

Design Technology

Year 8

Subject: Technology

Year: 8

Key Assessments

Knowledge Organiser tests and class work mark.

Core Texts/ Websites

- Design and Technology KS3 class book.
- BBC Bitesize.
- Technologiststudent.com

Use this Knowledge Organiser to prepare for lessons and build your understanding of D&T.

Useful Connectives:

Therefore, however, on the other hand, in my opinion, but, finally, firstly, secondly, thirdly, as well as this, moreover, furthermore, similarly, in contrast to.

Definition

- To label, provide information on the design
- A source that provides ideas
- The person who buys or uses the product
- The appearance of the product
- The place we live, work, socialise in
- The ability to sustain natural resources without impacting future generations
- What a product does, the purpose
- Measured in mms or cms.
- Used to assess environmental impact
- A quick drawing to show
- Assessing whether an idea is successful
- First rough designs in response to the task
- Final drawing of the product being made
- Collection of images to gain inspiration
- Products that are already available
- A list of specific design requirements
- An introduction to the overall task
- The physical matter the product is made from
- Collecting new data first hand (Questionnaire)
- Collecting data that already exists (Websites)
- Computer Aided Design
- Computer Aided Manufacture

Keywords

- Annotate
- Inspiration
- Consumer
- Aesthetics
- Environment
- Sustainability
- Function
- Size
- 6Rs
- Sketch
- Evaluate
- Initial Designs
- Final Design
- Mood Board
- Existing Product
- Design Specification
- Design Brief
- Materials
- Primary Research
- Secondary Research
- CAD
- CAM

Useful Sentence Starters for D&T:

Analyse: to examine a task/product in detail (use who, what, where, when and why).

- This is an example of good design because _____
- It is made from _____
- The target user for the product is _____
- It is made attractive by _____.

Develop: to improve or modify a design or product

- I have developed by ideas by _____
- I have combined the best parts of made design ideas that _____
- I have removed this part of the design/ changed the material because _____
- To improve the design, I need to _____.
- I decided to _____ because _____.

Justify: To give reasons for your decisions

- I think that is a successful design because _____.
- _____ is a suitable material as it is _____.
- The product can be used for an alternative purpose as it _____, therefore _____.
- I believe the choice of material affects the type of consumer because _____.

Evaluation: to assess a product. Identify a products

strengths and weaknesses and suggest modification

- The strengths of the product are _____
- The weaknesses of the product are _____
- To improve my product/design, I would _____
- To make my product more environmentally friendly I would _____

Using a Ruler:

Rulers are essential for achieving accurate measurements.

10 Millimeters

100cm = 1000mm

10cm = 100mm

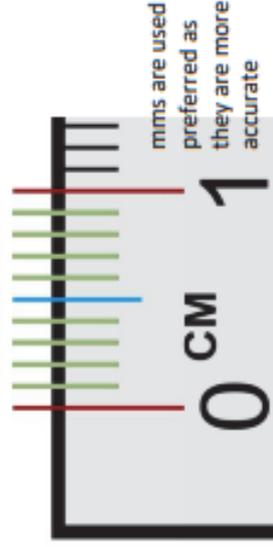
1cm = 10mm

0.1cm = 1mm

● 1cm

● 0.5cm

● 10 Lines per centimeter



Safety in workshop is very important. Signs will be placed around the workshop and on machines.



Red signs tell you something you must not do

Health & Safety



Green signs give you information.



Yellow signs warn you of a potential hazard.



Blue signs tell you something you must do.

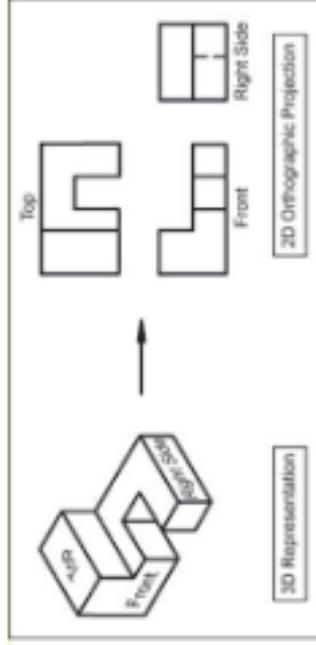
10 Health & Safety Rules in the workshop:

1. Do not run at anytime
2. Tie hair up and tuck loose items away
3. 1 person using a machine at a time
4. Stand behind the yellow line when somebody is on a machine
5. Do not talk to somebody whilst they are on the machine
6. Wear goggles when instructed
7. Wear an apron (ensuring it is tied up)
8. Stack chairs/stools up at the side
9. Put bags/coats under the workbenches
10. Ask if you do not know how to use a tool or machine.

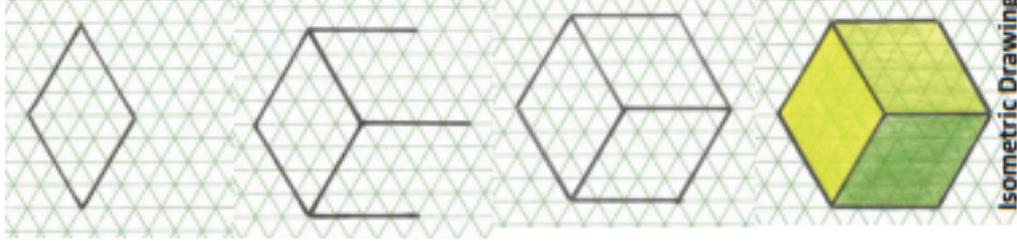
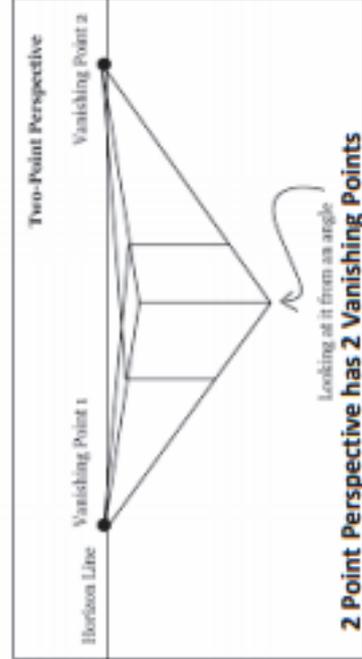
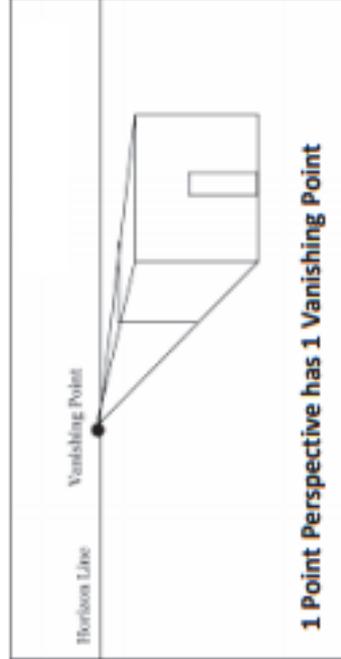
Technical Drawing Styles



Put instruments on one line
Straight edges should have a space



Orthographic Drawings show a 3D product in a 2D way.



Isometric Drawing

Material Characteristics	
Hardness	resist cutting and indentations to its surface
Toughness	Ability to withstand shock
Strength	The ability to withstand being pulled or stretched, crushed or compressed or twisted.
Elasticity	Ability to be stretched and return to it's original size
Flexibility	The ability to bend without breaking and then spring back to its original shape.
Impact Resistant	Ability to resist sudden shocks
Strength to Weight Ratio	Measure of strength to weight, for instance Aluminium is a light weight material but is strong. Therefore having a high strength-to-weight ratio
Ductility	Ability to be stretched like the length of wire without breaking
Malleability	The ability to be hammered, rolled or pressed into shape without breaking
Durability	Able to last a long time

Using a Ruler:
Rulers are essential for achieving accurate measurements.

1000cm = 1000mm
10cm = 100mm
1cm = 10mm
0.1cm = 1mm

● **1cm**
● **0.5cm**
● **10 Lines per centimeter**

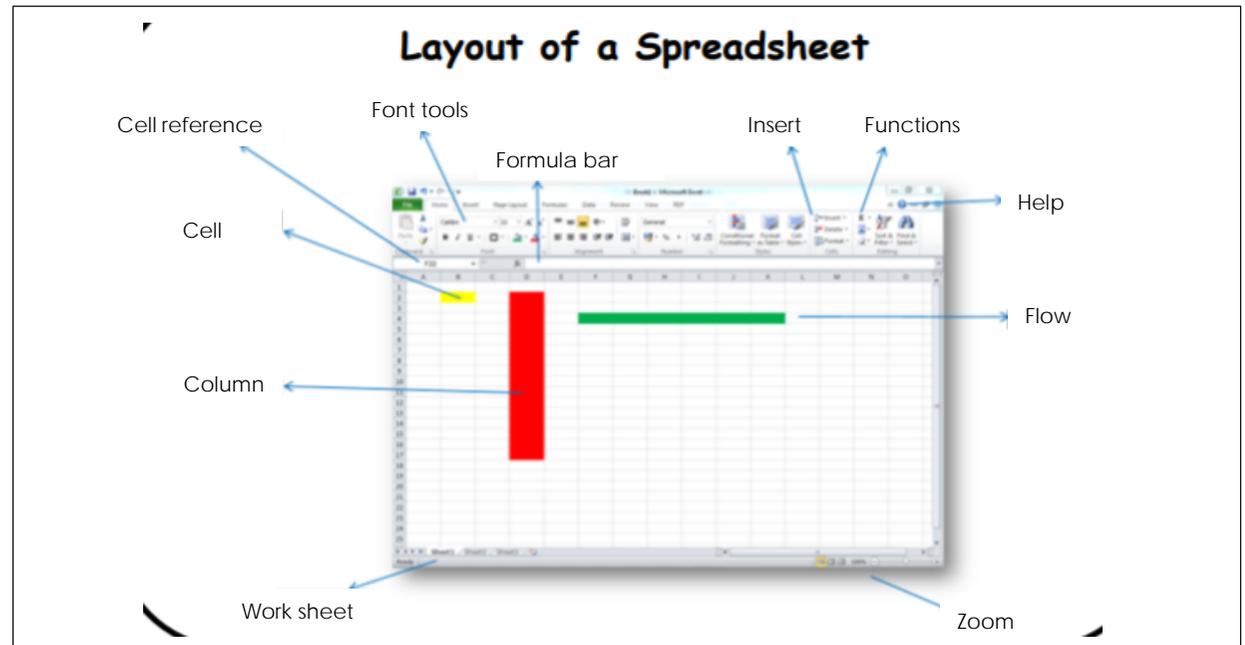
10 Millimeters

mms are used preferred as they are more accurate

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Year 8 Computing Spreadsheets

KEY VOCABULARY	
Cell	A box in which you can enter a single piece of data.
Cell Reference	The name given to a cell to uniquely identify it, for example, A1.
Formula	An expression which calculates the value of a cell.
Formatting	To change the appearance, layout or organisation of a spreadsheet.
Borders	Form an edge along or beside.
Rows	The range of cells that go horizontally across the spreadsheet/worksheet.
Columns	A vertical series of cells in a chart, table, or spreadsheet.
IF statement	The Excel IF Statement tests a given condition and returns one value for a TRUE result and another value for a FALSE result



Why do we use spreadsheets? Spreadsheets are used to store information and data. Once we have our information in a spreadsheet, we can run powerful calculations, make graphs and charts and analyse patterns

To make graphs: Highlight your data, click the insert tab at the top of Excel and then pick the chart you need.

Autofill: Click on the cell you want to duplicate, grab the black cross in the bottom right-hand corner and drag it down to the remaining cells. This also works if you want to copy the formulas down as well.

Key words

The God of Classical Theism	The Classical idea of what God is like.
Omnipotent	God is all powerful.
Wrath	God's anger.
Hebrews	The ancient people who would end up as members of the Jewish religion.
Omniscient	God is all-knowing.
Omnibenevolent	God is all-loving.
Just/ Judge	God is fair and is a fair judge.
Evil	Something that causes pain and suffering.
Genesis	The first book of the Bible. It contains the creation of the world.
Exodus	The second book of the Bible. It contains the story of Moses and the Hebrews in Egypt.
Abraham	The Father of Judaism known for being told to sacrifice his own son.
Moses	Responsible for the Ten Commandments, the Ten Plagues on Egypt and the parting of the Red Sea.
Job	A perfect follower of God who was tested by the Devil in a bet.
Deluge	The name for the flood at the time of Noah.
Noah	Responsible for building the ark to save the animals.
Old Testament	The first half of the Bible detailing the story of the Jewish People.
Bible	A collection of 66 books made up of the Old Testament and the New Testament.
Covenant	A contract with God that had conditions for God and his people.

Quotes

Genesis

God made Earth in '7 days'. **Genesis**

God made Adam from the 'dirt of the ground' and Eve from 'Adam's rib'. **Genesis**

God said you 'must not eat the fruit from that tree'. **Genesis**

The Lord God 'banished them from Eden'. **Genesis**

'God flooded the world for '40 days and 40 nights'. **Genesis**

God said to Abraham 'I will give you as many descendants as stars in the sky'. **Genesis**

God said to Abraham 'Sacrifice your son 'Isaac to me'. **Genesis**

Exodus

And God 'remembered his promise to the Hebrews'. **Exodus**

God sent a 'plague of darkness'. **Exodus**

God sent the 'Angel of Death'. **Exodus**

Moses lifted his staff and parted the Red Sea'. **Exodus**

Moses was given the Ten Commandments including 'do not steal' as part of the covenant. **Exodus**

Job

God said 'where were you when I made the foundations of the Earth?' **Job**

Psalms

God knows the 'number of hairs on your head'.

History

Key people

Enlightenment thinkers

John Locke

Argues that governments should have limits and people are born with certain liberties (life, health, possessions) that cannot be taken away.

Voltaire

Respect individual liberty and ensure people are given the freedom of speech.

American Revolution

George Washington

Leader of American forces in the War of Independence and first President of the United States.

King George III

Third king of the Georgian dynasty who tried desperately to hold onto the American colonies.

Thomas Paine

Influential writer who wrote 'Common Sense' and 'Rights of Man' arguing for freedom and liberty.

French Revolution

King Louis XVI

French king who ruled an absolute monarchy. He was seen as a weak leader who was indecisive.

Queen Marie Antoinette

Queen consort of France, Marie Antoinette was criticised for her luxurious and frivolous lifestyle. She was, however, a skilled politician.

Haitian Revolution

Toussaint L'Ouverture

Former enslaved person on the island of Haiti. Leader of the Haitian Revolution who fought against French control of the island.

Age of Revolutions



Key terms

Absolute monarchy

The king or queen rules with absolute power.

Age of Enlightenment

During this period, there was a growth in new ideas and new facts were discovered.

Aristocracy

The upper classes of society who are both wealthy and own land.

Bourgeoisie

A wealthy and intellectual 'middle-class'.

Colony

An overseas area controlled by a foreign power.

Constitution

A set of rules and laws that govern how a society is run.

Constitutional monarchy

A state where a king rules alongside a parliament.

Liberty

A person's right that they observe as a member of a society.

Plantation

Slave colony that relies on the work of enslaved workers.

Reason

Thinking critically about information before forming a belief.

Republic

A country without a monarch.

Revolution

Upheaval of the traditional system, generally through violent protest.

Key events

The Age of Enlightenment

An increase in new ideas spread amongst the intellectual classes, based around the ideas and notions of science. Using the theory of **reason** to answer real life questions, mostly around liberty and the rights of people. Ideas of fair government become common during this period.

The American Revolution

The 13 American Colonies were part of the British Empire. The British could govern the American colonies however they saw fit, whereas the colonies began wanting a say in their running. The Colonies were particularly angry at the huge taxes that the British charged on things like paper and tea. They began to refuse to pay taxes, chanting "**no taxation without representation**". On 4th July 1776 the 13 American Colonies signed the Declaration of Independence and began fighting the British crown for their freedom.

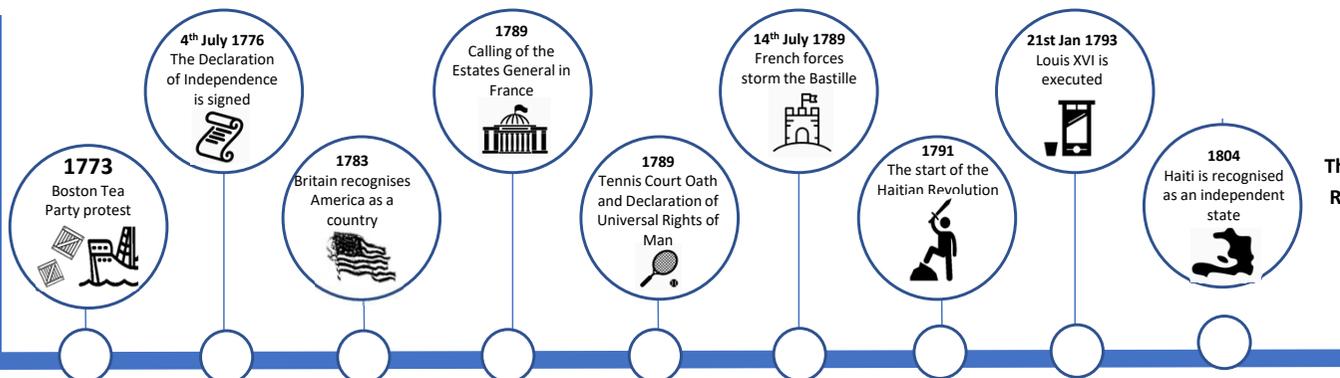
The French Revolution

Inspired by the American Revolution, the people of France began demanding reform and change. France was governed by an **Autocratic** ruler, Louis XVI who was seen by many to be a weak leader. His wife, Marie Antoinette, lived a luxurious and expensive lifestyle. The people of France were angry at increased taxes, which was made worse by poor harvests. Louis XVI called a meeting of the Estates General but failed to make any real changes and lost much of his support. The Third Estate Deputies (the peasants and workers) met, making the **Tennis Court Oath** where they demanded change. The people of Paris stormed the Bastille and revolution spread through France.

The Haitian Revolution

Successful revolution by self-liberated enslaved people and led by former enslaved person **Toussaint L'Ouverture**. Ending in 1804 with the colony's independence, it is a vital moment in world history; it is the only slave revolution to end with the creation of a state. Influenced by the French Revolution, the people of Haiti wanted freedom from slavery.

Timeline

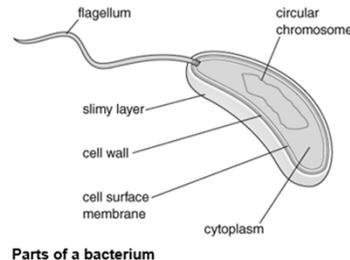


Todmorden High Science K.O. Year 8 Topic 8D Unicellular Organisms

Key term	Definition
Unicellular	An organism made of one cell.
Multicellular	An organism made of many cells
Bacterium	A type of prokaryote organism. Plural is bacteria.
Fungus	A member of the fungus kingdom. A fungus can be multicellular or unicellular but does not make its own food. Plural is fungi.
Virus	A non-living particle that can change how a living cell functions when it enters a cell. Inside a cell, a virus often causes the cell to make copies of the virus
Prokaryote	A member of the prokaryote kingdom. Prokaryotes are all unicellular and have cells that lack nuclei.
Microorganism	An organism too small to be seen with the naked eye.
Aerobic Respiration	A type of respiration in which oxygen is used to release energy from substances such as glucose.
Anaerobic Respiration	A type of respiration that does not need oxygen.
Fermentation	Anaerobic respiration occurring in microorganisms.
Limiting Factor	Something that stops a population growing.

The Big Ideas and Must Know Facts

Bacteria



Parts of a bacterium

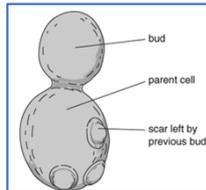
Some bacteria are important in making yoghurt and cheese. These bacteria use a type of anaerobic respiration to ferment milk:



Microscopic fungi

These include, for example, yeast. They:

- reproduce asexually by budding.
- can use aerobic respiration, which is important in baking.
- can use anaerobic respiration (fermentation), which is important in alcoholic drink manufacture.

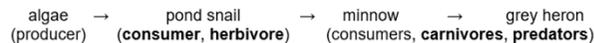


Protocists

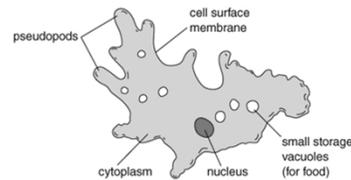
There are many different types of protocist, and some can **photosynthesise**:



Photosynthesising protocists are therefore **producers** in a **food chain**, for example:

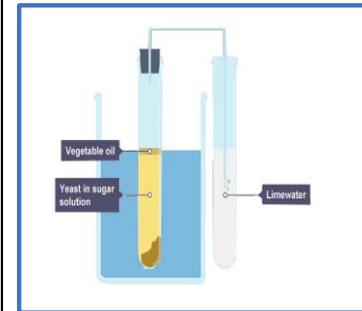


Some protocists move using **pseudopods**, while others use **cilia** and others use **flagella**.



Parts of an Amoeba

Required Practical.

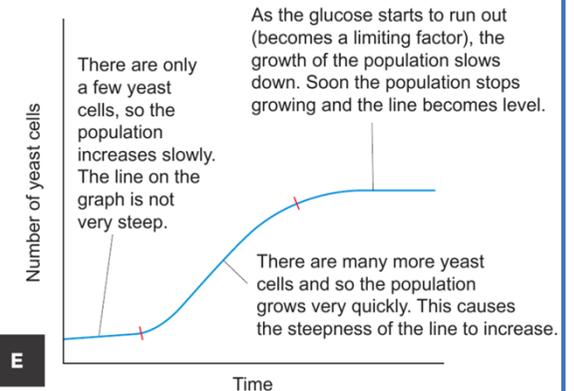


This apparatus is used to measure how quickly the yeast is growing by counting the number of bubbles in the limewater, or timing how long it takes for it to turn milky.

Growth curves

For yeast cells to grow and reproduce they need resources such as moisture, sugar and warmth. This is why bread dough is left in a warm place for it to rise. A few yeast cells soon become millions but the **population** of cells will not keep growing forever. Eventually the sugar runs out and the population stops growing. Something that slows down or stops a process is called a **limiting factor**.

How a yeast population changes with time

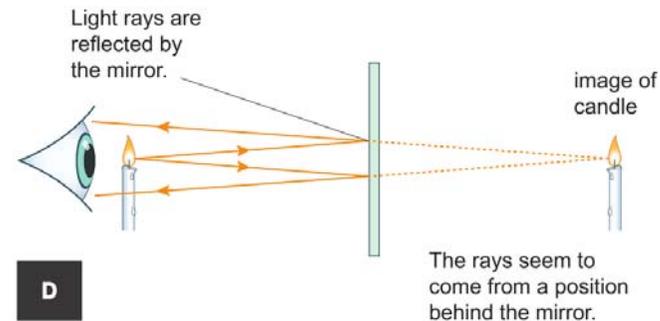
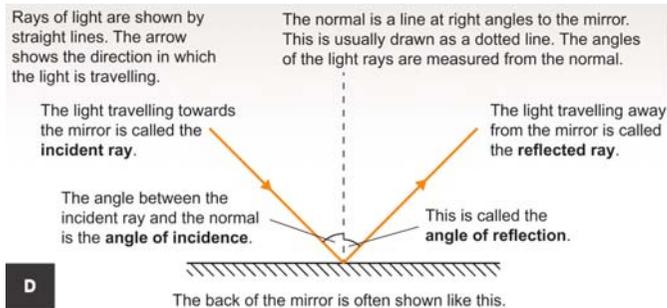


Todmorden High Science K.O. Year 8 Topic 8J Light

Key term	Definition
Longitudinal wave	A wave where the particles vibrate in the same direction as the wave is travelling
Opaque	Material that does not let light through. It is not possible to see through an opaque substance.
Ray	A narrow beam of light, or an arrow on a diagram representing the path of light and the direction in which it is travelling.
Reflect	To bounce off a surface instead of passing through it or being absorbed.
Translucent	Material that lets light through but scatters it. You cannot see things clearly through translucent materials
Transparent	A material that light can travel through without scattering. (Note: transparent substances may be coloured or colourless.)
Transverse wave	A wave where the vibrations are at right angles to the direction the wave is travelling.
Angle of incidence	The angle between an incoming light ray and the normal.
Angle of reflection	The angle between the normal and the ray of light leaving a mirror.
Normal	An imaginary line at right angles to the surface of a mirror or other object where a ray of light hits it
Refraction	The change in direction when light goes from one transparent material to another.
Dispersion	The separating of the colours in light, for example when white light passes through a prism.
Frequency	The number of vibrations (or the number of waves) per second. Different frequencies of light have different colours.

The Big Ideas and Must Know Facts

	Light	Sound
Type of wave	transverse 	longitudinal 
Speed	300 000 000 m/s in air	330 m/s in air
Travels through:	vacuum, gases, some liquids, some solids	matter (solids, liquids and gases)



Practical

Method



- A** | Stand a plane mirror on a piece of paper and point a ray box at the mirror. Draw a line on the paper along the back of the mirror. This will help you to make sure the mirror goes back to the same place if you move it accidentally.
- B** | Make a mark on the paper in the middle of the front of the mirror.
- C** | Switch on the ray box and aim the ray of light at the mark in the middle of the mirror. Mark where the rays of light are going by putting small crosses along the centre of the ray of light.



- B** | You can investigate the path of light through glass blocks using a ray box. You can mark the points where it enters and leaves and join these points with a straight line.

Spanish

De compras

1. ¿Qué hay en la calle principal?
What's on the main street?

- En la calle principal hay...
- On the main street there is/are ...

- La calle principal tiene...
- The main street has ...

- una zapatería
 - a shoe store
- una joyería
 - a jewelry
- una droguería
 - a drugstore
- una bombonería
 - a candy store
- una librería
 - a bookstore
- una pastelería
 - a cake shop

- una panadería
 - a bakery
- una carnicería
 - a butchery
- una pescadería
 - a fish store
- una farmacia
 - a drugstore
- una frutería
 - a fruit store
- un gran almacén
 - a large warehouse

2. ¿En qué gastas tu dinero?
What do you spend your money on?

- Gasto mi dinero en...
- I spend my money on...

- Gasto mi dinero de bolsillo en...
- I spend my pocket money on ...

- Ahorro mi dinero para...
- I save my money for ...

- los caramelos
 - the candies
- los chocolates
 - the chocolates
- el crédito para mi móvil
 - the credit for my mobile
- el maquillaje
 - the makeup
- las revistas
 - the magazines
- los tebeos
 - the comics

- la ropa
 - the clothes
- los videojuegos
 - The videogames
- el Ipod
 - the Ipod
- las zapatillas de deporte
 - the trainers
- los regalos
 - the gifts
- la bicicleta
 - the bicycle

3. ¿Qué ropa llevas?
What clothes are you wearing?

- Llevo...
- I wear...

- Me pongo...
- I wear...

- unas botas
 - boots
- una bufanda
 - a scarf
- calcetines
 - socks
- una camisa
 - a shirt
- una camiseta
 - a t-shirt
- una chaqueta
 - a jacket
- un cinturón
 - a belt

- una corbata
 - a tie
- una falda
 - a skirt
- unas gafas
 - glasses
- una gorra
 - a cap
- unos vaqueros
 - jeans
- un vestido
 - a dress
- unos zapato
 - shoes

Spanish

4. ¿Me puedo probar...? Can I try the on?

- el cinturón
 - the belt
- la corbata
 - the tie
- la falda
 - the skirt
- las gafas
 - the glasses
- la gorra
 - the cap
- los vaqueros
 - the jeans
- el vestido
 - the dress
- las zapatillas de deporte
 - the shoes (sports)
- los zapato
 - the shoes

Pronombres demostrativos Demonstrative Pronouns

- este/esta
 - this
- estos/estas
 - these
- ese/esa
 - that
- esos/esas
 - those
- aquel/aquella
 - that one
- aquellos/aquellas
 - those ones

5. ¿Qué vas a llevar para ir a la fiesta? What are you going to bring to the party?

- para ir...
- to go...
 - a la fiesta
 - to the party
 - a la boda
 - to the wedding
 - a la playa
 - to the beach
 - al partido de fútbol
 - to the football match
- voy a llevar...
- I'm going to wear...
 - unas botas
 - boots
 - una bufanda
 - a scarf
 - unos calcetines
 - socks
 - una camisa
 - a shirt
 - una camiseta
 - a t-shirt
 - una chaqueta
 - a jacket

Adverbios de Frecuencia Adverbs of Frequency

- normalmente
 - usually
- generalmente
 - generally
- siempre
 - always
- a veces
 - sometimes
- nunca
 - never

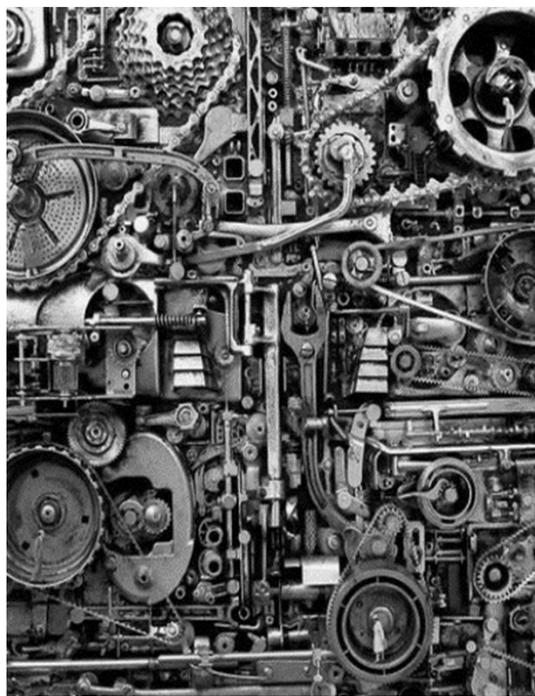
De compras

6. La Navidad Christmas

- ¡Feliz Navidad!
 - Merry Christmas!
- Navidad
 - Christmas
- Nochebuena
 - Christmas Eve
- Nochevieja
 - New Years Eve
- el pavo
 - the turkey
- la iglesia
 - church
- la misa del gallo
 - Midnight Mass
- el belén
 - the nativity scene
- el nacimiento
 - the birth
- los reyes magos
 - the three wise men
- la medianoche
 - the midnight
- el árbol
 - the tree
- las tarjetas
 - the cards
- los zapatos,
 - the shoes
- ¡Próspero Año Nuevo!
 - Happy New Year!

Year 8 – Mechanical Objects

During this topic you will be learning about the artwork of mechanical artist Jud Turner. You will begin by creating an accurate study of a piece of Jud Turner's work – this will be created using drawing pencil and a variety of shading techniques. You will then experiment with different printing techniques such as mono printing and reduction printing to create other mechanical inspired pieces of work. This topic will be teaching you how to create accurate studies from a secondary source image as well as how to create a variety of different styles of print making.



Important Vocabulary

Tone - the particular quality of brightness, deepness, or hue of a shade of a colour.

Hatching - shading with closely drawn parallel lines.

Cross Hatching - shading with intersecting sets of parallel lines.

Sketch - to press down lightly with your pencil

Proportion - adjust or regulate areas of your drawing so that it has a particular or suitable relationship to the rest of your work.

Print Making - the activity of making pictures by printing them from specially prepared plates or blocks.

How To Create A Effective Reduction Print

1. Firstly, you will draw out your design onto a piece of lino using a pencil or pen.
2. Then you will carve out your design using a specific lino cutter.
3. Next, you will roll out the lightest colour of ink onto a plastic sheet until it is a thin layer. You will then roll this ink onto your piece of lino.
4. You will print this lino by turning it upside down onto a piece of paper and using another clean roll to press the lino down. Lift the lino up to reveal your print.
5. You will then need to wash all your ink, rollers and lino until everything is clean.
6. The next step will be to carve out more from the piece of lino - anything you want to stay the first colour you used to print.
7. Finally you will roll out another colour and print your lino on top of your first print. This will give your reduction printing a double colour of ink.

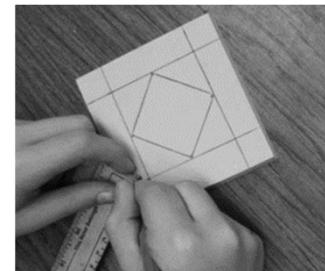


TABLE TENNIS

Forehand Serve

The tennis serve is the shot selected to begin a point in tennis. A table tennis serve can be hit either forehand or backhand. It must be thrown up from a flat palm into the air to a minimum height of six inches and visible to their opponent at all times.

Stage one

Stand in position on the balls of your feet, with knees slightly flexed. Face sideways with your shoulder pointing towards the target. Hold the ball in front of your body with left hand, right hand held back. Body weight should be on the back foot. Keep low.

Stage two

Throw the ball gently into the air (about 6 inches) with the palm of your hand. As the ball begins to drop, hold a forward stance and strike the ball flat with a fast arm in the middle of the ball. Transfer body weight from back to front foot.

Stage three

Follow through with the bat pointing towards the intended target. Return back to ready position for the next shot.

Forehand Drive

A forehand drive in table tennis is an offensive stroke that is used to force errors and to set up attacking positions. A successful shot should land close to your opponent's baseline or side-line.

Stage one

As the ball is returned, stand in position on the balls of your feet, with knees slightly flexed. Face sideways with your shoulder pointing towards the target. Body weight should be on the back foot.

Stage two

When ready to strike the ball, point your free arm towards the ball. At impact, rotate your body quickly to face forwards. Aim to hit the ball at its highest point. Transfer body weight from back to front foot.

Stage three

Follow through with the bat pointing towards the intended target. Return back to ready position for the next shot.

Forehand Push

A forehand push is a difficult defensive shot that requires the player to strike downwards on the back and underneath the ball to create backspin. When performed correctly, a forehand push is used to change the pace of an exchange or to return the ball in a very low manner.

Stage one

Stand square to the table in slight position and keep your feet shoulder width apart. Slightly flex your knees, leaning forward and hold your arms out in front. Keep close to the table.

Stage two

When ready to strike the ball, draw the bat backwards to the side of the body (strongest side). Hold the bat in an open angle with a straight wrist and your playing arm just in front of the body.

Stage three

On impact, bring the arms forward and ensure that power comes from the elbow and forearm (it is not a swing shot). Aim to hit the ball at its highest point. Transfer body weight from back to front foot.

Stage four

After impact, point the bat to where you want to hit the ball. Ensure that your arm does not swing across your body to the left. Return back to ready position for the next shot.

Forehand Smash

The forehand smash is a fast, hard and powerful stroke that aims to force the opponent away from the table or to win a point outright. However, the shot is not always about force and requires the player to use good timing, technique and precision simultaneously.

Stage one

As the ball is returned, stand in position on the balls of your feet, with knees slightly flexed. Face sideways with your shoulder pointing towards the target. Body weight should be on the back foot.

Stage two

When ready to strike the ball, point your free arm towards the ball. Raise the racket to a high position to generate downwards and forwards power.

Stage three

As the ball bounces off the table, rotate your body quickly to face forwards. Aim to hit the ball at its highest point. Transfer body weight from back to front foot. Return back to ready position for the next shot.

Block

The block shot is a defensive stroke that allows a player to use the speed of their opponent's shot against them. It needs to be completed straight after the bounce to ensure that the player maintains control of the ball.

Stage one

Stand square to the table in slight position and keep your feet shoulder width apart. Slightly flex your knees, leaning forward and hold your arms out in front. Keep close to the table.

Stage two

When ready to strike the ball, draw the bat backwards to the side of the body (strongest side). Hold the bat in an open position with a straight wrist and your playing arm just in front of the body.

Stage three

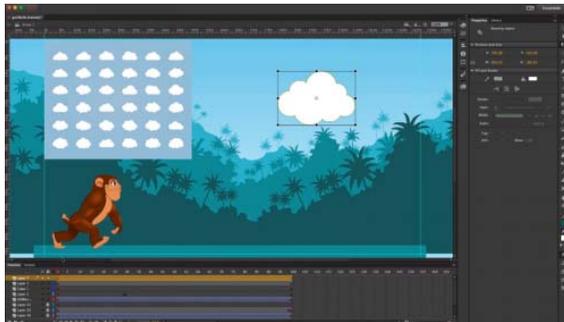
On impact, bring the arms forward and ensure that power comes from the elbow and forearm (it is not a swing shot). Aim to hit the ball at its highest point. Transfer body weight from back to front foot.

Stage four

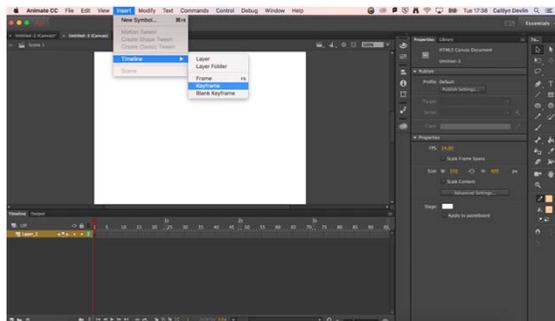
After impact, point the bat to where you want to hit the ball. Ensure that your arm does not swing across your body to the left. Return back to ready position for the next shot.

Adobe Animate

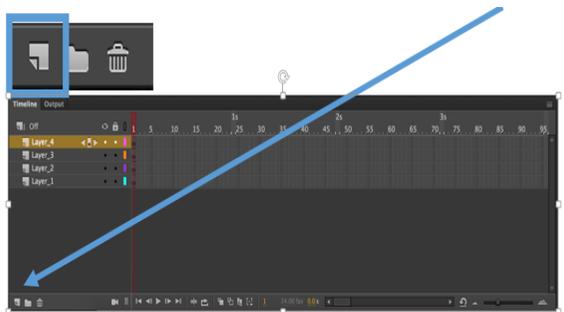
Animate is a professional animation software used by animation companies all over the world



How to add a new layer



How to add a new layer



Key words

Canvas

The name given to the blank document you create an animation on, once the animation process starts this is called The Stage

Frames

A frame in animation is each individual drawing on the time line, which when played in sequences gives the illusion of movement. There are three types of frames used in Adobe Animate, Key Frames, Frames and Blank Key Frames.

Key Frame

A key Frame is a Frame on the timeline which has an object or drawing on it.

Blank Key Frame

Blank Key Frames is a frame, which has nothing on it, so you will use this to create a news scene, a blank key Frame allows you have a break in action or change of scene.

layers

Layers are used so that an animator can have greater control over their animation; by separating different images or parts of the animation onto separate levels,

Frame by Frame Animation

Frame-by-Frame animation is when the image on the stage changes in every frame, it is used for detailed animation where movements should appear to happen seamlessly. Frame-by-Frame animation is the most time consuming, due to the number of drawings needed to make a single second of animation.

Onionskin

Onionskin is a tool used in digital animation which allows you to see multiple frames at once

Inbetweening

Inbetweening is a way of animating where the key frames are plotted out first, after which the frames in between are added to create a smooth transition and the illusion of movement.

Still Motion Animation

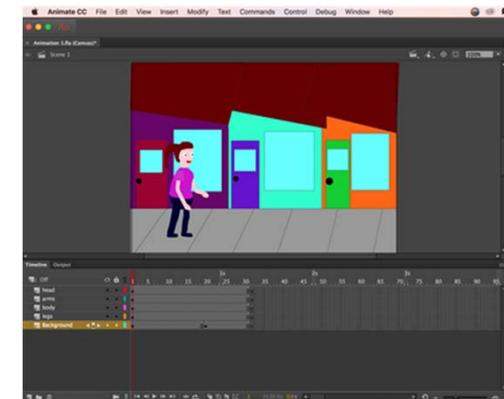
Still motion is another way of animating most commonly used in advertising and music videos that rely on a fast-paced movement of images. Still motion animation is similar to stop motion; however, instead of making small changes to each frame, every frame is a completely different image.

Motion Tweening

Motion tweening is a way of computer generating the path an object moves on

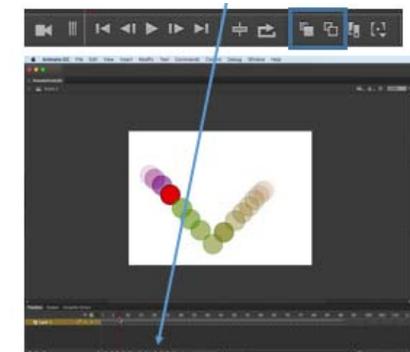
Organising Layers

Where a layer is positioned on the project timeline determines how that object or drawing is seen on the animating stage, as the layers are literally layered over the top of each another. The higher a layer appear on the project timeline the closer it will be to the front of the animating stage.



Using the Onionskin tool

There are two types of onion skins Onionskin and Onionskin Outline they are situated at the bottom of the Adobe animate interface next to the playback controls



Drama

Features of writing:

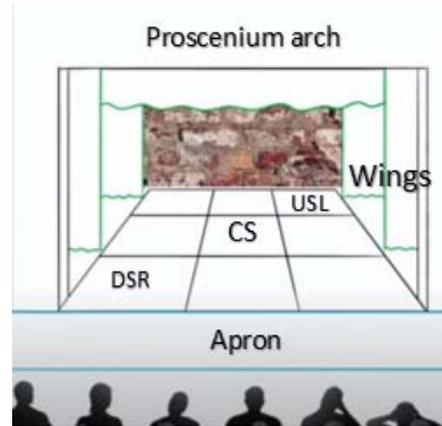
- Setting.
- Characters.
- Plot.
- Conflict.
- Protagonist.
- Antagonist.
- Prequel.
- Sequel.
- Duologue.
- Dialogue.

Acting skills

Vocal

- Pace.
 - Pause.
 - Tone.
 - Volume.
 - Diction.
 - Projection.
- ### Physical
- Facial expression.
 - Eye contact.
 - Posture.
 - Movement/stillness.
 - Gesture.
 - Proxemics.
 - Levels.

The Proscenium Arch:



Sound:

- Diegetic:** a sound from within the world of the play
- Directional:** where the sound comes from
- Distortion:** altering the sound
- Underscore:** music played in the background
- Recorded sound:** sound that has been recorded before the performance
- Live sound:** sound that is performed on the night of the show
- Volume:** how loud the sound is

Features of an effective poster:

- Name of the production.
- Appropriate design to establish genre.
- Where the performance is shown.
- When the performance is shown.
- Ticket information.



Lighting:

<p>Flood</p>	<p>Spot light</p>	<p>Gobo</p>
<p>Gauze</p>	<p>Gels</p>	<p>Projection</p>

Context

Literary context

The novel follows a literary tradition of gothic novels that typically include isolated houses or castles, hauntings and induce fear in the reader. Susan Hill set out to write a ghost story, inspired by Henry James's novel, *The Turn of the Screw*. She read a range of ghost stories to inspire her and made a list of elements that a ghost story should contain. One of the key features of these stories, as well as the ghost itself, is a 'most unimaginative and straightforward' person who 'most certainly did not believe in such things as ghosts'. We see this character clearly in the rational Arthur Kipps.

Historical context (Edwardian setting (1901 – 1910 but written in early 1980s – a historical novel)

Isolation is key generic convention of Gothic Horror (protagonist often an orphan or without family & rural, isolated settings / old mansions common). Hill is 'playing' with ideas of Gothic horror but changes protagonist to male not than female (gender reversal)
 Women often socially isolated in Edwardian society if not fitting traditional stereotype of 'angel in the house' e.g. Jannet excluded while pregnant / Alice Drablow dismissed as a "rum'un" by Mr Bentley.
 1970 & early 80s, Britain still expected mums to be at home (social isolation).
 Hill suffered emotional isolation with death of 1st fiancé and death of middle daughter
 Hill used real-life settings of marshes around Suffolk coast in 1970s to inspire desolate atmosphere in WIB e.g. the dry rustling of reed beds & moaning wind.

Narrative and events

Narrative exposition

Kipps emotionally isolated at **start of novel**. Christmas Eve: family telling Gothic ghost stories.

Rising action: Kipps more isolated & tension rises ('conspiracy of silence' in village, physical isolation of Eel Marsh House, literally cut-off by tide).

Narrative Climax in 'Whistle & I'll come to You' (ch10)

Epiphany in ch11 on seeing Robin after 12 days – "Now, I appreciated the bird's presence, enjoyed simply watching".

Resolution: isolated again – bleak ending.

Settings

Eel Marsh House ("gloomy old house") – isolated/ cut off by (**Nine Lives Causeway**). Tide comes in & no escape (Gothic horror convention). Eel Marsh sounds slippery/ unpleasant (drowning).

Crythin Gifford – rural village, isolated from towns & cities. Kipps travels by train through **Gapemouth Tunnel** then car (Samuel Daily) to reach Gifford Arms. Sense of being trapped in the past / another time (clash of old and new). Hill uses for Crythin Gifford: Samuel Daily tells Kipps of "drowned churchyard" & "swallowed-up village" (foreboding). Physical isolation of settings adds to gloomy feel & foreshadows horror events.

November: month of the dead (and echoes 'Frankenstein')

Key characters

Arthur Kipps

The narrator of the story. A character who is emotionally isolated from family. Young Kipps is inexperienced & feels socially isolated/detached from people of Crythin Gifford and from Samuel Daily at first. Ch2 states he had a "**Londoner's sense of superiority in those days**".

Keckwick

The driver of the pony and trap. Withdrawn from social contact (symbolic of boatman to Hades / The Underworld?). Typical mysterious Gothic Horror character (undead horseman).

Mr. Jerome

Jerome character who is afraid of Eel House Marsh and isolates himself from Kipps. He won't speak truth about the woman in black.

Jennet Humpfrye

Is isolated by her family when she falls pregnant. She is cut off and forced to give up her child. As the WIB, she is isolated by anger, bitterness and despair.

Mr. Bentley

Mr Bentley a renowned London solicitor for whom Kipps works. They later become business partners.

Tomes

Mr Bentley's clerk sniffs constantly as if he has a permanent cold. He deals mainly in wills. His name means books – ironic as that is what he spends most of his time working with.

Esme Kipps

Arthur Kipps' second wife – a widower when he married her.

Stella Kipps

Arthur Kipps' fiancé during the time of the events at Crythin and later his first wife.

Literary techniques

Simile	Comparing two things using like or as.
Metaphor	Stating one thing as though it is something else
Personification	Giving human features/characteristics to a non-human object.
Repetition	Where an idea is repeated multiple times throughout a text often to strengthen the idea presented.
Unreliable narrator	A sense that the narrator is not telling/is not able to tell the whole truth.
Imperative verb	A command verb such as 'put' or 'don't'.
Pathetic fallacy	A type of personification where emotions are given to a setting, an object or the weather.
Onomatopoeia	Words that sound a little like they mean.
Emotive Language	Language intended to create an emotional response.
Symbolism	Using images, ideas, motifs, objects, characters...to represent something else.

Key vocabulary – add to this list

Isolation	Alienation
Blasphemy	Redemption
Segregation	Withdrawal
Solitude	Detachment
Remoteness	

Themes – create a tally chart for each time these themes occur

Isolation	Community
Family	Secrets
Appearance and reality	Identity
Social class	Gender
The role of women	Tradition vs modernity

Symbolism – add explanations to these key symbols as we read

 Fog and Mist

 Eel Marsh

 Crythin Gifford

 The woman in black

 Eel Marsh House

 The various characters and settings

Humans in the rainforest

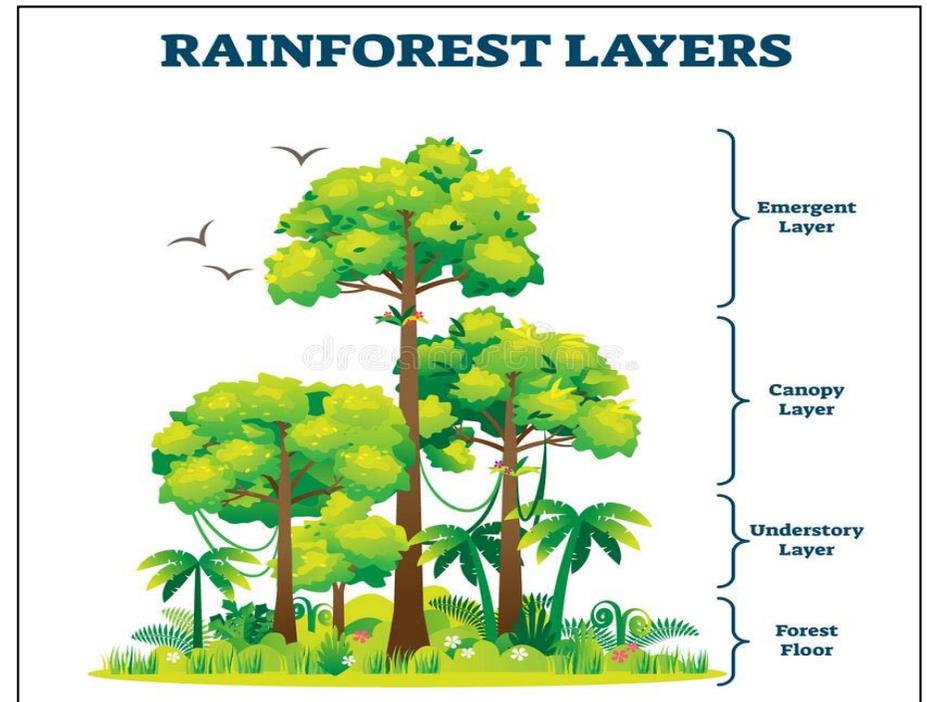
Indigenous	Native to an area; a people whose ancestors have lived in an area for a very long time.
Yanomami	An indigenous tribe in the Amazon. Some villages have never had contact with the outside world.
Shabano	Large circular huts with an open courtyard. Families live in units which are all open to face the courtyard.
Sustainable	An activity which can be repeated continuously without causing damage to the future.
Forest Fires	Fires which occur in forests, either naturally or because of human activity. Typically they spread very quickly and cause lots of damage.
Genocide	Large-scale killing of a group, with the intention of destroying a group completely.

Deforestation

Deforestation	The removal of trees to use land for different purposes.
Logging	Chopping down trees to use the wood to make products, such as paper and furniture.
Mining	Process of removing things such as minerals, coal and metals from beneath the ground.
Cattle Ranch	A large area of land used to raise cows.
Infrastructure	Basic structures of society; e.g. roads and electricity
Palm oil	Oil made from the fruit of the palm tree, which is used in a huge number of products.
Endangered Species	When a species of plant or animal is at risk of becoming extinct.

Rainforest Structure

Forest Floor	Bottom layer of the rainforest, mainly leaves, branches and bark decomposing on the soil surface.
Understory	Half way house between forest floor and canopy. Lots of shrubs and small trees.
Canopy	A layer with lots of trees which form a 'canopy' over the rainforest. Much of rainforest life can be found here.
Emergent	The tallest layer of the rainforest, some trees reach 70ft tall.
Epiphytes	Plants which grow on other plants for support.
Buttress Roots	Large, thick roots which spread out on the forest floor. These help tall rainforest trees to be stable, and find nutrients in the soil.



KEY WORDS	DEFINITION
Artistic <i>Gymnastics</i>	Gymnasts perform individual short routines on different apparatus.
Acro <i>Gymnastics</i>	Gymnasts work in partners or groups to perform floor routines, including acrobatics, dance and tumbling to music.
Rhythmic <i>Gymnastics</i>	Gymnasts individually or in groups perform floor routines to music with apparatus (E.g. Hoop, Rope, Ball, Cluns, Ribbon.)
Travelling	The transference of weight from one body part to another in order to move along the floor
Rotation	When the body moves around an axis (longitudinal, transverse or Medial).
Balance	A strong shape held still for 3 seconds, on patches or points.
Flight	A moment in time when no part of your of your body is in contact with the floor or any apparatus.
Aesthetic	Beautiful, pleasing to the eye.
Sequence	A set of movements that follow each other.
Performance	An act of presenting a form of entertainment or task.
Apparatus	The equipment needed to perform gymnastics (E.g. Ball, hoop, bench).
Analyse	Look at something in detail to explain it.
Body Tension	To contract the muscles in the body to hold a position still.
Extension	To straighten and stretch the limbs.
Control	Being aware of your body and what it is doing.
Flow	Movements are linked so they flow.
Precision	The movements performed are exact, neat and tidy.
Canon	The same movement performed one after the other.
Synchronisation	The same movements performed at the same time.
Contrasting	Performing different movements at the same time.
Dynamics	Whether the gymnastics movements are performed with strong movements or soft flowing movements.

Gymnastic movements

Travelling/linking: Skip, gallop, roll, crawl, slither, tiptoe, jump, slide, leap, bunny hop, spider walk, hop, spin twirl.

Rotation: Straddle, sitting, circle, forward roll, backwards roll, side roll, cartwheel, turning jump, bridge kick over.

Balances: Dish, arch 'Y' arabesque, shoulder, v-sit, wine glass, headstand (bent and straight legs), handstand.

Flight: Stretch jump, tuck jump, star jump, asymmetric jump, straddle jump, pike jump, turning jump, leaps, scissor kick, dive forward roll, dive cartwheel, Arab spring.

Exit routes

Diamond Gymnastic Club
Shay Lane
Halifax
HX3 6RS

Rochdale Olympic Gym Club
Springfield Park
Rochdale
OL11 4RE



Vocabulary

<i>abest</i>	is out/is absent
<i>aberat</i>	was out/was absent
<i>cubiculum</i>	bedroom
<i>emit</i>	buys
<i>ferōciter</i>	fiercely
<i>festīnat</i>	hurries
<i>fortis</i>	brave
<i>fūr</i>	thief
<i>intentē</i>	intently/carefully
<i>libertus</i>	freedman/ex-slave
<i>ōlim</i>	once/some time ago
<i>parvus</i>	small
<i>per</i>	through
<i>postquam</i>	after
<i>pulsat</i>	hits/thumps
<i>quod</i>	because
<i>rēs</i>	thing
<i>scrībit</i>	writes
<i>subitō</i>	suddenly
<i>superat</i>	overcomes/overpowers
<i>tum</i>	then
<i>tuus</i>	your/yours
<i>vēndit</i>	sells
<i>vituperat</i>	blames/curses

Word order

The Past Tense

When thinking about the past tense, there are two types of words; **perfect** and **imperfect**.

Perfect tense – a completed action that takes place in the past. (e.g. *Caecilius opened the door*)

Imperfect tense – an action that takes place over a period of time. (e.g. *Metella was sitting in the garden*)

In Latin, these two tenses need to be accounted for.

	Singular	Plural
Present	<i>portat sedet audit</i>	<i>portant sedent audiunt</i>
Imperfect	<i>portābit sedebat audibat</i>	<i>portābant sedebant audibant</i>
Perfect	<i>portāvit sedevit audvit</i>	<i>portāverunt sedeverunt audverunt</i>

Present: *Caecilius hortum intrat.*

Caecilius enters the garden.

Perfect: *Caecilius hortum intravit.*

Caecilius entered the garden.

Present: *servi vinum portant.*

The slaves carry the wine.

Imperfect: *servi vinum portabant.*

The slaves carried the wine.

Perfect: *servi vinum portaverunt.*

The slaves were carrying the wine.

Present: *senex in theatrum sedet.*

The old man is sat in the theatre.

Imperfect: *senex in theatrum sedebat.*

The old man sat in the theatre.

Perfect: *senex in theatrum sedevit.*

The old man was sitting in the theatre.

Ancient Civilisation – Slavery in Ancient Rome

- Slavery was completely accepted as part of life in Ancient Rome – these slaves were not free to make their own decisions or classed as citizens in Rome.
- They did not live separately from freed people; frequently slaves lived alongside their masters in the same home.
- People usually became slaves by being captured during war or by pirates. Children of slaves were automatically born into slavery. Slaves came from across the Roman empire and slavery was not based on race.
- Some masters were brutal and harsh, others were kind and humane. Slaves who could read and write were valuable to their master.

Freeing a slave

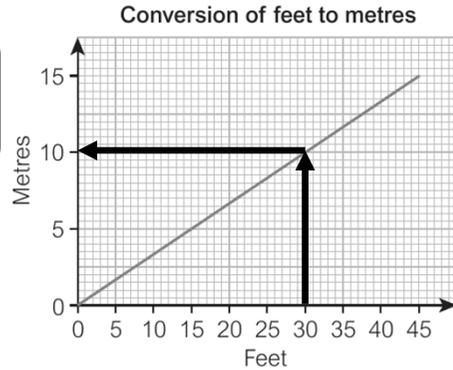
- Some slaves were freed by their masters as a sign of friendship, respect or as a reward. Freedom was also commonly given after a master's death.
- The law set out certain limits; a slave could not be freed before the age of 30, no more than 100 slaves could be freed in a will.
- The act of freeing a slave was called **manūmissiō** – meaning sending from the hand.
- An ex-slave became a **libertus** but they did not receive the same rights as a man born free. They were still expected to pay respects to their former master and work for them for a set number of days a year.

Conversion graphs – This graph can be used to convert between metres and feet.

E.g. Convert 30 feet to metres

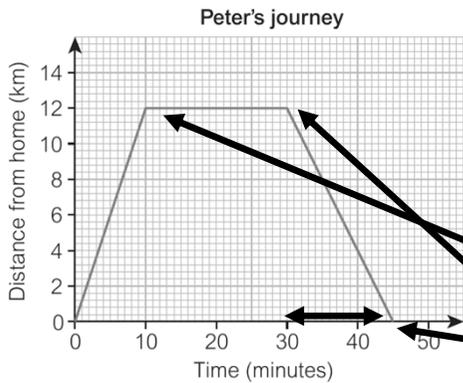
- Using a ruler go up to your line
- Go across to the other axis

30 feet \approx 10 metres



Distance-time graphs

- The vertical axis represents the distance from the starting point.
- The horizontal axis represents the time taken.



E.g. Peter was ten minutes from home after ten minutes.
Peter started his journey back home at 30 minutes.
It took Peter 15 minutes to get home.

(x, y)

Coordinates are always written with the x axis first, then the y axis.



Distance = Speed x Time



Time = $\frac{\text{Distance}}{\text{Speed}}$

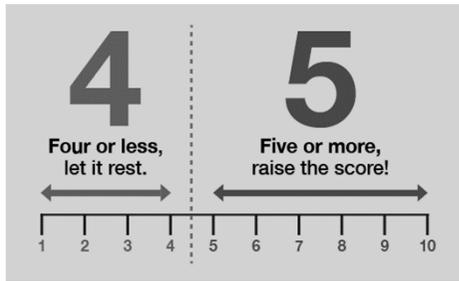


Speed = $\frac{\text{Distance}}{\text{Time}}$

Conversion graph	Conversion graphs convert one unit to another For example pounds (£) to dollars (\$).
Distance-time graph	Distance-time graphs show the relationship between distance travelled and the time it took.
Gradient	The gradient is the steepness of a line.
Trend	The trend of data is the general direction of change, ignoring individual ups and downs.
Linear graph	A linear graph is a single straight line.
Non-linear graph	A non-linear graph is not a single straight line.
Interpret	To decide on or explain the meaning of something. (In this unit suggesting the meaning of values on graphs)

Prior Knowledge Maths

2 decimal places (2dp) – A number rounded to 2 decimal places has two digits after the decimal point.



Ratio – Bar model

Ratios can be represented visually as a bar model.

This bar model shows the ratio 2 : 3 : 4

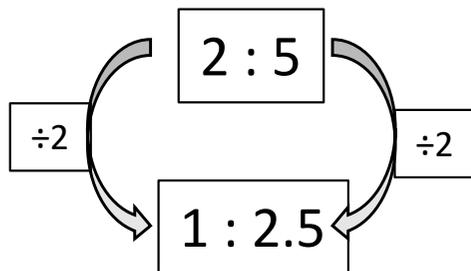


What fraction of the bar is pink?
 What fraction of the bar is yellow?
 What fraction of the bar is blue?

- >** Greater Than
- ≥** Greater Than or Equal To
- <** Less Than
- ≤** Less Than or Equal To

Unit ratio

In a unit ratio, one of the numbers is 1.



Year 8 – Unit 6 – Decimals and ratio

Decimal Place	A decimal place is the position of a digit to the right of a decimal point.
Significant figures	Numbers can be rounded to significant figures. The first significant figure is the one with the highest value. It is the first non-zero digit, counting from the left.
Descending	Descending means to move downward or to a lower position.
Ascending	Ascending means to move upward or to a higher position.
Proportion	Proportion is the relationship in number or size of two things or sets of things.
Unit ratio	In a unit ratio, one of the numbers is 1.

T	O	.	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$	$\frac{1}{100000}$	$\frac{1}{1000000}$
			tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths

Music

Film Music

Notation – Rhythms

	ta		<u>ti-ka-ti</u>
	<u>ti ti</u>		<u>tika tika</u>
	ta-a		Rest
	Tum ti		Syn – co – pa

Terminology

Bar & bar lines
Score
Notation
Staff
Articulation
Accuracy
Fluency
Expression
Tempo
Style
Genre
Instrumentation
Melody
Phrasing
Rhythm
Time signature

Film Music Composers

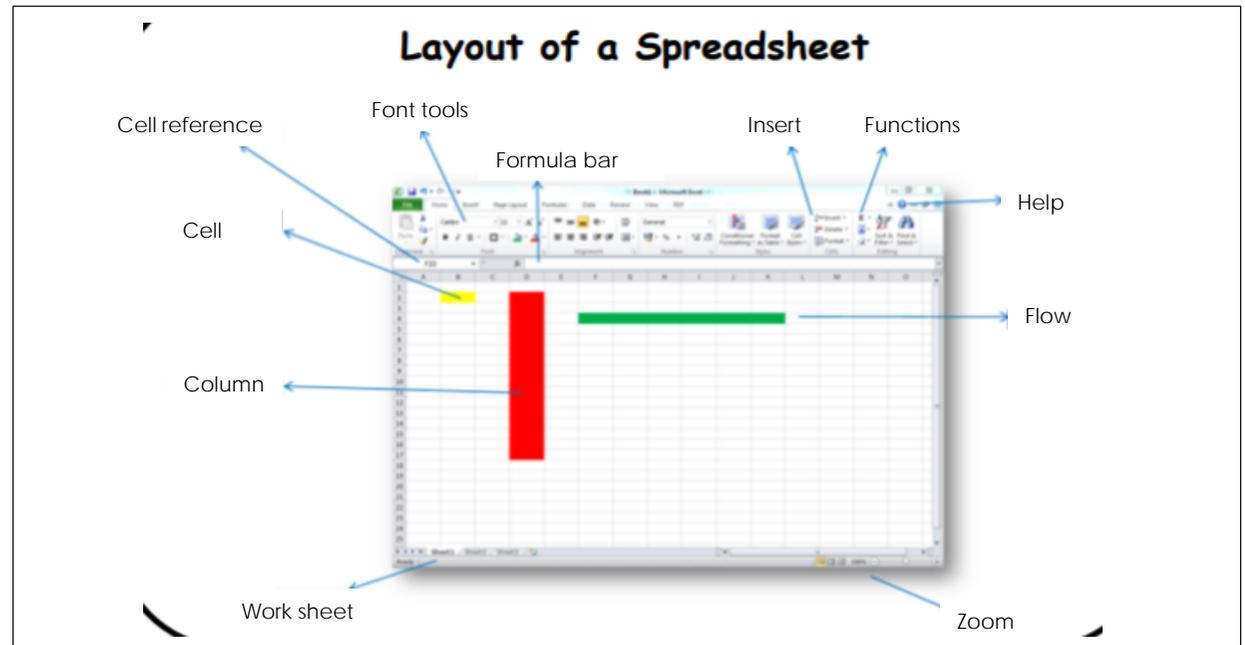
John Williams: Star Wars, Jaws, Harry Potter, ET, Jurassic Park, Indiana Jones.

Danny Elfman: Edward Scissorhands, The Simpsons, Alice in Wonderland.

Hans Zimmer: Pirates of the Caribbean, Gladiator, The Lion King.

KEY VOCABULARY	
Cell	A box in which you can enter a single piece of data.
Cell Reference	The name given to a cell to uniquely identify it, for example, A1.
Formula	An expression which calculates the value of a cell.
Formatting	To change the appearance, layout or organisation of a spreadsheet.
Borders	Form an edge along or beside.
Rows	The range of cells that go horizontally across the spreadsheet/worksheet.
Columns	A vertical series of cells in a chart, table, or spreadsheet.
IF statement	The Excel IF Statement tests a given condition and returns one value for a TRUE result and another value for a FALSE result

Year 8 Computing Spreadsheets



Why do we use spreadsheets? Spreadsheets are used to store information and data. Once we have our information in a spreadsheet, we can run powerful calculations, make graphs and charts and analyse patterns

To make graphs: Highlight your data, click the insert tab at the top of Excel and then pick the chart you need.

Autofill: Click on the cell you want to duplicate, grab the black cross in the bottom right-hand corner and drag it down to the remaining cells. This also works if you want to copy the formulas down as well.

Key words

The God of Classical Theism	The Classical idea of what God is like.
Omnipotent	God is all powerful.
Wrath	God's anger.
Hebrews	The ancient people who would end up as members of the Jewish religion.
Omniscient	God is all-knowing.
Omnibenevolent	God is all-loving.
Just/ Judge	God is fair and is a fair judge.
Evil	Something that causes pain and suffering.
Genesis	The first book of the Bible. It contains the creation of the world.
Exodus	The second book of the Bible. It contains the story of Moses and the Hebrews in Egypt.
Abraham	The Father of Judaism known for being told to sacrifice his own son.
Moses	Responsible for the Ten Commandments, the Ten Plagues on Egypt and the parting of the Red Sea.
Job	A perfect follower of God who was tested by the Devil in a bet.
Deluge	The name for the flood at the time of Noah.
Noah	Responsible for building the ark to save the animals.
Old Testament	The first half of the Bible detailing the story of the Jewish People.
Bible	A collection of 66 books made up of the Old Testament and the New Testament.
Covenant	A contract with God that had conditions for God and his people.

Quotes

Genesis

God made Earth in '7 days'. **Genesis**

God made Adam from the 'dirt of the ground' and Eve from 'Adam's rib'. **Genesis**

God said you 'must not eat the fruit from that tree'. **Genesis**

The Lord God 'banished them from Eden'. **Genesis**

'God flooded the world for '40 days and 40 nights'. **Genesis**

God said to Abraham 'I will give you as many descendants as stars in the sky'. **Genesis**

God said to Abraham 'Sacrifice your son 'Isaac to me'. **Genesis**

Exodus

And God 'remembered his promise to the Hebrews'. **Exodus**

God sent a 'plague of darkness'. **Exodus**

God sent the 'Angel of Death'. **Exodus**

Moses lifted his staff and parted the Red Sea'. **Exodus**

Moses was given the Ten Commandments including 'do not steal' as part of the covenant. **Exodus**

Job

God said 'where were you when I made the foundations of the Earth?' **Job**

Psalms

God knows the 'number of hairs on your head'.

History

Key people

Enlightenment thinkers

John Locke

Argues that governments should have limits and people are born with certain liberties (life, health, possessions) that cannot be taken away.

Voltaire

Respect individual liberty and ensure people are given the freedom of speech.

American Revolution

George Washington

Leader of American forces in the War of Independence and first President of the United States.

King George III

Third king of the Georgian dynasty who tried desperately to hold onto the American colonies.

Thomas Paine

Influential writer who wrote 'Common Sense' and 'Rights of Man' arguing for freedom and liberty.

French Revolution

King Louis XVI

French king who ruled an absolute monarchy. He was seen as a weak leader who was indecisive.

Queen Marie Antoinette

Queen consort of France, Marie Antoinette was criticised for her luxurious and frivolous lifestyle. She was, however, a skilled politician.

Haitian Revolution

Toussaint L'Ouverture

Former enslaved person on the island of Haiti. Leader of the Haitian Revolution who fought against French control of the island.

Age of Revolutions



Key terms

Absolute monarchy

The king or queen rules with absolute power.

Age of Enlightenment

During this period, there was a growth in new ideas and new facts were discovered.

Aristocracy

The upper classes of society who are both wealthy and own land.

Bourgeoisie

A wealthy and intellectual 'middle-class'.

Colony

An overseas area controlled by a foreign power.

Constitution

A set of rules and laws that govern how a society is run.

Constitutional monarchy

A state where a king rules alongside a parliament.

Liberty

A person's right that they observe as a member of a society.

Plantation

Slave colony that relies on the work of enslaved workers.

Reason

Thinking critically about information before forming a belief.

Republic

A country without a monarch.

Revolution

Upheaval of the traditional system, generally through violent protest.

Key events

The Age of Enlightenment

An increase in new ideas spread amongst the intellectual classes, based around the ideas and notions of science. Using the theory of **reason** to answer real life questions, mostly around liberty and the rights of people. Ideas of fair government become common during this period.

The American Revolution

The 13 American Colonies were part of the British Empire. The British could govern the American colonies however they saw fit, whereas the colonies began wanting a say in their running. The Colonies were particularly angry at the huge taxes that the British charged on things like paper and tea. They began to refuse to pay taxes, chanting "**no taxation without representation**". On 4th July 1776 the 13 American Colonies signed the Declaration of Independence and began fighting the British crown for their freedom.

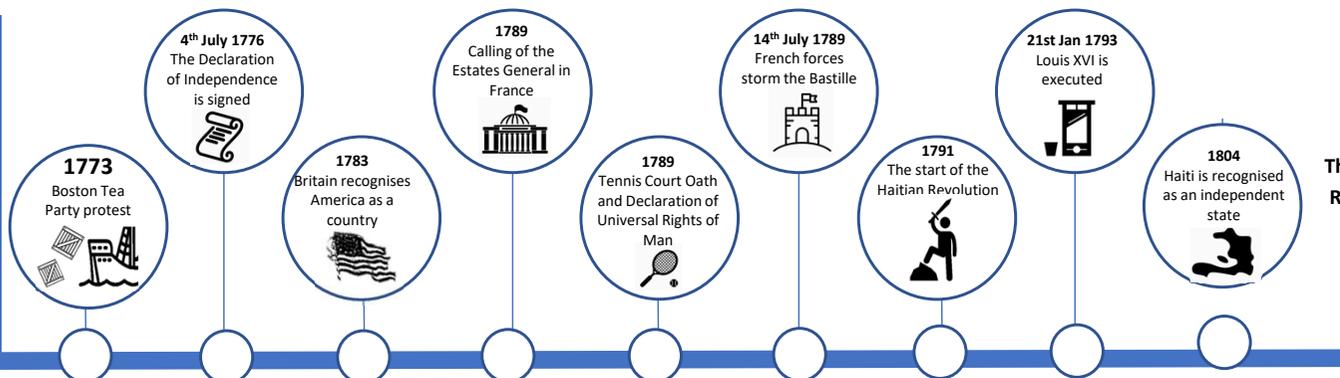
The French Revolution

Inspired by the American Revolution, the people of France began demanding reform and change. France was governed by an **Autocratic** ruler, Louis XVI who was seen by many to be a weak leader. His wife, Marie Antoinette, lived a luxurious and expensive lifestyle. The people of France were angry at increased taxes, which was made worse by poor harvests. Louis XVI called a meeting of the Estates General but failed to make any real changes and lost much of his support. The Third Estate Deputies (the peasants and workers) met, making the **Tennis Court Oath** where they demanded change. The people of Paris stormed the Bastille and revolution spread through France.

The Haitian Revolution

Successful revolution by self-liberated enslaved people and led by former enslaved person **Toussaint L'Ouverture**. Ending in 1804 with the colony's independence, it is a vital moment in world history; it is the only slave revolution to end with the creation of a state. Influenced by the French Revolution, the people of Haiti wanted freedom from slavery.

Timeline

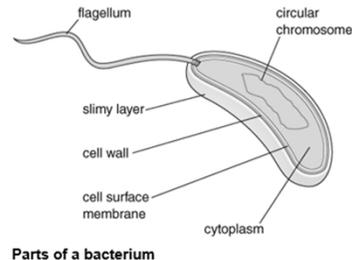


Todmorden High Science K.O. Year 8 Topic 8D Unicellular Organisms

Key term	Definition
Unicellular	An organism made of one cell.
Multicellular	An organism made of many cells
Bacterium	A type of prokaryote organism. Plural is bacteria.
Fungus	A member of the fungus kingdom. A fungus can be multicellular or unicellular but does not make its own food. Plural is fungi.
Virus	A non-living particle that can change how a living cell functions when it enters a cell. Inside a cell, a virus often causes the cell to make copies of the virus
Prokaryote	A member of the prokaryote kingdom. Prokaryotes are all unicellular and have cells that lack nuclei.
Microorganism	An organism too small to be seen with the naked eye.
Aerobic Respiration	A type of respiration in which oxygen is used to release energy from substances such as glucose.
Anaerobic Respiration	A type of respiration that does not need oxygen.
Fermentation	Anaerobic respiration occurring in microorganisms.
Limiting Factor	Something that stops a population growing.

The Big Ideas and Must Know Facts

Bacteria



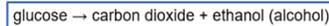
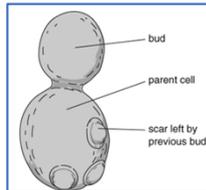
Some bacteria are important in making yoghurt and cheese. These bacteria use a type of anaerobic respiration to ferment milk:



Microscopic fungi

These include, for example, yeast. They:

- reproduce asexually by budding.
- can use aerobic respiration, which is important in baking.
- can use anaerobic respiration (fermentation), which is important in alcoholic drink manufacture.

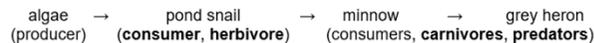


Protocists

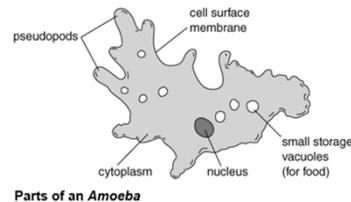
There are many different types of protocist, and some can **photosynthesise**:



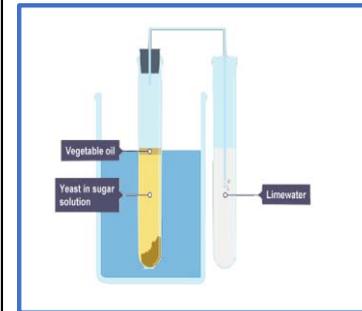
Photosynthesising protocists are therefore **producers** in a **food chain**, for example:



Some protocists move using **pseudopods**, while others use **cilia** and others use **flagella**.



Required Practical.

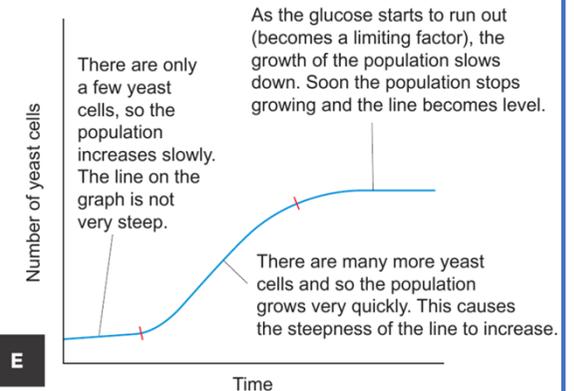


This apparatus is used to measure how quickly the yeast is growing by counting the number of bubbles in the limewater, or timing how long it takes for it to turn milky.

Growth curves

For yeast cells to grow and reproduce they need resources such as moisture, sugar and warmth. This is why bread dough is left in a warm place for it to rise. A few yeast cells soon become millions but the **population** of cells will not keep growing forever. Eventually the sugar runs out and the population stops growing. Something that slows down or stops a process is called a **limiting factor**.

How a yeast population changes with time

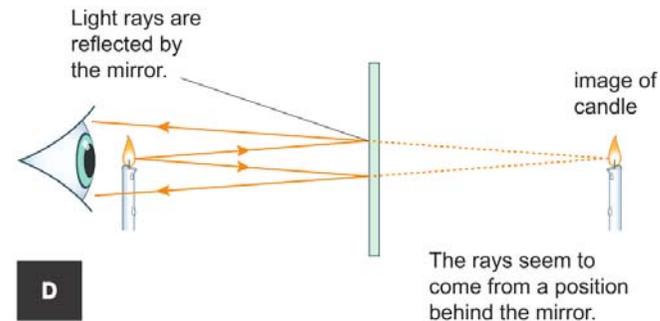
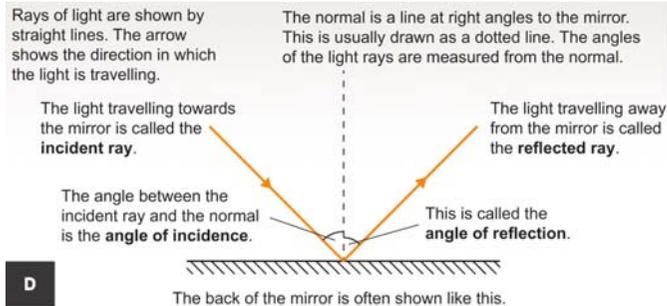


Todmorden High Science K.O. Year 8 Topic 8J Light

Key term	Definition
Longitudinal wave	A wave where the particles vibrate in the same direction as the wave is travelling
Opaque	Material that does not let light through. It is not possible to see through an opaque substance.
Ray	A narrow beam of light, or an arrow on a diagram representing the path of light and the direction in which it is travelling.
Reflect	To bounce off a surface instead of passing through it or being absorbed.
Translucent	Material that lets light through but scatters it. You cannot see things clearly through translucent materials
Transparent	A material that light can travel through without scattering. (Note: transparent substances may be coloured or colourless.)
Transverse wave	A wave where the vibrations are at right angles to the direction the wave is travelling.
Angle of incidence	The angle between an incoming light ray and the normal.
Angle of reflection	The angle between the normal and the ray of light leaving a mirror.
Normal	An imaginary line at right angles to the surface of a mirror or other object where a ray of light hits it
Refraction	The change in direction when light goes from one transparent material to another.
Dispersion	The separating of the colours in light, for example when white light passes through a prism.
Frequency	The number of vibrations (or the number of waves) per second. Different frequencies of light have different colours.

The Big Ideas and Must Know Facts

	Light	Sound
Type of wave	transverse 	longitudinal 
Speed	300 000 000 m/s in air	330 m/s in air
Travels through:	vacuum, gases, some liquids, some solids	matter (solids, liquids and gases)



Practical

Method



- A** | Stand a plane mirror on a piece of paper and point a ray box at the mirror. Draw a line on the paper along the back of the mirror. This will help you to make sure the mirror goes back to the same place if you move it accidentally.
- B** | Make a mark on the paper in the middle of the front of the mirror.
- C** | Switch on the ray box and aim the ray of light at the mark in the middle of the mirror. Mark where the rays of light are going by putting small crosses along the centre of the ray of light.



- B** | You can investigate the path of light through glass blocks using a ray box. You can mark the points where it enters and leaves and join these points with a straight line.

Spanish

De compras

1. ¿Qué hay en la calle principal?
What's on the main street?

- En la calle principal hay...
- On the main street there is/are ...

- La calle principal tiene...
- The main street has ...

- una zapatería
 - a shoe store
- una joyería
 - a jewelry
- una droguería
 - a drugstore
- una bombonería
 - a candy store
- una librería
 - a bookstore
- una pastelería
 - a cake shop

- una panadería
 - a bakery
- una carnicería
 - a butchery
- una pescadería
 - a fish store
- una farmacia
 - a drugstore
- una frutería
 - a fruit store
- un gran almacén
 - a large warehouse

2. ¿En qué gastas tu dinero?
What do you spend your money on?

- Gasto mi dinero en...
- I spend my money on...

- Gasto mi dinero de bolsillo en...
- I spend my pocket money on ...

- Ahorro mi dinero para...
- I save my money for ...

- los caramelos
 - the candies
- los chocolates
 - the chocolates
- el crédito para mi móvil
 - the credit for my mobile
- el maquillaje
 - the makeup
- las revistas
 - the magazines
- los tebeos
 - the comics

- la ropa
 - the clothes
- los videojuegos
 - The videogames
- el Ipod
 - the Ipod
- las zapatillas de deporte
 - the trainers
- los regalos
 - the gifts
- la bicicleta
 - the bicycle

3. ¿Qué ropa llevas?
What clothes are you wearing?

- Llevo...
- I wear...

- Me pongo...
- I wear...

- unas botas
 - boots
- una bufanda
 - a scarf
- calcetines
 - socks
- una camisa
 - a shirt
- una camiseta
 - a t-shirt
- una chaqueta
 - a jacket
- un cinturón
 - a belt

- una corbata
 - a tie
- una falda
 - a skirt
- unas gafas
 - glasses
- una gorra
 - a cap
- unos vaqueros
 - jeans
- un vestido
 - a dress
- unos zapato
 - shoes

Spanish

4. ¿Me puedo probar...? Can I try the on?

- el cinturón
 - the belt
- la corbata
 - the tie
- la falda
 - the skirt
- las gafas
 - the glasses
- la gorra
 - the cap
- los vaqueros
 - the jeans
- el vestido
 - the dress
- las zapatillas de deporte
 - the shoes (sports)
- los zapato
 - the shoes

Pronombres demostrativos Demonstrative Pronouns

- este/esta
 - this
- estos/estas
 - these
- ese/esa
 - that
- esos/esas
 - those
- aquel/aquella
 - that one
- aquellos/aquellas
 - those ones

5. ¿Qué vas a llevar para ir a la fiesta? What are you going to bring to the party?

- para ir...
- to go...
 - a la fiesta
 - to the party
 - a la boda
 - to the wedding
 - a la playa
 - to the beach
 - al partido de fútbol
 - to the football match
- voy a llevar...
- I'm going to wear...
 - unas botas
 - boots
 - una bufanda
 - a scarf
 - unos calcetines
 - socks
 - una camisa
 - a shirt
 - una camiseta
 - a t-shirt
 - una chaqueta
 - a jacket

Adverbios de Frecuencia Adverbs of Frequency

- normalmente
 - usually
- generalmente
 - generally
- siempre
 - always
- a veces
 - sometimes
- nunca
 - never

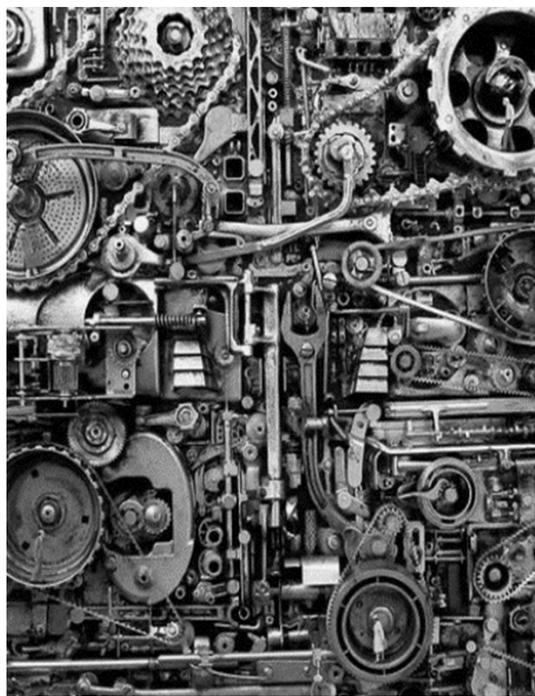
De compras

6. La Navidad Christmas

- ¡Feliz Navidad!
 - Merry Christmas!
- Navidad
 - Christmas
- Nochebuena
 - Christmas Eve
- Nochevieja
 - New Years Eve
- el pavo
 - the turkey
- la iglesia
 - church
- la misa del gallo
 - Midnight Mass
- el belén
 - the nativity scene
- el nacimiento
 - the birth
- los reyes magos
 - the three wise men
- la medianoche
 - the midnight
- el árbol
 - the tree
- las tarjetas
 - the cards
- los zapatos,
 - the shoes
- ¡Próspero Año Nuevo!
 - Happy New Year!

Year 8 – Mechanical Objects

During this topic you will be learning about the artwork of mechanical artist Jud Turner. You will begin by creating an accurate study of a piece of Jud Turner's work – this will be created using drawing pencil and a variety of shading techniques. You will then experiment with different printing techniques such as mono printing and reduction printing to create other mechanical inspired pieces of work. This topic will be teaching you how to create accurate studies from a secondary source image as well as how to create a variety of different styles of print making.



Important Vocabulary

Tone - the particular quality of brightness, deepness, or hue of a shade of a colour.

Hatching - shading with closely drawn parallel lines.

Cross Hatching - shading with intersecting sets of parallel lines.

Sketch - to press down lightly with your pencil

Proportion - adjust or regulate areas of your drawing so that it has a particular or suitable relationship to the rest of your work.

Print Making - the activity of making pictures by printing them from specially prepared plates or blocks.

How To Create A Effective Reduction Print

1. Firstly, you will draw out your design onto a piece of lino using a pencil or pen.
2. Then you will carve out your design using a specific lino cutter.
3. Next, you will roll out the lightest colour of ink onto a plastic sheet until it is a thin layer. You will then roll this ink onto your piece of lino.
4. You will print this lino by turning it upside down onto a piece of paper and using another clean roll to press the lino down. Lift the lino up to reveal your print.
5. You will then need to wash all your ink, rollers and lino until everything is clean.
6. The next step will be to carve out more from the piece of lino - anything you want to stay the first colour you used to print.
7. Finally you will roll out another colour and print your lino on top of your first print. This will give your reduction printing a double colour of ink.

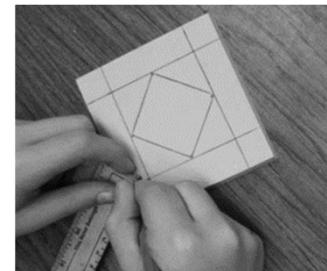


TABLE TENNIS

Forehand Serve

The tennis serve is the shot selected to begin a point in tennis. A table tennis serve can be hit either forehand or backhand. It must be thrown up from a flat palm into the air to a minimum height of six inches and visible to their opponent at all times.

Stage one

Stand in position on the balls of your feet, with knees slightly flexed. Face sideways with your shoulder pointing towards the target. Hold the ball in front of your body with left hand, right hand held back. Body weight should be on the back foot. Keep low.

Stage two

Throw the ball gently into the air (about 6 inches) with the palm of your hand. As the ball begins to drop, hold a forward stance and strike the ball flat with a fast arm in the middle of the ball. Transfer body weight from back to front foot.

Stage three

Follow through with the bat pointing towards the intended target. Return back to ready position for the next shot.

Forehand Drive

A forehand drive in table tennis is an offensive stroke that is used to force errors and to set up attacking positions. A successful shot should land close to your opponent's baseline or side-line.

Stage one

As the ball is returned, stand in position on the balls of your feet, with knees slightly flexed. Face sideways with your shoulder pointing towards the target. Body weight should be on the back foot.

Stage two

When ready to strike the ball, point your free arm towards the ball. At impact, rotate your body quickly to face forwards. Aim to hit the ball at its highest point. Transfer body weight from back to front foot.

Stage three

Follow through with the bat pointing towards the intended target. Return back to ready position for the next shot.

Forehand Push

A forehand push is a difficult defensive shot that requires the player to strike downwards on the back and underneath the ball to create backspin. When performed correctly, a forehand push is used to change the pace of an exchange or to return the ball in a very low manner.

Stage one

Stand square to the table in slight position and keep your feet shoulder width apart. Slightly flex your knees, leaning forward and hold your arms out in front. Keep close to the table.

Stage two

When ready to strike the ball, draw the bat backwards to the side of the body (strongest side). Hold the bat in an open angle with a straight wrist and your playing arm just in front of the body.

Stage three

On impact, bring the arms forward and ensure that power comes from the elbow and forearm (it is not a swing shot). Aim to hit the ball at its highest point. Transfer body weight from back to front foot.

Stage four

After impact, point the bat to where you want to hit the ball. Ensure that your arm does not swing across your body to the left. Return back to ready position for the next shot.

Forehand Smash

The forehand smash is a fast, hard and powerful stroke that aims to force the opponent away from the table or to win a point outright. However, the shot is not always about force and requires the player to use good timing, technique and precision simultaneously.

Stage one

As the ball is returned, stand in position on the balls of your feet, with knees slightly flexed. Face sideways with your shoulder pointing towards the target. Body weight should be on the back foot.

Stage two

When ready to strike the ball, point your free arm towards the ball. Raise the racket to a high position to generate downwards and forwards power.

Stage three

As the ball bounces off the table, rotate your body quickly to face forwards. Aim to hit the ball at its highest point. Transfer body weight from back to front foot. Return back to ready position for the next shot.

Block

The block shot is a defensive stroke that allows a player to use the speed of their opponent's shot against them. It needs to be completed straight after the bounce to ensure that the player maintains control of the ball.

Stage one

Stand square to the table in slight position and keep your feet shoulder width apart. Slightly flex your knees, leaning forward and hold your arms out in front. Keep close to the table.

Stage two

When ready to strike the ball, draw the bat backwards to the side of the body (strongest side). Hold the bat in an open position with a straight wrist and your playing arm just in front of the body.

Stage three

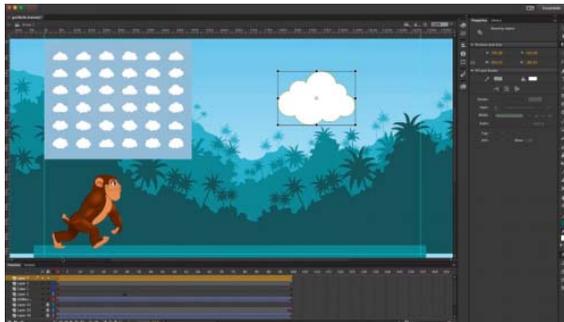
On impact, bring the arms forward and ensure that power comes from the elbow and forearm (it is not a swing shot). Aim to hit the ball at its highest point. Transfer bodyweight from back to front foot.

Stage four

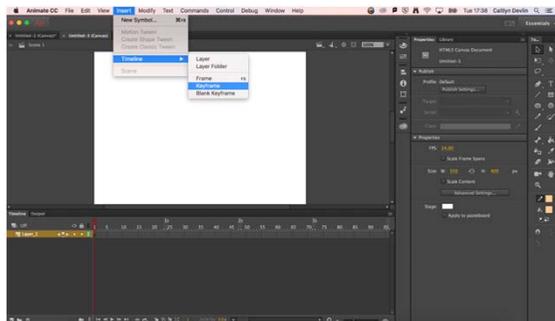
After impact, point the bat to where you want to hit the ball. Ensure that your arm does not swing across your body to the left. Return back to ready position for the next shot.

Adobe Animate

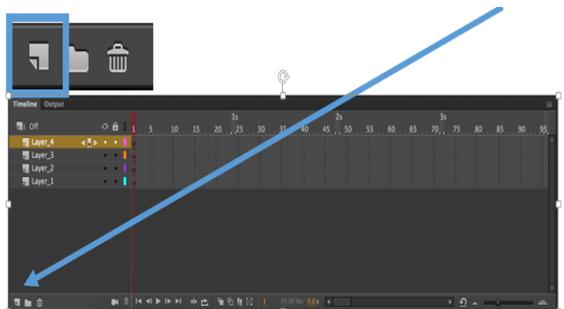
Animate is a professional animation software used by animation companies all over the world



How to add a new layer



How to add a new layer



Key words

Canvas

The name given to the blank document you create an animation on, once the animation process starts this is called The Stage

Frames

A frame in animation is each individual drawing on the time line, which when played in sequences gives the illusion of movement. There are three types of frames used in Adobe Animate, Key Frames, Frames and Blank Key Frames.

Key Frame

A key Frame is a Frame on the timeline which has an object or drawing on it.

Blank Key Frame

Blank Key Frames is a frame, which has nothing on it, so you will use this to create a new scene, a blank key frame allows you have a break in action or change of scene.

layers

Layers are used so that an animator can have greater control over their animation; by separating different images or parts of the animation onto separate levels,

Frame by Frame Animation

Frame-by-Frame animation is when the image on the stage changes in every frame, it is used for detailed animation where movements should appear to happen seamlessly. Frame-by-Frame animation is the most time consuming, due to the number of drawings needed to make a single second of animation.

Onionskin

Onionskin is a tool used in digital animation which allows you to see multiple frames at once

Inbetweening

Inbetweening is a way of animating where the key frames are plotted out first, after which the frames in between are added to create a smooth transition and the illusion of movement.

Still Motion Animation

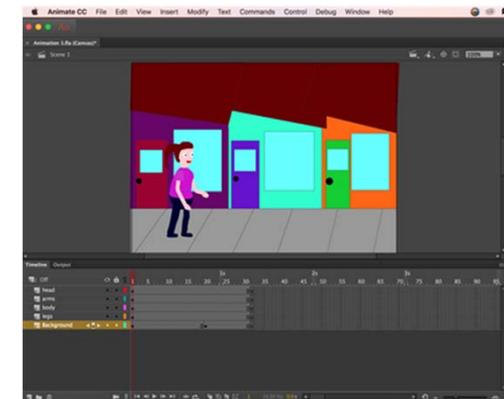
Still motion is another way of animating most commonly used in advertising and music videos that rely on a fast-paced movement of images. Still motion animation is similar to stop motion; however, instead of making small changes to each frame, every frame is a completely different image.

Motion Tweening

Motion tweening is a way of computer generating the path an object moves on

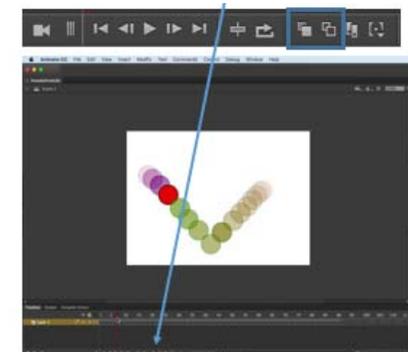
Organising Layers

Where a layer is positioned on the project timeline determines how that object or drawing is seen on the animating stage, as the layers are literally layered over the top of each another. The higher a layer appear on the project timeline the closer it will be to the front of the animating stage.



Using the Onionskin tool

There are two types of onion skins Onionskin and Onionskin Outline they are situated at the bottom of the Adobe animate interface next to the playback controls



Drama

Features of writing:

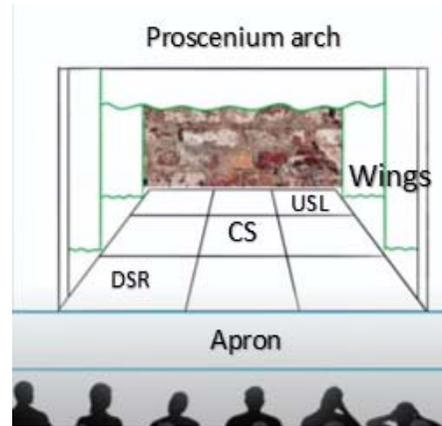
- Setting.
- Characters.
- Plot.
- Conflict.
- Protagonist.
- Antagonist.
- Prequel.
- Sequel.
- Duologue.
- Dialogue.

Acting skills

Vocal

- Pace.
 - Pause.
 - Tone.
 - Volume.
 - Diction.
 - Projection.
- ### Physical
- Facial expression.
 - Eye contact.
 - Posture.
 - Movement/stillness.
 - Gesture.
 - Proxemics.
 - Levels.

The Proscenium Arch:



Sound:

- Diegetic:** a sound from within the world of the play
- Directional:** where the sound comes from
- Distortion:** altering the sound
- Underscore:** music played in the background
- Recorded sound:** sound that has been recorded before the performance
- Live sound:** sound that is performed on the night of the show
- Volume:** how loud the sound is

Features of an effective poster:

- Name of the production.
- Appropriate design to establish genre.
- Where the performance is shown.
- When the performance is shown.
- Ticket information.



Lighting:

<p>Flood</p>	<p>Spot light</p>	<p>Gobo</p>
<p>Gauze</p>	<p>Gels</p>	<p>Projection</p>

Context

Literary context

The novel follows a literary tradition of gothic novels that typically include isolated houses or castles, hauntings and induce fear in the reader. Susan Hill set out to write a ghost story, inspired by Henry James's novel, *The Turn of the Screw*. She read a range of ghost stories to inspire her and made a list of elements that a ghost story should contain. One of the key features of these stories, as well as the ghost itself, is a 'most unimaginative and straightforward' person who 'most certainly did not believe in such things as ghosts'. We see this character clearly in the rational Arthur Kipps.

Historical context (Edwardian setting (1901 – 1910 but written in early 1980s – a historical novel)

Isolation is key generic convention of Gothic Horror (protagonist often an orphan or without family & rural, isolated settings / old mansions common). Hill is 'playing' with ideas of Gothic horror but changes protagonist to male not than female (gender reversal)
 Women often socially isolated in Edwardian society if not fitting traditional stereotype of 'angel in the house' e.g. Jannet excluded while pregnant / Alice Drablow dismissed as a "rum'un" by Mr Bentley.
 1970 & early 80s, Britain still expected mums to be at home (social isolation).
 Hill suffered emotional isolation with death of 1st fiancé and death of middle daughter
 Hill used real-life settings of marshes around Suffolk coast in 1970s to inspire desolate atmosphere in WIB e.g. the dry rustling of reed beds & moaning wind.

Narrative and events

Narrative exposition

Kipps emotionally isolated at **start of novel**. Christmas Eve: family telling Gothic ghost stories.

Rising action: Kipps more isolated & tension rises ('conspiracy of silence' in village, physical isolation of Eel Marsh House, literally cut-off by tide).

Narrative Climax in 'Whistle & I'll come to You' (ch10)

Epiphany in ch11 on seeing Robin after 12 days – "Now, I appreciated the bird's presence, enjoyed simply watching".

Resolution: isolated again – bleak ending.

Settings

Eel Marsh House ("gloomy old house") – isolated/ cut off by (**Nine Lives Causeway**). Tide comes in & no escape (Gothic horror convention). Eel Marsh sounds slippery/ unpleasant (drowning).

Crythin Gifford – rural village, isolated from towns & cities. Kipps travels by train through **Gapemouth Tunnel** then car (Samuel Daily) to reach Gifford Arms. Sense of being trapped in the past / another time (clash of old and new). Hill uses for Crythin Gifford: Samuel Daily tells Kipps of "drowned churchyard" & "swallowed-up village" (foreboding). Physical isolation of settings adds to gloomy feel & foreshadows horror events.

November: month of the dead (and echoes 'Frankenstein')

Key characters

Arthur Kipps

The narrator of the story. A character who is emotionally isolated from family. Young Kipps is inexperienced & feels socially isolated/detached from people of Crythin Gifford and from Samuel Daily at first. Ch2 states he had a "**Londoner's sense of superiority in those days**".

Keckwick

The driver of the pony and trap. Withdrawn from social contact (symbolic of boatman to Hades / The Underworld?). Typical mysterious Gothic Horror character (undead horseman).

Mr. Jerome

Jerome character who is afraid of Eel House Marsh and isolates himself from Kipps. He won't speak truth about the woman in black.

Jennet Humpfrye

Is isolated by her family when she falls pregnant. She is cut off and forced to give up her child. As the WIB, she is isolated by anger, bitterness and despair.

Mr. Bentley

Mr Bentley a renowned London solicitor for whom Kipps works. They later become business partners.

Tomes

Mr Bentley's clerk sniffs constantly as if he has a permanent cold. He deals mainly in wills. His name means books – ironic as that is what he spends most of his time working with.

Esme Kipps

Arthur Kipps' second wife – a widower when he married her.

Stella Kipps

Arthur Kipps' fiancé during the time of the events at Crythin and later his first wife.

Literary techniques

Simile	Comparing two things using like or as.
Metaphor	Stating one thing as though it is something else
Personification	Giving human features/characteristics to a non-human object.
Repetition	Where an idea is repeated multiple times throughout a text often to strengthen the idea presented.
Unreliable narrator	A sense that the narrator is not telling/is not able to tell the whole truth.
Imperative verb	A command verb such as 'put' or 'don't'.
Pathetic fallacy	A type of personification where emotions are given to a setting, an object or the weather.
Onomatopoeia	Words that sound a little like they mean.
Emotive Language	Language intended to create an emotional response.
Symbolism	Using images, ideas, motifs, objects, characters...to represent something else.

Key vocabulary – add to this list

Isolation	Alienation
Blasphemy	Redemption
Segregation	Withdrawal
Solitude	Detachment
Remoteness	

Themes – create a tally chart for each time these themes occur

Isolation	Community
Family	Secrets
Appearance and reality	Identity
Social class	Gender
The role of women	Tradition vs modernity

Symbolism – add explanations to these key symbols as we read

 Fog and Mist

 Eel Marsh

 Crythin Gifford

 The woman in black

 Eel Marsh House

 The various characters and settings

Humans in the rainforest

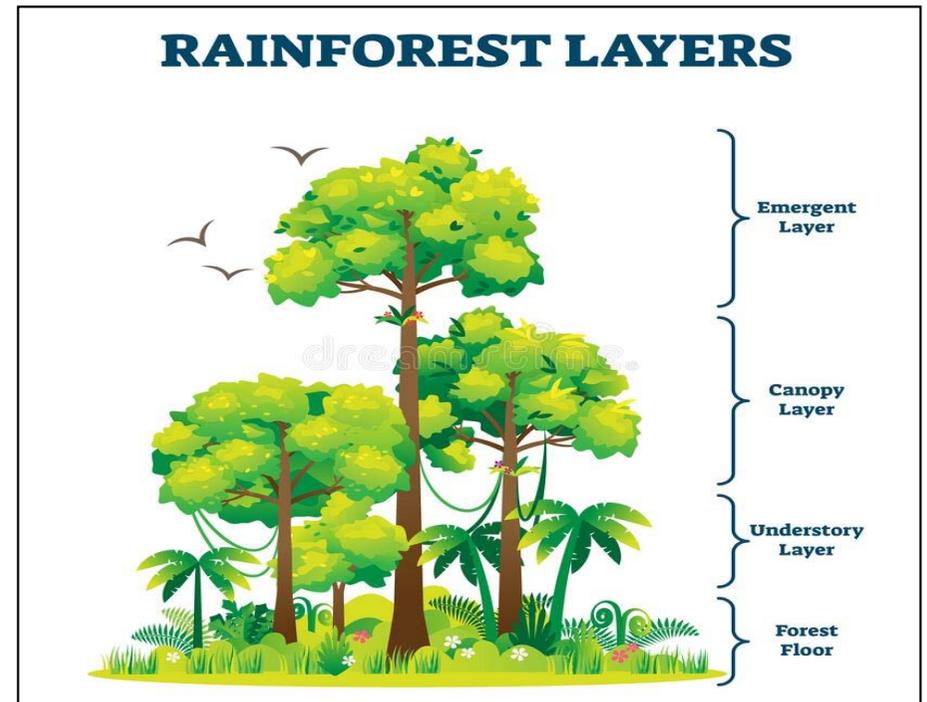
Indigenous	Native to an area; a people whose ancestors have lived in an area for a very long time.
Yanomami	An indigenous tribe in the Amazon. Some villages have never had contact with the outside world.
Shabano	Large circular huts with an open courtyard. Families live in units which are all open to face the courtyard.
Sustainable	An activity which can be repeated continuously without causing damage to the future.
Forest Fires	Fires which occur in forests, either naturally or because of human activity. Typically they spread very quickly and cause lots of damage.
Genocide	Large-scale killing of a group, with the intention of destroying a group completely.

Deforestation

Deforestation	The removal of trees to use land for different purposes.
Logging	Chopping down trees to use the wood to make products, such as paper and furniture.
Mining	Process of removing things such as minerals, coal and metals from beneath the ground.
Cattle Ranch	A large area of land used to raise cows.
Infrastructure	Basic structures of society; e.g. roads and electricity
Palm oil	Oil made from the fruit of the palm tree, which is used in a huge number of products.
Endangered Species	When a species of plant or animal is at risk of becoming extinct.

Rainforest Structure

Forest Floor	Bottom layer of the rainforest, mainly leaves, branches and bark decomposing on the soil surface.
Understory	Half way house between forest floor and canopy. Lots of shrubs and small trees.
Canopy	A layer with lots of trees which form a 'canopy' over the rainforest. Much of rainforest life can be found here.
Emergent	The tallest layer of the rainforest, some trees reach 70ft tall.
Epiphytes	Plants which grow on other plants for support.
Buttress Roots	Large, thick roots which spread out on the forest floor. These help tall rainforest trees to be stable, and find nutrients in the soil.



KEY WORDS	DEFINITION
Artistic <i>Gymnastics</i>	Gymnasts perform individual short routines on different apparatus.
Acro <i>Gymnastics</i>	Gymnasts work in partners or groups to perform floor routines, including acrobatics, dance and tumbling to music.
Rhythmic <i>Gymnastics</i>	Gymnasts individually or in groups perform floor routines to music with apparatus (E.g. Hoop, Rope, Ball, Cluns, Ribbon.)
Travelling	The transference of weight from one body part to another in order to move along the floor
Rotation	When the body moves around an axis (longitudinal, transverse or Medial).
Balance	A strong shape held still for 3 seconds, on patches or points.
Flight	A moment in time when no part of your of your body is in contact with the floor or any apparatus.
Aesthetic	Beautiful, pleasing to the eye.
Sequence	A set of movements that follow each other.
Performance	An act of presenting a form of entertainment or task.
Apparatus	The equipment needed to perform gymnastics (E.g. Ball, hoop, bench).
Analyse	Look at something in detail to explain it.
Body Tension	To contract the muscles in the body to hold a position still.
Extension	To straighten and stretch the limbs.
Control	Being aware of your body and what it is doing.
Flow	Movements are linked so they flow.
Precision	The movements performed are exact, neat and tidy.
Canon	The same movement performed one after the other.
Synchronisation	The same movements performed at the same time.
Contrasting	Performing different movements at the same time.
Dynamics	Whether the gymnastics movements are performed with strong movements or soft flowing movements.



Gymnastic movements

Travelling/linking: Skip, gallop, roll, crawl, slither, tiptoe, jump, slide, leap, bunny hop, spider walk, hop, spin twirl.

Rotation: Straddle, sitting, circle, forward roll, backwards roll, side roll, cartwheel, turning jump, bridge kick over.

Balances: Dish, arch 'Y' arabesque, shoulder, v-sit, wine glass, headstand (bent and straight legs), handstand.

Flight: Stretch jump, tuck jump, star jump, asymmetric jump, straddle jump, pike jump, turning jump, leaps, scissor kick, dive forward roll, dive cartwheel, Arab spring.

Exit routes

Diamond Gymnastic Club
Shay Lane
Halifax
HX3 6RS

Rochdale Olympic Gym Club
Springfield Park
Rochdale
OL11 4RE



Vocabulary

<i>abest</i>	is out/is absent
<i>aberat</i>	was out/was absent
<i>cubiculum</i>	bedroom
<i>emit</i>	buys
<i>ferōciter</i>	fiercely
<i>festīnat</i>	hurries
<i>fortis</i>	brave
<i>fūr</i>	thief
<i>intentē</i>	intently/carefully
<i>libertus</i>	freedman/ex-slave
<i>ōlim</i>	once/some time ago
<i>parvus</i>	small
<i>per</i>	through
<i>postquam</i>	after
<i>pulsat</i>	hits/thumps
<i>quod</i>	because
<i>rēs</i>	thing
<i>scrībit</i>	writes
<i>subitō</i>	suddenly
<i>superat</i>	overcomes/overpowers
<i>tum</i>	then
<i>tuus</i>	your/yours
<i>vēndit</i>	sells
<i>vituperat</i>	blames/curses

Word order

The Past Tense

When thinking about the past tense, there are two types of words; **perfect** and **imperfect**.

Perfect tense – a completed action that takes place in the past. (e.g. *Caecilius opened the door*)

Imperfect tense – an action that takes place over a period of time. (e.g. *Metella was sitting in the garden*)

In Latin, these two tenses need to be accounted for.

	Singular	Plural
Present	<i>portat sedet audit</i>	<i>portant sedent audiunt</i>
Imperfect	<i>portābit sedebat audibat</i>	<i>portābant sedebant audibant</i>
Perfect	<i>portāvit sedevit audvit</i>	<i>portāverunt sedeverunt audverunt</i>

Present: *Caecilius hortum intrat.*

Caecilius enters the garden.

Perfect: *Caecilius hortum intravit.*

Caecilius entered the garden.

Present: *servi vinum portant.*

The slaves carry the wine.

Imperfect: *servi vinum portabant.*

The slaves carried the wine.

Perfect: *servi vinum portaverunt.*

The slaves were carrying the wine.

Present: *senex in theatrum sedet.*

The old man is sat in the theatre.

Imperfect: *senex in theatrum sedebat.*

The old man sat in the theatre.

Perfect: *senex in theatrum sedevit.*

The old man was sitting in the theatre.

Ancient Civilisation – Slavery in Ancient Rome

- Slavery was completely accepted as part of life in Ancient Rome – these slaves were not free to make their own decisions or classed as citizens in Rome.
- They did not live separately from freed people; frequently slaves lived alongside their masters in the same home.
- People usually became slaves by being captured during war or by pirates. Children of slaves were automatically born into slavery. Slaves came from across the Roman empire and slavery was not based on race.
- Some masters were brutal and harsh, others were kind and humane. Slaves who could read and write were valuable to their master.

Freeing a slave

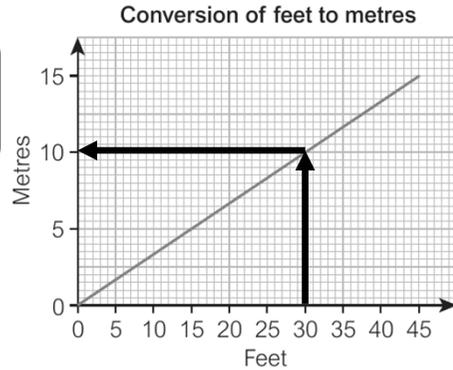
- Some slaves were freed by their masters as a sign of friendship, respect or as a reward. Freedom was also commonly given after a master's death.
- The law set out certain limits; a slave could not be freed before the age of 30, no more than 100 slaves could be freed in a will.
- The act of freeing a slave was called **manūmissiō** – meaning sending from the hand.
- An ex-slave became a **libertus** but they did not receive the same rights as a man born free. They were still expected to pay respects to their former master and work for them for a set number of days a year.

Conversion graphs – This graph can be used to convert between metres and feet.

E.g. Convert 30 feet to metres

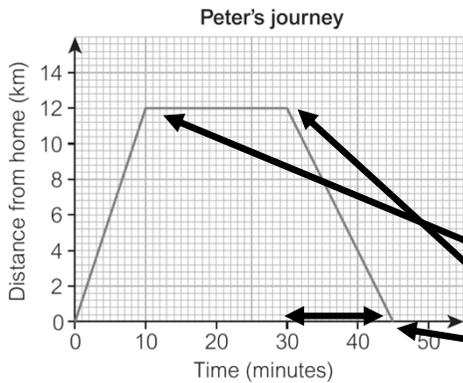
- Using a ruler go up to your line
- Go across to the other axis

30 feet \approx 10 metres



Distance-time graphs

- The vertical axis represents the distance from the starting point.
- The horizontal axis represents the time taken.



E.g. Peter was ten minutes from home after ten minutes.
Peter started his journey back home at 30 minutes.
It took Peter 15 minutes to get home.

(x, y)

Coordinates are always written with the x axis first, then the y axis.



Distance = Speed x Time



Time = $\frac{\text{Distance}}{\text{Speed}}$

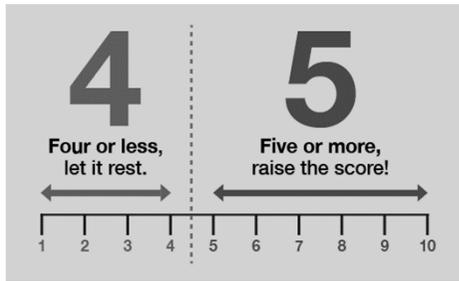


Speed = $\frac{\text{Distance}}{\text{Time}}$

Conversion graph	Conversion graphs convert one unit to another For example pounds (£) to dollars (\$).
Distance-time graph	Distance-time graphs show the relationship between distance travelled and the time it took.
Gradient	The gradient is the steepness of a line.
Trend	The trend of data is the general direction of change, ignoring individual ups and downs.
Linear graph	A linear graph is a single straight line.
Non-linear graph	A non-linear graph is not a single straight line.
Interpret	To decide on or explain the meaning of something. (In this unit suggesting the meaning of values on graphs)

Prior Knowledge Maths

2 decimal places (2dp) – A number rounded to 2 decimal places has two digits after the decimal point.



Ratio – Bar model

Ratios can be represented visually as a bar model.

This bar model shows the ratio 2 : 3 : 4

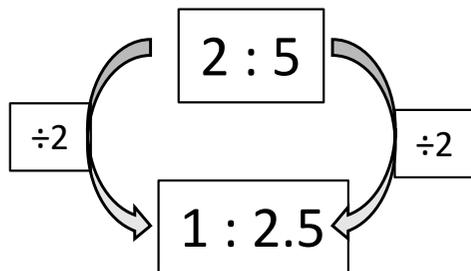


What fraction of the bar is pink?
 What fraction of the bar is yellow?
 What fraction of the bar is blue?

- >** Greater Than
- ≥** Greater Than or Equal To
- <** Less Than
- ≤** Less Than or Equal To

Unit ratio

In a unit ratio, one of the numbers is 1.



Year 8 – Unit 6 – Decimals and ratio

Decimal Place	A decimal place is the position of a digit to the right of a decimal point.
Significant figures	Numbers can be rounded to significant figures. The first significant figure is the one with the highest value. It is the first non-zero digit, counting from the left.
Descending	Descending means to move downward or to a lower position.
Ascending	Ascending means to move upward or to a higher position.
Proportion	Proportion is the relationship in number or size of two things or sets of things.
Unit ratio	In a unit ratio, one of the numbers is 1.

T	O	.	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$	$\frac{1}{100000}$	$\frac{1}{1000000}$
			tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths

Music

Film Music

Notation – Rhythms

	ta		<u>ti-ka-ti</u>
	<u>ti ti</u>		<u>tika tika</u>
	ta-a		Rest
	Tum ti		Syn - co - pa

Terminology

Bar & bar lines
Score
Notation
Staff
Articulation
Accuracy
Fluency
Expression
Tempo
Style
Genre
Instrumentation
Melody
Phrasing
Rhythm
Time signature

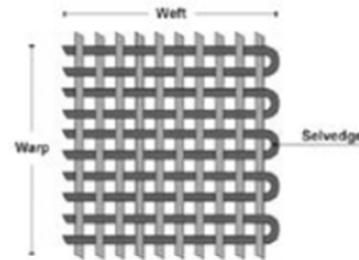
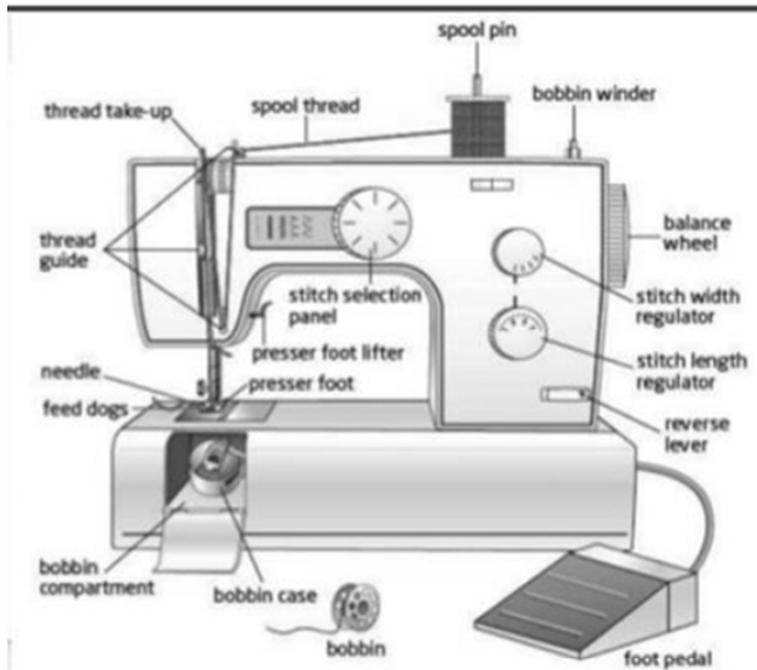
Film Music Composers

John Williams: Star Wars, Jaws, Harry Potter, ET, Jurassic Park, Indiana Jones.

Danny Elfman: Edward Scissorhands, The Simpsons, Alice in Wonderland.

Hans Zimmer: Pirates of the Caribbean, Gladiator, The Lion King.

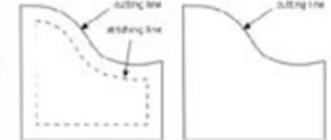
Year 8 Textiles Knowledge Organiser



Embroidery



Applique



Seam Allowance

Key skills:

- Hand sewing techniques
- Running stitch
- Blanket stitch
- How to thread the machines
- How to use the machines safely and correctly

Equipment:

- Stitch unpick
- Iron
- Tailors chalk
- Heat press
- Needle
- Pins
- Fabric and paper scissors
- Bobbin and bobbin case
- Tape measure
- Thread

Key words

- Embroidery
- Applique
- Fleece
- Felt
- Cotton
- Fastener
- Zip
- Stitch
- Natural fibre
- Seam allowance

Natural fibres from plants



Cotton



Linen

Natural fibres from animals



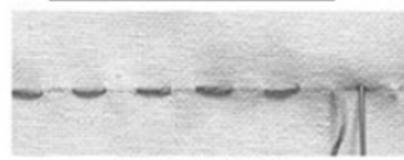
Silk



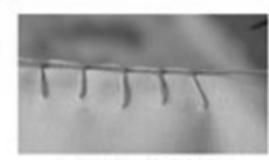
Wool

Synthetic fibres are man made

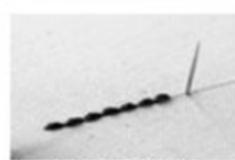
Synthetic, such as nylon and polyester, are produced entirely from chemicals.



Running Stitch



Blanket Stitch



Back Stitch

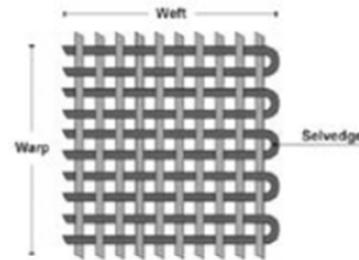
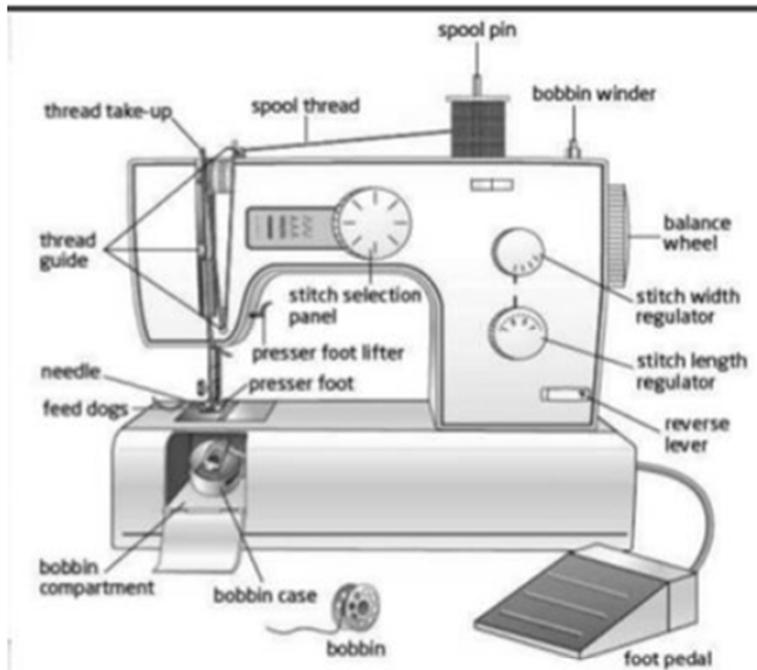
RETHINK	Ask whether we can sustain our current way of life and the way we design and make.
REUSE	Take an existing product that's become waste, and use the material or parts for another purpose, without processing it.
RECYCLE	Take an existing product that has become waste and reprocess the material to use in a new product.
REPAIR	When a product breaks down or doesn't function properly, try to fix it.
REDUCE	Minimise the amount of material and energy you use.
REFUSE	Don't use a material or buy a product if you think you don't need it or if it's unsustainable.



IF YOU CAN'T REUSE IT, REFUSE IT



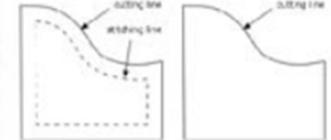
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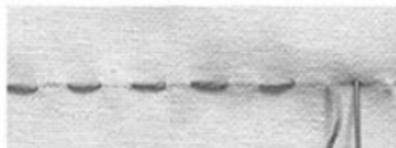
Silk



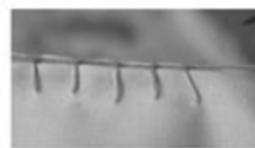
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[Recycling]

IF YOU CAN'T REUSE IT, REFUSE IT

