

The Trafalgar School at Downton

Knowledge Organiser

Year 9: Terms 1 and 2 2025/2026

Name.....Tutor



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When writing, don't fragment: Language Methods to Practise in your Fortnightly Writing Challenge and Examine in your Reading fuse or splice your sentences: alliteration: the repetition of a consonant sound to begin a series of words. Unfortunately, I don't think I'm 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 going to get a good grade. Because I anecdote: didn't study. include an anecdote about falling in his home as a boy and breaking his arm. FRAGMENI Fix it by re-joining the fragment to anik Gor Gorgo Gora antithesis: putting two opposite ideas together to highlight contrasts. the sentence: Unfortunately, I don't emotive language: words and phrases that are used to make the reader feel a particular emotion. think I'm going to get a good grade because I didn't study. extended a version of metaphor that extends over the course of multiple lines, paragraphs, or stanzas of prose or poetry. metaphor: In the holiday, I went to Paris it is alla, the most beautiful place I have ever foreshadowing: the writer hints at an event that will happen later in his story/poem/play/writing. aya Pal Fuse visited. imperative verbs: instructional/command words that give the action the speaker/writer wants you to do. Fix it by using a full stop (never a 8.50) comma), coordinating conjunction like a simile, but instead of using 'like' or 'as' it compares two things by suggesting that something is something else. metaphor: ghun (for, and, but, or, yet, so), or modal verbs: help show the level of possibility, ability, obligation or permission of the main verb/action e.g. might, can, must, may ... green of subordinating conjunction (as, uga Pid uug Usiiti because, so that, before, after, until, pathetic fallacy: the projection of human emotions/mood onto non-human objects found in nature e.g. the weather. since, when, although, etc.), or semi-colon to join the two sensory 8. J. 3 sentences: employing the five senses in writing to evoke a mental image and/or sensation for the reader. description: In the holiday, I went to Paris as it is quite the most beautiful place I have ever a comparison which finds similar characteristics in two objects and compares them, always by using the words 'like' or simile: visited. (X) 'as'. factual data used in a persuasive way. statistics: Heavy rain fell throughout the night, (my) by morning every major road was an adjective or adverb that shows the highest or lowest degree of comparison e.g. best, worst, finest, most, etc. superlative: flooded. SPLICE using words that sound like the noise they represent. onomatopoeia: a type of figurative language that gives an object human characteristics Fix it in the same way you would fix personification: (emotions, sensations, speech, physical movements). a fuse: Heavy rain fell throughout the night; by morning every major rhetorical a question asked for a purpose other than to obtain the information the question asks e.g. create a dramatic effect; road was flooded. emphasise a point; make you think about/eager to learn the answer. question:

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

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) <u>dependent clauses and phrases</u>.

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 **d**on't expect me before 11.'

Overtion Monk

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 store 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 <u>interjections</u>:

'Hi! What's new?' 'Ouch! That hurt.'
'Oh! When are you going?'

he'd ever been.

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 | am → l'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

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:

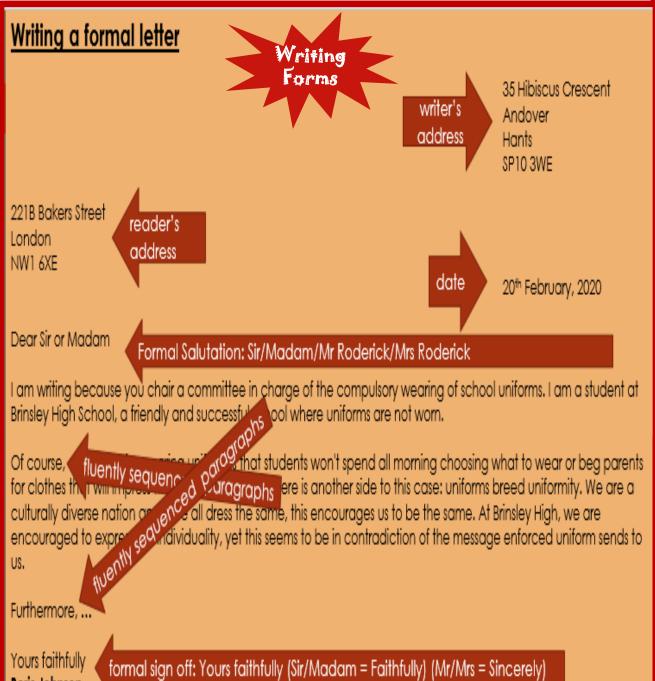
1) show a pause or hesitation in someone's speech or thought.

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 ...





Boris Johnson

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.

Writing a Narrative: extract is from The Silent Land, by Graham Joyce.

It was snowing again. Gentle six-pointed flakes from a picture book were settling on her jacket sleeve. The mountain air prickled with ice and the smell of pine resin. Several hundred metres below lay the dark outline of Saint-Bernard-en-Haut, their Pyrenean resort village; across to the west, the irregular peaks of the mountain range.

..

If there are few moments in life that come as clear and as pure as ice, when the mountain breathed back at her, Zoe knew that she had trapped one such moment and that it could never be taken away. Everywhere was snow and silence. Snow and silence; the complete arrest of life; a rehearsal and a pre-echo of death. She pointed her skis down the hill. They looked like weird talons of brilliant red and gold in the powder snow as she waited, ready to swoop. I am alive. I am an eagle.

...

The noise itself filled her ears and muffled everything, and then there was silence, and the total whiteness faded to grey, and then to black!

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.

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 cliffhanger ending?

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

Yours Sincerely

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

P3

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.

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?

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

WILLIAM GOLDING

William Golding was born on 19th September, 1911, in Cornwall, England. He grew up in Marlborough, Wiltshire. Golding's parents tried to bring him up with a scientific, rational view of the world and wanted him to be a scientist. A frustrated child, he found an outlet in bullying his peers. Later in life, he described his childhood self as a brat, even going so far as to say, "I enjoyed hurting people."

Golding went to Oxford in 1930 to study science but changed to English Literature. After graduating he worked as a writer, actor and producer with a small theatre group and then became a teacher.

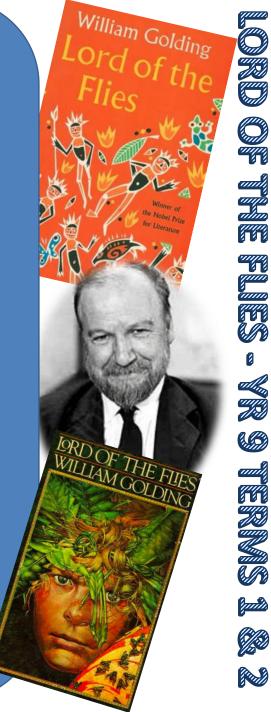
During the Second World War Golding served with the Royal Navy and was profoundly affected by his experiences. After the war he taught English and Philosophy at Bishop Wordsworth's boys' school in Salisbury. His experience teaching unruly young boys served as inspiration for his first novel *Lord of the Flies*. He also wrote LOTF due to his disgust after the war. He was appalled at what human beings can do to one another — he thought people were born with the potential to be evil and war gave people an excuse to release this evil personality trait. War and conflict were the perfect conditions for it.

Years later he said that writing the book was 'like lamenting the lost childhood of the world'. In 1962 he retired from teaching to become a full time writer.

The novel is an examination of what human nature is really like. In 1954, the world had witnessed many shocking events: the systematic destruction of the Jewish race, two world wars revealing atrocities of what man can do to man, the 1945 the mushroom cloud of the atomic bomb. The Cold War where people were terrified of a nuclear war was in full flow...this is, potentially, what the boys were being evacuated from..

Golding also explores the idea of original sin – the religious idea that we are all capable of evil – it is innate in our nature. He also explores how both power and man corrupts everything they come into contact with – for example, the destruction of the island when the fire gets out of control.

He won the Booker Prize in 1980 with 'Rites of Passage', was awarded the Nobel Prize for Literature in 1993 and was knighted in 1988. William Golding died in 1993.



This novel can be split into three distinct parts...

PART 1	INNOCENT BOYS ON BEAUTIFUL ISLAND – the boys arrive and have an assembly making the early decisions about what to do. There is an emphasis on island as a paradise and there is a hope of rescue. The boys find pleasure in the day to day events. There is a strong sense of law, order and sense – the boys have a strong sense of the forbidden and what is
	boys have a strong sense of the forbidden and what is right and wrong.

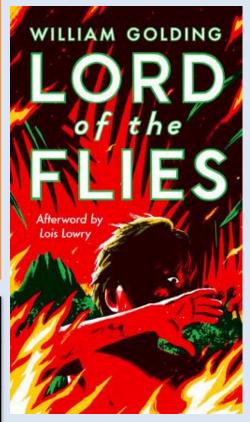
PART 2 THREAT AND FEAR APPEAR – with the arrival of the sign from the adult world, comes a physical threat – the fear becomes real. Destruction occurs and this is caused by the boys' actions. There is the beginning of the idea that they have evil within them (Simon's realization that "what I mean is...maybe it's only us". Evil has been let loose on the island.

PART 3	CONSEQUENCES OF CREATING EVIL – moral anarchy
	is unleashed – rule and order is destroyed – the boys
	lose individual identity and become a mass/mob.

SYMBOLS IN THE NOVEL	The Lord of the Flies	The dead airman
Piggy's glasses	The island	The conch
fire	The Beast	

Themes in 'Lord of the Flies'

Human nature	Violence and death
Civilisation v savagery	Survival
Innocence and loss of it	Power
Fear	Leadership



Did you know...?

Ralph's name comes from the Anglo-Saxon language and means 'counsel' (good advice)

Jack's name is Hebrew in origin and means 'one who supplants' (takes over/replaces)

Roger's name, which is Germanic in origin, means 'spear' (weapon)

Simon's name comes from the Hebrew word meaning 'listener'



Terminology	Definition
allegory	a story, poem, or picture that can be interpreted to reveal a hidden meaning, typically a moral or political one. Remember 'Animal Farm' in Year 7?
microcosm	a community, place, or situation regarded as encapsulating in miniature the characteristics of something much larger. In LOTF, the island is a microcosm of the globe as a whole. Remember the ranch in 'Of Mice and Men' in Year 8?
macrocosm	the whole of a complex structure, especially the world or the universe, contrasted with a small or representative part of it. Contrasted with microcosm.
scar	a mark left where a wound, burn, or sore has not healed completely. The plane crash leaves a SCAR on the island paradise – suggests it is not perfect from the start. This can also suggest that humankind ruins things – it is a manmade object that creates this scar and the boys do not respect their island paradise.
irony	the expression of one's meaning by using language that normally signifies the opposite, typically for humorous or emphatic effect.
foreshadowing	be a warning or indication of (a future event).
metaphor	a figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable.
symbolism	the use of symbols to represent ideas or qualities. In LOTF, the conch is a symbol of law and order/civilisation.
authority	the power or right to give orders, make decisions, and enforce obedience.
civilised	bring (a place or people) to a stage of social and cultural development considered to be more advanced
savage	Not domesticated or cultivated; wild: a savage animal. Not civilized; barbaric: a savage people

SOME USEFUL WEBSITES TO HELP YOU WITH THE LORD OF THE FLIES:

ttps://youtu.be/NnnZ6y1HPgI Why you should read LOTF by TED-Ed

Sparknotes.com (search for Lord of the Flies)

www.william-golding.co.uk

www.cliffsnotes.com (search for Lord of the Flies)



IMPORTANT QUOTATIONS

Within the diamond haze of the beach something dark was fumbling along...Then the creature stepped from the mirage on to clear sand, and they saw that the darkness was not all shadow but mostly clothing.

You got your small fire alright. [..] the boys were falling still and silent, feeling the beginnings of awe at the power set free below them.

Bollocks to the rules [...] we'll close in and we'll beat and beat and beat –"

We've got to have rules and obey them. After all, we're not savages.

Roger gathered a handful of stones and began to throw them. Yet there was a space round Henry, perhaps six yards in diameter, into which he dare not throw. Here, invisible yet strong, was the taboo of the old life. Round the squatting child was the protection of parents and school and policemen and the law.

Fear can't hurt you any more than a dream. There aren't any beasts to be afraid of on this island...serve you right if something did get you, you useless lot of crybabies.

I'm frightened. Of us.

"There isn't anyone to help you. Only me. And I'm the beast...Fancy thinking the Beast was something you could hunt and kill...You knew didn't you? I'm part of you? [...] Why things are the way they are?"

"I just take the conch to say this. I can't see no more and I got to get my glasses back. Awful things has been done on this island. I voted for you for chief. He's the only one who ever got anything done. So now you speak Ralph..."

The conch exploded into a thousand white fragments and ceased to exist.

Ralph wept for the end of innocence...

CHARACTERS

Ralph: the largest and most physically powerful. Wants to plan and follow rules, but even he is sometimes seduced by savagery. Symbolises: law, government and civil society.

Piggy: the smartest boy but has asthma and is fat so he is bullied. Has a tendency to lecture and is ridiculed. Symbolises: science and rationality.

Jack: leader of the hunters. Loves to hunt and kill, gets angry when he does not get his own way. Believes a leader should be obeyed. Symbolises: dominance, power and fear.

Simon: dreamy, dark haired boy prone to fits. He recognizes that the beast is within themselves. He is unafraid and he meditates. At one with nature.

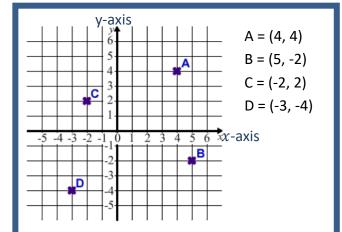
Symbolises: religion and spirituality.

Roger: quiet and intense at first then becomes more and more evil. He tortures SamnEric and likes to inflict pain. Symbolises: brutality

Straight Line Graphs

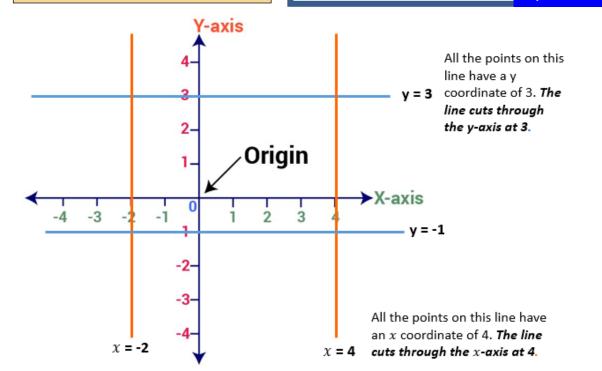
What do I need to be able to do?

- Plot and read Cartesian Coordinates
- Identify and plot lines parallel to the axes
- Recognise the line y = x
- Understand what a gradient and y-intercept is
- Recognise a positive and negative gradient
- Give an equation of a line that is parallel to a given line
- Plot lines in the form y=mx + c
- Find the equation of a line



Coordinates are used to show a position on a graph. They are written with the notation (x, y). The first coordinate is the horizontal position (x-axis), the second is the vertical position (y-axis).

Sparx U789



Plotting a Straight Line Graph

Sparx U741

Every straight line has an equation in the form of:

the steepness of the line

where the line cuts the y axis

The **GRADIENT**

The y-INTERCEPT

Suppose we want to plot the graph

$$y = 2x + 1$$

We complete a table of values by substituting (replacing) the ${\pmb x}$ values from the table into the equation.

E.g. When
$$x = 0$$

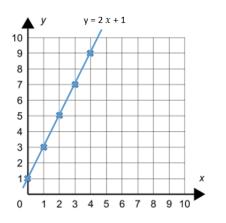
$$y = 2 \times 0 + 1 = 1$$

So the coordinate in the form (x, y) would be (0, 1)

x	0	1	2	3	4	5	6
y = x + 3	1	3	5	7	9	11	13
	(0, 1)	(1, 3)	↓ (2,5)	(3,7)	↓ (4, 9)	(5, 11)	(6, 13)

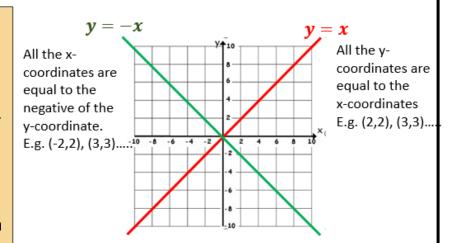
We then plot these coordinates on the graph, join them with a straight line using a ruler and label the line with the equation.

Notice the link between sequences: in this case you are finding the first 6 terms of the sequence 2n + 1

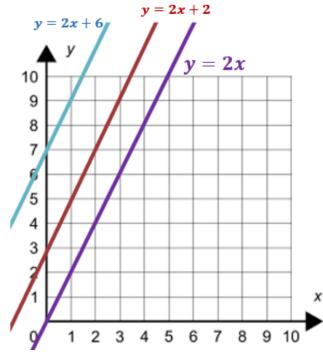


The gradient of the line y=-x is -1. When the gradient is **negative**, the line slopes **down**. The gradient of y=x is 1. When the gradient is **positive**, the line slopes **up**.

A line that goes straight across horizontally, has a gradient of 0.



Sparx U377



All these straight lines have the same gradient of 2.

This means that for every unit the line goes across, it goes 2 units up.

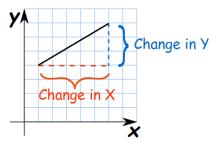
So if two lines have the <u>same</u> gradient, they are <u>parallel</u>.

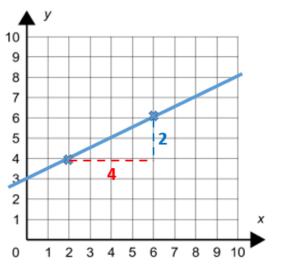
A line parallel to the line y = -5x + 7could be y = -5x + 2

Finding the equation of a line from a graph

Sparx U315

$$Gradient = \frac{Change in Y}{Change in X}$$





To find the m (the gradient), pick 2 coordinates and draw a triangle. Divide the change in y by the change in x.

Gradient =
$$\frac{2}{4} = \frac{1}{2}$$

This means that for every unit the line goes across, it goes $\frac{1}{2}$ a unit up.

The c, is where the line crosses the y-axis which is 3.

So the equation of this line is $y = \frac{1}{2}x + 3$

When plotting graphs remember to:

Always label your axes 'x' and 'y'

Make sure your scale is even on your axes

Use a pencil and a ruler

Label your straight line graph

Key words

Axis/Axes (plural)

Origin – The point (0, 0)

Coordinates

Y-intercept

Gradient

Parallel

Plot

Solving Linear Equations

What do I need to be able to do?

- Identify an equation as linear
- Understand algebraic notation
- · Represent an equation as a function
- Identify inverse operations
- Solve single sided linear equations
- Solve double sided linear equations
- Solve equations involving brackets
- Solve equations involving fractions
- Solving inequalities
- Solve linear simultaneous equations

Algebraic notation

Add and subtract? – depends on the sign IN FRONT of a term

Multiply? The × sign is not used in algebra (because it looks like x often used as an unknown number. If letters and numbers are written together remember there is a "hidden" times sign between them.

Divide? Algebra uses FRACTIONS to show divide rather than the ÷ sign

Recognising Linear Equations and Inequalities

Methods to solve equations depend on what type of equation it is ... so recognising when an equation is linear is important

LINEAR equations only contain simple x terms

Examples: 2 step Linear

$$2x + 5 = 11$$

...with brackets 5(x-3) = 8

$$5(x-3)=8$$

Double sided Linear

$$5x - 1 = 11x + 2$$

...with fractions

$$\frac{2x+5}{6} = \frac{x}{4} + 2$$

If there is a term with x raised to any power the equation is not linear (a x^2 means the equation is QUADRATIC and x^3 means it is CUBIC

Inverse Operations

Every operation has an opposite which will undo its effect...

Add ⇔ Subtract

Multiply ⇔ Divide

Square ⇔ Square root

 $+x \leftrightarrow -x$

 $\times \leftrightarrow \div$

 $x^2 \leftrightarrow \sqrt{x}$

Solving Linear Equations

Sparx U755, U325, U870, U505, U599

An equation explains a relationship – it is a number sentence where one element is unknown but the relationships around it are. When you are asked to "SOLVE" a LINEAR equation, you are being asked to find the one value of the unknown that means the number sentence is correct. To do this we can "unpick" the relationships around the unknown until we are just left with.... Always aiming to get to this

x = (the number)

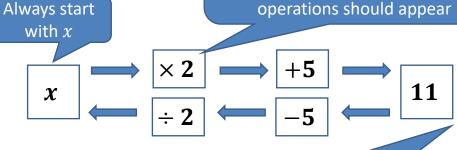
whatever you start with!

Understanding Linear Equations – Function Machines

If we need to "unpick" equations, to get to our final statement, we will need to understand how an expression is built up around x. A function machine is a good way to start....

Solve: 2x + 5 = 11

REMEMBER: Algebra follows number rules... so think BIDMAS when working out which order the operations should appear



"Unpick" the problem by applying the inverse operation in the opposite order (working backwards from the previous "answer")

Workings: $x = (11 - 5) \div 2$

Solution x = 3

Solving Linear Equations

Sparx U755, U325, U870

<u>Solving Linear Equations – Balance Method</u>

Functions machines are good at understanding equations but cannot deal with all linear equation. The BALANCE METHOD can.

The principle that you want to "unpick" an equation from around xremains... you just need to remember whatever needs to be done to unpick one side of an equation, must be done to the other side also

 $(\div 2)$

Solving simple 2 step equations:

Solve:
$$2x + 5 = 11$$

 $2x = 6$
 $x = 3$

Check by substituting: 2x3+5 =11 **☑**

Show workings i.e. what you are going to do to get (-5)to the next line...

Notice that these are exactly the same operations and order as identified in the function machine!

As equations get more complex the principle remains the same... what do you need to do to unpick to get to "x=..." or in other words ...

what looks horrible?... what's needs to be done to get rid of it?!

Solving Double Sided equations:

Solve:
$$5x - 1 = 11x + 2$$

$$5x - 1 = 11x + 2 \quad (-5x)$$

$$-1 = 6x + 2 \quad (-2)$$

$$-3 = 6x$$
Just switched $6x = -3$ $(\div 6)$

"x" on both sides of equation **Fix?** Get rid of one of them!

RECOMMENDED: REMOVE THE SMALLER UNKNOWN by adding or subtracting it (because removing the smaller will always leave a POSITIVE x term

What looks horrible?

Remember: Any division problem can be written as a fraction!

Solving Linear Equations – Brackets

Sometimes brackets can be dealt with using the function machine methods but if in doubt - get rid of them by expanding!

Solve:
$$4(x-3) = 8$$

$$4x - 12 = 8$$

$$4x = 20$$

$$x = 5$$
Check by substituting:

 $4(5-3) = 4x2 = 8 \ \square$

$$3(x + 8) = 4 - 2x$$

$$3x + 24 = 4 - 2x$$

$$5x + 24 = 4$$

$$5x = -20$$
(+2x)
(-24)
(÷5)

Check by substituting:

$$3(-4+8) = 3 \times 4 = 12$$

and
 $4-2x(-4) = 4+8 = 12 \square$

x = -4

SMALLER unknown is negative... so ADD to remove!

Sparx U505

<u>Solving Linear Equations – Fractions</u>

Sometimes fractions can be dealt with using the function machine methods but if in doubt – get rid of them by multiplying through by denominator!

Solve:
$$\frac{2x+5}{6} = 2$$
 (x6)
 $2x + 5 = 12$ (-5)
 $2x = 7$ (÷2)
 $x = 3.5$

$$x = 3.5$$

Solve: $\frac{2}{x} = 5$ (xx)
 $2 = 5x$ (÷5)

$$2 = 5x \qquad (\div 5)$$

After multiplying by the denominator: - original numerator STAYS THE SAME - ALL OTHER TERMS ARE SCALED UP

$$\frac{3x-5}{2} + 1 = x + 2$$

$$3x - 5 + 2 = 2x + 4$$

$$3x - 3 = 2x + 4$$

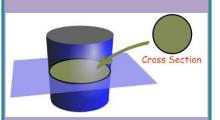
$$x - 3 = 4$$
(x2)
(x2)
(x2)

x = 7

Working in 3D

Faces = flat surfaces Edges = sides/lengths Vertices = corners

A prism is a 3D shape which has a continuous cross-section.



The surface area of an object is the sum of the area all of its faces. It is measured in units squared e.g. cm².

Sparx U761, M884

	1	
2	3	4



Net of Cube



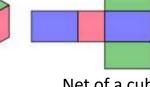












sphere

1 curved surface

no edges

no vertices

triangle based pyramid

4 faces

6 edges

4 vertices

cube

6 faces

12 edges

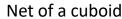
8 vertices

triangular prism

5 faces

9 edges

6 vertices





cylinder

2 faces 1 curved surface

12 edges

no vertices



Net of a cylinder

A **Net** shows which 2D shapes can be folded and joined to make a 3D shape. When you are drawing a net, or solving a problem involving a shape net, think carefully about where the edges of the faces meet.

Know the names

quare based pyramid	cuboid	cone
5 faces	6 faces	1 face 1 curved surface

o ruces	O Tuces	I race I car rea sar
8 edges	12 edges	1 edge
5 vertices	8 vertices	0 vertices
		_

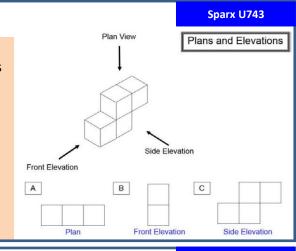






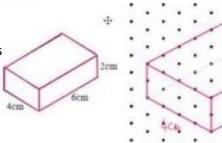
Plans and Elevations

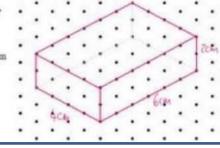
A plan is like the birds eye view of the shape. The front is the view as if someone was stood in front of the shape and the side is the view from the side. The plan, front and side should always be drawn in 2D. If the shape is made from cubes, it must have the correct number of squares in the diagram.



Isometric Drawing

A method for visually representing 3D objects in 2D. You might be asked to draw the 3D object from the plan view and elevations.





Sparx U743

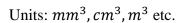
Volume

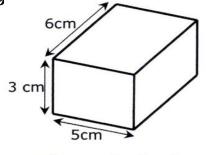


 $V = Length \times Width \times Height$

 $V = L \times W \times H$

The volume of an object is the amount of 3D space that it occupies. It is measured in units cubed e.g. cm3.





volume = $6 \times 5 \times 3$ $= 90 \text{ cm}^3$

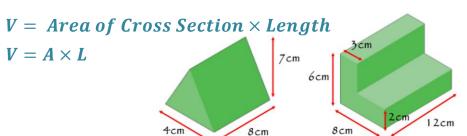
Net of a triangular prism

Sparx U786, U174

Working in 3D - Volume Surface area

Volume of Prisms

Sparx U174



Volume of Cylinder





2cm-

$$V = \pi(4)(5)$$
$$= 62.8cm^3$$

Sparx U915, U464

Surface area of Cylinder



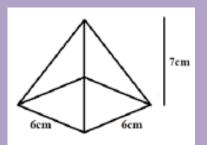
$$SA = 2\pi r^2 + 2\pi rh$$

A cylinder is a prism with the cross section of a circle.

Volume of Pyramid

$$Volume = \frac{1}{3}Bh$$

where B = area of the base

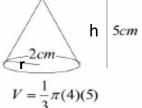


$$V = \frac{1}{3} \times 6 \times 6 \times 7 = 84cm^3$$

Sparx U484

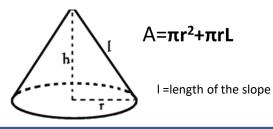
Volume of Cones

$$V = \frac{1}{3}\pi r^2 h$$



 $=20.9cm^{3}$

Surface Area of Cones



Sparx U116, U523

Frustrums

A frustum is a solid (usually a cone or pyramid) with the top removed.

Find the volume of the whole shape, then take away the volume of the small cone/pyramid removed at the top.

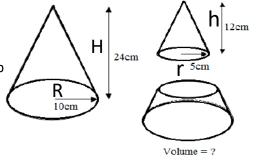
$$V = \frac{1}{3}\pi R^2 H - \frac{1}{3}\pi r^2 h$$

H = height of whole thing

R = radius of whole thing

h = height of the smaller top

r = radius of smaller top

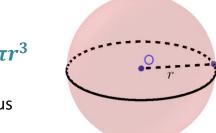


Sparx U350

Volume of Sphere

$$V = \frac{4}{3}\pi r^3$$

r is radius



Surface area of Sphere

$$SA = 4\pi r^2$$

This is the curved surface area. Think how much paint it would take to cover the outside.

You may or may not be given the formula for each of these in the exam so best to learn them. You must know how to substitute into them and use them.

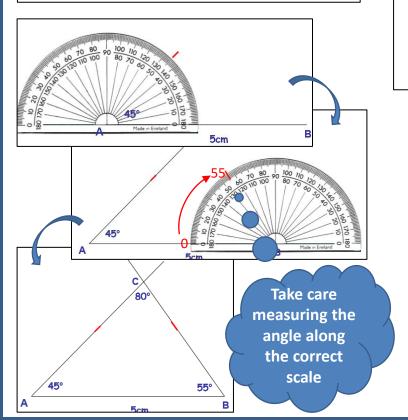
Sparx U617

Sparx U893

Angle Side Angle (ASA)

Example 2: Construct triangle ABC with AB side 5cm and angles A=45°, B=55°

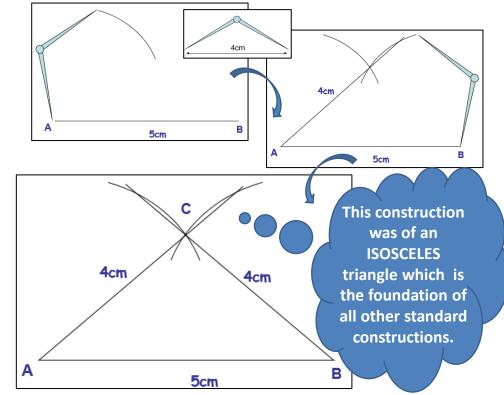
- 1. Draw a line 5cm long. Label it AB
- 2. Measure an angle of 45° at A
- Draw a long line out from A Remember to write in the angle.
- 4. Measure an angle of 55° at B
- Draw a long line out from B Remember to write in the angle
- 6. Label the crossing point C

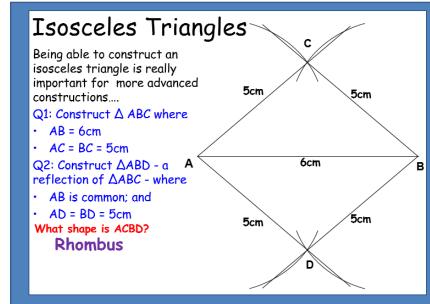


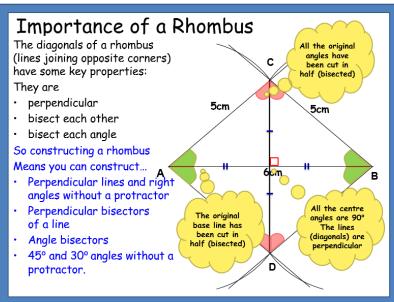
Side, Side, Side (SSS)

Example 3: Construct triangle ABC with AB = 5cm, AC = 4cm and BC = 4cm

- Draw a line 5cm long. Label it AB
- 2. Stretch your compass out to 4cm
- Place the point on A and make a long arc above the line AB
- Check that your compass is (still) stretched to 4cm
- Place the point on B and make a long arc above the line AB
- 6. Join the crossing point to A and B.
- Label the point C. Remember to mark the length of sides AC and BC







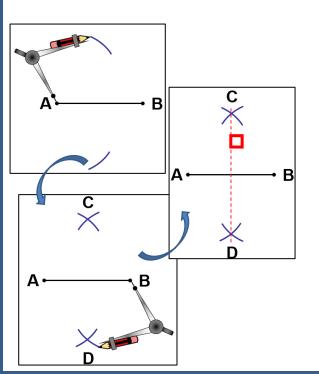
Perpendicular Bisector

Example 1: Construct a perpendicular bisector of line AB

 Stretch your compass out more than half the distance of AB

(it is a good idea to measure what distance you use to ensure that you can keep it the same throughout)

- Place the point on A and make a long arc above and below the line AB
- 3. Without changing the stretch of your compass, place the point on B and make a long arc above and below the line AB
- Join the crossing points with a line crossing AB.
- 5. Label the right angle and equal lengths.



Perpendicular from a point to a line

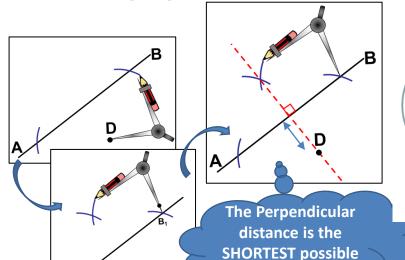
Example 2: Construct a line from D that is perpendicular to line AB

Stretch your compass out more than the distance from D to AB

(it is a good idea to measure what distance you use to ensure that you keep it the same throughout)

- Place the point on D and make two arcs each cutting the line AB (or one long arc cutting the line AB twice) one nearer A (A₁) and the other nearer B (B₁)
- 3. Without changing the stretch of your compass, place the point A₁ make a long arc above AB
- 4. Repeat by making a long arc from point B₁
- 5. Join the point where these two arcs cross to D with a line crossing AB.

6. Label the right angle



distance

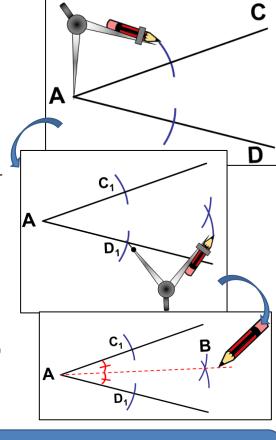
Angle Bisector

Example 3: Construct an angle bisector of the angle CAD

- Stretch your compass out to a known distance (so you can keep the same distance throughout)
- Place the point on A and make a long arc (or two short ones) one cutting the line AC (at C₁) and the other cutting the line AD (at D₁)
- 3. Without changing the stretch of your compass, place the point C₁ make an arc in the space between the lines AC and CD
- 4. Repeat by making an arc from point D₁
- Join the point (A) where these two arcs cross to B

D

6. Label the two equal angles created at <CAD



Note: all the arcs drawn in these standard constructions are from of 4 overlapping circles which create a rhombus

Combining different constructions can create:

60° and 30° angle (construction of equilateral triangle and angle bisector)

90° and 45° angle (construction of perpendicular lines and angle bisector)

Parallel lines (combine perpendiculars from 2 points on a line) leading to rectangles

KS4 Biology: B16 Adaptations, interdependence and competition

Key term	Definition
Ecosystem	The interaction of a community of living organisms with the non-living (abiotic) parts of their environment.
Biotic factors	Living components of an ecosystem . e.g. availability of food, new predators/pathogens/competitors.
Abiotic factors	Non-living factors that affect living organisms e.g. light intensity, temperature, moisture levels, soil pH, wind intensity and direction, CO_2 for plants, O_2 for aquatic animals.
Community	Organisms that interact with each other in an ecosystem .
Interdependenc e	The network of relationships between different organisms within a community e.g. each species depends on other species for food, shelter, pollination etc.
Adaptations	Features that enable organisms to survive in the conditions in which they normally live.
Quadrat	A sample area used for measuring the abundance and distribution of organisms in the field.
Abundance	A measure for how common or rare a particular type of organism is in a given environment.
Distribution	Where particular types of organisms are found within an environment.
Transect	A measured line or area along which ecological measurements are made.
Extremophiles	Organisms that live in environments that are very extreme e.g. high temperature, pressure or salt concentration e.g. bacteria living in dead sea vents are extremophiles.

Plants compete for space, water, light.

Competition in animals: mates, shelter, water, food. This may be with different species or within the same species.

You can use this method to study:

- **1.Number of an individual species** the total number of individuals of one species (e.g. daisies) is recorded.
- **2.Species richness** the number of different plant or animal species is recorded but not the number of individuals within a species.
- **3.Percentage cover** the percentage of the quadrat area that is covered by one species (e.g. grass). Remember our quadrats are divided into 25 sections each small square is worth 4%.

Adaptations

<u>Functional adaptation:</u> Any adaptation that helps an organism survive e.g. plants with spikes or horns on animals.

There are no case study adaptation organisms that you have to learn, you have to be able to apply your knowledge to the examples they ask you about.

<u>Structural adaptation:</u> Physical adaptations e.g. beak shape to crack nuts, fur colour for camouflage.

<u>Behavioural adaptation:</u> things that organisms do in order to survive e.g. bird song to find a mate, hibernation to avoid the lack of food in winter.

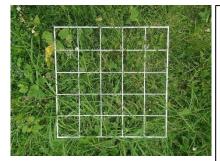
You must link the adaptation to the purpose of that adaptation

Required practical: Measure the population size of a common species in a habitat

Random sampling using quadrats

Sampling of the area you are studying must be random. It must show no **bias** – for instance, choosing to sample where there are lots of plants.

- 1. When you have chosen a sampling area, first divide it up into a grid for example using tape measures on each side.
- 2.Use a suitable method you could draw numbers out of a hat to generate a pair of random coordinates on your grid.
- 3. Place the first quadrat on your grid using these coordinates.
- 4. Count the number of different species within this quadrat (the species richness).
- 5. Repeat steps 1-4 so that you have a total of at least 10 counts.



<u>Required practical:</u> Use sampling techniques to investigate the effect of a factor on the distribution of species.

- 1. Lay a tape measure along the transect (between two points).
- 2. At regular intervals use a quadrat to sample the organisms and measure any abiotic factors e.g. use a light meter.
- 3. Repeat steps 1 and 2 along a different transect between the two points.

C1 Atomic structure

KS4 Chemistry:

Chemical symbolsAn atom is the smallest part of an **element** that can exist.

Atoms are represented by a chemical symbol which consists of one or two letters. They starts with

a capital letter, with any other letter in lower case.

Chemical formulae

A chemical formula is used to represent an element or compound. The formula for most elements

is just its chemical symbol. E.g. helium, He. Some non-metal elements exist as molecules that are made up of two atoms. Their formulae are the symbol followed by a **subscripted** '2'. E.g.iodine, I₂

Compounds The formula shows:
the symbols for each element in the compound
the number of atoms of each element in a unit of the compount

the number of atoms of each element in a unit of the compound E.g. sodium chloride, NaCl

Chemical equations A word equation represents a chemical reaction using the names of the substances involved

Reactants are substances that react together. In a chemical reaction, the atoms or ions in reactants separate from one another. They join back together in a different way to form **products**.

Word equations always take this form: reactants → products

reactants → products

Sodium + chlorine → sodium chloride

<u>Symbol equations</u> use the formulae of the reactants and products. It shows the number of units of each substance involved.

 $2Na + Cl_2 \rightarrow 2NaCl$

The law of conservation of mass states that no atoms are lost or made during a chemical reaction, so the total mass of the products is equal to the total mass of the reactants.

Compound

Keyword

Atom

Element

Mixture

Filtration

Crystallisation

Distillation Chromatography

Isotope

Plum Pudding

Nuclear Model

Relative atomic mass

Development of Atomic Model

Model

The plum pude positive charge was incorrect.

points.

l0.1nm.

Table. There are 118 elements.

the liquid to leave crystals.

a stationary phase (e.g. paper)

An average value of mass that takes account of the abundance of the isotopes of the element.

The plum pudding model shows that the atom is a ball of positive charge with negative electrons embedded in it. This

Definition

The smallest part of an element that can exist. All substances are

made of atoms. No overall electrical charge. Very small, radius of

An element contains only one type of atom. Found on the Periodic

Two or more elements chemically bonded with each other. Can only

be separated into the elements through chemical reactions.

Contains two or more elements or compounds not chemically bonded. Can be separated using physical methods e.g. by filtration,

A process that separates mixtures of insoluble solids and liquids.

A process that separates dissolved solids from liquids by evaporating

A process that separates a mixture of liquids based on their boiling

A process that separates mixtures by how quickly they move through

An atom of the same element with different numbers of neutrons.

crystallisation, distillation and chromatography.

Rutherford's scattering experiment found a central area of positive charge.

The nuclear model has a positive nucleus and electrons in shells.

Chadwick later discovered neutrons.

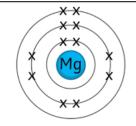
Bohr discovered the arrangement of electrons in shells.

Neutron

An atom has a central **nucleus**.

This is surrounded by **electrons** arranged in shells.

The nucleus is tiny compared to the atom as a whole.



Na

Properties of Sub-Atomic Particles

Sub-atomic particle	Mass	Charge	Position in Atom
Proton	1	+1	Nucleus
Neutron	1	0	Nucleus
Electron	Very small	-1	Orbiting in shells

Calculating numbers of subatomic particles

The symbol for an atom shows its mass number at the top, and its atomic number at the bottom.

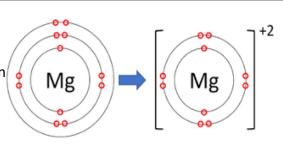
To calculate the numbers of subatomic particles in an atom, use its atomic number and mass number:

- •number of protons = atomic number
- •number of electrons = atomic number
- •number of neutrons = mass number atomic number

Isotopes

Atoms of the same element must have the same number of protons, but they can have different numbers of neutrons.

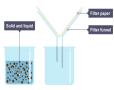
lons Atoms form ions (charged particles) by loosing or gaining electrons. These as shown using diagrams. Metal atoms loose electrons and non metal atoms gain electrons



Mixtures

Mixtures can be separated by physical processes. These processes do not involve chemical reactions, and no new substances are made.

Filtration is used to separate an insoluble solid from a liquid.
It is useful for separating sand from a mixture of sand and water, or excess reactant from a



<u>Crystallisation</u> is used to produce solid crystals from a solution.

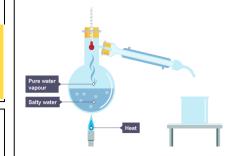
When the solution is warmed, some of the solvent evaporates leaving crystals.



Simple distillation

reaction mixture.

is used to separate a solvent from a solution. The dissolved solvent has a higher boiling point than the solvent.



Paper **chromatography** is used to separate mixtures of soluble_substances. These are often coloured substances such as food colourings, inks, dyes or plant pigments.

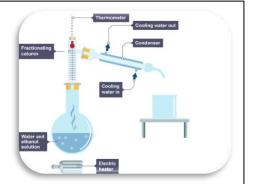
stationary phase, which in paper chromatog uniform, absorbent paper.

mobile phase is the solvent that moves through the paper, carrying different substances with it.



<u>Fractional distillation</u> is used to separate different liquids from a mixture of liquids.

It works because different liquids have different boiling points and will evaporate at different temperatures

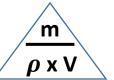


KS4 Physics: P6 Molecules and matter

Density

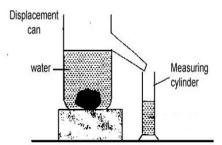
Density
$$(kg/m^3) = mass (kg)$$

Volume



To calculate the density of an irregular shape

- 1. Place the object into a displacement can
- 2. Record the volume of water displaced by the object with a measuring cylinder
- 3. Measure its mass on a balance
- 4. Calculate density using the equation density = mass/volume



m³)

Density: an objects mass per unit volume (how heavy an object is for its size)

To calculate the density of a regular shape

- 1. Calculate its volume (e.g. measure each side and then do volume = bxhxw
- 2. Measure its mass on a balance
- 3. Calculate density using the equation

Converting units

This is tricky in this section

1m = 100cm

 $1m^3 = 100cm \times 100cm \times 100cm (1,000,000cm)$

So 1 cm = 0.01 m, but $1 \text{cm}^3 = 0.000001 \text{m}^3$

States of matter and changes of state

Latent heat – the amount of energy transferred to a substance when it changes state

Specific latent heat – the amount of energy transferred to 1kg of a substance when it changes state



- Energy E in Joules (J)
- Mass m in kilograms (kg)
- Specific latent heat L in joules per kilogram (J/kg)

	Solid	Liquid	Gas
Arrangement of particles	Close together	Close together	Far apart
	Regular pattern	Random arrangement	Random arrangement
Movement of particles	Vibrate on the spot	Move around each other	Move quickly in all directions
Diagram			X

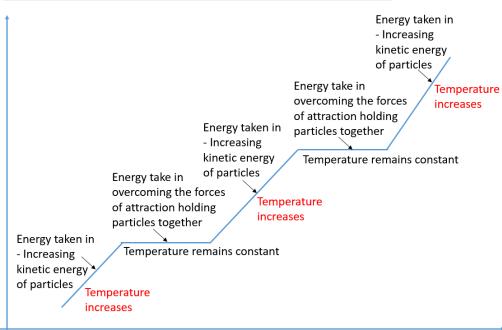
Specific latent heat of fusion, L_F – energy transferred during melting / freezing

Specific latent heat of vaporisation, L_V – energy transferred during boiling / condensing

Energy changes during changes of state

Energy

Energy



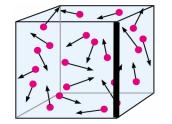
Internal energy - the sum of a particles kinetic energy and potential energy

If a substance increases in temperature, its internal energy increases because the particles have a greater kinetic energy

If a substance changes state (melts or boils), its internal energy increases because the particles have a greater potential energy.

Gas pressure

Pressure is caused by the gas particles colliding with the container and exerting a force



Gas pressure can be increased by:

- Increasing the temperature this makes the particles move faster and causes more collisions per second and collisions with a greater force, resulting in a higher pressure.
- Decreasing the volume this results in a higher frequency of collisions.
- Increasing the number of particles in the system – this again results in more collisions occurring per second, increasing the pressure.

Boyles Law

At a constant temperature

Pressure (Pa) x volume (m^3) = constant

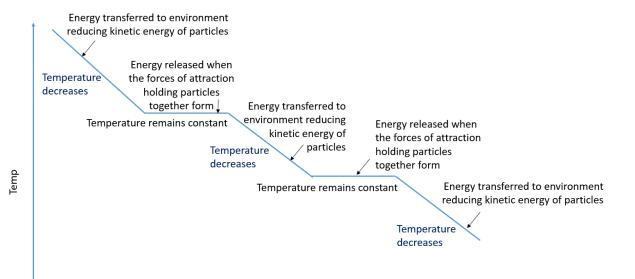
p x v = constant

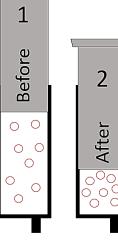
If you double the volume the pressure will half

If a system is changed

Pressure x volume before must equal the pressure x volume after

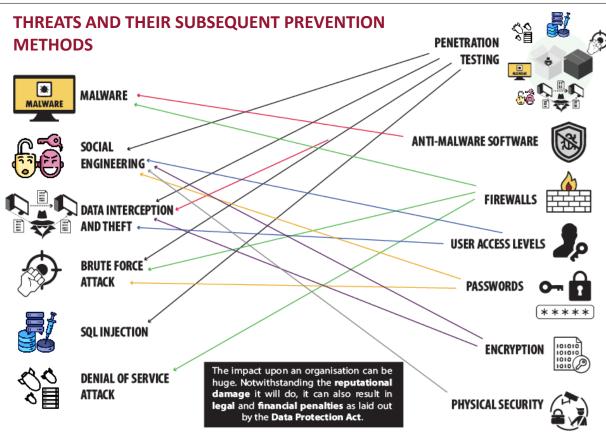
$$P_1 \times V_1 = P_2 \times V_2$$





1. COMPUTER CRIME & CYBER-SECURITY

Year 9 Computer Science – Autumn Term



CYBERCRIME

refers to criminal activities that are conducted using computers or the internet. This can include hacking, identity theft, phishing, and the distribution of malware, among other illicit activities. The goal is often to steal sensitive information, money, or to disrupt services.

PHISHING

is a type of cyber attack in which attackers pose as legitimate entities to deceive individuals into providing sensitive information such as usernames, passwords, and credit card details. Phishing attacks typically occur through email, fake websites, or instant messages.

TROJAN HORSE

A Trojan Horse is a type of malicious software that appears to be legitimate or useful but is actually designed to harm, disrupt, or steal information from the system it infects. Once activated, it can create backdoors for other malware or allow unauthorized access to the user's system.

HACKING

Hacking is the unauthorised access or manipulation of computer systems, networks, or data. Hackers may exploit vulnerabilities for various purposes, including data theft, espionage, or simply for the challenge.

ADVANCE FEE FRAUD

Advance Fee Fraud is a scam where the victim is persuaded to advance sums of money in the hope of receiving a significantly larger amount of money or some other benefit, which never materializes. Common examples include the Nigerian prince scam and lottery frauds.

VIRUS GENERATED EMAIL

A Virus Generated Email is an email that is automatically sent by a computer virus from an infected system. These emails often contain malicious attachments or links designed to spread the virus to other systems.

EMAIL SCAMS

Email Scams involve deceptive emails sent to individuals with the intent to defraud. These scams can include phishing, advance fee fraud, lottery scams, and others, aiming to trick recipients into providing personal information, financial details, or money.

MALWARE

Malware (short for "malicious software") is any software intentionally designed to cause damage to a computer, server, client, or computer network. This includes viruses, worms, Trojans, ransomware, spyware, adware, and more.

RANSOMWARE

Ransomware is a type of malware that encrypts a victim's files. The attacker then demands a ransom from the victim to restore access to the data upon payment. Instructions for how to pay the ransom are typically displayed in a message to the victim.

IDENTITY THEFT

Identity Theft involves stealing someone's personal information (such as Social Security number, bank account details, or credit card numbers) to commit fraud or theft. This can result in financial loss and damage to the victim's credit rating.

GENERAL DATA PROTECTION REGULATIONS (GDPR)

The General Data Protection Regulation (GDPR) is a legal framework that sets guidelines for the collection and processing of personal information of individuals within the European Union (EU). It aims to give control to individuals over their personal data and simplify the regulatory environment for international business.

DATA HARVESTING

Data Harvesting (or data mining) is the process of extracting large amounts of data from websites, databases, or other sources, often without the consent of the data owner. This data is then analysed to find patterns, trends, or useful information.

COPYRIGHT

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2. AI & MACHINE LEARNING

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ARTIFICIAL INTELLIGENCE

An artificial creation of human-like intelligence that can 'think' like humans with abilities such as learning or problem solving.

NEURAL NETWORKS

Neural networks work like neurons in the brain. A neural network classifies information in the same way a human brain does.

FACTS AND RULES

A fact for classifying a person might be that: People have a mouth. A rule that helps to classify a person could be: People might wear sunglasses

MACHINE LEARNING

Machine learning (ML) is a part of AI. In machine learning, the machine will work out the rules for itself. It will be given a large amount of training data to work out these rules.

STRUCTURED AND UNSTRUCTURED DATA

In **structured data**, the data has been organised. For example, a company's financial data may be organised by month; a weather station's data may be organised by hour. **Unstructured data** has not been organised. For example, emails, newspaper articles, messages, social media posts are unstructured.

STRENGTHS OF MACHINE LEARNING	WEAKNESSES OF MACHINE LEARNING
It can find patterns we did not know were there	It is only as good as the training data given to it
It can solve simple questions and leave skilled humans to deal with special or harder cases	It only gives a probability, not a certain answer
The machine improves with experience	Results may need careful interpretation
It can handle unstructured data	Errors can be hard to detect

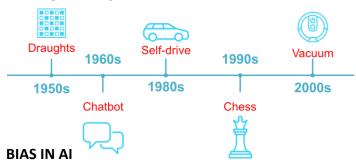
ETHICS

'Ethics' is a significant aspect of philosophy. At its simplest, ethics is about what is right, or wrong.

ETHICS OF AI

Ethical questions can be very difficult to answer It is important to consider the possible negative effects of new technologies by asking questions such as: How reliable is the technology? Will there be cases of mistaken identity? How secure is the system? Could evidence be tampered with? Is it fair to be fined by a machine? What happens if the AI is programmed to follow rules that aren't in the interests of the majority of people?

DEVELOPMENTS IN AI



Up to 40% of jobs could be replaced by automation & Al by 2035

Bias could occur in any area of AI. Some areas that may be affected could be:

People tend to prefer sweeter fruit and vegetables, so AI could only pick or produce the very sweetest. This would affect people who don't like these

Al could use training data for job applications that makes it biased – for instance, if the training data was all from people with European names, it may reject someone who has a non-European name even though they could be very good at the job.

FACIAL RECOGNITION

Facial recognition can work by calculating the distances between points on a face



THE TURING TEST

This test was created by Alan Turing in 1950. A human sits in one room and asks questions through a computer. The questions go to a computer and a human. If the human cannot tell the difference between talking to a computer and a human, the computer passed the test.

PROBLEMS WITH PATTERNS

Al and machine learning are very good at finding patterns. The problem is, they might spot patterns that don't exist.

CHATBOTS

Chatbots, also known as virtual assistants are able to help people by replying to messages or voice commands.

SENTIMENT ANALYSIS

When we analyse how people feel about something, it is known as sentiment analysis

Sentiment analysis can be used to: Find a reaction to a product such as a film or TV series. Find out feelings to a fashion trend. Find how people feel about political issues or voting intentions.



Triple Alliance

History – Terms 3 & 4.
Causes and Events of the
First World War

leutral countries



Triple Entente

The **First World War**, also known as the **Great War**, began in 1914 after the assassination of Archduke Franz Ferdinand of Austria. His murder catapulted into a war across Europe that lasted until 1918. During the conflict, Germany, Austria-Hungary, Bulgaria and the Ottoman Empire (the Central Powers) fought against Great Britain, France, Russia, Italy, Romania, Japan and, from 1917, the United States (the Allied Powers).

Thanks to new military technologies and the horrors of trench warfare, the First World War saw unprecedented levels of carnage and destruction. By the time the war was over and the Allied Powers claimed victory, more than 16 million people—soldiers and civilians alike—were dead.

Use the word MAIN to remember the main issues surrounding the cause of the First World War:

- Militarism many countries believed it was important to build large armies and navies.
- Alliances the Triple Alliance and the Triple Entente were said to have been formed to help prevent war.
- Imperialism European nations were creating empires and coming into conflict.
- Nationalism all countries were looking out for their own interests.

By 1914, Europe was a powder keg of problems waiting to go off





The assassination of Archduke Franz Ferdinand and his wife Princess Sofia on 28th June 1914 was a key spark of the war

	28 th June 1914 - Archduke Franz Ferdinand is assassinated in Bosnia			The BEF
verview of key events of the First World War	28 th July - Austria-Hungary declares war on Serbia. Russia begins mobilizing its troops			Conscription
	1st August - Germany declares war on Russia			Schlieffen Plan
_	3 rd August - Germany declares war on France as part of the Schlieffen Plan.			
Va	4 th August - Germany invades Belgium. Britain declares war on Germany.			Stalemate
7	8 th August 1914 Britain passes DORA (the Defence of the Realm Act) which gives the government			No Mans Land
r	powers such as to ration food, control the news and use factories.			Tommy
t ≪	September 1914 The French stop the German attack at Marne, leading to the start of Trench Warfare on the Western Front			Barbed Wire
irs	April 1915 – Poison gas is used for the first time at the Second Battle of Ypres			Mustard Gas
	June 1915 – The first ever 'dog fight' between German and British airplanes		>	Artillery
of th	February 1916 - The Battle of Verdun begins between France and Germany. This battle will last until December 1916 and will finally result in a French victory.		oulai	Trench Foot
	May 31 - The largest naval battle of the war, the Battle of Jutland, is fought between Britain and Germany in the North Sea.		Vocabula	Trench Fever
Ve	July 1916 – Battle of the Somme, the largest battle of the war.			Dugout
>	Sept 1916 – The ever first tank is used in the Battle of the Somme		Key	Bayonet
k e	January 1917 – Conscription introduced in Britain			Armistice
of	31 st July – 10 th November 1917 – The Battle of Passchendaele.			War effort
view	20 th November – 7 th December 1917 – The Battle of Cambrai, first large scale use of tanks in battle.			Conscientious Objector
verv	February 1918 – Representation of the People Act, this gives the first time vote to men over 21 and women over 30			Suffragette
0	21 st March – 18 th July 1917 – German Spring Offensive, Germans make the largest territorial gains in the war since 1914.			Suffrage
	11 th November 1918 – An armistice is signed, Germany surrenders and WW1 ends			Strike
	1919 – Government passes a law forcing women to leave their war time jobs as men return from			Munitions
	the war and factories were not needed for wartime production			David Lloyd George

attack Russia so they would not have to fight both. alemate A deadlock where no side is able to make progress to win. Area separating opposing armies in trench warfare. Mans Land Nickname for a British soldier. mmy rbed Wire Strong wire with sharp barbs at regular intervals, used to stop people passing. ustard Gas Poisonous gas used by the Germans, French and British Large guns that fire explosive shells over long distances tillery ench Foot A painful condition of the feet caused by long exposure in cold water or mud, as a result some feet were amputated. ench Fever A disease caused by lice bites which made soldiers very ill in the trenches.

Shelter dug into the side of the Trench

equal rights for women, like voting.

Military weapons and ammunition

The right to vote in political elections.

Where workers refuse to work in protest

Prime Minster of Britain during and after WW1

A blade attached to the end of a soldiers rifle

An agreement made by tin a war to stop fighting.

How people at war and at home contribute to the war.

Someone who refuses to fight or be involved in war for religious, moral or political reasons, also called 'Conchies'

Women who protested, using violent methods to achieve

The British Expeditionary Force, Britain's army in 1914

Compulsory order for all men 18 to 41 to join the army

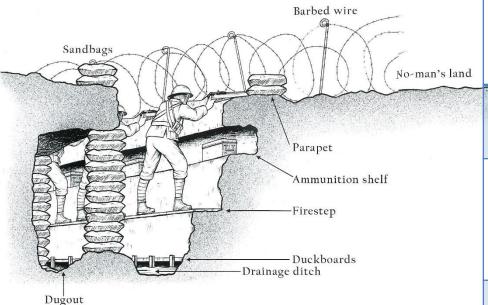
German plan in 1914 to attack and defeat France, then

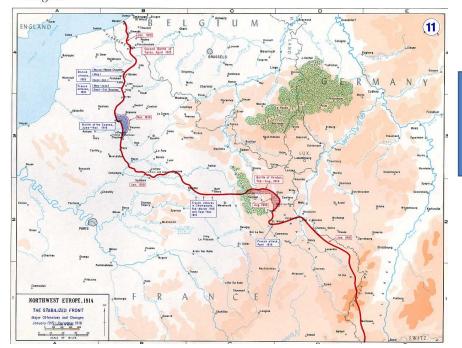
British Soldiers Equipment



The British Expeditionary Force that went to war in 1914 was arguably the best equipped and trained force in Europe. The khaki serge uniforms adopted in 1902 and worn by officers and men were the first real example of camouflaged combat clothing. Men wore a soft peaked cap with the regimental cap badge. This was replaced by the end of 1915 with a steel helmet.

Cross-section of a typical frontline trench





Key Concepts

Trench Warfare	Trench warfare is a type of fighting where both sides build deep trenches as a defence against the enemy. These trenches can stretch for many miles and make it nearly impossible for one side to advance.
Western Front	The area of fighting in western Europe in the First World War. A majority of fighting was done in North–Eastern France and Belgium in trenches
Alliance	An agreement between countries to protect each other in war. This was major cause of WW1, there were two main alliance in 1914. The Triple Entente (France, Britain and Russia) and the Triple Alliance (Germany, Austria-Hungary and Italy)
War of Attrition	A war based on winning by wearing down the enemies armies, economy and morale. This happened in the First World War

By the end of 1914, the trench system in Western Europe ran from the Belgian coast to the Swiss border over 480 miles away!





Check out a First World War frontline trench here:

https://youtu.be/FvYIIuxh2kY

Medical Problems on the Western Front.

Trench Foot

Trench foot was a major problem caused by standing in waterlogged trenches with no change of boots or socks. In the first stage, the feet would swell, go numb and the skin would turn red or blue. The condition could get worse quickly, leading to gangrene and amputation of limbs!

In the cold, wet winter of 1914-15 cases of Trench Foot were serious. The 27th Division of the British army experienced 12,000 cases of trench foot.

Attempted Solutions

To prevent the impact of trench foot, medical officers ordered soldiers should carry 3 pairs of socks and change them twice a day. They were also encouraged to rub whale oil into their feet.



Attempts were made to pump out trenches to reduce waterlogging and add duckboards, but constantly bombing made this hard

Rash Back Pain Muscle Aches Aches

Trench Fever (PLO)

Flu like symptoms with high temperature, headache and aching muscles which was spread by lice. • Men could be ill for up to a month

Estimated half a million men on the Western front were affected by Trench Fever.

Attempted Solutions

Delousing stations were set up on the front; clothes were disinfected, men were bathed and sprayed with chemicals to prevent lice.

As a result of this, there was a decline in the numbers experiencing the condition.

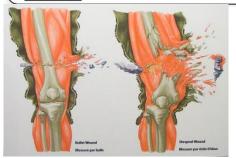
Shell Shock

Symptoms included tiredness, headaches, nightmares, loss of speech, uncontrollable shaking and complete mental breakdown. It is estimated 80,000 British troops experienced shellshock

Called NYD,N (Not Yet Diagnosed, Nervous) as a code by the army for shellshock.

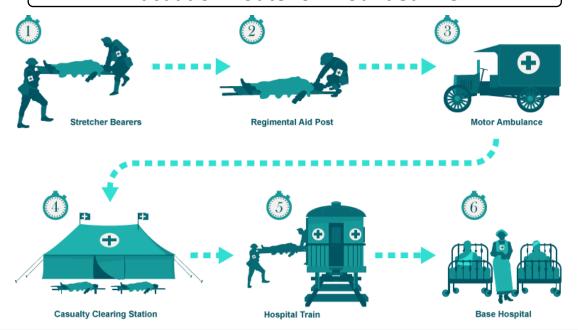
Attempted Solutions

This condition was not understood at the time, some soldiers who experienced shell shock were accused of cowardice and any were punished, some even shot.



Wounds were nearly always infected by the time soldiers reached aid stations, so new methods of treatment had to be introduced

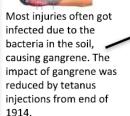
Evacuation Route for Wounded Men



New Wounds

The First World War introduced a wide range of wounds for medical staff to attend to. For example, high explosive shells and shrapnel (fragments of metal) were responsible for 58% of wounds whilst bullets were responsible for another 39%





60% of shrapnel wounds were to the arms and legs, a common treatment was amputation. Over 41,000 had their limbs amputated.



Gas gangrene could not be cured, it could often kill in a day.

Artillery, gun fire and bombs could break bones, pierce vital organs and destroy tissue. Many never made it to hospital

Gas Attacks

Gas caused great panic as soldiers were unprepared for it. It wasn't a major cause of death, only 6000 soldiers died during WW1.

There were 3 types used in the war:

Chlorine: Ypres 1915

Caused death by suffocation. Before gas masks, soldiers soak cotton pads in urine and pressed them to their faces

Phosgene 1915

Used Ypres. Faster acting than chlorine, killing an exposed person within 2 days.



Mustard Gas 1917

Odourless gas that worked within 12 hours. Caused internal and external blisters and could pass through clothing to burn skin.

Solution

British soldiers were given Gas masks from July 1915, which became more sophisticated over time



Factfulness Key idea

Distribution

of wealth

(patterns)

Reasons for

Development

indicators

Population

Pyramids

r 1000 inhabitants

different

levels of

wealth

Key knowledge

Wealth is not evenly distributed some countries have more than others; some continents tend to be richer or poorer in generally... but even within a country, or city,

the spread will still be uneven. War – destroys a country's infrastructure Diseases –people are less likely to survive illnesses Education -cannot get qualifications to get better paid jobs and improve their quality of life **Unfair trade and debt** – Many countries are in a lot of debt and cannot pay it off. This slows development. **Gender inequality** – halving your workforce = half the money.

There are a variety of methods e.g. life expectancy or

literacy rates that offer clues as to how developed a country is. Each has its uses, but none are perfect.

A graph that allows us to see the gender and age

structure of a population. Different shapes tell us

The Demographic Transition Model

different things about the population of the country.

Making a simple, fixed idea about a group of people, which might not be true for everyone. **Stereotyping Gender Inequality** When people are treated unfairly or have different opportunities based on gender. Demographic **Transition Model** Levels of Development

Key terms

Birth Rate

Death Rate

Life Expectancy

(HDI) Human

Gross Domestic

Product (GDP)

Literacy Rates

Poverty

Diversity

Multiplier Effect

Resultant population

Dashed line

predictions

totals

Development Index

Bias

A model showing how birth and death rates change as a country develops over time. How rich, advanced, or well-off a country is, based on things like wealth, health, and education. The number of babies born for every 1,000 people in a country each year.

Definitions

presented.

The number of deaths for every 1,000 people in a country each year The average number of years a person is expected to live. A score that combines life expectancy, education, and income to measure a country's development. The total value of all goods and services a country produces in one year. The percentage of people in a country who can read and write. How money spent (like from tourism or investment) creates extra jobs and spending in the local area

Not having enough money to meet basic needs like food, shelter, and healthcare.

A mix of different people, cultures, or ideas in one place.

Unfair support for one idea or group over another, which can affect how information is

Tectonics

Key knowledge

Key idea

Tectonic

theory

Plate boundary	The edge of a plate which interacts with it's neighbour.
Fault Line	A fracture in the Earth's crust along which significant movement has occurred, often associated with earthquakes.
Epicentre	The point on the Earth's surface located directly above the focus (origin) of an earthquake.
Focus	The point within the Earth where the earthquake occurred.
Seismic Waves	Vibrations that travel through the Earth, released by the sudden movement of rock along faults/plate
Subduction	tectonic plate moves under another (less dense) plate, often generating intense seismic and volcanic activity.
Richter Scale	A numerical, logarithmic scale for expressing the magnitude of an earthquake on the basis of seismograph oscillations.
Magnitude-	The size of an earthquake measured on the Richter Scale.
	Fault Line Epicentre Focus Seismic Waves Subduction Richter Scale

Tectonic plates move because the core of the earth is very hot and heats the magma in the mantle, this then rises as it

is less dense, before reaching the crust, travelling in each direction underneath it, cooling again which makes it denser,

Definitions

Massive slabs of Earth's lithosphere

whose interactions shape the planet's

Key terms

Tectonic

Plates

Buddhism

	Beliefs	Key terms	Definitions
Origins of Religion	Buddha a prince of India called Siddhartha Gautama (c2500 years ago). He was prophesied to become a saviour of the people. His father wanted him to be a great leader and showered him in gifts but never let him leave his palace. When	Anatta	The belief that we are always changing; we are never the same person and hold no permanent identity
		Anicca	The belief that everything in life is always changing
	Siddhartha was older he wished to see outside the palace walls and go on a tour of	Dukkha	The belief that we are never satisfied. This is because everything is
	the city. His father allowed this, ensuring he only saw the best sights and healthy, happy people, sparing him seeing the problems of the world.	Finhafold wash	always changing – we always want more and the next new thing.
		Eightfold path	8 principles of doing things morally right to benefit yourself and society
4 Sights	 When Siddhartha was on his tour, he saw 4 sights he had never seen before. These were an elderly man, a sick man, a funeral of a dead man and a holy 	Enlightenment	A state of peace and harmony, where everything is in balance
	man. Returning to the palace, Siddhartha could not believe the suffering and	Five Precepts	5 Rules for Buddhists to keep to maintain Right Action
N 42 - 1 - 1 - 1 - 1 - 1 - 1	wanted to help. He left the palace looking for answers.	Four Noble Truths	4 Truths from Buddha, after his realisation of suffering when seeing the 4 Sights
Middle Way	• Siddhartha tried to live with pain and suffering to experience what others felt.	Four Sights	Buddha saw 4 things that shocked him: elderly man, dead man,
	He realised it was a Middle Way he must follow – not a life of luxury or of suffering and poverty.		sick man and a Holy man, on his tour of the city
	suffering and poverty.	Karma	The belief that our actions have consequences in life and between lives (after death for re-birth).
Enlightenment	 Siddhartha listened to Holy men, and sat under a Bonhi tree trying to find meaning of life. One day he had a great realisation about the world. He found peace and harmony; enlightenment. He became Buddha and taught others about the core Buddhist beliefs. 5 rules Buddhists should live by to ensure they follow the right action of the Eightfold Path I will not: harm another living being take what is not given speak falsely e.g. I will not lie cloud my mind with alcohol or drugs I will avoid harmful sexual activity 	Middle Way	Living a balanced life: Not one of luxury/richness, but not one of
		Nirvana	poverty and suffering At the point of enlightenment – when Samsara ends.
			· · · · · · · · · · · · · · · · · · ·
5 precepts		Reincarnation	The re-birth based on karma at the end of each life. You can be reincarnated into 6 different realms
		Samsara	The belief of birth, death and rebirth (reincarnation). It is about the cycle of life.
		Temple	Place of worship, medication and offering
		The 3 marks of Life	These are 3 ideas about life; Anicca, Anatta and Dukkha
4 Noble Truths	 When seeing his 4 sights Buddha came up with 4 Noble truths about the world 1. Life involves suffering 	Tripitaka	Buddhist religious text/scripture
	2. Suffering is caused by attachment, greed and craving	Vihara	Where Buddhist monks live – the area in the temple
		Wesak	Buddhist Festival recognising Buddha and his teachings

Buddhism

Beliefs

Eightfold Path



- These are the beliefs and principles Buddha decided to live by.
 Buddhists follow these guidelines through life so they follow the
 Middle Way. These shape how Buddhist behaviour to others, live their life and their mental state.
- · The eight beliefs are:



Death and afterlife

- The Buddha taught that we are all made up of physical and mental parts that are constantly changing called **anatta**
- We are living in a **life of impermanence** where we have no permanent soul. The idea of re-birth or **reincarnation**
- He believed that a person's actions would have an effect on their life in the future called **Karma**.







Practices

Worship

- Shrine room centre of worship. Often has a statute of Buddha
- Offerings are made in the shrine room to Buddha. Eg flowers, food, lighting a candle or burning incense
- The temple is open for Buddhists to worship/ take part in meditation and chanting. They often have a Vihara. Some have Halls for learning, where monks train and learn

Holy Books

The **Tripitaka** is the source of authority for Buddhists. It contains 3 sections:

- 1. Rules for how Buddhists should behave. (chanted at worship)
- 2. The **teachings and sayings** of Buddha
- 3. Teachings about the nature of life and reasons for being, and guidelines on how to reach enlightenment

Festival of Wesak

- Wesak recalls the birth, enlightenment and death of Buddha;
 each year on the full moon in May
- During the festival Buddhists, **decorate homes**, **light lanterns** and eat vegetarian foods. They **attend temple**, **m**ake **offerings** to the temple and to the poor. They also **meditate**.

Key Quotes from the Buddha

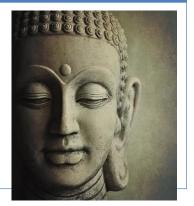
"Nothing is impermeable, strive on with awareness"

"happiness is a choice and suffering is optional"

"Contentment is the greatest wealth"

"Speak well of others, not of their faults"

"Self control is strength"



TERM 1 FRENCH – DISCUSSING MODERN TECHNOLOGY

KEY #LEARNING:

How to talk about / describe your mobile

How to talk about what you do with modern tech

How to talk about the role of social media in your life / modern society

Key questions for this term:

As-tu un portable? Que fais-tu avec?= Do you have a 'phone? What do you do with it?

La technologie est importante pour toi ? = Is modern technology important for you?

Que penses-tu des réseaux sociaux ?= What do you think of social media?

A modal verb is a word like 'can', 'must', 'should' etc. You use it with an **infinitive** verb.

Je peux aller en ligne = I can go on line

Je ne peux pas prendre des photos = I can't take photos On peut faire du shopping = You can / one can do shopping

Je dois faire mes devoirs = I must / have to do my homework

Direct object pronouns.

The words for 'it', or 'them'. In English, 'I use it every day'; 'I like them'

Je **l'**utilise chaque jour

Je **les** aime

Notice it goes before the verb.

	As-tu un portable?	je l'utilise (I use it) pour		
	(Do you have a mobile phone)	télécharger la musique(to download music)		
	Que fais-tu avec? What do you do with (it)?)	faire mes devoirs(to do my homework)		
	Oui, j'ai un portable (Yes I have a phone)	regarder des vidéos (to watch videos)		
	Il est (it is) + description	faire du shopping (to do shopping)		
ı		faire des recherches (to do research)		
ı		rester en contact avec ma famille (stay in contact with		
1		my family)		
	quelquefois (sometimes)	Je peux (I can)		
	des fois (at times)	On peut (one can / you can)		
	le matin (in the mornings)	prendre des photos (take photos)		
	le soir (in the evenings)	envoyer des textos (send texts)		
	au collège (at school)	tchatter avec des amis(chat with my friends)		
	quand je suis avec des amis (when I'm with my friends)	aller en ligne (go on line)		
		jouer aux jeux vidéos(play games)		

A reminder about French adjectives. Don't forget to make the adjective 'agree' with the noun. Is it masculine or feminine? Singular or plural?

Masculine Singular	Feminine Singular	Masculine plural	Feminine Plural	ENGLISH
vieux	vieille	vieux	vielles	old
nouveau	nouvelle	nouveaux	nouvelles	new
moderne	moderne	modernes	modernes	modern
mince	mince	minces	minces	thin
laid	laide	laids	laides	ugly
joli	jolie	jolis	jolies	pretty
utile	utile	utiles	utiles	useful
cher	chère	chers	chères	expensive
noir	noire	noirs	noires	black
petit	petite	petits	petits	small

TERM 2 FRENCH- DISCUSSING FILM, TV AND MUSIC

KEY #LEARNING:

How to talk about / describe your tastes in film, TV and music!

Describe a film / TV programme and explain why you like it

In Year 8, you first met the 'perfect tense'. This is used to talk about what you 'did'.

The **imperfect tense** is used to talk about what you were doing / used to do...

I watched a comedy on Saturday —perfect tense I was watching / I used to watch comedies on Saturday — imperfect tense

je regard<u>ais</u> = I used to watch tu regard<u>ais</u> = you used to watch il regard<u>ait</u> = he used to watch nous regard<u>ions</u> = we used to watch vous regard<u>iez</u> = you used to watch ils regard<u>aient</u> = they used to watch



Key questions for this term:

Que penses-tu de la musique française ? = What do think of Spanish music?

As-tu vu un film français ?= Have you ever seen a Spanish film?

Quelles sortes de film aimes-tu? = What sort of programmes / films do you like?

As-tu une émission préférée ?= Do you have a favourite TV programme?

Aimes- tu la musique / ... Do you like music / TV / films?)

Quelle sorte de ... aimes -tu? (What type of ... do you like?)

Mon film préféré , c'est... my favourite film is...)

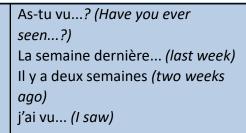
j'adore / j'aime (I love / Ilike)
je n'aime pas (I don't like)
je ne supporte pas (I can't stand)
les films d'action / de guerre (war)
les émissions de sport (sports programmes)
les dessins animés (cartoons)

les feuilletons (soaps)

le rock

la musique classique

c'est intéressant ennuyeux



C'était ... (it was)
Je l'ai trouvé ... (I found it...)





KEY #LEARNIN	
TERM 1 SPANI	SH – DISCUSSING MODERN TECHNOLOGY

How to talk about / describe your mobile

How to talk about what you do with modern tech

How to talk about the **role of social media** in your life / modern society

Key questions for this term:

¿Tienes un móvil? Que haces con él= Do you have a 'phone? What do you do with it?

¿La tecnología moderna es importante para ti?= Is modern technology important for you?

¿Qué opinas de las redes sociales?= What do you think of social media?

8	¿Tienes un móvil?
	(Do you have a mo
	¿Qué haces con él?
	Sí, tengo un móvil(
	Sí, tengo un móvil(Es (it is) + descrip

gordo

guapo

hermoso

moreno

precioso

rubia

have a mobile phone)

ces con él?What do you do with it?) un móvil(Yes I have a phone)

+ description

Lo uso para (I use it...)

descargar música (to download music) hacer mis deberes (to do my homework)

ver videos (to watch videos)

hacer compras (to do shopping)

hacer investigación (to do research)

mantenerme en contacto con mi familia (stay in contact with my family)

A veces (sometimes) Puedo ...(I can)

algunas veces(at times) Por la mañana (in the mornings)

_

Por la tarde (in the evenings)

En el colegio (at school)

gorda

guapa

hermosa

morena

preciosa

rubia

Cuando estoy con mis amigos (when I'm with my friends)

Se puede... (one can / you can) No puedo/ no se puede(I can't / you can't)

sacar fotos (take photos)

mandar mensajes (send texts)

charlar con mis amigos (chat with my friends)

ENICHICH

Fat

Dark

Blond

Good-looking

Beautiful

beautiful

ir en linea(go on line)

Familia Blood

gordas

guapas

hermosas

morenas

preciosas

Rubias

jugar a los juegos (play games)

Modal verbs

A modal verb is a word like 'can', 'must', 'should' etc.

You use it with an infinitive verb.

Puedo ir en linea= I can go on line

No puedo tomar fotos = I can't take photos Se puede hacer compras = You can / one can do shopping

Debo hacer mis deberes = I must / have to do my

homework

Debes hacer los deberes= You should go and see your cousins

Direct object pronouns in Spanish

You usually put the object pronoun before the verb. In English we put it after the verb.

Ejemplos:

Uso mi móvil para ver videos.

I use my phone to watch videos

Lo uso para ver videos.

I use it to watch videos

Masculine Singular	Feminine Singular	Masculine plural	Feminine Plural	ENGLISH
alto	alta	altos	altas	Tall
bajo	baja	bajos	bajas	Short
debil	débil	débiles	débiles	Weak
delgado	delgada	delgados	delgadas	Thin
A reminder about adject	ives (describing something	()	De estatura media	Medium height
			De talla media	Medium build
esbelto	esbelta	esbeltos	esbeltas	Slim
feo	fea	feos	feas	Ugly
flojo	floja	flojos	flojas	Weak
fuerte	fuerte	fuertes	fuertes	Strong

gordos

guapos

hermosos

morenos

preciosos

rubios

TERM 2 SPANISH- DISCUSSING FILM, TV AND MUSIC

KEY #LEARNING:

How to talk about / describe your tastes in film, TV and music!

Describe a film / TV programme and explain why you like it

The imperfect tense

The first past tense that you learnt in Spanish was the preterite tense. This describes single completed actions that took place at a particular time in the past and had a clear beginning and end. You are now going to learn the imperfect tense. This has two main uses:

- 1. To say what someone used to do or what used to happen over a longer and vaguer time frame (i.e. when I was little)
- 2. To describe a scene or say what something was like. For example: Llovía mucho y la gente era antipática (It was raining a lot and the people were unpleasant).

The imperfect tense

Fortunately, the imperfect is fairly easy to form. It has two sets of endings and only three irregulars. The endings are as follows:

	hablar	comer	decidir
уо	ha <u>bla</u> ba	co <u>mía</u>	deci <u>día</u>
tú	ha <u>bla</u> bas	co <u>m</u> ías	deci <u>d</u> ías
él/ella	ha <u>bla</u> ba	co <u>mía</u>	deci <u>día</u>
nosotros	ha <u>blá</u> bamos	co <u>m</u> íamos	deci <u>d</u> íamos
vosotros	ha <u>bla</u> bais	co <u>m</u> íais	deci <u>d</u> íais
ellos/as	ha <u>bla</u> ban	co <u>mían</u>	deci <u>dían</u>

Key questions for this term:

¿Que piensas de la música española?= What do think of Spanish music?

¿Has visto una película española?= Have you ever seen a Spanish film?

¿Qué tipo de programas / películas te gustan?= What sort of programmes / films do you like?

¿Tienes un programa de televisión favorito? = Do you have a favourite TV programme?

¿Te gusta la música / televisión / películas?(Do you like music / TV / films?) ¿Qué tipo / qué tipo de películas te gustan? (What type of films do you like?) mi película favorita es ...(my favourite film) me encantan/ me gustan (I love / Ilike) detesto/no me gustan (I hate / Idon't like) no soporto

les.. películas policiacas, películas comicas, películas de guerra (war films), películas del extranjero (foreign films), películas de espías (spy films), películas de d'aventura, películas dramáticas, películas de acción, películas animados (animated films), los westerns

un programa (tv programme), un concurso (games show)

un dibujo animado (cartoon), las noticias (news), el tiempo (weather forecast) una telenovela (soap opera)

la música rock la música pop

interesante (interesting) aburrido(boring)

emocional (moving) terrible (rubbish)



Ser (to be) Ir (to go) Ver (to see) The three irregulars are: iba ve**ía** VΟ <u>e</u>ra tú veías ibas eras él/ella iba ve**ía** era éramos ve**íamos** nosotros ibamos ibais veíais vosotros erais ellos/as iban veían eran



¿Has visto? (Have you ever seen...?) La semana pasada (last week) Hace dos semanas (two weeks ago) ví... (I saw) vimos (we saw)

mire (I watched)

Fue (it was) Lo encuentro (I found it...)





Traditional Mexican patterns used on **Alebrijes**





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

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...

TALKING ABOUT ART:

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

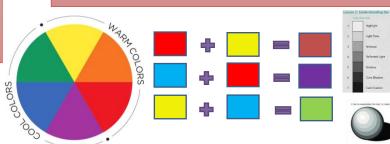
Alebrijes are brightly coloured Mexican folk art sculptures inspired by mythical creatures.

Artist Pedro Linares invented the style of and name of the Alebrijes, which originated in Mexico City.

The story goes that Linares was very ill in 1936 and while in his sick bed, he dreamt of strange places and animals. He saw 'a donkey with butterfly wings, a rooster with bull horns, a lion with an eagle head and all of them were shouting one word, 'Alebrijes! Alebrijes! Alebriies!'.

Once recovered from his illness, Linares started to recreate the creatures he had dreamt about. Originally, the Alebrijes were made from a range of papers, and engrudo (a kind of glue made from wheat flour and water) to create a papier mache sculpture.

Today, most Alebrjies are made from wood (though some are still papier mache). In the 1980s Linares was invited to take part in a series of workshops with other Mexican artists and makers. Through the exposure of Linares creatures and style, other artists soon adapted their own carvings of creatures, adding more mythical elements to their own animal designs. Over the years the Alébrijies have spread from town to town.





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

MARK MAKING

ALMadillo

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

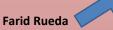
SOFT

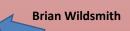




Artists you could research:

Manuel Jimenez Ramirez













Dance Music

Exploring Rhythm, Chords and Metre in Music for Dance



Rhythm

The order of the notation duration

Pitch
The highness or lowness of a note in sound frequency

Structure and Form
How the composition is built

Melody
The Tune

Instrumentation
The instruments used by the composer

Tempo
The Speed of the Music

All the musical parts that support the Melody





DR P SMITH is an acronym that we use to remember the essential elements of music at Trafalgar.

These are the key ingredients that combine to produce all sound and all music.

Use your smartphone to scan the QR codes to find out more...



PULSE/BEAT – A regular beat that is felt throughout much music. RHYTHM – A series of notes of different lengths that create a pattern..

METRE – The repeating pattern of beats and how they are grouped SIMPLE TIME – 2/4, 3/4 and 4/4 time signatures COMPOUND TIME – 6/8, 9/8 and 12/8 time signatures COMMON TIME – Another way of referring to a 4/4 time signature, shown in staff notation by a curly "C".

PRIMARY CHORDS – Chords constructed on the first (tonic: chord I), fourth (subdominant: chord IV), and fifth (dominant: chord V) notes of a scale consisting of the root, third and fifth.

TIME SIGNATURE – Tells us how many beats (and what type of beats) there are in each bar of music and is made up of two numbers – the top numbers tells us how many beats and the bottom number tells us what types of beats.

BAR – How music is divided up into different units called "bars". BAR LINE – a single line to divide music up into sections adding up to a certain number of musical beats shown by the time signature.













Dance Music

Exploring Rhythm, Chords and Metre in Music for Dance

The RHYTHMS of dance music always match the STEPS of the dance: the two are inter-related. Dance music is based on CHORD PATTERNS: mainly PRIMARY CHORDS (I, IV & V(7)) and has a clear MELODY with an ACCOMPANIMENT (HOMOPHONIC TEXTURE). Different dances and their music use different METRES/TIME SIGNATURES.



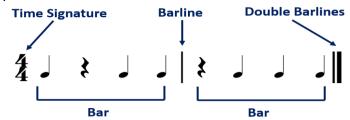
A. Pulse, Time and Metre in Dance Music

The **BEAT** or **PULSE** of dance music is always **REGULAR**. Here is a regular crotchet pulse of 12 beats:



A single **BEAT** is a basic unit of musical time. In dance music, beats are grouped together to make a repeating pattern – normally made up of either twos, threes or fours.

The repeating pattern of beats gives us the METRE or the TIME of the music, shown by the TIME SIGNATURE at the start of a piece of music. Each repetition of the beat-pattern is called a BAR and bars are separated by vertical lines called BARLINES. A DOUBLE BARLINE always comes at the end of a piece of music or section of music.



The **TOP NUMBER** of a time signature tells you how many beats there are in each bar. The **BOTTOM NUMBER** tells you what types or note values these beats are (as divisions of a semibreve = 1):

1 = Semibreve

2 = Minim

4 = Crotchet

8 = Quaver

16 = Semiguaver

4/4 can also be shown by a "C" meaning COMMON TIME



B. Simple Time in Dance Music

SIMPLE DUPLE METRE: Two beats to

a bar

1 2 1 2 1 2 1 2 1 2 1 2 1 2

Dance music such as **MARCHES**, the **TANGO** and **IRISH REEL** often use simple duple metre.

SIMPLE TRIPLE METRE: Three beats

to a bar



3 1 2 3 1 2 3 1 2 3

Dance music such as **WALTZES** and the **MINUET, COURANTE** and **SARABANDE** from the Baroque Dance Suite often use simple triple metre.

SIMPLE QUADRUPLE METRE: Four

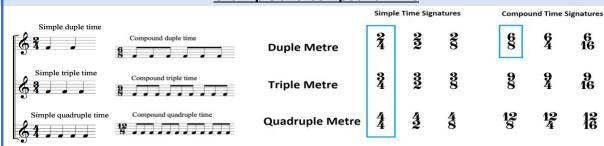
beats to a bar



Dance music such as the **TANGO**, the **IRISH REEL**, the **ALLEMANDE** from The Baroque Dance Suite,

AMERICAN LINE DANCE MUSIC (Country and Western), DISCO and CLUB DANCE often use simple quadruple metre.

C. Simple and Compound Time

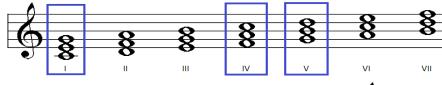


Dance music such as the **IRISH JIG** and the **GIGUE** from the Baroque Dance Suite often use compound duple metre (6/8) with a "**ONE** and a **TWO** and a" feel to the music.

D. Chords in Dance Music

Dance music is based on CHORD PATTERNS. PRIMARY CHORDS:

CHORD I, CHORD IV and CHORD V are most



commonly used in dance music with **SEVENTH CHORDS** featuring in popular dance music such as **DISCO** and **CLUB DANCE** (adding a note seven notes above the root of a chord, such as and **DOMINANT SEVENTH CHORD**). All seventh chords have 4 notes. Chords are often performed in different ways as an **ACCOMPANIMENT** in dance music.

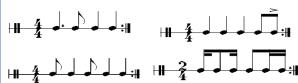
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E. Characteristic Rhythms in Dance Music

The **MARCH** has a strong **LEFT**, right, **LEFT**, right rhythm:



The **TANGO** has several rhythms:



The **WALTZ** has a strong **OOM**-cha-cha, **OOM**-cha-cha rhythm:



FOUR-ON-THE-FLOOR is a common rhythm in **DISCO** and more modern dance music:

Count	1	and a	2	and a	3	and a	4	and a
Bass Drum								
Snare Drum or Hand Claps								
Hi-Hat Cymbal								•



SOUNDTRACKS

Exploring Film Music





Language for Learning

Rhythm

The order of the notation duration



Pitch

The highness or lowness of a note in sound frequency



Structure and Form

How the composition is built





Instrumentation

The instruments used by the composer

All the musical parts that support the Melody



Tempo

Harmony



The Speed of the Music



LEITMOTIF – A frequently recurring short melodic or harmonic idea which is associated with a character, event, concept, idea, object or situation which can be used directly or indirectly to remind us of one not actually present on screen.

SOUNDTRACK – The music and sound recorded on a motion-picture film. **THEME SONG** – Often a song in the popular song genre frequently performed over the opening or closing titles of a film.

MICKEY-MOUSING – When the music fits precisely with a specific part of the action in a film e.g. cartoons.

CONCORD/DISCORD – Concords sound calm and complete, discords create tension and suspense.

SEQUENCING – The repetition of a leitmotif often rising in pitch – CHROMATIC SEQUENCING.

INTERVAL OF A FIFTH – Two notes which are 5 notes apart – often used by film music composers to create an empty feeling of outer-space in Sci-Fi soundtracks.

MUSICAL CLICHÉ – Devices used by film music composers that are "associated with" a particular character, event or situation often used in cartoons e.g. using a bassoon to represent a foolish character.

A. The Purpose of Music in Film

Film Music is a type of **DESCRIPTIVE MUSIC** that represents a **MOOD**, **STORY**, SCENE or CHARACTER through music, it is designed to SUPPORT THE ACTION AND EMOTIONS OF THE FILM ON SCREEN. Film Music can be used to:

- Create or enhance a mood (though the **ELEMENTS OF MUSIC**) ->
- Function as a **LEITMOTIF** (see D)
- To emphasise a gesture (MICKEY-MOUSING when the music fits precisely with a specific part of the action in a film e.g. cartoons)
- Provide unexpected juxtaposition/irony (using music the listener wouldn't expect to hear giving a sense of uneasiness or humour!)
- Link one scene to another providing continuity
- Influence the pacing of a scene making it appear faster/slower
- Give added commercial impetus (released as a SOUNDTRACK) sometimes a song, usually a pop song is used as a **THEME SONG** for a film.
- Illustrate the geographic location (using instruments associated with a particular country) or historical period (using music 'of the time').

D. Leitmotifs

LEITMOTIF – A frequently recurring short melodic or harmonic idea which is associated with a character, event, concept, idea, object or situation which can be used directly or indirectly to remind us of one not actually present on screen. Leitmotifs can be changed through **SEQUENCING, REPETITION** or **MODULATION**



giving a hint as to what may happen later in the film or may be heard in the background giving a "subtle hint" to the listener e.g. the "Jaws" Leitmotif

E. History of Film Music

Early films had no soundtrack ("SILENT CINEMA") and music was provided live, usually IMPROVISED by a pianist or organist. The first SOUNDTRACKS appeared in the 1920's and used existing music (BORROWED MUSIC – music composed for other (non-film) purposes) from composers such as Wagner and Verdi's operas and ballets. In the 1930's and 1940's Hollywood hired composers to write huge Romantic-style soundtracks. JAZZ and **EXPERIEMENTAL MUSIC** was sometimes used in the 1960's and 1970's. Today, film music often blends POPULAR. ELECTRONIC and CLASSICAL music together in a flexible way that suits the needs of a particular film.

B. How the Elements of Music are used in Film Music

PITCH AND MELODY - RISING MELODIES are often used for increasing tension, FALLING MELODIES for defeat. Westerns often feature a BIG THEME. Q&A PHRASES can represent good versus evil. The INTERVAL **OF A FIFTH** is often used to represent outer space with its sparse sound. **DYNAMICS – FORTE (LOUD)** dynamics to represent power; **PIANO** (SOFT) dynamics to represent weakness/calm/resolve. CRESCENDOS used for increasing threat, triumph or proximity and **DECRESCENDOS** or **DIMINUENDOS** used for things going away into the distance. Horro Film soundtracks often use EXTREME DYNAMICS or SUDDEN DYNAMIC **CHANGES** to 'shock the listener'.

HARMONY - MAJOR - happy; MINOR - sad. CONSONANT HARMONY OR CHORDS for "good" and DISSONANT HARMONY OR CHARDS for "evil". SEVENTH CHORDS often used in Westerns soundtracks.

DURATION – **LONG** notes often used in Westerns to describe vast open spaces and in Sci-Fi soundtracks to depict outer space; **SHORT** notes often used to depict busy, chaotic or hectic scenes. **PEDAL NOTES** – long held notes in the **BASS LINE** used to create tension and suspense. **TEXTURE – THIN/SPARE** textures used for bleak or lonely scenes;

THICK/FULL textures used for active scenes or battles. ARTICULATION - LEGATO for flowing or happy scenes, STACCATO for

'frozen' or 'icy' wintery scenes. ACCENTS (>) for violence or shock. RHYTHM & METRE – 2/4 or 4/4 for Marches (battles), 3/4 for Waltzes, 4/4 for "Big Themes" in Westerns. IRREGULAR TIME SIGNATURES used for tension. **OSTINATO** rhythms for repeated sounds *e.g. horses*.

C. Film Music Key Words

SOUNDTRACK – The music and sound recorded on a motion-picture film. The word can also mean a commercial recording of a collection of music and songs from a film sold individually as a CD or collection for digital download.

MUSIC SPOTTING – A meeting/session where the composer meets with the director and decides when and where music and sound effects are to feature in the finished film.

STORYBOARD – A graphic organiser in the form of illustrations and images displayed in sequence to help the composer plan their soundtrack.

CUESHEET – A detailed listing of **MUSICAL CUES** matching the visual action of a film so that composers can time their music accurately.

CLICK TRACKS – An electronic **METRONOME** which helps film composers accurately time their music to on-screen action through a series of 'clicks' (often heard through headphones) – used extensively in cartoons and animated films.

DIEGETIC FILM MUSIC – Music within the film for both the characters and audience to hear e.a. a car radio, a band in a nightclub or sound effects. NON-DIEGETIC FILM MUSIC – Music which is put

"over the top" of the action of a film for the audience's benefit and which the characters within a film can't hear – also known as UNDERSCORE or INCIDENTAL MUSIC.

F. Film Music Composers and their Soundtracks



Jerry Goldsmith Planet of the Apes Star Trek: The Motion Picture The Omen Alien



John Williams Star Wars Jaws Harry Potter Indiana Jones Superman, E.T.



James Horner Titanic Apollo 13 Braveheart Star Trek II Aliens



Morricone The Good, The Bad and The Ugly For a Few Dollars The Mission



Danny Elfman Mission Impossible Batman Returns Men in Black Spider Man



Hans Zimmer The Lion King Gladiator Dunkirk Blade Runner 2049 No Time to Die



Bernard Hermann Psycho Vertiao Taxi Driver





The 5 Key Persuasive techniques that we investigate ...

Bribery- offering a reward to get what we want.

Blackmail – threatening to reveal a secret to get we want

Emotional Blackmail- trading the relationship to get something.

Guilt Trip – making them feel bad to get what we want.

Sympathy Bid – making them feel sorry for us ...

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.

These are a collection of words that enable you to evaluate drama work specifically instead of saying something is, 'good' or 'bad' which doesn't mean very much in drama.

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

**** three ideas to assist you in finding depth and detail in your work*** Context

Everything happens in a context. The context affects the way a character is behaving, what they are feeling. The context is the situation that the scene comes out of. We can understand why a character is being in such a bad mood if we know that a moment or two earlier, before this scene, they discovered that their house had been burgled and all their special things smashed. You will be asked to think up the pre scenes to the scenarios that you devise so that you extend your work and put the scene, characters and their behaviour, 'into context'.

Consequence

All our actions, all our words and all behaviours have consequences. Same for the characters that we play. In this scheme of work you will be asked to invent scenes that show the outcome of the characters actions- in the example above, you would need to work out a logical and creative consequence to the character's bad mood and devise a scene to show it.

Montage

This is the technique of splicing together a number of short scenes all connected by the same theme or issue. A bit like a collage that you do in art. You first met this technique way back in Y7 when you produced a collection of scenes around the 'Joys and Jubilations, the Trials & Tribulations' of your first few weeks at a new school. It is a technique much admired at GCSE and A level by the examination boards. We will deepen our knowledge and sharpen our skills in this technique in this SOW.

Part 2; Devising 3 emotionally charged duologues; The Care Home, 'School', I love you, but..

Key Theatre Practitioners:

Constantin Stanislavski

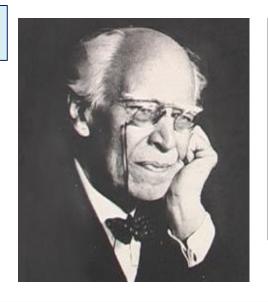
Stanislavski's acting ideas are contained in his Psychological Technique (Psycho-Technique.) Together, they assist an actor in creating their role and beginning to live the life of the character on stage- that is to think, feel and behave <u>as</u> the character.

In this scheme we consider four of **Stanislavski's** ideas; **The Given Circumstances, Objectives, Emotion Memory** and the **Creative If**. They are taught here so that you can make your acting believable and truthful.

Most actors that you know from TV, cinema and the stage will have been affected and influenced by his ideas. Drama Schools and by many directors. He can be thought of as the Father of modern acting even though he was a Russian who lived a hundred years ago.

We may never stray from the main purpose of our work which is to love our art with the whole of our heart and love it unselfishly.

Constantin Stanislavski



Constantin Stanislavski

1863-1938

The father of modern drama

Undoubtedly, there is no one who has contributed more to developing the creative art of the actor, than Constantin Stanislavski. He worked as an actor and theatre director as well as a theatre teacher. The majority of his life and work were dedicated to finding ways to assist actors in playing their roles creatively, truthfully. In his time he was one of Russia's finest actors and directors. He founded the Moscow Art Theatre (MAT) and was a pioneer of Naturalistic theatre – the style that we in the west are most familiar with today. His ideas on actor training are contained in several readily available books.

Key theatre theory:

Stanislavski's Psychological Technique:

The (character's) Given Circumstances.

You first met this idea in the *Walking On Ice* Exercise. The character's Given Circumstances are everything about the character and their situation that are relevant to the scene/ play. They include their age, mood, relationship status, financial situation, class, status, the situation they have come from, the situation that they are going to, what they want, what they want in this particular situation. The more you know about your character, the more rounded and detailed your portrayal of them will be.

The Actor/character's Objective

What a character wants from a situation is called their **objective**. Their objective is what they want to achieve from a situation. We make a link between the ways characters use, bribery, flattery and other persuasive techniques to get what they want and Stanislavski's idea of the character's objective which is also about what the character wants. **An objective should always begin, 'I want...'** Some objectives are straightforward; I want a drink because I am thirsty', others involve a bit more psychology, I am taking a drink because I want time to think of a good excuse...'

Key theatre theory continued

Stanislavski's Psychological Technique:

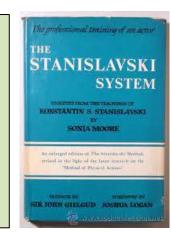
Emotion Memory

Often actors have to play characters in situations that they have never been in themselves and characters who have feelings that they have never felt exactly themselves. If this is true then an actor can remember feelings that are similar to the ones that the character is experiencing.

The Creative if

This is a good technique for keeping everything above board and honest- this helps our creative self to have faith, trust and believe. An actor can say to themselves, 'I know that I am not a new teacher on their first day in a rough school looking for the school office (4th Year Are Animals) but what would I do, what would I think, how would I behave, 'if I was'. Using the creative If properly will be like using a lever to," lift you from your everyday life and onto the plane of the Imagination." Stanislavski.

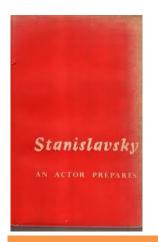
Sonia Moore's book is the clearest and most accessible book on Stanislavski's ideas on acting. It has recently been reprinted and is readily available

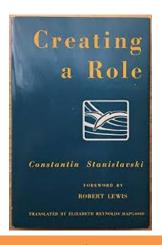


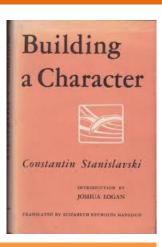
This work if designed to assist you in making a significant step forward with your internal acting technique. The intention is for you to learn how to act naturally and truthfully on stage

GCSE drama & Theatre Studies students use these ideas increasingly in their final performance exam.

Towards the end of his life, Stanislavski laid out the results of his, near 50 years, research into an actors craft in writing. They were translated into English in 3 volumes by Elizabeth Hapgood







Images of two vintage copies of the original translations of Stanislavski's ideas into English. I still have the one on the right.

You will develop your ability to use these Psychological techniques of Stanislavski's in two or three structured improvisations. These will all be in pairs and increasingly challenging on a number of levels. You will particularly practise Stanislavski's idea of character motivation and the actors objective

Knowledge Organiser – Year 9 Food

Macro and Micro nutrients

There are 5 main groups of nutrients. These 5 groups can be divided into 2 groups

Macronutrients

which are needed by the body in large amounts.

Micronutrients

which are needed by the body in small amounts.

Micronutrients

Food Poisoning

Living organisms (including bacteria) need certain "things" or conditions to survive:









Food

Time

What are Nutrients?

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

Macro	o Nutr	ient	Role in the body		Food Example	
Carb	ohydra	ate	The main source of energy for the body. Bread, rice, past potatoes			
Р	rotein		Provides the body with growth and rep	pair. Meat, poultry, beans, eggs, lentils, tofu, fish		
	Fat		Provides the body with insulation and small amount protects vital organs Provides essential fatty acids for the bo	. cream, nuts, oily fish,		
Vitamin			Role in the body		Food examples	
А		Helps to ke the immun	ep the eyes healthy and strengthen e system.		k green leafy vegetables, ots, liver	
В		Helps to re	Helps to release the energy from the food we eat.		ad, milk, cereals, fish, at	
С		, , ,			sh fruit, broccoli, natoes	
D		Important for absorbing calcium and help with healthy bone structure			r fish, eggs, butter, shine	
Mineral	J	Role in the body			Food Examples	
Calcium	1	-	Important for strong teeth and bones. It also helps with blood clotting. Milk, yoghurt, soya, digreen leafy vegetables			
Iron			red blood cells which help to xygen around the body.		s, whole grains, dark en leafy vegetables,	

meat, liver





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.

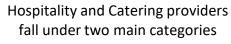
Food – Understanding the 4 C's Concept Cooking - thorough cooking kills bacteria so ensure food is cooked to 75°c to make sure all bacteria are killed - check this by using a food probe.

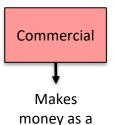
Cleaning - effective cleaning removes harmful bacteria and stops them spreading so ensure all work tops, utensils and equipment are cleaned thoroughly with hot soapy water.

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 9 Food





business

Itchy skin

Red rashes

Cramping gut

Non-Commercial

Does not make money as a business

Itchy mouth

Vomiting

Swollen throat

Allergies

Are immune system reactions

(symptoms of a reaction can include)

In extreme cases, it can cause

"anaphylactic shock"

Intolerances

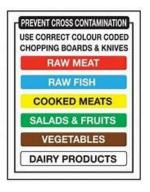
A food intolerance is not the

same as a food allergy.

It is not an immune system response.

It is a chemical reaction in the gut.

Swelling



Personal Attributes

Team player

Hospitality and catering providers will look for certain personal attributes in people who want to work for their business, these can include:

smearing

Factors affecting food choice Biological Hunger appetite and taste Cost of food, income, availability **Economic** Access to shops, food skills, education, time Physical Family, culture, meal patterns Social **Attitudes** Knowledge about food and beliefs Seasonality The food is locally grown at certain times, cheaper Religion Certain religions restrict certain foods Ethical Your beliefs prevent you from eating some foods Medical Some illnesses dictate your diet like diabetes Activity levels and mobility affect requirements Age

Fridge Storage

You should store meat and poultry on the bottom shelf of the fridge to prevent liquid dripping on to other food. Store in a clean, sealed container. Keep cooked and raw meats separate to avoid cross contamination. The fridge temperature should be between 1°c - 5°c.

Self motivation

Honesty



garnishing

Personal

presentation

Initiative

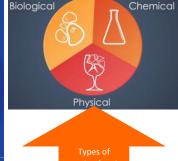


- Good Hygiene practice prevents Cross

Effective Cleaning removes harmful bacteria and stops them spreading

C - Effective *Chilling* prevents harmful bacteria multiplying





Tastes

Technology

Nationality

Opinions

Customer Demographic

A profile showing what particular groups of people want, need and expect.

Gender

Money

/Costs

Fashions

Choice

Age

What are some of the symptoms? Diarrhoea

Bloating

Migraine

drizzling

Food Styling

Patience

Food styling is where a chef creates a dish and then uses a range of presentation techniques, these can include:

- Different textures
- Different flavours
- Different shapes/colour
- Interesting to look at
- **Appetising**

Organoleptic = using the senses

feathering

Year 9 Graphics: Interior and Exterior

Interior and spatial designers are involved in the design or renovation of internal spaces, including structural alterations, furnishings, fixtures and fittings, lighting and colour schemes.

Exterior designers include, architects, public space designers, garden or landscape designers and many more! Exterior designers focus on the outside spaces and buildings, looking at functionality and aesthetics.

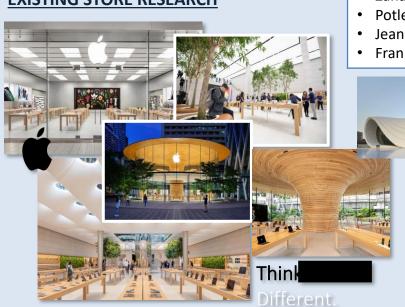
What is the definition of commercial interior design?

Commercial interior design refers to the interior design done in commercial spaces, such as offices, **shops**, restaurants, lobbies, and other public spaces.

British Design award winners 2021:

- Michel Anastassiades
- •Soane Britain
- •Kitty Joseph
- •Tom Raffiald
- Zoffany
- •Sam Wilde

EXISTING STORE RESEARCH





Architects:

- Zaha Hadid
- Potlemy Dean
- Jeanne Gang
- Frank Lloyd Wright



Garden/Landscape Designers:

- Tom Stuart Smith
- Getrude Jekyll
- Derek Jarman
- Capability Brown
- Beth Chatto

Design Process An approach for breaking down a large pinto manageable chunks. Target Audience A particular group at which a product is towards. Design Brief Outlines the specifics of a design project can include the design project overview, timelines, target audience information, a budget. Research A collection of new knowledge and/or the of existing knowledge in a new and creat way so as to generate new concepts and understandings. Colour Theory The collection of rules and guidelines which designers use to communicate with user through appealing colour schemes in visinterfaces. Mood board An arrangement of images, materials, pinterfaces. Mood board An arrangement of images, materials, pinterfaces. Evaluation Is a process that critically examines a demanded to present a particular style or concept. Modelling Making a model allows designers to visual style or concept.	
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i ,	
Modelling Making a model allows designers to visu	sign.
and test how a product looks and perfor 3D and is a great way of checking a prod viability .	ms in

Which Brand will you choose?...

























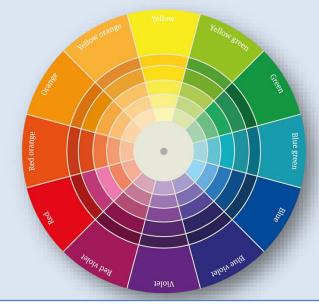




COLOUR PALLETS

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.

The Colour Wheel



Colour pallets which effectively reflect our company brand.



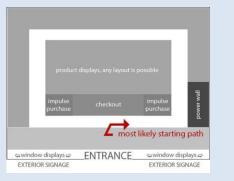


Interior Design Considerations in Retail Store Design

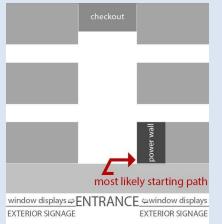
- Value of Space. The value of space, depending on the location within the store, is expressed in sales per square foot of floor space, and sales per cubic foot of cubic space.
- Space Utilization and Allocation.
- Storage of Stock.
- Customer Traffic Flow.
- Types of Goods.

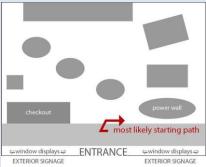
CUSTOMER FLOW

Customer flow is the movement of customers around a store. Providing more check-outs increased customer flow, reduced bottlenecks and improved sales.



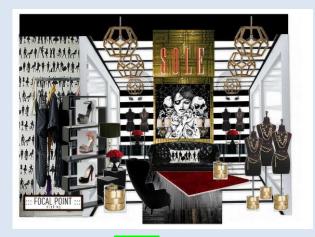






MOOD BOARD

A mood board is a visual representation of ideas for a design project. At its most basic, a mood board is a collage of images. The purpose of a mood board is to help explore ideas and figure out the general style, mood, colours, and overall feel of a room or project space.



MODERN, LIGHTS, NEON, MINIMAL, CITY, URBAN

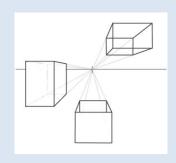


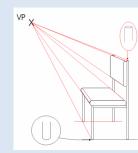
ORGANIC, NATURAL, WOOD, RUSTIC, COUNTRY



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.





3D MODEL

What is model in interior design?

An architectural model is a 3D representation of a proposed building design. With an architecture model, you can see the potential scale and design of a construction or interior design project.











YR9 Textiles Knowledge Organiser

team.

The fashion and textiles industry today has been transformed by the advent of new technologies and the development of computers and processors has led to the automation of a lot of areas within manufacturing processes.

CAD - Computer Aided Design

Computer Aided Design – allows designers to draw, design, plan and model on screen using a computer.

Advantages of CAD	Disadvantages of CAD
Designs can be created, saved and edited easily, saving time.	CAD software is complex to learn.
Designs or parts of designs can be easily copied or repeated.	Software can be very expensive. Upgrades may be necessary.
Designs can be worked on by remote teams simultaneously.	Compatibility issues with software.
Designs can be rendered to look photo-realistic to gather public opinion in a range of finishes.	Security issues - Risk of data being corrupted or hacked or get a 'virus'
CAD is very accurate.	
CAD software can process complex stress testing and model materials and components.	SolidWorks OFFICE
Designs can be presented easily with the client or other members of the	CAD Software

CAM - Computer Aided Manufacture

Computer Aided Manufacture is the manufacturing of products designed using CAD. CAM can create a faster production process.

Advantages of CAM	Disadvantages of CAM
Quick – Speed of production can be increased.	Training is required to operate CAM. This can add to cost.
Consistency – All parts manufactures are all the same.	High initial outlay for the machines.
Accuracy – Accuracy can be greatly improved using CAM.	Production stoppage – If the machines break down or there's a power cut, the production would stop.
Fewer Mistakes – There is no human error unless pre programmed.	Social issues . Areas can decline as human jobs are taken. This will lead to
Cost Savings – Workforce can be reduced.	unemployment.

If you are designing products and they are made in another country you need to talk to the factory ALL the time.

E-mail used to be THE THING but now that's moved on to virtual 'cloud based' sites where product information can be uploaded to and which can be accessed from anywhere on the globe. So it's quick and easy. Designs can be worked on

by remote teams simultaneously

Scales of Production

One off/Bespoke: when you make a unique item.

Batch: when a limited number of the same product is made.

<u>Mass</u>: when a large quantity of the same product are made over a long period of time. This typically uses a production line.

<u>Just-In-Time</u>: a form of stock control when goods are delivered 'just in time' to use on the production line.

Production Line

In Industry products are usually made by passing each stage of making down a line: this is known as a **production line**. At each stage of making, a specific operator carried out a required task then passes it on to the next machine or person to continue making the product.

Planned Obsolescence

Sometimes manufacturing companies plan or design products to have a short useful life. They do this so the product will become obsolete or unfashionable or they will no longer function after a certain period of time and new products will have to be purchased. This is called planned obsolescence.

The following table explains how these production methods are used in the textile industry:

System	Product market	Design and production	Skill Level and Cost
Bespoke	Made-to-measure garments are made to fit the measurements of an individual <u>client</u> [client: person or organisation that wants a product manufactured - eg a retailer.]; the garment design is developed from a <u>basic block pattern</u> [basic block pattern: pattern made with standard-sized pattern pieces] and a <u>toile</u> [toile: a prototype garment made from low-cost fabric.] is made to test the fabric drape, <u>the fit</u> [the fit: how well the size and shape of a garment fits a human body.]		Very high-level skills in design and manufacture; high- cost materials; high labour costs
One-off	Haute Couture, eg made by fashion houses Haute Couture, eg made by shich set trends for high street shops. Fashion designers such as Vivienne Westwood design Haute Couture garments for individual clients. These designers have catwalk shows which set trends for high street shops.		Very high-level skills in design and manufacture; high- cost material and labour costs
Batch production	Ready-to-wear (RTW) designer label, eg Designers at Debenhams Garments are designed to fit a range of standard sizes and shapes. Garment patterns are developed from a basic block using CAD: Computer Aided Design - a system which helps the user produce accurate drawings A sample garment is made up in a medium size, from the intended fabric. Once the design has been approved it is put into production in a range of standard sizes. They are sold through upmarket retailers.		High-level design, pattern making and sampling skills; cost- effective materials and lower manufacturing costs
Mass production	Mass-market retailers, e.g. Top Shop	Similar production methods to batch production: garments produced in limited range of sizes; standardised production methods are used to produce a wide range of styles. Most fashion products are batch produced in large batches e.g. 20,000. Some classic products like jeans are mass produced for a world market.	High-level design, pattern making and sampling skills; cost- effective materials; products often made overseas where labour costs are low

Technical Textiles

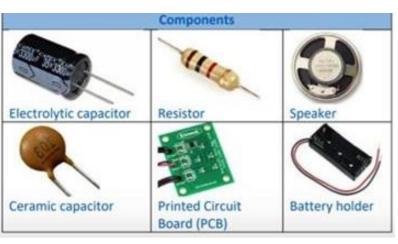
A 'Smart material' is one which reacts to an external stimulus or input. This means that it can alter its functional or aesthetic properties in response to a changing environment. This group of materials can react to stimuli such as heat, pressure, moisture, stress, PH level, light (including UV) and electricity.

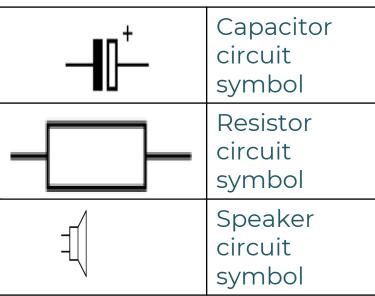
Name and stimulus	Characteristics	Uses
Thermochromic pigments Heat	Pigments embedded into the thermochromic material respond to temperature changes by changing colour. They normally change as they heat up and cool down, but some versions are irreversible.	Flexible thermometers, temperature indicators, clothing, novelty goods, over-heating or over cooling indicators.
Photochromic pigments UV light	The pigments that are embedded into photochromic material respond to changes in the UV light levels by changing colour or darkening. Once the UV light is taken away they change back or lighten.	Novelty products, paints and clothing that change colour in UV light
Shape Memory Alloy (Nitinol) Heat or electricity	A shape can be programmed when heated to 540°C; it can be deformed and will return to the memory shape when reheated to 70°C.	Frames for glasses, dental braces, self-expanding stents used In surgical procedures to open capillaries.
Hydrochromic	Hydrochromic inks change colour (become transparent) when wet or if moisture is present.	Often used on novelty products to bring out the colours of text or an image – e.g. an umbrella.
Hydrophobic	Hydrophobic finishes REPEL water and cause water to form nearly perfect spheres that roll off coated materials.	Products that require waterproofing –outdoor items such as tents and awnings.
Photo luminescent (Glow-in-the dark) Light	Glow in the dark materials carry inorganic phosphors that absorb light in the visible and ultra violet wavelengths and then reemit visible light, or a "glow".	Toys, stickers, paints, clock face/dials, emergency signs.

Modern materials are materials that are constantly progressing as well as new ways of working with materials.

Name	Characteristic	Uses
Gore-Tex	Waterproof, wind proof, breathable fabric, moisture vapour can escape.	Outdoor clothing from skiwear to mountain wear, walking boots, cross country trainers, gloves sportswear.
Kevlar Poly- paraphenylene terephtalamide	Extremely strong and hard-wearing, excellent cut and tear resistance, high thermal protection, nonflammable, good chemical resistance.	Personal armour, helmets, bullet-proof vests, motorcycle safety clothing, extreme sports equipment, audio equipment, musical instruments.
Conductive fabrics and threads	The thread or fabric can pass an electrical current along its length, linking electronic components. It allows for flexible and wearable control of electronic products for entertainment, safety health and fitness.	Connecting wearable inputs, processes and outputs, such as switches, lights, Bluetooth connectivity and speakers in technical clothing, children's soft electronic toys, wearable electronic sports equipment and anti-static clothing.
Fire resistant fabrics	Resists heat and ignition from the naked flame to protect the wearer.	Fire blankets, firefighting or safety clothing such as gloves, aprons and boiler suits. Protection for racing car drivers.
Microfibres & Micro- encapsulation	Very depending on the specific textile, can be statically charged to pick up dust and filter particles, can be absorbent yet fast drying.	Medical textiles, fabrics, cloths and towels. High-tech clothing which can be anti-bacterial, heat regulating or insect repelling.

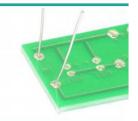
Design and Technology





INSERT COMPONENT

Place the component into the board, making sure that it goes in the correct way around, and the part sits closely against the board. Bend the legs slightly to secure the part. Place the board so you can access the pads with a soldering iron.



CLEAN SOLDERING IRON

Make sure the soldering iron has warmed up. If necessary use a brass soldering iron cleaner or damp sponge to clean the tip.



PICKUP IRON AND SOLDER

Pick up the Soldering Iron in one hand, and the solder in the other hand.



HEAT P

Place soldering iron tip on the pad.









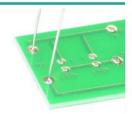
APPLY SOLE

Feed a small amount of solder into the joint. The solder should melt on the pad and flow around the component leg.



STOP SOLDERING

Remove the solder, and then remove the soldering iron.



TRIM EXCESS

Leave the joint to cool for a few seconds, then using a pair of cutters trim the excess component lead.



REPEAT

Repeat this process for each solder joint required.





The variety of methods used to join timbers

The advantages and disadvantages of a range of surface finishes that can be applied to timber

Name	Appearance	Advantages	Disadvantages	
Butt		Easy to make, it is just square ends glued together	Weak: there is no mechanical strength, just the glue Not aesthetically pleasing	
Dowel		Automated machines can drill the dowel holes quickly and accurately	Hard to line up the dowels accurately by hand	
Lap		Quite easy to cut		
Housing		Holds a shelf or divider securely in the middle of a carcass (frame) Pairs well with corner lap joints	Can be tricky to cut neatly on a wide board Very accurate marking out and cutting required to ensure a shelf is exactly level	
Mitre		 Looks good because no end grain shows Good for picture frames 	Weak, it is only a butt joint at 45°	
Mortise and tenon	Mortise	A strong joint Good for joining a table or chair frame to legs	Time consuming to cut by hand	
Dovetail		 A very strong joint – the dovetails lock together securely Good for a drawer front that will get pulled hard 	Very tricky to cut accurately by hand	







WX FOLISH	
WAX POLISH BLACK BISON	N
	BIO R









	Туре	Description	Advantages	Disadvantages
	Paint	A coloured pigment in liquid that dries out	Available in a range of colours	Covers up the natural woodgrain
	Stain	A coloured liquid that soaks into the wood surface	Makes a pale coloured wood like pine a darker colour to mimic more expensive woods like oak or mahogany	Does not look quite like another wood as the pine grain still shows
Sign	Varnish	A clear coating that dries to shine	Gives a hard wearing finish that shows the grain of the wood Can be a high gloss or a matte finish	Can scratch or chip and expose the wood
4	Wax	A soft solid that is rubbed into the surface with a cloth	Easy to apply Gives a plain natural look	Rubs away and needs reapplying Not a glossy finish
	Oil	Is rubbed onto the surface and soaks in	Good waterproofing for timber Vegetable oil on kitchen ware is non toxic	Surface feels oily
	Shellac	A cloudy liquid made from a resin secreted by a beetle Lots of layers are rubbed on and polished to a finish called French polish	Traditionally used on expensive furniture for its glossy lustre	Easily damaged by water and heat
	Veneer	A thin layer of wood glued onto the surface	An expensive decorative wood like mahogany can be put onto a cheaper wood like pine or chipboard	The veneer is natural wood so it still needs a finish applied

The Trafalgar School AT DOWNTON

How to use a knowledge organiser – step by step guide

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