

Year 9

NAME:

Form Group:

SPRING TERM 1

SUBJECT KNOWLEDGE ORGANISERS

You will definitely enjoy what you've worked hard for—
you'll be happy; and things will go well for you

Proverbs 128:2

History / Information

Japanese landscape art, known as **Sansui-ga**, has a long history rooted in harmony with nature. It began around the 7th century, influenced by Chinese art, and became uniquely Japanese over time. Artists often painted mountains, rivers, and trees, focusing on balance and simplicity. Traditional techniques used ink on paper or silk, with soft, flowing brushstrokes. The Edo period (1603–1868) saw a rise in **ukiyo-e** prints (woodblock printing), where artists like Hokusai created famous works like *The Great Wave*. Japanese landscape art reflects the country's respect for nature and captures both real and imagined scenes, often symbolizing peace and spiritual connection to the world.

Key Words

1. **Ink Wash / Sumi-e** – A painting method using diluted ink to create soft, flowing tones and natural textures.
2. **Woodblock Prints / Ukiyo-e** – Often depicting landscapes, popular during the Edo period.
3. **Symbolism** – Using natural elements (like trees, flowers, or mountains) to represent deeper meanings, such as strength or beauty.
4. **Asymmetry** – An uneven balance in the artwork, where elements are placed in a way that feels natural and balanced without being perfectly symmetrical.
5. **Minimalism** – Focusing on simple, clean designs with few details to create a peaceful, calm feeling.
6. **Light and Shadow** – The careful use of light and dark areas in the artwork to add depth and create mood or atmosphere.
7. **Horizon Line** – The line where the sky meets the land or water, often positioned high or low to create a feeling of openness or focus.

Japanese Landscape Art Characteristics

1. **Nature Focus** – Emphasis on mountains, rivers, trees, and skies, highlighting the beauty and tranquility of nature.
2. **Balance and Simplicity** – Scenes are designed with harmony, often avoiding excessive detail for a peaceful effect.
3. **Ink Wash (Sumi-e)** – Use of delicate brushstrokes and ink to create soft, flowing landscapes.
4. **Perspective** – Traditional Japanese landscape art uses flat or simplified perspectives, not realistic depth.
5. **Seasonal Themes** – Often depict different seasons, like cherry blossoms in spring or snowy scenes in winter.
6. **Symbolism** – Nature elements often carry symbolic meanings, such as mountains representing strength or trees symbolizing longevity.
7. **Minimalism** – Art tends to focus on key features of a landscape, avoiding clutter.
8. **Watercolour and Prints** – Use of watercolour in traditional scrolls and woodblock prints like **ukiyo-e**.

Support

Below is video with more information surrounding Japanese Landscape Art.



Japanese Landscape
Art Brief History

Research Page Criteria

Creative Background - Linking the background to the style of art or making it look similar to the work of the artist.

Study Piece - Recreating a piece of artwork as accurately as you can.

Information - Information about the artist, time period, art style that is written in full sentences and in your own words.

Title - A clear and readable title that is creatively displayed in the style of the artist or art style.

Images of artwork - Including images of artwork of the art style or artist so that viewers can visually see and understand the artwork you are presenting.

Opinion - Explaining and sharing your opinion about the art style, the artist, the idea behind the artwork in your own words.

Year 9 Data Science (Data Handling)

Data Science is extracting meaning from a data set in order to support decision making

Key Terms

Data set	Correlation	Visualisation	Infographic
Causation	Outlier	Anomaly	Variable

Data set

A data set is a collection of facts on a specific topic, stored together in a record, table or database.

Data can be analysed to identify trends and patterns.

Predictions, decisions and conclusions can be made using methods of data analysis

Variable

Variables are the pieces of data being collected, specifically data that can change and affect the results of the data analysis.

Correlation

In data analysis we look for the relationship that one variable has with another E.g Is there a correlation between increasing temperatures and increased rainfall?

Causation

This is when one variable affects the outcome of another variable

Outlier

This is when a piece of data stands out for being much larger or smaller than the next data point, e.g a class performs much better on a test than they did in the previous test or the next test.

Anomaly

Data that stands out, usually due to a variable that had not originally been considered in the data.

Independent Learning Tasks

How can data analysis help a business?

Can you identify any examples of data analysis in our every day life?

Why might a teacher analyse exam data?

Is data analysis always accurate? Why?

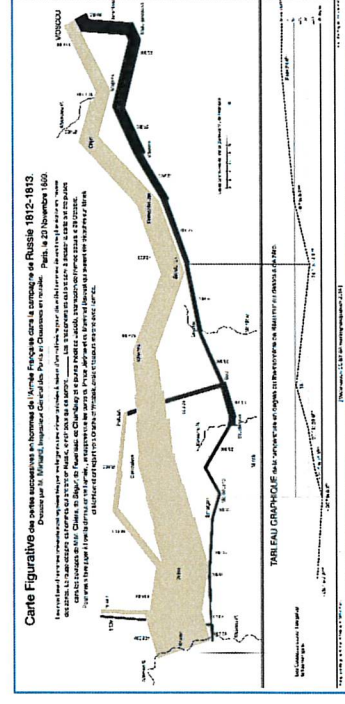
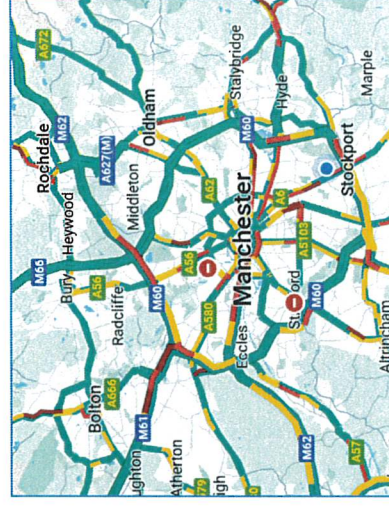
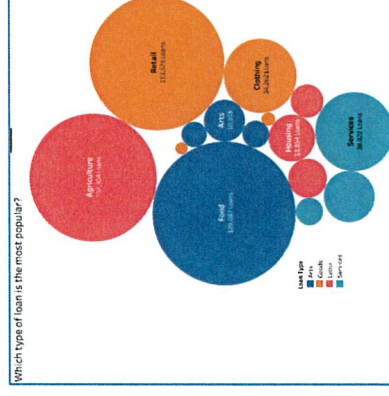
Data set vs Infographic

Data that is presented as a collection of text can be difficult to analyse.

Data presented as an infographic makes it easier to identify key information. This is how we visualise data.

The type of infographic used depends on the data you are using and what you want to find out.

Bar charts, pie charts and bubble charts are all examples of infographics.

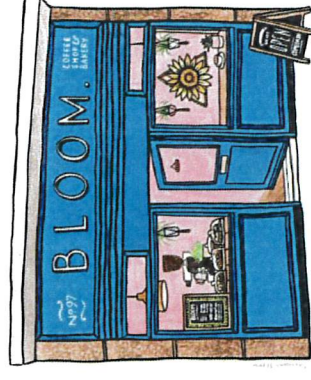


Y9 Construction

Knowledge Organiser

Postcard questions!

- What is the difference between all 3 stop buttons around the room?
- What does sustainability mean?
- Which way does an oscillating motion go? Can you think of an example?



What are the four line types we use to draw in 2-point perspective?

When drawing in one- point perspective you should stick with four main line types:

Example types of line:	Name	Example types of line:	Name
	V _ _ _ _ _		C _ _ _ _ _
	P _ _ _ _ _		H _ _ _ _ _

Types of Motion! Scan the QR code to revise some information -

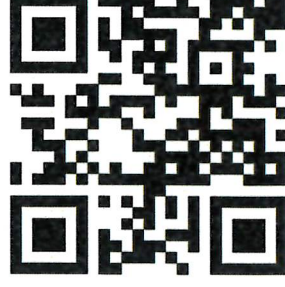


Skills you will learn & develop

Marking and measuring
Cutting Skills (Coping/Tenon and/or Scroll Saw)
Drilling with the Pillar/Bench Drill
Sanding/Finishing your material
Safety in the workshop
Painting your shop front
Theory work & drawing in 2 point perspective
Use of CAD/CAM (laser cutter) in your model

Name generator!

Struggling to come up with a name for your homework? Use this QR code to help!



Struggling to come up with an idea? Think of a hobby you enjoy and how you could create a shop out of that!

Year 9 Drama - DNA


KEYWORDS		PLAY THEME	SYNOPSIS
Cross Cutting	When different scenes are cut or sliced and performed at the same time	Bullying The most obvious character who is bullied is Adam which happens before the beginning of the play and seemingly has caused his death. However, it is worth considering who the main bullies are and what types e.g. verbal, mental and physical. Gangs Adam is not only desperate to be part of the gang but consider what the others are prepared to do to stay in the gang. Power There are numerous power struggles within the play, and it shifts throughout. It is Cathy that ultimately takes on the role as gang leader in the end, consider why?	DNA was written in 2007 and is set in the early 21st Century. It's about a group of teenagers, who could be described as a 'gang' who have accidentally killed one of their classmates. When they realise their mistake, they try to cover up the crime but inadvertently implicate an innocent man.
Hierarchy	How people are ranked according to their status		
Gang	A group of people, usually friends, who act collaboratively.		
Story Board	An outline or draft line of a production using pictures and some text		
Multi Role	When a person plays more than one role		
Monologue	A a long speech by one actor in a play		

CHARACTERS				
<u>Mark and Jan</u> Mark and Jan act as narrators who explain what is happening. They are always together and help in the cover up.	<u>Leah</u> Leah is a moral character who worries about the groups actions. She is insecure and seeks Phil's attention	<u>Phil</u> Phil is the group's leader for most of the play. He's quiet, emotionless, and manipulative	<u>Lou</u> Lou worries about the group getting caught. She follows whoever is in charge	<u>John Tate</u> John Tate starts as the group leader, but his authority is weak, and he leaves early in the play.
<u>Danny</u> Danny is a selfish character who is more worried about becoming a dentist than Adam's wellbeing	<u>Richard</u> Richard seems unhappy about the cover up, but he goes along with it. He challenged John Tate's leadership.	<u>Cathy</u> Cathy is violent and remorseless about Adam's death. She helps to kill Adam after he reappears	<u>Brian</u> Brian is the weakest. He's bullied into covering up Adam's death and he suffers a mental breakdown	<u>Adam</u> Adam is bullied by the group and thought to be dead. He turns out to be alive, but Phil has him killed.





WHAT DO YOU THINK?
Why does Phil not speak with Leah?
Whose friendship is the most toxic and why?
Who is the real leader of the gang? What makes you think this?
If you were part of this gang? What would you have done?!

SUPPORT		
		
DNA Plot Synopsis	How to write a Monologue	Creating a Character

English Year 9 Knowledge Organiser HT4 – Romantic Poetry

Key words		Unit Overview Romanticism was a movement which believed in the importance of freedom and democracy. It was heavily inspired by nature and the idea of liberty to protest injustice and inequalities created by an oppressive hierarchical system.
Mistreatment		
Corruption		
Subjugation		
Pantheism		
Manifestation		

What do you think?
What inequalities exist today?
How is society supported by our systems and how are these systems flawed?
Why were the romantics inspired by nature and what did it symbolise for them?

The sublime	
The Chimney Sweeper analysis	
Ailsa Rock analysis	
The Industrial Revolution	

Perform your poem for the Poetry
By Heart competition!

**POETRY BY
HEART**



KEYWORDS

Hydration – The process of replacing water in the body.

Eatwell guide -A healthy eating model showing the types and proportions of foods needed in the diet.

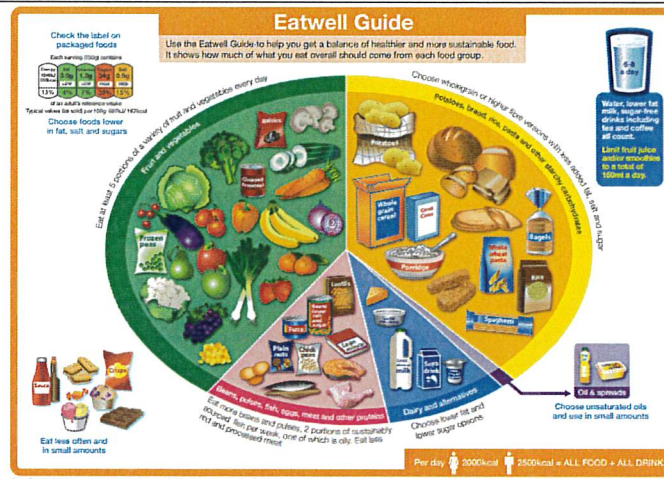
Hazard – A danger or a risk.

Enzymic browning – the reaction that takes place in some foods (apples) when oxygen is present causing the food to turn brown.

Modified – adapted or changed to improve.

Cross Contamination- The transfer of bacteria from one food to another, from humans, animals' other food or equipment.

Heat Transfer – The way heat moves from one area to another through conduction, convection and radiation.



CLEANING

Cleaning kills bacteria

- Wash hands before, during and after food preparation
- Wash all worktops, utensils, chopping boards and equipment
- Rinse unwashed salad, fruit and vegetables

CHILLING

Chilling prevents microbial growth.

- Cool food to below 5 degrees Celsius as quickly as possible and defrost food in the fridge
- Fridge = - 0 degrees – 5 degrees
- Freezer – 15 degrees or below

COOKING

Cooking kills bacteria

Food needs to be heated till steaming hot with the core temperature reaching

- 60 degrees Celsius for 45 minutes
- 65 degrees Celsius for 10 mins
- 70 degrees Celsius for 2 minutes
- 75 degrees Celsius for 30 seconds
- 80 degrees Celsius for 6 seconds

CROSS CONTAMINATION

Bacteria are transferred from one object to another

- Keep raw and cooked food separate
- Never wash raw meat
- Keep raw meat and shellfish on the bottom shelf of the fridge

Support



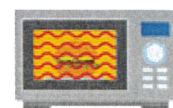
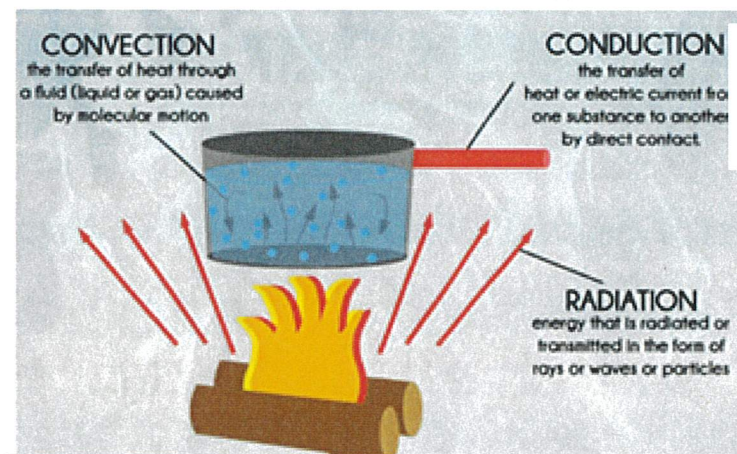
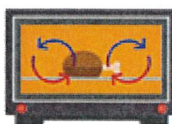
QR CODE – Eatwell Guide



QR CODE - Healthy Eating – modifications video



QR CODE - Health and Safety / cross contamination



QR CODE: Methods of Heat transfer video/website

WHAT DO YOU THINK?

Why is Food hygiene and safety important in Food Technology? What can poor standards lead to?

What elements make up a healthy diet? Why is this important?

What are the different methods of heat transfer? Can you identify which ones you have used in food technology?



Antarctica

Challenges facing Antarctica

Antarctica is a frozen continent at the South Pole. The average temperature is around -30°C , but mountainous areas inland are much colder, falling to temperatures of -60°C . The continent is a *desert* as snow rarely falls.

Antarctica has distinct *seasons*. During the Antarctic winter, the continent has 24 hours of darkness. More ice forms and the continent doubles in size. In contrast, there are 24 hours of daylight in the Antarctic summer.



Some animal species have *adapted* to survive the *hostile* conditions in Antarctica. For example, penguins have flippers to help them to swim and feathers to trap warm air close to their bodies

Learn more by watching Frozen Planet on BBC iPlayer

Managing Antarctica

International Antarctic Treaty

Image caption,

The flags of the 12 founding countries of the International Antarctic Treaty. After some countries tried to stake a claim to the continent, the *International Antarctic Treaty* was established in 1959 and signed by 12 countries. More than 50 countries have now signed it. The treaty is an agreement to put aside any *territorial claims* on the continent. It also *establishes* rules that nations must follow. Some of these rules are summarised below:

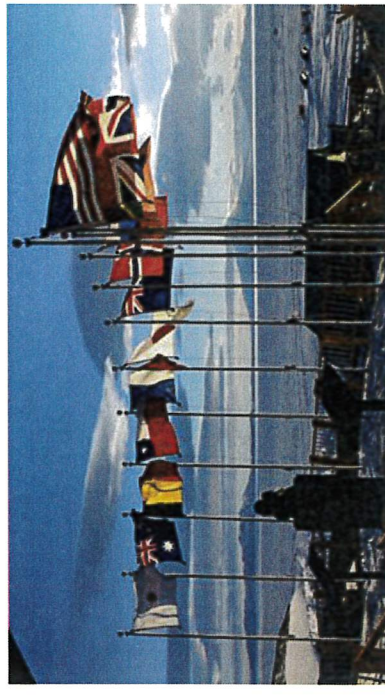
- Antarctica must be used for peaceful purposes only. All *military* activities are banned.
- There can be no *nuclear explosions* within Antarctica. The disposal of *radioactive waste* is also banned.
- Scientists from any country can carry out research, but any plans and findings must be freely shared.

Climate change

Melting ice means some animals will lose their habitat. Climate change is affecting Antarctica. Parts of the continent are experiencing the greatest increases in temperature on the planet, leading to the melting of ice and loss of *habitat* for species like penguins. Some estimates suggest that sea levels have risen by around 3 mm per year since the 1990s.

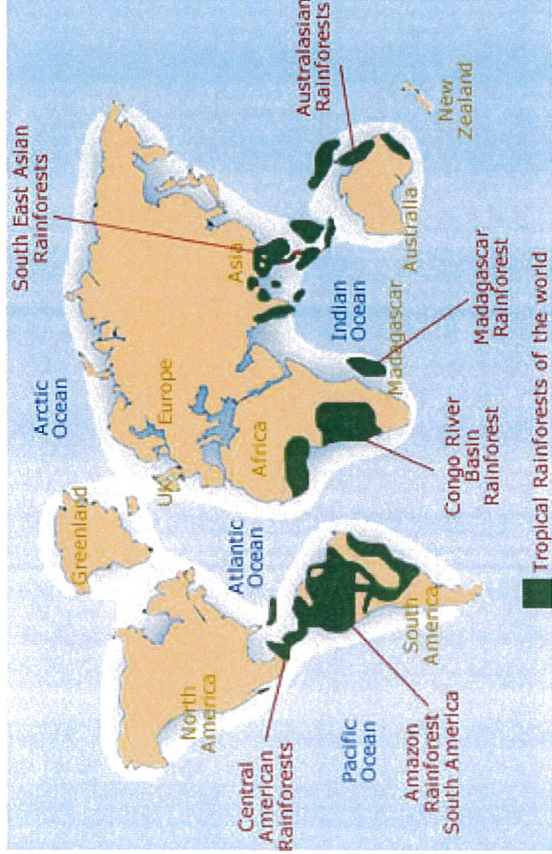
Resources

Antarctica has many *resources*. As no single country owns Antarctica, access to these resources could cause conflict. *Minerals*, such as copper and gold, fossil fuels and fish *stocks* are all valuable resources that could be *exploited*. The landscape is also a resource, and so increasing numbers of tourists are visiting Antarctica

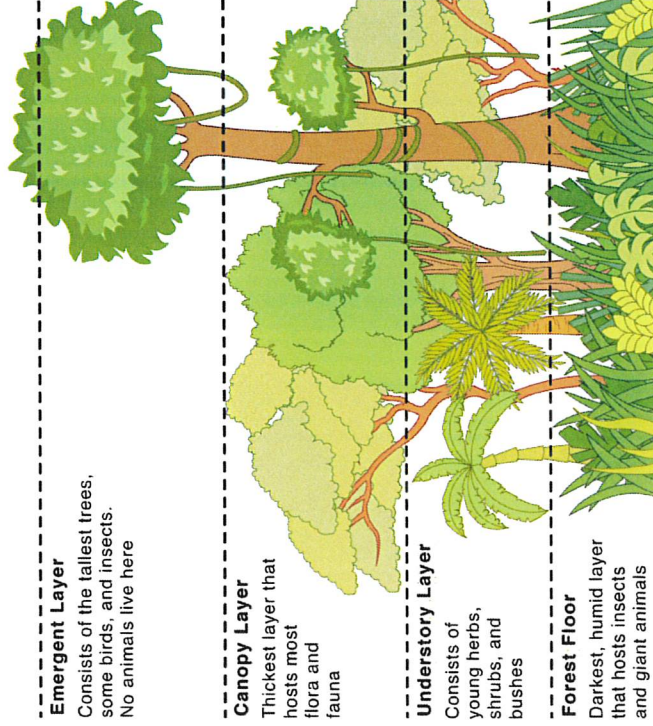




Tropical Rainforests



Layers of the Rainforest



Deforestation is when areas of the rainforest are chopped down. Deforestation is happening due to the following reasons:

- **Farming:** large areas are cleared to grow **cash crops** (crops sold for profit) such as soya beans. Large areas are also cleared for **cattle ranching**, where the land is used to plant grass for cows to graze. The cows will then be sold and used for meat.
- **Logging:** rainforests are cut down so that valuable trees like mahogany can be used to make furniture. Other trees are cut down for making paper products.
- **Mining:** some rainforest is chopped down to build mines to access precious natural resources such as iron ore, copper, tin, and gold.
- **Road building:** the construction of access roads for farmers, loggers and miners results in large parts of the rainforest being destroyed so that machinery can access natural resources and extract them.
- **Hydroelectric power (HEP):** this is where energy is generated from fast-flowing water. The creation of HEP stations in the Amazon rainforest has resulted in large areas of forest being flooded to create reservoirs and dams.

Positive Impacts	Negative Impacts
Wood provides fuel, logs, and paper	Animal habitats are destroyed
The logs can then be used to build houses	Machinery used releases carbon emissions which can lead to climate change
The land can be used for cattle ranching, mining, and farming	Trees take years to grow back
Poorer countries depend on the money made by the logging industry	Many plants haven't been discovered yet - they could contain cures to diseases
Deforestation industry provides jobs	When tree roots are removed, it makes the soil loose which can be washed away into rivers

Managing Deforestation

- **Education:** promoting the value and benefits of biodiversity and teaching people how to be more **sustainable** (less damaging).
- **Creating National Parks:** creating protected areas that can't be used for deforestation.
- **Afforestation:** planting trees where deforestation has taken place so that animals have a habitat.
- **Selective logging:** only chopping down certain trees so that most of the trees are left alone.



The Holocaust

1933 - The Nazis introduce non violent persecution of Jews e.g. boycotting of Jewish businesses.



1935 - The Nuremberg Laws - Jewish people no longer German citizens and cannot marry non Jews.



9 November 1938 - Kristallnacht. Night of the Broken Glass - Jewish businesses and synagogues targeted - Jews are killed in the violence.



1938-1942 - many Jewish people moved to Ghettoes. Einsatzgruppen start murdering Jews and minorities.



1942 - The Wannsee Conference where the Final Solution was decided.



1944-45 - Death marches and liberation of Death camps by the Allies.

Key Terms:

Anti-Semitism – hatred of Jewish people.

Boycott – to stop buying something or going somewhere to make a point about something.

Persecution – targeting a group for harsh treatment.

Kristallnacht – the violent events of 9 November 1938 where Jewish businesses and synagogues were burnt down. Many Jewish men were murdered or sent to Concentration camps.

Synagogue – the buildings where Jewish people worship.

Ghetto – a walled part of a City where Jewish people were sent to live in exile. Conditions were extremely harsh.

Einsatzgruppen - squadrons whose purpose was to shoot dead Jews and other undesirable minorities after the Nazis invaded the USSR in 1941 and advanced into Eastern Europe.

The Final Solution – the systematic gassing and killing of Jews and other undesirable minorities in Death Camps such as Auschwitz.

Holocaust – the name given to the Jewish Genocide by the Nazis.

Genocide – an attempt to kill an entire race – in this case all of the Jews in Europe.

Aryans – the German so called 'Master Race' characterised by having blonde hair and blue eyes.

Untermenschen – German for 'sub human' – used to describe Jewish people and other undesirable minorities such as Blacks, homosexuals, gypsies and disabled.



Where can I
find out
more?

The Story: In the 1933 the Nazis took charge of Germany and began to persecute Jewish people and other 'undesirable' minorities. This persecution started off in a non violent manner – for example with the boycotting of Jewish businesses. However, it grew to be more sinister and violent with turning points in 1935 (Nuremberg Laws) and 1938 (Kristallnacht). After the outbreak of WW2, the Nazis invaded more parts of Europe to conquer territory and with that territory came a higher number of Jewish people. Getting rid of these Jews and other minorities became what the Nazis called 'The Final Solution'. Death camps were built where Jews were systematically gassed. Over 6 million Jews were murdered in this way.



YEAR 9...

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Reasoning with Number						Reasoning with Geometry					
Using percentages	Maths and money	Deduction	Assessment Series 1	HALF TERM		Deduction	Rotation and Translation	Pythagoras' Theorem	Enlargement and similarity	Reas...	

HT3

Keywords

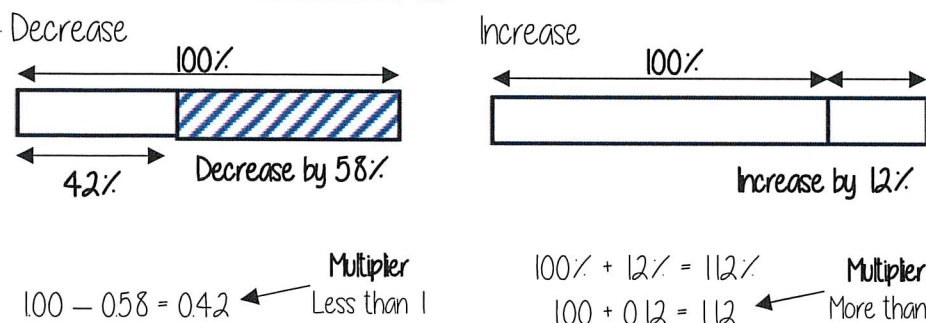
Parallel: two straight lines that never meet with the same gradient.
Perpendicular: two straight lines that meet at 90°
Transversal: a line that crosses at least two other lines.
Conjecture: a statement that might be true but is not proven.
Polygon: a 2D shape made from straight edges.
Counterexample: an example that disproves a statement

Keywords

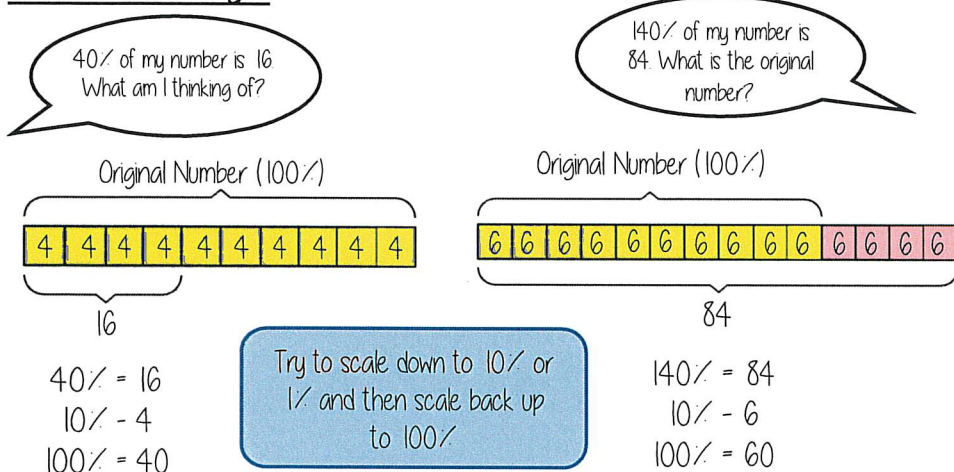
Percent: parts per 100 – written using the % symbol
Decimal: a number in our base 10 number system. Numbers to the right of the decimal place are called decimals.
Fraction: a fraction represents how many parts of a whole value you have.
Equivalent: of equal value.
Reduce: to make smaller in value.
Growth: to increase/ to grow.
Multiplier: the number you are multiplying by.
Profit: the income take away any expenses/ costs.

Balance: the amount of money in a bank account
Expense: a cost/ outgoing
Deposit: an initial payment (often a way of securing an item you will later pay for)
Multiplier: a number you are multiplying by (Multiplier more than 1 = increasing, less than 1 = decreasing)
Per Annum: each year
Currency: the type of money a country uses.
Unitary: one – the cost of one.

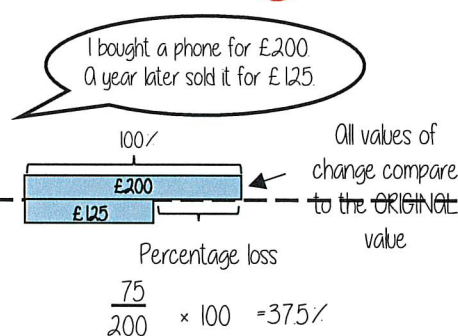
Percentage Increase/ Decrease R



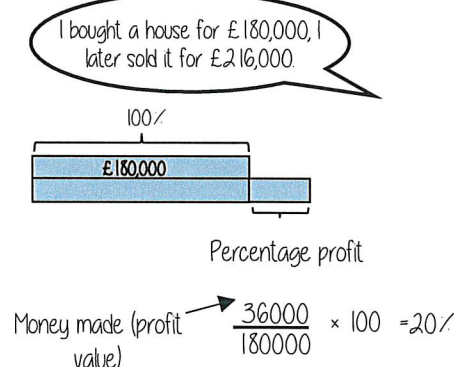
Reverse Percentages



Percentage change R



$$\frac{\text{Difference in values}}{\text{Original value}} \times 100$$



Simple Interest

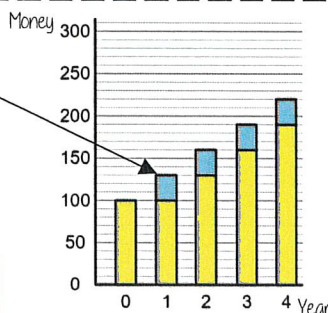
For each year of investment the interest remains the same

$$\frac{\text{Principal amount} \times \text{Interest Rate} \times \text{Years}}{100}$$

Principal amount is the amount invested in the account
 e.g Invest £100 at 30% simple interest for 4 years

$$\frac{100 \times 30 \times 4}{100} = 120$$

This account earned £120 interest
 At the end of year 4 they have £220



Compound Interest

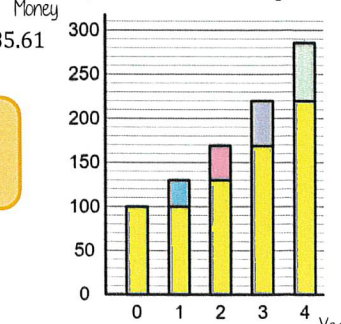
Interest is added to the current value of investment at the end of each year so the next year's interest is greater.

$$\text{Principal amount} \times \text{Multiplier}^{\text{Years}}$$

e.g Invest £100 at 30% compound interest for 4 years

$$100 \times 1.3^4 = \text{£}285.61$$

This account has £285.61 in total at the end of the 4 years.



Songwriting

Support

How to compose a chord pattern



How to compose a melody



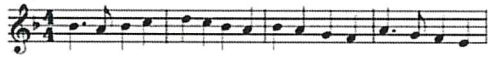
Key Words

- **Lyrics** – The words of a song, usually consisting of **verses** and a **chorus**.
- **Hook** – A ‘musical hook’ is usually the ‘catchy bit’ of the song that you will remember. It is often short and used and repeated in different places throughout the piece. Hooks can be either **melodic**, **rhythmic** or **verbal/lyrical**.
- **Riff** – A repeated musical pattern often used in the introduction and instrumental breaks in a song or piece of music. Riffs can be rhythmic, melodic or lyrical, short and repeated.
- **Melody** – The main tune of the song often sung by the **lead singer**.
- **Counter-Melody** – An ‘extra’ melody often performed ‘on top of’ the main melody that ‘fits’ with it a **descant** or **instrumental solo**.
- **Texture** – The layers that make up a song *e.g., Melody, Counter- Melody, Hooks/Riffs, Chords, Accompaniment, Bass Line.*

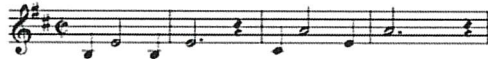
Melodic Movement

- **Conjunct**– Melodies which move mainly by step or use notes which are next to or close to one another.
- **Disjunct**– Melodies which move mainly by leap or use notes which are not next to or close to one another.
- **Range**– The distance between the lowest and highest pitched notes in a melody.

Conjunct



Disjunct



I	ii	iii	IV	V	vi	vii°
C	Dm	Em	F	G	Am	B°
G	Am	Bm	C	D	Em	F#°
D	Em	F#m	G	A	Bm	C#°
A	Bm	C#m	D	E	F#m	G#°
E	F#m	G#m	A	B	C#m	D#°
B	C#m	D#m	E	F#	G#m	A#°
F#	G#m	A#m	B	C#	D#m	E#°
Gb	Abm	Bbm	Cb	Db	Ebm	F°
Db	Ebm	Fm	Gb	Ab	Bbm	C°
Ab	Bbm	Cm	Db	Eb	Fm	G°
Eb	Fm	Gm	Ab	Bb	Cm	D°
Bb	Cm	Dm	Eb	F	Gm	A°
F	Gm	Am	Bb	C	Dm	E°

Structure

How the song is divided up into sections.

- **Introduction** – often shortened to ‘intro’, the first section of a song which sets the mood of the song and is sometimes, but not always, an instrumental section using the song’s chord pattern.
- **Verses** – Verses introduce the song’s theme and have the same melody but different lyrics for each verse which helps develop the song’s story.
- **Link** – a optional short section often used to join different parts of a song together.
- **Pre-chorus** – an optional section of music that occurs before the **chorus** which helps the music move forward and “prepare” for what is to come.
- **Chorus** – occurs several times within a song and contains the most memorable **hook**. The chorus relays the message of the song and is repeated with the same melody and lyrics each time it is heard. In popular songs, the chorus is often repeated several times towards the end of the song.
- **Middle 8/Bridge**– a section (often 8 bars in length) that provides contrasting musical material often featuring an instrumental or vocal solo using new musical material allowing the performer to display their technical skill on their instrument or voice.
- **Coda/Outro**– The final section of a popular song which brings it to an end (Coda is Italian for “tail”!)

KEYWORDS

Smash- Hit with power and speed downward into the opponent's court.

Backhand- Hit with the back of the hand leading.

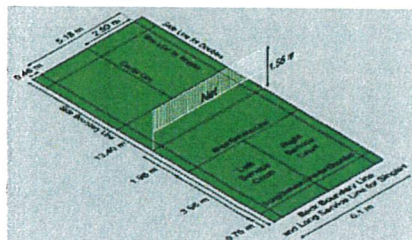
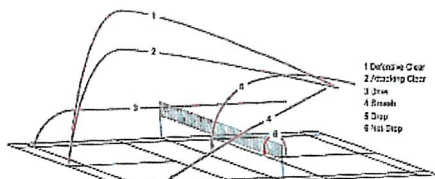
Overhead Clear- Defensive shot allowing time to recover by moving their opponent and increasing the amount of time the shuttle is in the air.

Baseline- Back boundary line at each end of the court, parallel to the net.

Service Line- The first horizontal line on each side of the court, closest to the net.

Drop Shot- Hit the shuttle downwards aiming for it to just go over the net.

Accuracy- The ability to control movement in a given direction or at a given intensity.



Unit Overview

Grip and ready position: To be able to demonstrate & use the correct grip and ready position.

forehand clear: The forehand clear shot enables players to move their opponent to the back of the court. This will create space in the mid and front court to exploit and provide time for the player to return to their base position.

forehand drive: The forehand drive is an attacking shot that is usually played from the sides of the court when the shuttlecock has fallen too low for it to be returned with a smash.

Forehand Drop shot: To be able to outwit opponents using simple drop shot. Teaching points; deception, low over net & use of angles.

Forehand Smash: To understand the importance of movement and preparation for an effective smash. Teaching points: Shuttle in front of head, Snap wrist, Aim towards ground

Basic Serve: The badminton serve is the shot selected to begin the point. The serve must be hit from behind the service line and travel diagonally from one side of the court into the opposite service box.

SUPPORT

Four types of service



Overhead Clear Tutorial



Single Rules

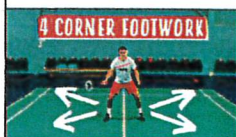
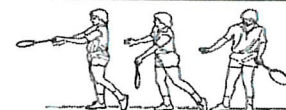


Doubles Rules



WHAT DO YOU THINK?

What is the best and most accurate way to perform a forehand shot in badminton?



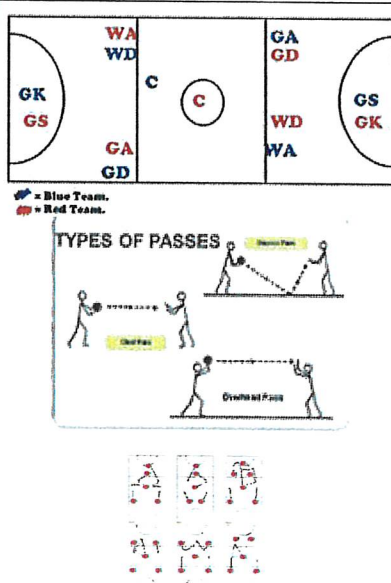
How does footwork benefit a performer in Badminton?





How can I use different tactics to develop my badminton game?

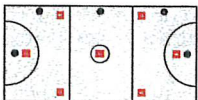


PE Knowledge Organiser- HT3 Netball

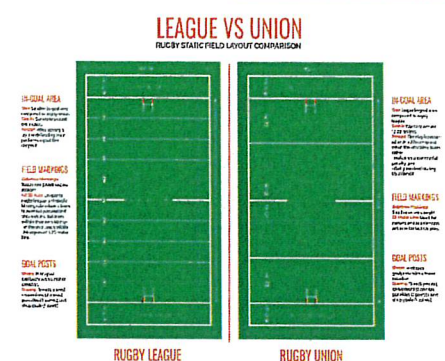
KEYWORDS		Unit Overview		
Accuracy- the ability to perform movements with skill and precision.		Rule	Explanation	Consequence
Co-ordination- the ability to use two or more body parts together		Obstruction	Standing closer than 3ft	Penalty pass, stand by opponent's side
Agility- the ability to change direction at speed		Contact	Contacting opponent	Penalty pass, stand by opponent's side
Man to man marking- each player is assigned a player to defend and track all their movements.		Footwork	Re-grounding landing foot when in possession	Free pass
Rebound- a player attempts to score a goal by shooting but the ball hits the goalposts and bounces back into play.		Replaying the ball	Bouncing ball or picking up 'lost' ball	Free pass
Centre pass- The first centre pass within the centre circle of the court is decided between the two captains by the toss of a coin. The centre passes then alternate between the teams, regardless of which team has scored. Every time there is a goal, the ball returns to the centre where the centre position passes the ball.		Holding	Holding the ball for more than 3 seconds	Free pass
		Offside	A player entering an area they aren't permitted to	Free pass from off-side infringement
		Over-a-third	Ball passing over two transverse lines	Free pass from second line
		Breaking	Moving into centre third at centre pass before whistle	Free pass from place of infringement



SUPPORT							
Four types of service		Overhead Clear Tutorial		Single Rules		Doubles Rules	

WHAT DO YOU THINK?
How would I be able to lose my defender when trying to move into space?
Think about the 7 different positions in netball and who they would be marking.

How do I know what pass best suits my situation?

PE Knowledge Organiser- HT3 Rugby

KEYWORDS		Unit Overview
Ruck- A ruck is a phase of play where one or more players from each team, who are on their feet, in physical contact, close around the ball on the ground.		
Scrum- a means of restarting play after a stoppage which has been caused by a minor infringement of the Laws (for example, a forward pass or knock-on)		
Lineout- a means of restarting play after the ball has gone into touch (off the field of play at the side).		
Conversion- If a team scores a try, they have an opportunity to convert it for two further points by kicking the ball between the posts and above the crossbar.		
Drop kick- A drop kick is when a player kicks the ball from hand and the ball touches the ground between being dropped and kicked. If a drop kick goes through a goal then it results in a drop goal.		
High-tackle- A high tackle (or head-high tackle) is a form of tackle where the tackler grasps the ball carrier above the line of the shoulders (most commonly around the neck or at the line of the chin and jaw).		
		<p>Tag rugby- introduction of contact within this sport as well as passing, moving, dribbling and eventually kicking.</p> <p>Introducing the difference in playing style between rugby union and rugby league.</p> <p>Demonstrating knowledge and understanding of rules and strategies within the game to be able to perform effectively.</p>

SUPPORT							
Rugby Positions		Rugby passing		Rugby tackling		Rugby sidestep	

WHAT DO YOU THINK?
Can you name any specific positions in a rugby team? E.g. scrum half.
What components of fitness would be most beneficial to a winger in rugby?
What are the main differences between rugby league and rugby union?

Adultery	A sexual act between a married person and someone other than their marriage partner.
Civil partnership	A legal ceremony giving a homosexual couple the same legal rights as husband and wife.
Cohabitation	Living together without being married.
Contraception	Intentionally preventing pregnancy from occurring
Faithfulness	Staying with your marriage partner and having sex only with
Homosexuality	Sexual attraction to the same
Nuclear family	Mother, father and children living as a unit.
Pre-marital sex	Sex before marriage.
Procreation	Making a new life.
Promiscuity	Having sex with a number of partners without commitment.
Re-constituted family	Where two sets of children (stepbrothers and sisters) become one family when their divorced parents marry each
Re-marriage	Marrying again after being divorced from a previous marriage.

Key Knowledge:

Changing attitudes:

In the UK in the 1960s it was expected that young people would not have sex until they were married; most people would be married in the church by the age of 25; most marriages would last for life; most families would consist of husband, wife and their children; homosexuals would not be seen in public because homosexual sex was a criminal offence.

Marriage:

The Catholic purpose of marriage is so that:

- a couple can have a lifelong relationship of love and faithfulness.
- So that the couple can have the support and comfort of each other
- For the procreation of children
- For bringing up a Christian family

Divorce:

The Catholic Church does not allow divorce. Therefore if someone legally gets a divorce they cannot remarry in the Catholic church.

Some other Christians will allow divorce if the marriage has broken down. If someone legally gets a divorce some Christian churches will allow them to remarry but they must talk to the priest / minister about why their first marriage didn't last to make sure they are sure this time.

Family:

Most non-religious people see their family as the most important thing in their lives too.

Most non-religious people have just as good a family life as religious people.

Non-religious families respect their children more by not forcing them to take part in religion.

Religion cannot make a difference to how much parents love their children.

Non-Catholic Attitudes to contraception:

Almost all non-Catholic Christians believe that all forms of contraception are allowed.

Contraception improves women's health.

Contraception can raise the standard of living for families.

Contraception can allow sex for enjoyment which strengthens a marriage.

There is nothing in the Bible about it.

Contraception can be used to limit the size of a family

Contraception can combat AIDS/HIV.



The Bible on marriage/divorce:

"A man who divorces his wife and marries another woman commits adultery against his wife. In the same way, a woman who divorces her husband and marries another man, commits adultery." (Mark 10:11-12)

"Any man who divorces his wife for any cause other than her unfaithfulness, commits adultery if he marries some other woman." (Matt 19:9)

"A man will leave his father and mother and unite with his wife, and the two will become one" ... "No human being then must separate what God has joined together. (Mark 10:7-9)

KEYWORDS	UNIT OVERVIEW				
SPEED – A measure of how far something travels in a given time DISTANCE – TIME GRAPH – A graph showing how far an object travels per unit of time	Pressure Knowledge Understanding Equipped In this unit you will learn: <ul style="list-style-type: none"> •Speed •Motion graphs •Pressure in gases •Pressure in liquids •Pressure on solids •Turning forces 				
PIVOT – The point at which a lever or a see-saw balances	Equations: $\text{Speed (m/s)} = \frac{\text{distance (m)}}{\text{time (s)}}$ $\text{Pressure (N/m}^2\text{)} = \frac{\text{force (N)}}{\text{Area (m}^2\text{)}}$ $\text{Moment (Nm)} = \text{force (N)} \times \text{distance (m)}$				
GAS PRESSURE – The force exerted by air particles when they collide with a surface	Pressure in Liquids and Solids $\text{Force, } F$ $\text{Unit Area, } A$ The pressure at the bottom of a liquid is bigger than at the top, because the weight of the water pushing down increases with depth.				
LIQUID PRESSURE – The pressure cause by the collision of particles in a liquid	Pressure in Liquids and Solids $\text{Force, } F$ $\text{Unit Area, } A$ The pressure at the bottom of a liquid is bigger than at the top, because the weight of the water pushing down increases with depth.				
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LIQUID PRESSURE – The pressure cause by the collision of particles in a liquid	Pressure in Liquids and Solids $\text{Force, } F$ $\text{Unit Area, } A$ The pressure at the bottom of a liquid is bigger than at the top, because the weight of the water pushing down increases with depth.				

KEYWORDS		UNIT OVERVIEW														
ACID – A solution with a pH below 7	POLYMER – A substance with very long molecules	<h2>Reactivity Series</h2> <div><table><tr><td>Potassium</td></tr><tr><td>Sodium</td></tr><tr><td>Lithium</td></tr><tr><td>Calcium</td></tr><tr><td>Magnesium</td></tr><tr><td>Aluminium</td></tr><tr><td>Carbon</td></tr><tr><td>Zinc</td></tr><tr><td>Iron</td></tr><tr><td>Hydrogen</td></tr><tr><td>Copper</td></tr><tr><td>Silver</td></tr><tr><td>Gold</td></tr></table></div> <p>Iron is more reactive than copper so displacement happens:</p> <p>copper sulfate + iron → copper + iron sulfate</p>	Potassium	Sodium	Lithium	Calcium	Magnesium	Aluminium	Carbon	Zinc	Iron	Hydrogen	Copper	Silver	Gold	<h2>Science Year 9 – Metals and Other Materials</h2> <h3>Knowledge Understanding Equipped</h3> <p>In this unit you will learn:</p> <ul style="list-style-type: none">Metals and acidsMetals and oxygenThe reactivity seriesMetal displacement reactionsExtracting metalsCeramicsPolymersComposites <p>Link to Kerboodle</p> 
Potassium																
Sodium																
Lithium																
Calcium																
Magnesium																
Aluminium																
Carbon																
Zinc																
Iron																
Hydrogen																
Copper																
Silver																
Gold																
CERAMIC – A compound that is hard, strong and has a high melting point e.g. a metal silicate	REACTIVITY – A measure of how readily a substance undergoes a chemical reaction															
COMPOSITE – A mixture of material with properties that are a combination of the materials in it	METAL – elements on the left of the periodic table. They are good conductors of electricity and energy															
DISPLACEMENT REACTION – A reaction where a more reactive metal displaces a less reactive metal	STATE SYMBOL – A symbol that represents states of matter (s) solid, (l) liquid and (g) gas or (aq) aqueous, a substance where water is the solvent.															

SUPPORT

Metals and Oxygen

Metal	Reaction with oxygen
magnesium	burns vigorously
zinc	burns less vigorously
iron	burns
lead	do not burn; when heated, form layer of oxide on surface
copper	no reaction
gold	no reaction

METAL + OXYGEN → METAL OXIDE

Metals and Acid

METAL + ACID → SALT + HYDROGEN

The three main acids are hydrochloric acid, sulfuric acid, and nitric acid.

copper + hydrochloric acid → copper chloride + hydrogen

iron + sulfuric acid → iron sulfate + hydrogen

magnesium + nitric acid → magnesium nitrate + hydrogen

Metal Extraction

An ore is a rock that contains enough metal that it is worth extracting.

More reactive than carbon
Extracted by electrolysis

Less reactive than carbon
Extracted by reduction

Very unreactive
Found in their native state

potassium
sodium
calcium
magnesium
aluminium
carbon
zinc
iron
tin
lead
hydrogen
copper
silver
gold
platinum

Increasing reactivity

Ceramics, Polymers and Composites.

Earthenware

Stoneware

Porcelain

Ceramics do not react with water, acids, or alkalis.

Natural polymers include wool and rubber. Synthetic polymers include polyester and nylon.

Diagram showing the structure of natural polymers (wool and rubber) and synthetic polymers (polyester and nylon).

Composites have properties that are a combination of the properties of the materials that are in it.

Spanish Year 9 Term 2

World of Work

Los trabajos / Los empleos

el / la camarero/a	waiter / waitress
el / la peluquero/a	hairdresser
el / la limpiador/a	cleaner
el / la jardinero/a	gardener
el / la cocinero/a	chef
el / la esteticista	beautician
el / la dependiente/a	sales assistant
el / la recepcionista	receptionist
el / la periodista	journalist
el / la abogado/a	lawyer
el / la cantante	singer
el / la taxista	taxi driver
el / la enfermero/a	nurse
el / la policía	policeman
el / la mecánico/a	mechanic
el / la diseñador/a	designer



¿Cómo va a ser tu futuro?

En el futuro...	In the future...
ganar mucho dinero	earn lots of money
hacer un trabajo interesante	do an interesting job
ir a la universidad	go to university
ser famoso/a	be famous
ser voluntario/a	be a volunteer
tener hijos	have children
viajar (mucho)	travel (a lot)
estudiar	study
vivir en el extranjero	live abroad
trabajar al aire libre	to work in the open air
trabajar con animales	to work with animals
trabajar con niños	to work with children
trabajar en equipo	to work in a team
trabajar en una oficina	to work in an office
trabajar solo/a	to work alone
hacer un trabajo creativo	to do a creative job
hacer un trabajo manual	to do a manual job
va a ser genial	it is going to be great
va a ser flipante	it is going to be awesome
va a ser fenomenal	it is going to be fantastic

Key phrases for all units

En mi opinión	In my opinion
Creo que/ Pienso que	I think that
Me gusta (mucho)	I like it (a lot)
No me gusta (nada)	I don't like it (at all)
Tengo que	I have to
(No) Soy	I am (not)
Voy a	I am going to
Quiero ser	I want to be
(No) Me gustaría ser	I would (not) like to be

Practise



¿En qué consiste tu trabajo?

contestar al teléfono	answer the phone
ayudar a los clientes	help customers
cortar el pelo a los clientes	cut customers' hair
cuidar las plantas	look after the plants
hacer manicuras	do manicures
limpiar habitaciones	clean rooms
preparar comida	prepare food
servir la comida	serve food
vender productos en la tienda	sell products in the shop



¿Cómo es tu jefe? / ¿Cómo son los clientes?

Mi jefe/a (no) es muy educado/a	My boss is (not) very polite
Los clientes son exigentes	The clients are demanding
Mis compañeros (no) son simpáticos	My colleagues are (not) nice

¿Cómo es tu trabajo? / ¿Cómo eres?



difícil	difficult
duro	hard
estimulante	stimulating
interesante	stressful
repetitivo	interesting
educado/a	polite
maleducado/a	rude
ambicioso/a	ambitious
creativo/a	creative
independiente	independent
inteligente	intelligent
organizado/a	organised
paciente	patient
responsable	responsible
serio/a	serious
sociable	sociable
trabajador/a	hard-working

Describe tu trabajo

¿En qué trabajas?	What do you do for a living?
¿Por qué decidiste ser...?	Why did you decide to be a...?
Decidí ser	I decided to be
Estudié	I studied
¿Cómo es un día de trabajo típico?	What is a typical day like?
¿Qué cualidades tienes que tener?	What qualities do you have to have?
Tienes que ser...	You have to be...
En mi trabajo...	In my job...
¿Cuáles son tus ambiciones?	What are your ambitions?

KEYWORDS

Fabrics-Are made up of yarns and yarn is made up of fibres.

Fibres-A material in a thin and continuous strand.

Man made/Natural made.

Synthetic or non-synthetic-If something is man made, it isn't natural and can't be found in the world around us.

Analysing (An existing product)

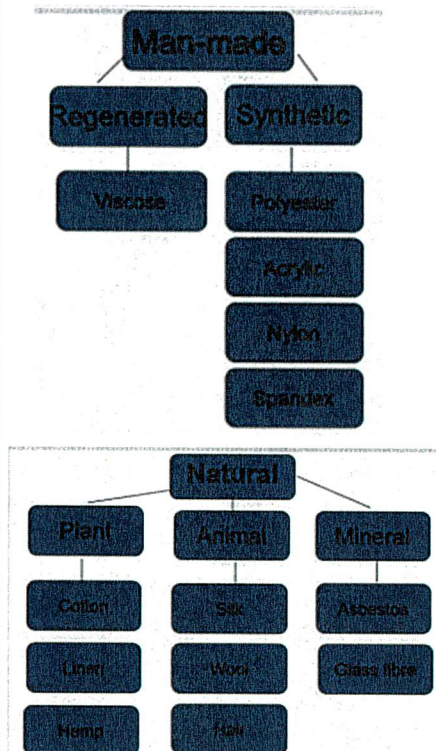
Sew on the spot/tie off

Seam allowance-The area between sewing and the raw cut of the fabric.

Properties and uses of fibres-le.

Cotton is strong and easy to care for, making it useful to use when making clothes.

Year 9 Knowledge Organiser-Textiles.



Unit Overview

Create a drawstring bag, adding additional features such as logos, zips, pockets etc.

You will use the running stitch or the blanket stitch to hand sew your work.

The bag must be aimed at a particular target audience.



SUPPORT

Textiles and materials



SCAN ME

Sources and origins of fabrics and materials



SCAN ME

Synthetic Fibres | Types, Properties and Uses



WHAT DO YOU THINK?

Can you identify which material is the best one to use for a particular product?

Do you understand the process of stopping your work from unravelling?

Which stitch would work best for this project and why?