Background

Attitude

Motivation

External character

Accent

Tone

Pitch

Volume

Facial Expression

Gesture

Posture

Body Language

Costume

Make up

Characters don't really exist in two parts, any more than we do in everyday life. It is simply a way of looking at things and gives a good framework for analysing and evaluating drama work.

Mime is the technique of creating an **illusion**, of making something appear to be there when it is not. To do this successfully, the actor needs to **picture** the object clearly in their mind's eye and then **show** its shape etc. the spectators can also **'see' the object in their imagination**

Actors are trained in the same way at most serious drama schools. There are classes in voice and movement to improve actors **external technique** and ability to communicate their characters effectively. There are also **internal technique** acting classes where actors develop their **imagination, concentration** and other aspects of their **Internal technique**

Devise/ Devising-

Meaning, 'to plan & make' – **Devising** is one of the 4 key acting disciplines that we study and use.

We use the **Ingredients of a Play** when devising

Character

Plot

Genre

Setting

Theme

Speech

Key knowledge & Previous Learning

Character, **Plot**, Setting, **Theme**, Speech & **Genre**. See Y7 KOI for definitions

Freeze Frame

A still image like a photograph. The actors must be perfectly still – even their eyes. This can be difficult. It helps to choose one thing to focus your gaze on. Until you have more experience, it is better not to focus on another student.

You made a poster of all the other things that you need to consider when making a freeze frame. Can you remember them?

The Hands Free Zone

After the summer holidays, you may have forgotten about this idea. I will do my best to remind you. I have put the guidelines and reasoning from Y7 below.

Students do not generally put their hands up in class unless they want to ask a specific question or have a request. Most class activities and discussions take place without raising hands. The teacher will invite different students to contribute at different times so that everyone participates in lessons. The teacher will always either, give you an opportunity to discuss and prepare a response first with other students or, frame the question in such a way as you cannot be wrong. We are not interested in being right or wrong – we are interested in learning. So, no hands, unless there is an emergency of course, otherwise, no hands. You will be reminded and have lots of time to practise so that it becomes a habit for you in drama.

Speaking in the first person singular

You will be encouraged to speak in the 1st person singular – that's; **I, me, my & mine**, in lessons when speaking about your own experience. This avoids confusion and allows you to begin to take responsibility for your ideas and what you are saying. Again, you don't have to worry because you will be reminded and have lots of time to practise so that it becomes a habit for you in drama.

Personal & Interpersonal Skills (PIPS)

Working with others can be difficult as you have probably realised by year 8. They may have different ideas to you, they may not have any ideas, they might not listen to you etc. It can be tricky. In this scheme of work you may need to be **patient** whilst other students are reading parts that you want to read. You may also need to be **courageous** and volunteer to read a part, or risk reading one of the parts that are outside your usual range or might allow you to extend your vocal and physical range –

Goodworm and Spellbeetle are excellent choices for those wishing to seriously take a leap, as **Spellbeetle** would say!!

PIPS are the skills and qualities that you need to work effectively in a group, they include; **tolerance, courage, kindness, honesty** and many more.

Do you remember when you designed your PIPS poster for home work in year 7? What skills and qualities are you bringing to your group work? What skills and qualities are you still working on?



Expectations and Routines



Basketball



Physical Ability and Technique



What muscles do we need to Warm-up in Basketball and how would you do this?

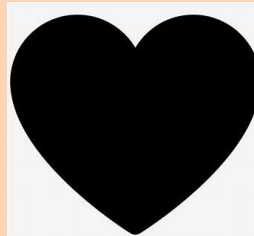
1. Pulse Raiser
2. Dynamic stretches
3. Skill practice/ Drills

Basic Rules

1. Game is started by tip off from the centre spot.
2. The game is played by 5 players made up of guards, forward and a centre.
3. Two referees and two table officials will officiate the game.
4. If a ball goes over a touch line an inbound pass is taken. If a basket is scored then the ball will be passed in from the back line.
5. To score the ball must cross the opposition's basket.
6. The traveling rule is applied when a player lifts their pivot foot before releasing the ball.
7. Double dribble – Once you stop your dribble you can not start it again without a shot or pass. You can also not bounce the ball with two hands.

Game understanding:

1. What are the advantages of using man to man marking when defending?
2. Research the different types of formations (pictured) and positions.
3. Why is it important to use width in a game.



Effort and Engagement

Implementation of the Academic Standards to the PE Environment:

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

Controlling the ball: A triple-threat basketball position is a posture where a player can do one of three things: dribble the ball, pass the ball, or shoot the ball. A player in triple-threat stance keeps their centre of gravity low with one foot forward, and they hold the ball close to their hip away from the defender

Passing: Three main types of pass.

Chest pass

Bounce pass

Over head pass

Dribbling: Dribbling allows you to move with the ball, however the ball must be bouncing.

Shooting: There are two main types of shots that allows you to score baskets.

Set shot: this is played from the triple threat position and is used for free throws worth 1 point, shots inside the arc worth 2 points and shots outside the arc worth 3 points.

Lay-up: this is played off the dribble with a jump towards the basket, the aim is to place the ball into the basket or just onto the backboard.

Coaching Points – create space

- Provide quick support angles to receive the ball in space.
- Create space for other players by moving the defenders.
- Can you play passes wide areas and move opposition defenders out of position?
- Creating space in attacking areas can lead to scoring opportunities.



Expectations and Routines



Football



Physical Ability and Technique



Effort and Engagement

What muscles do we need to Warm-up in Football and how would you do this?

1. Pulse Raiser
2. Dynamic stretches
3. Skill practice/ Drills

Basic Rules

1. Game is started by kicking the ball from the centre spot.
2. The game is played by 11 players made up of goalkeepers, defenders, midfielders and attackers.
3. Referee and two assistants will officiate the game.
4. If a ball goes over a touch line a throw in is taken. If an attacker kicks over the goal line it is goal kick and if a defender or goalkeeper kicks it over the goal line it is a corner.
5. To score the ball must cross the opposition's goal line.
6. The offside rule also applies where an attacker is in front of all opposing defenders when the ball is kicked.
7. Handball- It is forbidden to touch the ball from your finger tips to shoulder. Unless you are the goal keeper.

Game understanding:

1. What are the advantages of using man to man marking when defending?
2. Research the different types of formations (pictured) and positions.
3. Why is it important to use width in a game.

Implementation of the Academic Standards to the PE Environment:

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Controlling the ball: Using different parts of the body – this could be the feet or thigh. Remember to cushion the ball.

Passing: There are 3 types of passes. Side foot pass, driven pass with the laces and a lofted pass. Using the side of the foot allows you to pass accurately over a short distance, a driven pass allows you to pass the ball on the floor, but a greater distance. Finally, a lofted pass allows you to lift the ball in the air over players. Remember to keep your standing foot next to the ball when you make the pass.

Dribbling: Dribbling allows you to move the ball quickly around the pitch using the inside and outside of your feet and keeping the ball close to your feet and your head up.

Turning with the ball and outwitting a defender: Turning with the ball allows you to change direction using different techniques, such as dragging the ball back with the sole of your boot. Outwitting and opponent allows you to beat a defender using different techniques such as a step over.

Shooting: there are different types of shots that allows you to score goals. Your instep can be used to control and place the ball into the goal. If you use your laces then this allows more power to be produced.

Attacking – keeping possession: making a number of passes allows your team to keep possession and advance up the field.

Tackling: Techniques – tackling, jockeying and forcing the player onto their weaker foot.

Coaching Points – create space

- Provide quick support angles to receive the ball in space.
- Create space for other players by moving the defender.
- Can you play passes wide areas and move opposition defenders out of position?
- Creating space in attacking areas can lead to goal scoring opportunities.



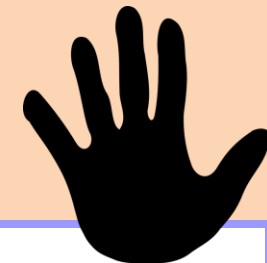
Expectations and Routines



Netball



Physical Ability and Technique



Can you lead a Netball Team warm-up?

- What activities would you include?
- How clear are your instructions and can your team follow them?
- Can you control a team drill and ensure skills are performed with the correct technique?

The basic rules of Netball:

1. You cannot travel with the ball (*Footwork Rule*)
2. There are only 7 players on court from each team.
3. You cannot snatch or hit the ball out of a player's hands (*Contact Rule*).
4. When defending the ball, you must stand 3 feet away from the person with the ball (*Obstruction Rule*).
5. Players cannot hold the ball for more than 3 seconds, throw it to yourself (*Held Ball and Handling Rules*)
6. Players are not allowed to move into the areas that they are not designated to (*Offside Rule*).

Throw In:

When the ball goes out of play, the throw in is taken from behind the line, where the ball went out of play.

Game understanding:

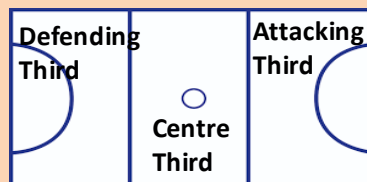
- Which rules result in a free pass or a penalty pass?
- How many different ways can you create space to receive a pass?
- How many different ways can you lose your defender?
- What set patterns of play can you create?



Effort and Engagement

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Passing:

Shoulder Pass

1. Control the ball with both hands, placing it above your shoulder, then remove the supporting hand.
2. Fingers should be spread behind the ball.
3. Feet should be shoulder width apart.
4. Bring the ball back, bending your elbow.
5. Bring the arm forward, following the ball through until your arm and fingers are in front of you, in the direction you want the ball to travel.
6. As you bring your arm forward, step forward with the opposite foot to the arm you are holding the ball in.

Shooting

1. Rest the ball on your preferred shooting hand with the other hand supporting on the side.
2. Feet should be shoulder width apart.
3. Look at the back of the ring.
4. Bend your knees, lift your heels off the floor and push the ball up and over the top of the ring to loop into the net.

Defending:

The purpose of defending is to try to get the ball off the other team and gain possession.

- Stage One Defending: Mark your player
- Stage Two Defending: Mark the ball
- Stage Three Defending: Mark the space



Expectations and Routines

Warm-up for injury prevention:

What injuries could occur in Rugby if you did not complete an appropriate warm-up?

Does the warm-up you complete vary depending on the position you play?

Basic Rules

1. Game is started by kicking the ball from the centre spot forwards.
2. The U13 game has 13 players and 25 min half.
3. Referee and two assistants will officiate the game.
4. The ball must be passed backwards
5. If a ball goes over a touch line an uncontested lineout is taken.
6. To score the ball must cross the opposition's goal line. They **try** is worth five points, a **conversion** is worth two points, and a **goal kick** is worth three points this could be a penalty kick or drop goal.
7. Tackling – Must be below the shoulder.
8. 6 player scrum –strike and push.
9. Ruck and maul – unlimited.
10. Fend-off below armpits.

Game understanding:

- Are there different ways to pass the ball?
- What types of tackle are there?
- Why is body position so important in the scrum?



Rugby



Effort and Engagement

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Physical Ability and Technique



Passing: Hold the ball in two hands with your fingers spread across the seam, with your chest facing forward. Draw the ball back across one hip, keeping your elbows slightly bent, as you turn your chest away from the target.

Sweep the ball off your hip as you swing your hands through an arc, keeping your elbows close to your body. Release the ball with a flick of the wrists and fingers.

Follow through with your fingers pointing to the target - chest high in front of the receiver. **The pass must go backwards.**

Tackling: Tower of power, cheek to cheek, ring of steel.

Fly hack: A kick at the ball on ground made by a running player.

Scrum: Crouch, bind, set will be instructed by the referee and players can only push when the ball has entered the scrum. Players must maintain their tower of power, they must also maintain their bind.

Kicking at goal:




Conversions: Lean the ball forwards slightly to expose the "sweet spot". Before pacing out your run-up, stand over the ball in the kicking position to make sure it is in the right place to strike. Run up to the ball in an arc with your body turned 45 degrees. Swing through the strike zone, making contact with the instep of your foot.

Drop kick: Hold the ball in two hands, pointing downwards. As you step forward with your non-kicking foot, raise the ball to waist level. As you drop the ball onto the ground, simultaneously bring your knee up ready to strike the ball on the bounce. Just as the ball touches the ground, bring your kicking foot through and strike the ball with the lower part of your instep.

Design and Technology

Cams

	Linear Motion Motion in a straight line indefinitely.		Reciprocal Motion Back and forth motion.
	Rotation Motion Motion in a circle.		Oscillating Motion Oscillation is a back and forth motion about a pivot point

	Pear-shaped	Eccentric/circular	Drop (Snail)
Effect of shape	<ul style="list-style-type: none"> Motionless (dwells) for about half the cycle During the second half it rises and falls 	<ul style="list-style-type: none"> Circular to give a smooth continuous movement as the follower rises or falls 	<ul style="list-style-type: none"> Gives a slow rise with a spiral cross-section and then a sudden fall
Example	<ul style="list-style-type: none"> Opens and closes valves in a car engine 	<ul style="list-style-type: none"> In a fuel pump or in steam engines 	<ul style="list-style-type: none"> Used in hammers/punches or machines needing a sudden drop
Cams			



4 Types of movement




Rotary – Motion around a central point Example: a fan or a bike wheel

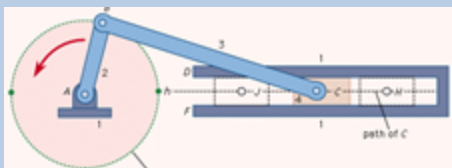
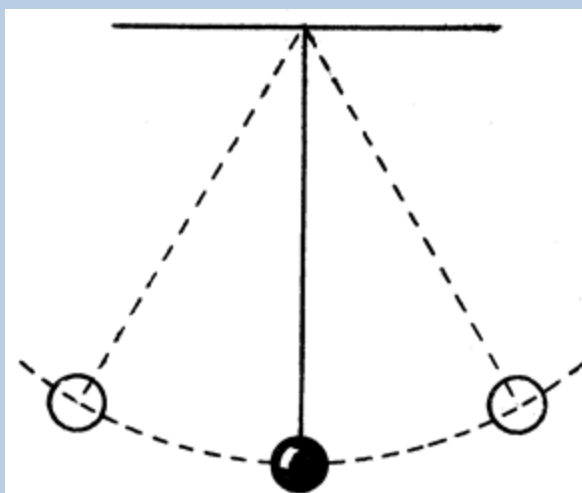
Oscillating - Motion that swings backwards and forwards in an arc from a central point Example: child on a swing or a pendulum

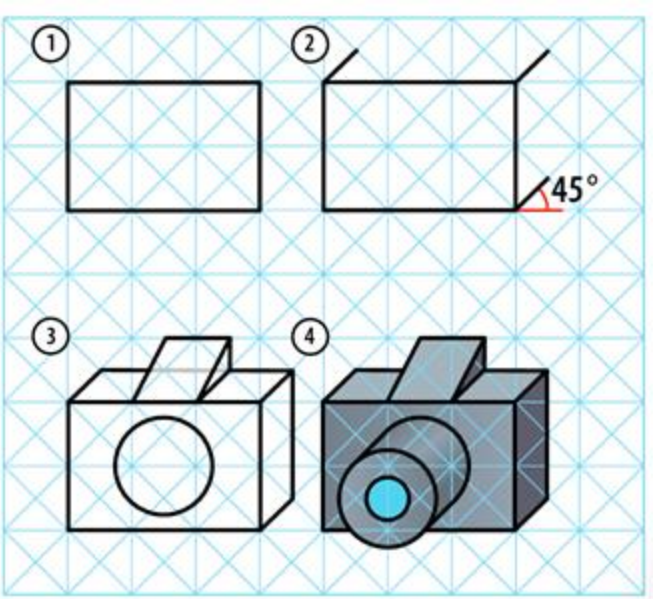
Linear - Moving in a straight line in one direction Example: train travelling along a track or a conveyor belt

Reciprocating - Moving backwards and forwards in a straight line Example: sewing machine needle or car piston

Follower

Roller	Knife edge	S	Flat
			
<ul style="list-style-type: none"> Used when higher speeds are required, such as in engines Rolling motion reduces friction so it will wear better Has separate parts in the roller mechanism and contends with forces pushing them to the side 	<ul style="list-style-type: none"> Used when accuracy is required, such as in an embroidery machine, as the cam's profile is followed closely Suffers from a rapid rate of wear and contends with forces pushing them to the side 		<ul style="list-style-type: none"> Used when higher load bearing capabilities are required, such as in a steam engine Has reduced forces pushing it, but suffers from increased friction The larger surface area means it could rotate, but has larger load carrying abilities

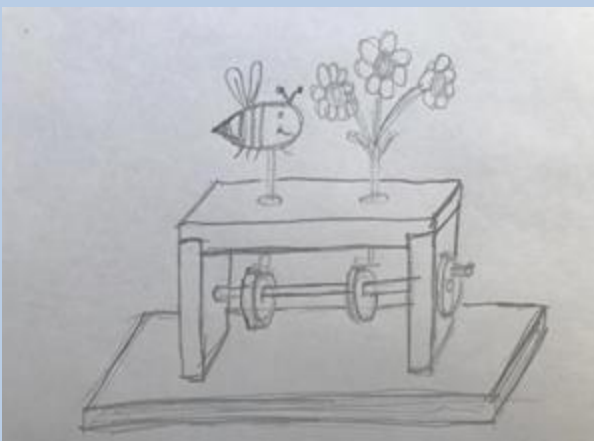




Oblique

Oblique projection is the simplest method of creating 3D designs based on 45-degree lines. For support, use oblique grid paper to guide your angles:

- 1 Draw the front view in 2D.
- 2 From each corner, draw construction lines projecting out at 45 degrees.
- 3 On the construction lines, measure half the true length.
- 4 Draw the back of the product to complete the product.

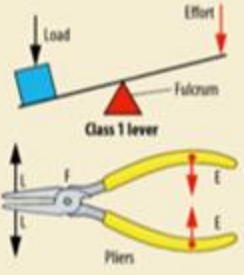
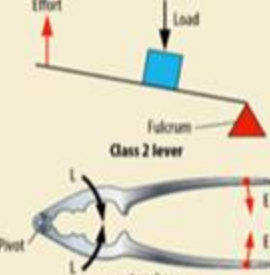
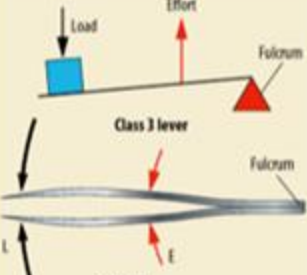


Specification Point to Include	Questions to Answer
Form	Why is the product shaped or styled as it is? What shape / style should it be?
Function	What does it do?
Client and user	How does it meet the needs? How is the product designed for the user?
Performance	How does it work? How does it do the job it was designed to do? How will it work? What other factors / issues does it need to take into consideration?
Materials and Components	What materials should it be made from? What properties/ characteristics should the materials/ components have? What materials/components/ parts have they used and why
Scale of Production and Cost	What scale of production has been used? How does this affect the overall cost?
Sustainability	How has sustainability been taken into consideration?
Aesthetics	How is it made to be aesthetically pleasing?
Marketability	What makes this product different from anything else on the market?
Consideration of Innovation	What elements of the product are innovative or move the product forward compared to other versions available on the market?

SCAMPER TECHNIQUE

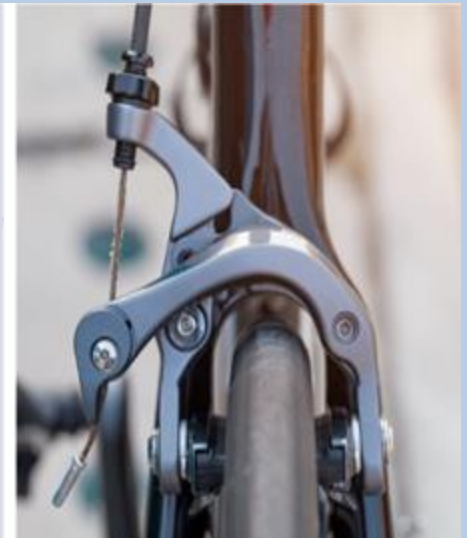
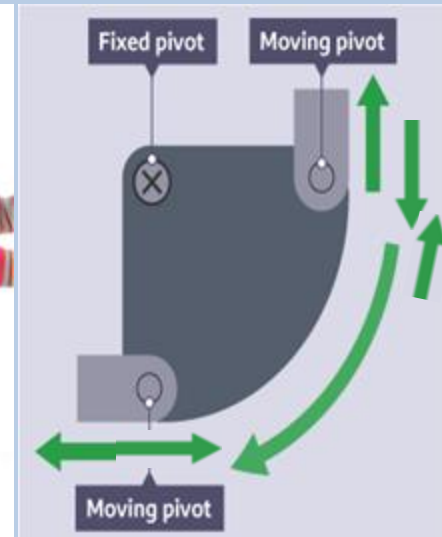
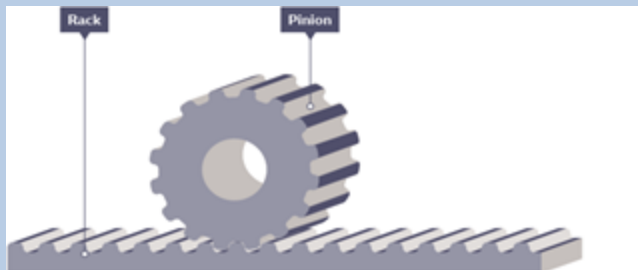
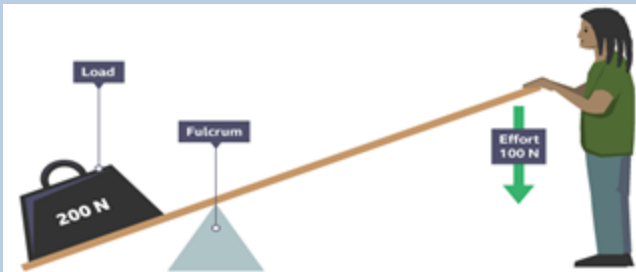
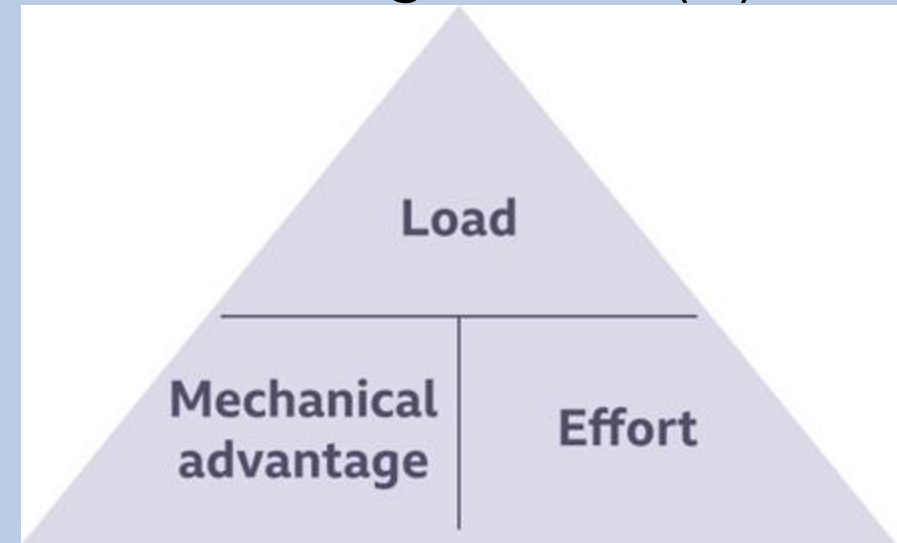


- **Jigs** - used to guide a drill or saw to cut in exactly the same place each time on every piece of timber - reduces marking out time thus increasing the efficiency of the manufacturing process
- **Fixtures** - holds the piece of timber in place whilst it is being worked on
- **Templates** - made out of paper, card, thin metal or wood, these are drawn around to mark out the same shape repetitively, with the aim of speeding up the marking-out process and decreasing the chance of an error occurring
- **Patterns** - a collection of templates that go together to make a part, or all, of a product

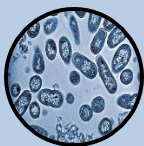
	Class 1	Class 2	Class 3
Reason for mechanical advantage	A large input movement can produce a small output movement but with greater force	A large input movement can produce a smaller output movement with greater force, but the fulcrum is at one end	Limited; the force applied by the user is greater than the output force
Example	Pliers or crowbar	Wheelbarrow or nutcracker	Tweezers or spade
			

1	2	3
F	L	E

mechanical advantage = load (N) ÷ effort (N)



Bacteria are living organisms.



This means they need certain things to survive or like certain conditions to grow and multiply in, but what?

5 things bacteria NEED to grow

Oxygen

Warmth

Moisture

Food

Time



Food Standards

Some of the ethical issues surrounding food production and understanding where your food comes from.



Carbon Footprint

Carbon footprint means: The amount of carbon we as individuals produce as a result of actions we do – such as driving, shopping, using electricity etc.

Carbon dioxide in large amounts contributes to global warming and has a negative effect on our planet.



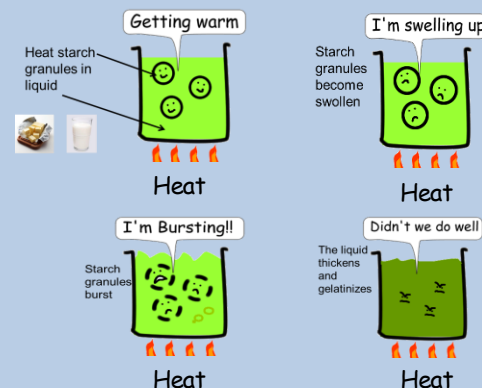
Fair Trade

There are also rules and initiatives to help the people who are involved in food production to ensure they too are treated ethically.



Gelatinisation

The thickening of a liquid using starch.



When heated at 60°C, the starch granules begin to absorb the liquid and swell up.

At 80°C the particles will have absorbed about five times their volume of water until they burst open and release starch, thickening the liquid.

This process is Gelatinisation

Seasonality

We can help reduce our carbon footprint by eating foods **grown locally** and foods that are **in season** in our own country.

Hygiene



Personal

Hair up – Reduces the risk of bacteria transferring to food through hair dropping in

Aprons on – Protects you from spillages and reduces risk of bacteria transferring to food from everyday clothing

Washing hands - regularly using hot soapy water to reduce the bacteria on your hands

Blue plasters – Blue plasters should be used to cover cuts and grazes as they will be easily seen if they accidentally fall into food.

Food – Understanding the 4 C's Concept

Cooking – thorough cooking kills bacteria so ensure food is cooked to 75°C to make sure all bacteria are killed – check this by using a food probe.

Cleaning – effective cleaning removes harmful bacteria and stops them spreading so ensure all work tops, utensils and equipment are cleaned thoroughly with hot soapy water.

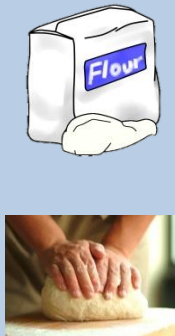
Cooling – effective chilling prevents harmful bacteria multiplying so ensure all food is stored at the correct temperatures, ensure cooked food is cooled within 90 minutes.

Cross contamination – Good hygiene practice prevents Cross contamination so when raw food comes into contact with ready to eat food. For example raw meat juices spilling onto salad.

Knowledge Organiser – Year 8 Food

Key Processes

Kneading-
to work dough, to develop the gluten that is found in flour, this gives baked goods their structure and texture. When making dough, the flour and other dry ingredients are combined with the wet ingredients, usually warm water, along with yeast.



Handling Raw Meat -
Always wash hands with warm water and soap for 20 seconds before and after handling raw *meat*.



Don't cross-contaminate!
Keep *raw meat*, poultry, fish, and their juices away from other food. Wash cutting board, utensils, and countertops with hot, soapy water after use.



Reducing – heating up a sauce based product to evaporate the water and making the sauce thicker in consistency.



Cooking Skills

- Chop
- Fold
- Roll
- Knead
- Shape
- Simmer
- Boil
- Bake
- Fry

Multicultural Foods

Fajitas - Mexico



Macaroni Cheese & Pizza - Italy

Sweet & Sour - China



1. Protein
2. Fat
3. Carbohydrate
4. Vitamins
5. Minerals

PLUS Water and Fibre (neither are nutrients but are required for a healthy diet).

Farm to Fork Process



Food Labelling



The Government ensures that food manufacturers must include certain information to protect the consumer.

Sources of Food

Ingredients can be grown, gathered, caught, reared or made / manufactured.

This aspect of food is known as **FOOD PROVENANCE**

Why do we need to know this?

How food is produced has an impact on it's quality, its nutritional properties, the environment, as well as its cost.

The general rule is '**the closer to its original form, the better the food is for us**'.



Packaging

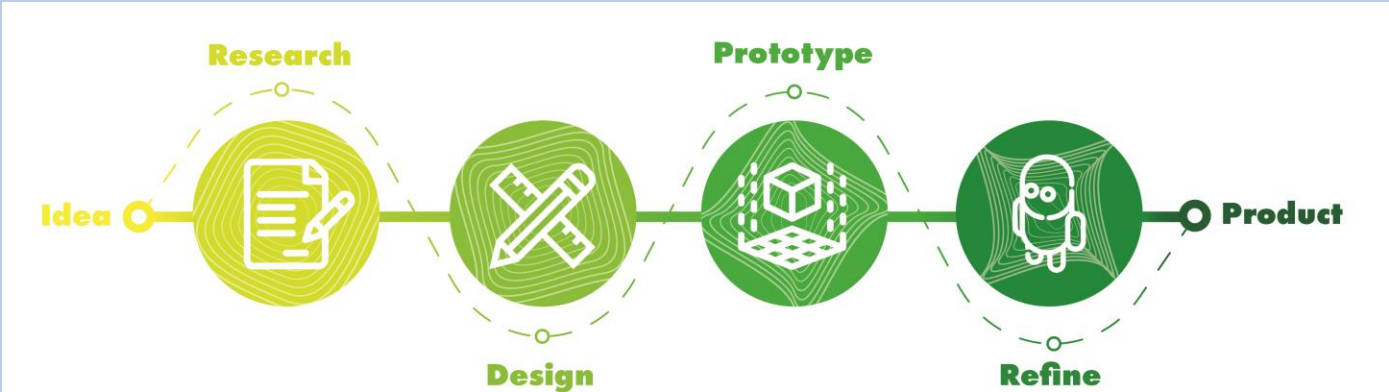
TYPE OF PACKAGING	EXAMPLE USES	ADVANTAGES	DISADVANTAGES
Glass	Jam, pasta sauces,	Strong, see product through, sense of quality leakproof	Heavy, breaks easily
Aluminium Foil	Takeaway meals, pies,	Can hold heat, can be heated, can be shaped, rigid, leakproof, portion control	Cheap, not very strong
Cardboard & oven proof paperboard.	Ready meals, sandwiches, dry cereals	Can be printed onto, greaseproof, lightweight, can be recycled, leakproof	Does keep fresh
Paper	Sugar, flour,	Cheap, lightweight, can be printed onto	Not water resistant or leakproof,
Cling film	Meat onto of plastic trays	Easy to shape, cheap	Not strong
Plastics	Milk bottles, yoghurt pots, margarine tubs,	Can be moulded into shapes, can be see through, cheap, can be recycled, can be see through	Not always easy to recycle, hygienic
Polystyrene	Takeaway meals, hot drinks	Keeps food hot	Can't be printed onto, difficult to recycle
Tin cans	Baked beans, meat sauces, fruit, vegetables	Strong, leakproof, portion control, product sealed so extends shelf life	Heavy, cannot be printed onto

Year 8 Design Technology Knowledge Organiser – Product Design:
Memphis Table Lamps

What does a ‘Product Designer do’?

- **A Product Designer, at it’s core, is a problem solver.**
- A Product Designer is someone who uses the different facets and tools of design to create and execute a solution that solves for a user’s experience deficiencies.

Product Design Process



DESIGN BRIEF

You are the owner of a small product design agency, you have been asked to create a small showcase piece to go on display at a design festival over the summer.

You have been asked to design and make an eye-catching table top lamp. This must be constructed using recyclable and sustainable materials.

The design festival this year focuses on the work of the designers associated with the design movement “Memphis”. Your designs should reflect the movement and be interesting and engaging.

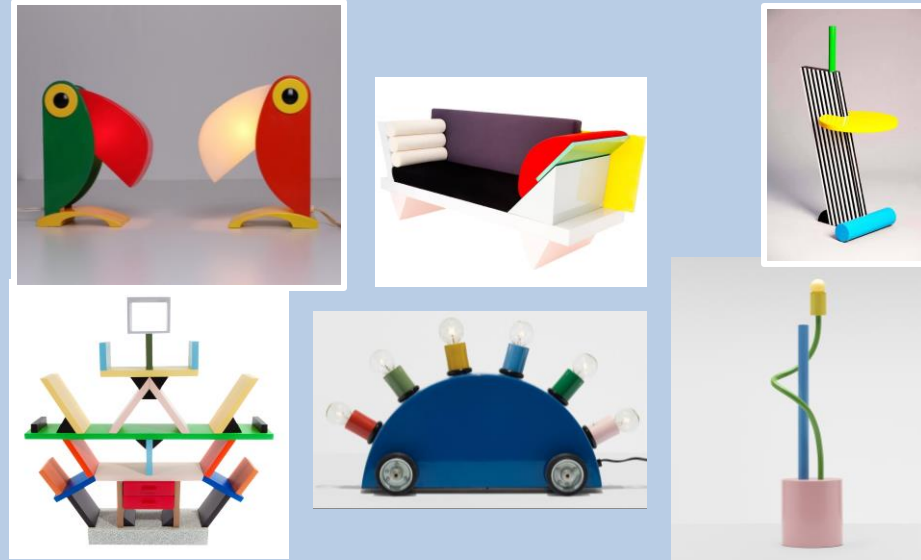
KEY TERMS	DEFINITION
Graphic Design	The art or skill of combining text and pictures in advertisements, magazines, or books.
Design Process	An approach for breaking down a large project into manageable chunks.
Target Audience	A particular group at which a product is aimed towards.
Design Brief	Outlines the specifics of a design project which can include the design project overview, timelines, target audience information, and budget.
Research	A collection of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts and understandings.
Colour Theory	The collection of rules and guidelines which designers use to communicate with users through appealing colour schemes in visual interfaces.
Typography	The art or practice of setting and arranging type.
Mood board	An arrangement of images, materials, pieces of text, etc. intended to present a particular style or concept.
Evaluation	Is a process that critically examines a design.
Modelling	Making a model allows designers to visualise and test how a product looks and performs in 3D and is a great way of checking a product's viability.

Existing Product Research: Table Lamps



EXISTING PRODUCT ANALYSIS: Product analysis means studying how well a product does its job. It is a form of primary research and involves looking at existing products, working out how they were made and seeing what features might be useful to any possible new design.

Designers start by exploring and evaluating the work of others through technical analysis of products. They can then design products that are an improvement upon a current product, or design something that takes the best features and combines them.



ETTORE SOTTsass



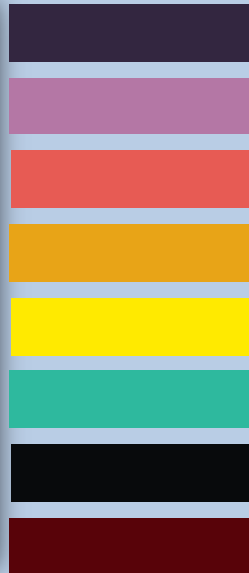
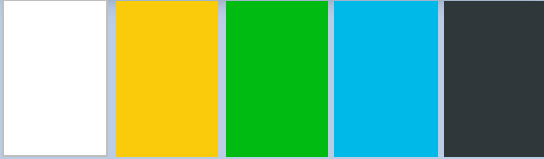
- The Memphis Design movement emerged in the 1980's.
- They started as a group of Italian architects that challenged the idea that products had to follow conventional colours, shapes and patterns.
- It's known for its use of bright neon, primary and pastel colours, geometric shapes, and bold, repetitive patterns.
- A key designer of the movement was Ettore Sottsass.
- The design movement focused on putting personality back into simple products by making them look unique.
- Memphis design has been used as inspiration for product and interior design.
- Their style was inspired by Art Deco and Pop Art styles.



Ettore Sottsass was an Italian architect and designer during the 20th century. His body of work included furniture, jewellery, glass, lighting, home objects and office machine design, as well as many buildings and interiors. His style was defined by bright colour choices, statement pieces and decoration. Ettore Sottsass was an iconic figure in design history as one of the founders of Memphis Design.

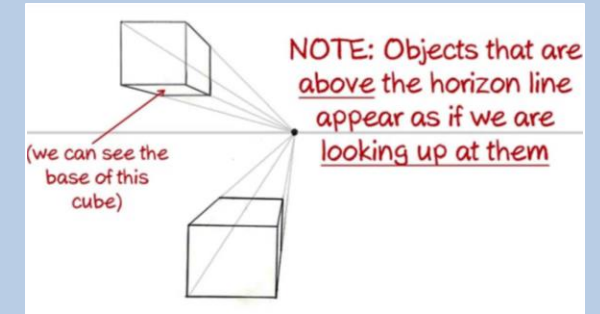
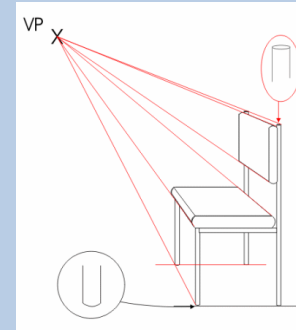
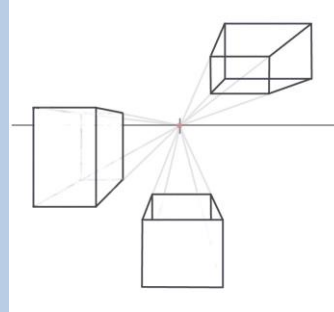
COLOUR PALLETS

Memphis design combines colours and patterns which clash making the designed pieces eye catching and original.



ONE POINT PERSPECTIVE

One point perspective is a drawing method that shows how things appear to get smaller as they get further away, converging towards a single 'vanishing point' on the horizon line. It is a way of drawing objects upon a flat piece of paper (or other drawing surface) so that they look three-dimensional and realistic.



Here's a list of useful vocabulary that is frequently used when describing a one point perspective drawing.

- **Parallel** – Parallel lines are lines that never touch, even if they are extended indefinitely.
- **Horizontal Lines** – Lines drawn from side to side level with the horizon. Horizontal lines will be parallel the top and bottom edges of your paper.
- **Vertical Lines** – Lines drawn up and down and perpendicular (right-angled) to the horizon. Vertical lines should be parallel to the sides of your paper.
- Make sure all the vertical lines are upright and parallel to each other. Make sure each horizontal line is sideways and parallel to each other.
- **Slanted Lines** – Lines that are neither vertical nor horizontal; slanted lines are diagonal.
- **Horizon Line** – The horizon line is a special horizontal line that represents eye level to the viewer.
- Most of the time the horizon line will be imaginary so while you should include it you should draw it lightly so it can be erased or drawn over later on.
- **Vanishing Point** – A point on the horizon line where all perspective lines meet.
- The vanishing point exists on the horizon line. Note: it doesn't have to be in the middle of the paper.
- **Perspective Lines (orthogonal lines)** – The lines that meet at the vanishing point. Perspective lines are parallel in real life but converge in a one point perspective drawing.
- **Plane** – A plane is a flat, two-dimensional surface with no thickness. A cube, for instance, has 6 planes.
- **Form** – A form is a 3-D object, it contains volume and three dimensions.






YR8 Textiles Knowledge Organiser

Textiles are highly adaptable and can be constructed to maximise different properties including a very high strength and weight ratio, which means less materials can be used to make strong and robust products.

Textiles are available in many different forms including rolls, yarns, and fibres. Some textiles can be very cheaply produced and some are extremely expensive, especially when using rare fibres and labour intensive techniques.

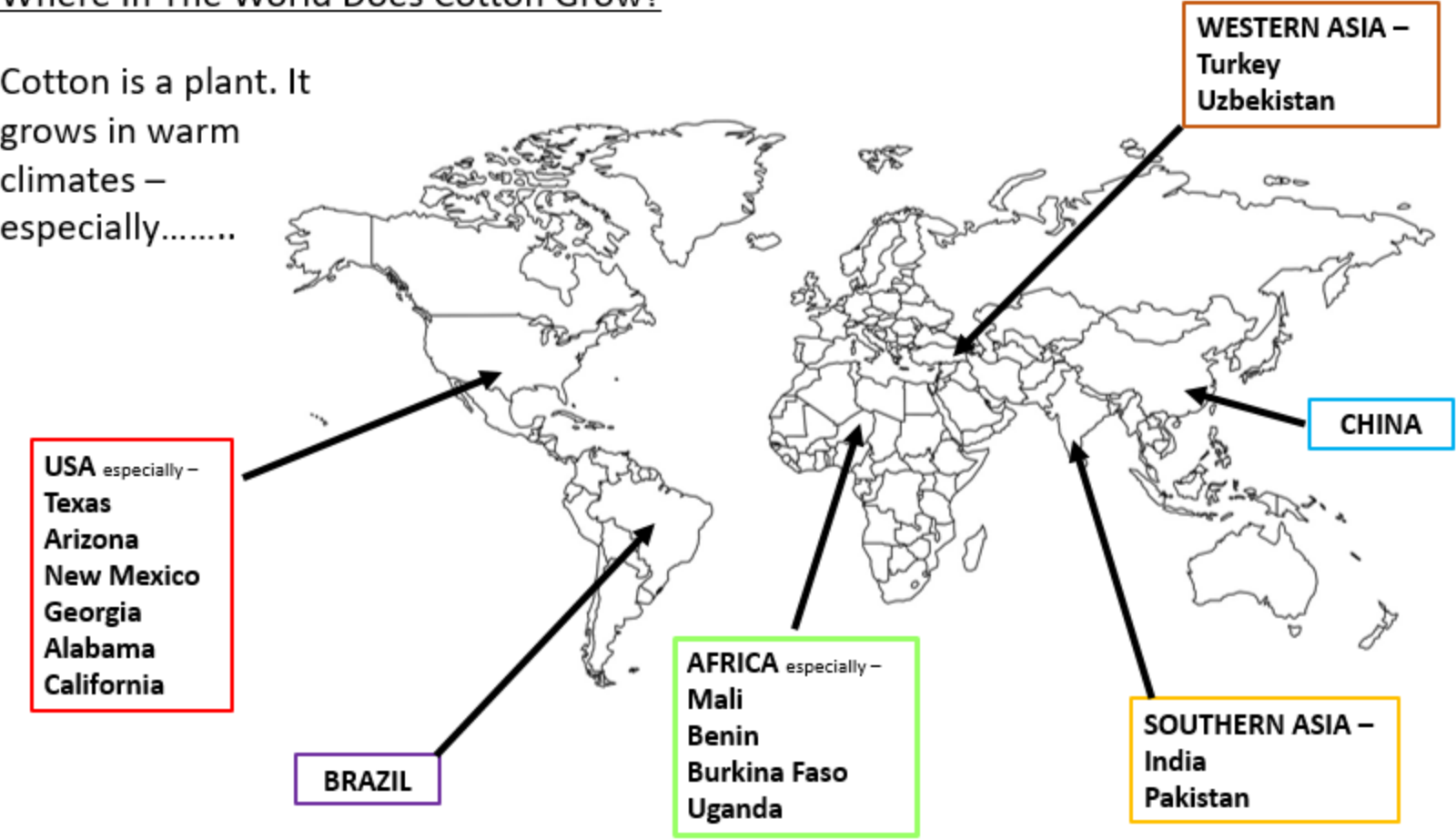
The categories of textile are:

- Natural Fibres
- Synthetic Fibres
- Woven Textiles
- Non-woven Textiles
- Knitted Textiles

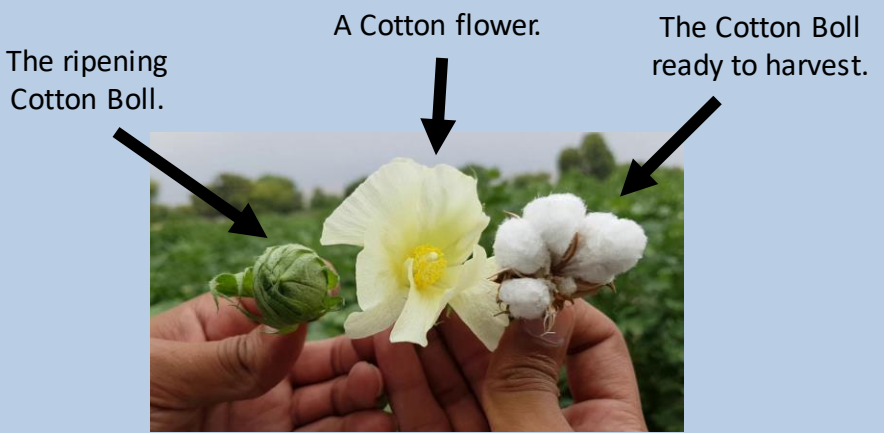
Natural Fabrics		
Plant-based natural fibres	Characteristics	Uses
Cotton 	Soft and strong, absorbent, cool to wear and easily washable. Cotton fabrics can be given a brushed finish to increase their properties.	Most clothing, especially shirts, underwear and denim can be made from cotton. Also used for towels and bedsheets.
Animal-based natural fibres	Characteristics	Uses
Wool 	From fine and soft to thick and coarse, it is warm and naturally crease resistant. Can shrink. Often blended to add functionality.	Jumpers, coats, suits and accessories worn for warmth. Specialist wools are very soft and expensive. Felt products and carpets.
Silk 	Very soft and fine finish, gentle on skin, can feel cool in summer yet warm in winter, drapes well, absorbent, strong when dry (weaker when wet), tricky to wash, can crease easily and is usually expensive.	Luxury clothing including nightwear and underwear, soft furnishings, bed sheets, silk paintings and wall hangings.
Synthetic Fibres		
	Characteristics	Uses
Polyester 	Tough, strong, hard wearing, very versatile, holds colour well, non-absorbent so quick drying, machine washes well. Often blended with other fibres. Easily coloured.	Clothing, fleece garments, bedsheets, carpets, wadding, rope, threads, backpacks, umbrellas and sportswear.
Polyamide (Nylon) 	Good strength, hard wearing, non-absorbent, machine washes well, easily and frequently blended.	Clothing, ropes and webbings, parachutes and sports material. Used as a tough thread on garments.
Elastane (LYCRA)	Added to fabric to enhance working properties, particularly to add stretch. Allows freedom of movement, quick drying, holds colour well, machine washable.	Sportswear, exercise clothing, swimsuits, hosiery, general clothing, surgical and muscular supports.
Blended and Mixed Fibres		
Poly- Cotton	More durable than pure cotton but not as breathable. Can be produced more cheaply than cotton alone. Many blends are available; 65% cotton 35% polyester to 50/50 are common.	General clothing, sheets and bedding. Can be used as an alternative to most cotton products.

Where In The World Does Cotton Grow?

Cotton is a plant. It grows in warm climates – especially.....



The Cotton Plant - *Gossypium hirsutum*



Cotton is grown in large fields.

Cotton is the most recognised and widely used natural fibre used in the world today.

Cotton, used in its pure form or blended with other fibres, makes much of the world's clothing and textile products.



The cotton is harvested either by machine or by hand.



The cotton bolls are collected and taken to a factory.



This machine – a Cotton Gin - separates the seeds from the cotton fibres.



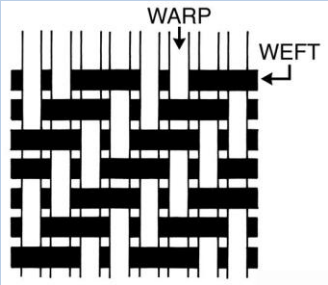
The cleaned fibres are spun into a yarn.



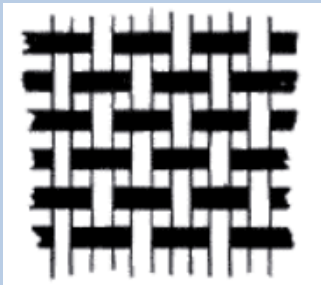
These yarns are woven or knitted into material.

Woven Textiles

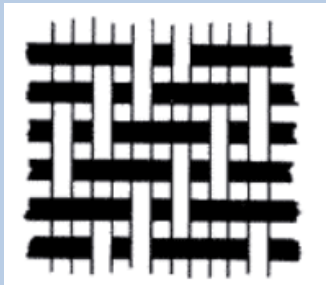
Weaving is the most common way to produce cloth from yarn. The cloth is made up of two sets of yarns which are threaded at 90 ° to each other. The warp threads are fixed in the loom and run the length of the fabric. The weft threads run across the width of the fabric from selvedge to selvedge. There are many different types of weave, the most common of which is plain weave. Plain weave is a very simple but tight weave. The weft yarn goes alternatively under and over the warp yarns. It is the most basic pattern and hence tends to be the cheapest to produce. The finished fabric is identical on both sides.



Plain Weave



Twill Weave



Non-Woven Textiles

Non-Woven fabrics are made directly from fibres without being spun into yarns. The most commonly available non-woven fabrics are bonded fabrics made from a web of fibres held together with heat or adhesive. Common uses of non-woven fabrics include disposable products such as garments worn by surgeons and crime scene investigators, dishcloths and interfacings. Non-woven fabrics can be given special treatments such as flame resistance to make head rest covers on trains and aircrafts.

Felting

This is a mechanical process which has traditionally been done by hand, but is now mainly machine produced. It involves matting together wool or synthetic fibres using a combination of heat, pressure, moisture and movement to mesh fibres together in a random way. Felt can be formed into shapes when wet, but it does not have any elasticity and will drape well when dry. It is not strong and can pull apart under tension, but will not fray like woven fabrics.

	Characteristics	Uses
Knitted fabric	Warm to wear, different knits have different properties such as stretch and shape retention. Weft knits ladder and unravel more easily than warp.	Jumpers, cardigans, sportswear and underwear fabrics, socks, tights and leggings craft items such as soft toys.

Knitted Textiles

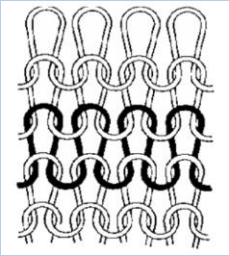
Knitting is a traditional technique of interlocking yarn loops together to produce a fabric and has been used well over 2000 years. There are two types of knitted fabric called weft knit and warp knit. With all knitted fabric, if a yarn breaks then it can come apart or ladder. Knitting can be done by hand or machine.

Weft Knitting

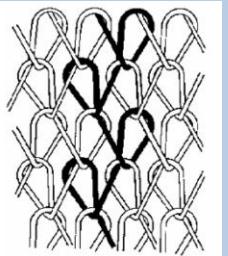
Weft knit fabrics are made by hand or by machine using a single yarn that forms interlocking loops across the width of the fabric. They tend to be quite stretchy due to the method of interlocking and therefore can lose their shape quite easily.

Warp Knitting

The loops in warp knit fabrics interlock vertically and are less prone to unravelling and laddering, which makes them easier to cut into sections and sew together for the construction of complex garments. They are less stretchy than weft knits and tend to hold their shape more effectively.



Weft Knit



Warp Knit

	Characteristics	Uses
Bonded fabric	Fabrics lack strength, they have no grain so can be cut in any direction and do not fray.	Disposable products such as protective clothing worn for hygiene purposes, tea bags, dish cloths and dusters.
Felted fabric	Can be formed with moisture and heat; once dry it has no elasticity or drape, and can pull apart easily. Wool varieties can be expensive.	Hats, handicraft, pads under furniture to prevent scratching, soundproofing and insulation.

Design Strategies

You can use design strategies to come up with initial design ideas without getting you on a bad one. Designing is a really complex process and there are several different ways of doing it:

Systems approach: This means breaking down the process into a number of different strategies and doing each in turn.

User-Centred design: The wants and needs of the client are prioritised - their thoughts are given a lot of attention at every stage of design and manufacture

Iterative design: Centred around the design process of evaluation and improvement at each stage of designing.

When you are designing a product it is easy to get stuck on a particular idea. This is called design fixation and it can stop you thinking creatively and coming up with innovative ideas.

Following the design strategy can help you avoid design fixation and encourage you to look at your design in a critical way to make improvements. Other ways to avoid are-

- Collaboration
- Honest feedback
- Focusing on new solutions
- Using fresh approaches

Key Words

PRODUCT ANALYSIS: investigating the design of existing products.

FUNCTION: the task that the product is designed to do.

AESTHETICS: relating to the beauty of a product; how something looks.

Product Analysis: involves investigating **existing products**. It's not just about describing them, it's about understanding why they are designed in the way they are too! If you can identify the good features of the product you may be able to use these in your own design.

Aesthetics	Describe - Appearance? Use of Colour? Lettering? Images? Style? Decoration method?
Cost	Is the product value for money? Do you think it was expensive or cheap to make? How much would it sell for?
Customer	Who's the customer? Who is it aimed at and why? How well does it suit the customer. What makes it suitable for them?
Environment	Is the product environmentally friendly? Is it recyclable? Can it be re-used? Does it use organic cotton? Will it last a long time?
Safety	Is the product safe to use? Are there any sharp edges or loose parts? What regulations has it passed? What does the care/flammability label say?
Size	What size is it? What shape is it? Are the measurements equal?
Function	What is the product's job? What has it been designed to do? How well does the product do its job?
Materials	Is it made from suitable materials? What is the fabric content? What are the wash/ care instructions

Existing Products

An example

Aesthetics – This is a square removable cushion cover with heart applique on the front. It has piping around the edge. The colour scheme is light beige with accents of blue. It has been made from linen and is soft. There are some buttons on the front which have been hand stitched on.

Materials & Manufacture – This cushion has been made from linen and the hearts from cotton. A sewing machine has been used to make the cushion. The buttons have been sewn on by hand.

Function – This cushion is for **comfort** and for **decorative** purposes for use on a sofa or chair. It is made from linen so it is **easy to wash** and is comfortable.

Size – This cushion is **40cm x 40cm**. It is a good size and very usable.

Cost – This cushion is **machine** constructed although it has **hand stitched** embellishments and piping around the edge. Although made using a machine, the hand embellishments will make it more **expensive**.

Customer – I think that this cushion is for use by **men and women** however it has hearts on the front which may appeal more to women. It has buttons on the front which could be dangerous for young children.

Environment – This cushion has been made from linen which comes from a plant. This is a good material to use because it is natural and is a **RENEWABLE RESOURCE**. It should last a long time because it has been well made and this also means that it can be **PASSED ON** to someone else, given to a **CHARITY SHOP** when the user no longer wants it.

Safety – Because the cushion has been made by machine training would be required to use it. The cushion is safe to use however the buttons could be a **choking hazard** to young children.



ACCESS FM: is a way of remembering what you should investigate when analysing a product. Each letter stands for a different thing you should analyse.

A **SPECIFICATION** can come from analysing existing products. ACCESS FM can be used to check that you have covered all the different types of need in your specification.

Tie - Dye

A resist technique. The process of **tie-dye** typically consists of folding, twisting, pleating, or crumpling fabric or a garment and binding with string or rubber bands, followed by application of **dye/s**.

Natural Fabrics are best for tie-dye.

Pre washed cotton is more absorbent. New cotton fabric has a waxy finish applied to stop it creasing too much.



Chemical Fabric Dyes



Elastic bands



Dye Bath/Vat



Apron

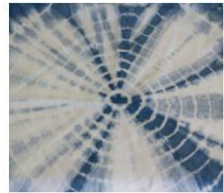


Gloves



You must always follow the health and safety rules when using dyes.
An apron and gloves should be worn when working with dyes. In industry eye protection would be worn as well.
All equipment should be used correctly.

TIE-DYE PATTERNS AND TECHNIQUES



THE CIRCLE



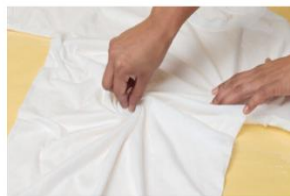
Step 1:
Pinch fabric at the centre of where your bullseye will be. Pull upward into a cone shape, guiding the fabric with other hand.



Step 2:
Wrap a rubber band 1 to 2 inches below tip of fabric, then continue binding fabric with desired amount of rubber bands.



THE SPIRAL



Step 1:
Pinch fabric at the center of where your spiral will start. Twist until all fabric is in a spiral shape.



Step 2:
Bind spiral with 3 to 4 rubber bands, overlapping rubber bands to create 6 to 8 wedge shapes.



THE SUNBURSTS



Step 1:
Pinch fabric and pull upward about 1 to 2 inches. Secure with rubber band and repeat for desired number of sunbursts.



Step 2:
Cover your fabric with the desired amount of elastic bands.



THE CRACKLED



Step 1:
Scrunch fabric into a crumpled mound.



Step 2:
Randomly wrap elastic bands around your fabric.



THE STRIPED



Step 1:
Pleat and fold fabric either vertically or horizontally.



Step 2:
Use rubber bands to secure pleated fabric, evenly spacing rubber bands and adding as many as desired.



THE MARBLE



Step 1:
Place marbles on your fabric and then pull the fabric around them.



Step 2:
Wrap an elastic band around the marble. Repeat until you have as many as you wish on your work.

Patchwork

PATCHWORK is a form of needlework or craft that involves sewing together small pieces of fabric and stitching them together into a larger design.

Patchwork is traditionally 'pieced' by hand, but modern quilt makers often use a sewing machine instead. The size of the finished piece is determined by the maker

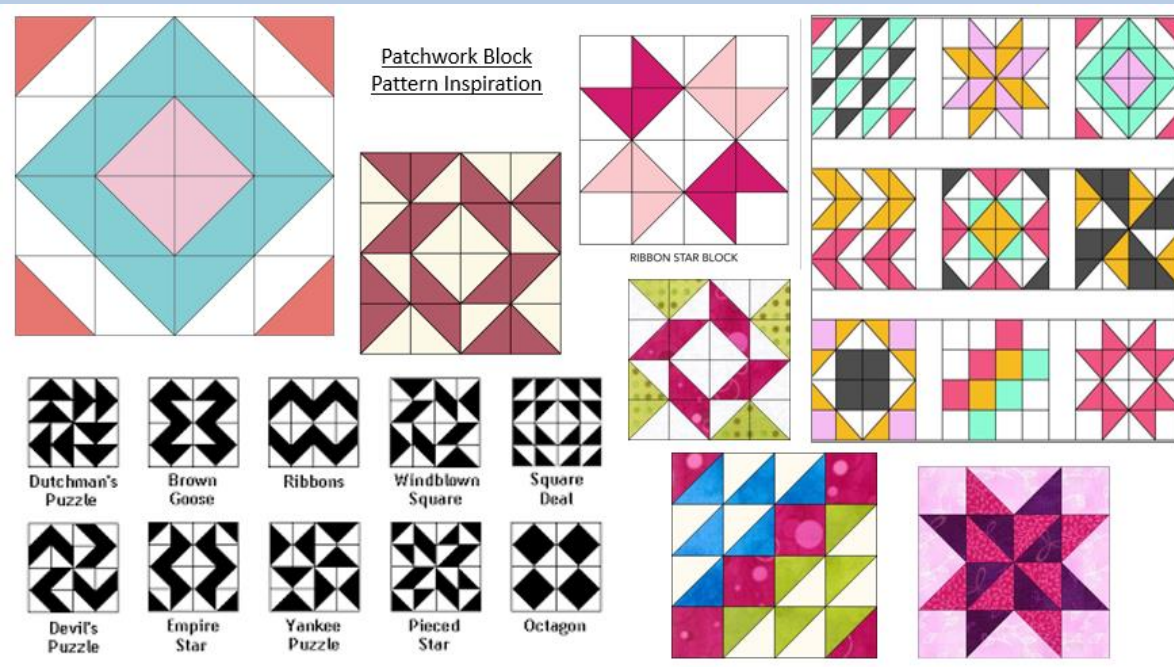
Construction Key Words

RIGHT SIDE = the side of the **fabric** is the side that is meant to be seen. It usually looks nicer.

PRESS = Iron the fabric/seam. This must be done after every stitched seam.



Use tailors chalk to mark around your templates onto the fabric. Cut them out using fabric scissors.



CROSS PIN = placing pins in fabric horizontally to keep the two pieces together temporarily whilst stitching.

'10 LINE' = the 1cm distance from the machine needle to the line on the throat plate.

SEAM ALLOWANCE = the area between the fabric edge and the stitching line on two pieces of material being sewn together.

QC CHECKS = checking for quality and accuracy of your stitching and construction



Lay out your fabric pieces so that they follow your design.



Flip 'right side' of fabric pieces together and 'cross pin' in place along the edge you are going to stitch. Machine straight stitch "10" line. Remember to use the reverse stitch at the beginning and the end.



Iron the patchwork on the reverse. Do this every time you stitch a seam.

The tradition of the patchwork we know today was taken to America by the Pilgrims.

They took at least one piece of "bed furniture" i.e. blankets, with them. Times were hard, they had no money so, as things wore out, so they would be repaired and reused.

Patchwork is a great way to consider the **6 Rs** and **RECYCLE** materials and fabrics – a good form of **SUSTAINABILITY**.

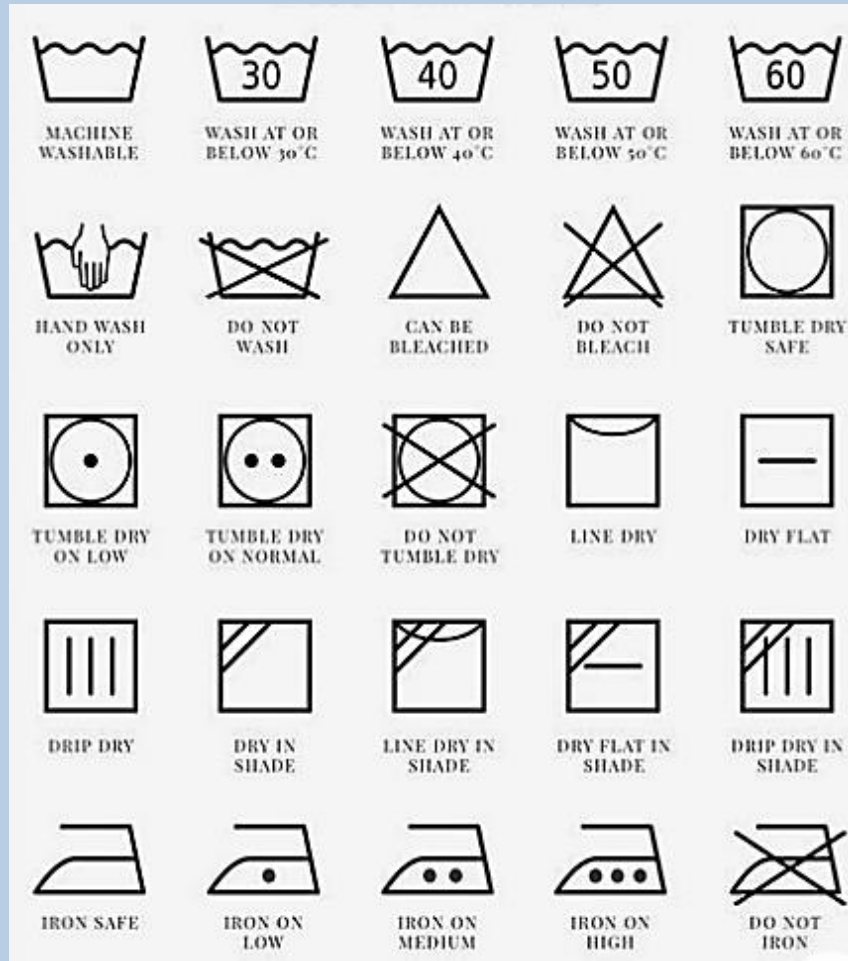
CARE INSTRUCTION LABELS

The world of care labels can be confusing. There are many **symbols**, all with slightly different meanings.

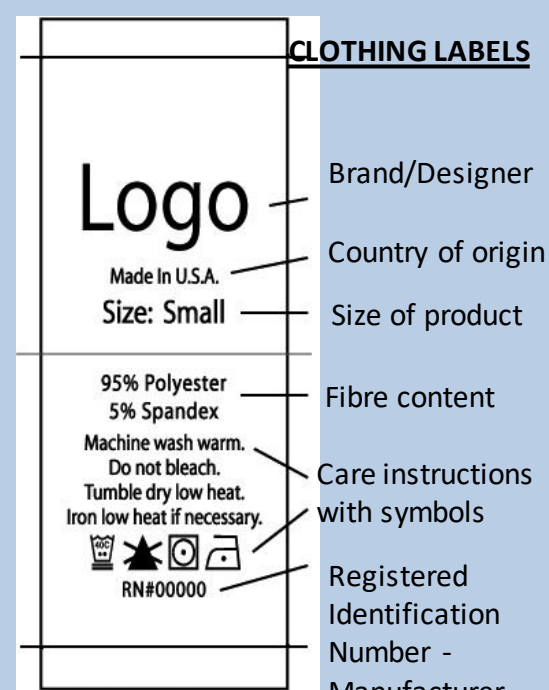


Reasons to have care labels:

- To make sure that the garments we buy stay in the condition we buy them and do not shrink or stretch.
- Symbols provide the same information to everyone without language barriers.
- Using symbols allows for smaller, more comfortable care labels.
- Smaller labels also cost less to produce which could translate into consumer savings.



CLOTHING LABELS



Designers need to be aware of the issues related to products that they design. The regulations detailed below need to be incorporated into their design specifications to ensure that the product created meets the demands of regulations and the end user.



There are four areas of information that are required to be displayed by **LAW**:

- Garment care symbols
 - Country of origin
 - Fibre content
 - Manufacturer (Registered Identification Number)
- And on children's clothing/toys SAFETY e.g. flammability.

Key Act/Regulation	Which area of the textiles/fashion industry is it related to?
Children's Clothing (hoods/cords) Regulations 1976	Children's wear
Nightwear (safety) Regulations 1985 Nightwear (Amendment) Regulation 1987	Nightwear for adults and children
Furniture and Furnishings (Fire) (Safety) Regulations 1988 1989 1993	Any furniture, furnishings including chairs and cushions.
Toys (safety) Regulations 1995	All toys
Textile Products (indication of fibre content) Regulations 1986, 1988, 1998	All textile products, usually shown on the care label.
Footwear (indication of Composition) labelling Regulations 1995	All footwear needs to clearly show the key details of fibre content/fabric composition.

The Electric Iron. Think safe- Act safe – Be safe

Temperature Dial

This adjusts the
TEMPERATURE.

Power Lead

Don't allow the cable to trail on the floor.

Temperature Indicator

It switches off when the iron
reaches the set temperature.

You need to know
how to keep yourself
and others safe in the
Textiles Workshop.

As there might not be a super
hero to rescue you!

This is the **PLUG.**

When you are finished with an iron **TURN IT OFF** at the
mains.

Ensure the iron is placed on a secure surface, out of the
way.

Most fabrics are prone to creasing. To work with fabrics you need them to be flat and as crease-free as possible. The best way to achieve this is to use an iron.

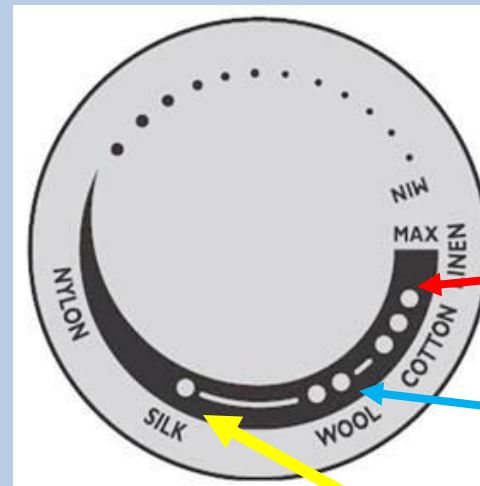
Ironing helps to remove creases. Irons are used for pressing too. Pressing is when you want a crease to stay in a fabric; on a collar for example or a pleat down the front of a pair of trousers.

In industry, ironing is done by hand using large steam irons.

Another use for irons is to apply the interfacing material Bondaweb which can be used for the decorative technique – Applique. Bondaweb requires heat to activate the adhesive within it.

What do the 'dots' mean?

The dots on the iron relate to the dots found on the iron symbol found on the care label. They show the temperature you should iron the garment on, so one dot = cool, two dots = medium, three dots = hot. The cross through the iron means – you guessed it – do not iron.



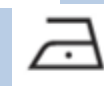
Do not iron



Iron on a HIGH heat



Iron on a medium heat



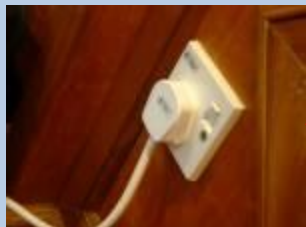
Iron on a LOW heat

If the plug
and/or power
lead are
damaged in any
way **DO NOT**
USE it (any
electric item).

Sole Plate

It is **METAL**. It gets **HOT**. **DO NOT TOUCH.**

Make sure that the iron is switched off and
always placed securely on the board when
not in use.



Year 8 PSHCE Term 1 Discrimination, our Rights and Responsibilities in the Community.

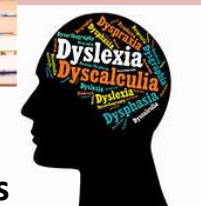
Vocabulary for Discrimination and the community topic.	
Diversity	A range of different things.
Community	A group of people living in the same place or having a particular characteristic in common.
Ethnicity	The fact or state of belonging to a social group that has a common national or cultural tradition.
Commonwealth	An international association consisting of the UK together with states that were previously part of the British Empire, and dependencies.
British Empire	A former collective term for the territories under the leadership or control of the British crown, including those in the Commonwealth of Nations and their colonies, protectorates, dependencies, and trusteeships.
Stereotypes	A widely held but fixed and oversimplified image or idea of a particular type of person or thing.
Disability	A physical or mental condition that limits a person's movements, senses, or activities.
Social skills	The personal skills needed for successful social communication and interaction.
Sexuality	A person's sexual orientation or preference.
Homophobia	Dislike of or prejudice against homosexual people.
Discrimination	The unjust or prejudicial treatment of different categories of people, especially on the grounds of race, age, or sex.
Race	A group of people sharing the same culture, history and language. The fact or condition of belonging to a racial division or group; the qualities or characteristics associated with this.
Racism	Prejudice, discrimination, or antagonism directed against a person or people on the basis of their membership of a particular racial or ethnic group, typically one that is a minority or marginalized. The belief that different races possess distinct characteristics, abilities, or qualities, especially so as to distinguish them as inferior or superior to one another.

Community

What is community? How many different communities do you belong to?

Your immediate family, Your neighbourhood, The village or town where you live, The County which you live in. The country you are part of. The clubs that you belong to. The school you go to. The House you are a part of and the tutor group you are a member of. All of these groups of people make up a community. But what makes a good community and how can you be a good citizen of that community?

There are many similarities within a community but there is also diversity. How do we make sure that we celebrate the **diversity** of our communities and find the benefits and positives of difference.



Invisible disabilities



Discrimination

Racist, Ageist Homophobic,
disablist, sexist, xenophobic.

There are many ways in which different groups are marginalised. But how do we stop this and how do we have an inclusive society?



Disabilities.

Disablist language: A way of speaking about, behaving towards or treating someone which discriminates against them because they have a disability

What has made our country so diverse?

Britain, down to its deepest roots, has always been a diverse nation. Our diversity is a result of invasion, expansion, empire and Commonwealth, and being a safe haven for people fleeing danger. For over 2000 years people have arrived in Britain, contributing their own cultural influence.



- Much of our diversity comes from the British Empire, which at its height governed over one quarter of the world's population – that's 458 million people!
- After the British Empire collapsed, people from the Commonwealth migrated to Britain, and countries such as the Caribbean and India were invited to help strengthen our workforce.

43-410AD: Romans invaded, bringing the first black people with them from North Africa. A few hundred years later they returned to Italy leaving those who wished to stay.



1555-1833: African and Afro-Caribbean people arrived because of Britain's involvement in the slave trade.



1700 onwards: Indians and Chinese arrived because of Britain's growing Empire and trade with far off countries.



1840 Many people came to England to escape a terrible famine in Ireland.



Today: Immigrants continue to arrive from the EU and around the world, adding to the diversity of our country.



Today, people continue to move all around the world. The expansion of the European Union has seen a number of Europeans come to the UK in recent years. Our current population of over **60 million people** includes a mix of people from different **racial, religious and cultural** backgrounds.

1946: After the Second World War many refugees came to Britain from Eastern Europe.



Our Cultural Life:

Ethnic diversity has made our society rich in culture and contributed to our economic, social and democratic development.

Everything in modern Britain – from music and fashion to food and language – has been influenced by different ethnic communities, cultures and social groups...

When we talk about diversity, we don't just talk about race and ethnicity. Diversity includes **all different people**, each contributing their own uniqueness, making Britain a more interesting place to live. So diversity includes people of different **gender, ages, sexual orientation, disability, religion, beliefs** and more. It is important that everyone respects and celebrates each other's differences so we can all get along, learn from each other and share an exciting mix of cultures and experiences.

Sexuality: What it means and how it affects me.

Terminology	Meanings
Homosexual	Person sexually attracted to a person of the same sex
Heterosexual	Person sexually attracted to a person of opposite sex
Bisexual	Person sexually attracted to both men and woman
Transgender	Person who emotionally and psychologically feels that they belong to the opposite sex

We will be exploring what homosexuality is. How people who are Gay or Lesbian can be treated and discriminated against and we will also be looking at how society has progressed and changed with the passing of new laws and rights for the homosexual community.



How does being Homosexual in 2023 compare to coming out 10 years ago? Have our social views changed?



What is Race?
The United Kingdom is made up of a variety of people with very different cultural backgrounds and races. But what do we mean when we ask what race you are?

Racism, Prejudice and stereotyping.



Rosa Parks and Martin Luther King Jr. The Civil rights movement and the segregation of Black and white people.

Terminology	Descriptions
Segregation	The action or state of setting someone or something apart from others.
KKK	Ku Klux Klan. A secret hate group in the southern U.S., active for several years after the Civil War, which aimed to suppress the newly acquired rights of Black people and to oppose carpetbaggers from the North, and which was responsible for many lawless and violent proceedings. Official name Knights of the Ku Klux Klan. a secret hate group inspired by the former, founded in 1915 and currently active across the U.S., especially in the South, directed against Black people, Muslims, Jews, Catholics, foreign-born individuals, and other groups.
Civil rights movement	The civil rights movement in the United States was a decades-long struggle by African Americans and their like-minded allies to end institutionalized racial discrimination, disenfranchisement and racial segregation in the United States.
Bus Boycott	<i>Montgomery bus boycott</i> was a political and social protest campaign against the policy of racial segregation on the public transit system of <i>Montgomery</i> , Alabama. It was a seminal event in the civil rights movement.
Selma to Montgomery March.	The Selma to Montgomery marches were three non violent protest marches, held in 1965, along the 54-mile highway from Selma, Alabama, to the state capital of Montgomery.

We will be looking into the Black civil rights movement of the 1960’s in the United states and finding out why Martin Luther King was so influential and how this relates to the issues today of the Black Lives Matter campaign. We will then explore current issues linked to the protests.

Sam is an adult with a learning disability. This is an account of one day in Sam's life.

08:00	Sam leaves the house in the morning to catch the bus to work. Walking down the street to the bus stop, Sam counts the houses and checks the colours of all the front doors to make sure that everything is the same as yesterday.
08:10	Sam waits at the bus stop for the #34 bus. Three buses arrive before the 34, and as they pull in Sam says their numbers and destinations out loud. Two teenagers in school uniform stare at Sam and start to laugh.
08:15	The bus arrives and Sam gets on it. "Hello Sam, how are you today?" asks the driver. Sam replies, "I'm fine thank you." The bus is busy. Sam doesn't like sitting next to strangers but takes a deep breath and sits in the last empty seat next to a man. "I am going to work," Sam says, but the man just turns away and looks out of the window. The man gets off at the next stop, but although there are still people standing up, no-one sits down next to Sam.
08:30	After a few miles there are some roadworks with one-way traffic signals. This delays the bus, which means Sam won't arrive at work at the usual time. "We're going to be late," he says to the woman standing up next to him. "Just ignore the weirdo," the woman says to her child.
12:30	Sam has made sandwiches for lunch, but walks to the supermarket close by. Sam walks around all the aisles but doesn't see anything else to buy. As Sam leaves the supermarket the security guard demands to see what is in Sam's bag. Sam doesn't want to open the bag but the security guard forces it open. Inside are the sandwiches Sam brought from home, a book and Sam's phone. The security guard says, "If you bring that bag in here again I'll have you for shoplifting."
14:30	Sam finishes work in the afternoon, and goes to catch the bus home. "The bus might be late because of the road works," Sam says to a lady with a pram. "That's ok," she says, "I'm not in a rush." There are plenty of empty seats on the bus so Sam doesn't have to sit next to anyone. The lady with the pram smiles at Sam as she gets on.
15:00	The bus drops Sam off in town. The teenagers from the morning are at the bus stop again. As Sam gets off the bus one of them shouts, "Retard." People have said that word to Sam before.
15:05	Walking back down the street to home, Sam thinks about the friend who is coming over later for a film night. Sam remembers that it is the friend's turn to choose the film this time. Sam's sister is waiting outside the house with her baby boy. She hands the baby to Sam, who smiles, and gives him a big kiss and a cuddle.

1. Make a list of feelings Sam might be experiencing at the different times of the day.
2. Why do people speak to and treat Sam in the way they do?
3. What affect could the words weirdo and Retard have on Sam?
4. Why do people use these sorts of words to describe Sam?
5. On what do people base their opinion of Sam?
6. Who showed Sam understanding and acceptance? How might these people have made Sam feel?
7. What Stereotypes of people with learning disabilities are shown in the story?
8. Is there anything that surprises you about Sam's day?



How could you or someone else have challenged or changed the disablist or discriminatory language and behaviours shown towards Sam?

Language/Behaviour	Way to Challenge/change	Available Support

Year 8 PSHE Term 2 Mental health. What do we mean when we talk about good mental health?

Let's Talk about it!

Key Word	Description
Depression	More than simply feeling unhappy or fed up for a few days. This is when you feel persistently sad for weeks or months.
Anxiety	A feeling of unease, such as worry or fear, that can be mild or severe. Can become hard to control worries.
Bipolar	This affects your moods, which can swing from one extreme to another. depression – feeling very low and lethargic mania – feeling very high and overactive. This is not mood swings - each mood can several weeks or longer.
Schizophrenia	Severe long term mental health issue. Hallucinations – hearing or seeing things that do not exist outside of the mind. Delusions – unusual beliefs not based on reality, muddled thoughts based on hallucinations or delusions, not caring about your personal hygiene and wanting to avoid people, including friends
Panic disorder	An anxiety disorder where you regularly have sudden attacks of panic or fear. Everyone experiences feelings of anxiety and panic at certain times. It is a natural response to stressful or dangerous situations. But for someone with this, feelings of anxiety, stress and panic occur regularly and at any time, often for no apparent reason.
Eating disorders	An unhealthy attitude to food, which can take over your life and make you ill.

Mental Health and Wellbeing are an important part of Trafalgar and the support it gives to our students, but what is mental health and how can you support your own good mental health?

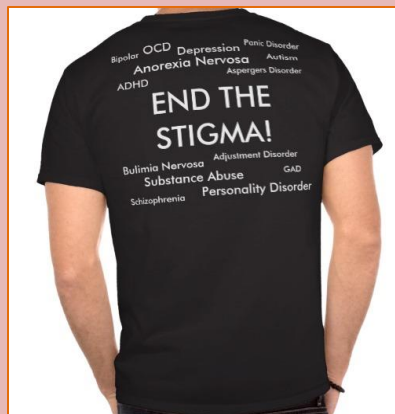
For us to understand it, it is important for us to understand the different areas included in mental health. This can be from hormone imbalances whilst going through puberty right through to diagnosed disorders.

Health and wellbeing

Why do we have Yondrs at school?

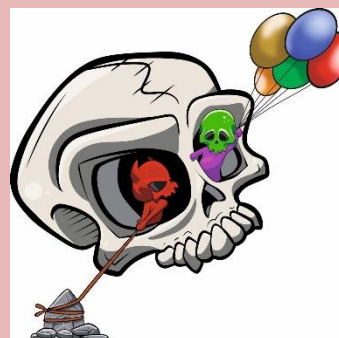
What is an appropriate amount of time to spend using technology?

How can social media affect our mental health and self esteem?



Previously people stigmatised mental health issues e.g. if you were known to have had a mental health issue employers may have turned you down for a job even though you would have been able to do that job. Often, a lack of understanding of mental health leads to people fearing it or making inaccurate assumptions.

1. **20 %** of the world's children and teenagers have mental health problems.
2. More people around the world are on disability benefit for mental problems than physical disabilities.
3. Suicide is the **2nd** leading cause of death in 15-29 year olds around the world.
4. In low income countries there is one psychiatrist for every **million** people.
5. **Sixteen** million people attempt suicide around the world every year.



Where Can you get help and support?

Talk to trusted adults at home and in school.

School CP Teachers : Mrs Faulkner and Mrs Brook

Student Welfare: Makayla and Jane.

Visit the school Website and go to the student Wellbeing area.

Mind (Charity)

You can also call Childline on 0800 1111 or visit

www.childline.org.uk

NSPCC

Mental health is as important as Physical Health



How can you support your own Mental Wellbeing?

- Exercise, sport and physical activity
- Eating healthily
- Getting enough sleep
- Relaxation techniques
- Helping others
- Doing things you enjoy
- Exploring nature
- Learning new things
- Creative expression
- Spending real time with friends
- Staying in touch with friends online
- Doing family activities
- Doing homework or school projects
- Seeking support

Many people in the public eye suffer from some of the issues we are discussing, from PTSD, Depression, anxiety, OCD and eating disorders. The difficulty with these health issues is that they are unseen. This can mean that many suffer in silence to worried about what others may think of them if they speak out.

So how do we get people talking and stop the stigma?



The ways we find to relax and unique to each of us. Some like to walk, others like to read, chat and some like to be still and quiet. It is important that you find what works for you and be aware that it is okay to sometimes not be okay!

NOT TALKING ABOUT MENTAL HEALTH DISORDERS.....

.....can cause real problems:

People may think they are all alone.

Make people feel trapped and so make it worse.

People might think there is something more seriously wrong with them.

People don't get the support they need



We will also be looking at the unseen difficulties and Social anxieties that some people may have such as Autism, ADHD, OCD, Dyslexia and explore how we can be more inclusive and understanding of the challenges they have to face.



When we feel overwhelmed in a classroom, What can we do?

Remember

- Its Ok to have a bad day
- It's Ok to make mistakes, it is often where learning begins.
- Set back is not failure. Nothing is perfect.

Some steps to manage your anxiety

Routine Create a good morning routine. Creating a good routine helps you arrive at school calm and focussed.

Rationalise Is this a true picture or am I overthinking this? Anxious thoughts often go to worst case scenarios. Repeat to yourself it is not going to be as bad as you imagine.

Recognise the signs you are becoming anxious, what is happening in your body? If you notice your anxiety is rising take steps to calm yourself, find what works for you.

Talk Don't be afraid to talk about your anxious thoughts, we all experience anxiety on some level. Find friends or adults that will talk it through with you. It is ok to ask for help

Some Anxiety Coping Statements

- This feeling is a signal to take a deep breath
- My anxiety does not define me
- I am stronger than I think.
- This is a normal human emotion
- It is ok to take a break

Things that can increase anxiety

Isolating yourself
Irregular sleep
Caffeine
Too much social media
Reading a lot of negative news
Skipping meals

NOTES:

Places that you can get support should you need it for any of the issues we are covering.

Talk to your
Parents/ Family



www.ceop.police.uk

Emma Lawson
the School
Counsellor



Vicky the School
Nurse on Monday
Lunchtimes



www.thinkuknow.co.uk



www.themix.org.uk

Lead Child
protection teachers
are Mrs Faulkner
and Mrs Dawson



A coach, Leader of
your uniformed
organisation or
community you
belong to.

Phil Roades
Local Baptist
Minister

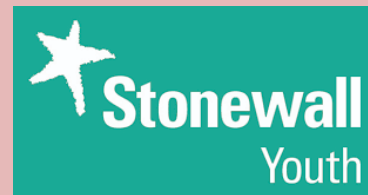


www.Samaritans.org

Makayla and
Carmen in Student
Wellbeing



Talk to your
Tutor or HOH



www.stonewall.org.uk



www.therisetrust.org

Lewis the
school Chaplin



A member of school
staff you find it easy
to talk to

Always know that you are not alone. We are all
here for you and it is always best to TALK!