LYMM
HIGH SCHOOL

#7

NAME:

Year 9 Knowledge Organisers

Autumn Term

(Half term 1 and 2)

LYMM
HIGH SCHOOL

A Knowledge-Rich Curriculum at Lymm High School

Why are we using Knowledge Organisers?

Research around memory suggests that "knowledge is sticky": the more factual knowledge you know, the easier it is to learn more in future! But there is a catch: If knowledge is studied once, and not revisited or revised, it is not stored in long-term memory.

To strengthen your memory, and ensure information is stored permanently in your long-term memory, it must be revisited frequently. This means that after one lesson, or a single test, the knowledge is not fully embedded or learned unless it is studied again.

This is why your knowledge organiser is an important part of revising the essential information you learn in class!

Use of Knowledge Organisers for revision and in class

As part of their home learning, students should be revising what they have learned recently, but also content they were taught previously. Therefore, as part of our strategy to ensure that knowledge is embedded over time, we have developed knowledge organisers, which contain the 'bedrock knowledge' necessary in each subject area. A mastery of this knowledge will ensure that students can progress comfortably to new units of learning, and can be successful in their subjects.

This information will provide the basis of our assessments and exams, and so getting into good revision habits with these resources will ensure students feel as prepared as possible.

Teachers may set specific areas of each knowledge organiser as part of homework tasks on 'Satchel one' – formerly 'Show my Homework' – however students should be using their knowledge organiser for independent revision regularly.

For mastery of your subjects, remember:

"Don't practise until you get it right. Practise until you can't get it wrong!"

As well as supporting revision at home, this knowledge organiser should be kept in students' bags, and brought to school each day so that it can also be used and referred to in lessons.

CONTENTS
(Subjects are arranged alphabetically)

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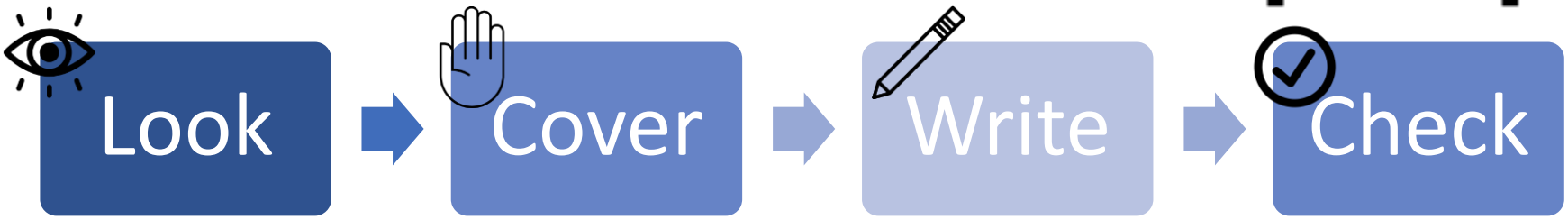
How to use your knowledge organiser:

Recommended strategies *(don't just read or highlight – **get active**!):*



- Create **mind maps**
- Create **flash cards**
- Write out **key points on post-it notes** and place somewhere visible so you see and review them regularly
- **Write your own quiz questions** based on your knowledge organiser – leave until the next morning, next day, or next week to see how well you have retained the information
- **Get someone else to test you**
- **Use key vocabulary** from your KO in sentences
- Use the formulae, vocabulary lists, facts, processes etc on your KO to **help you complete homework tasks**
- **Draw diagrams and flow charts** of key information
- **Summarise each section** into your own words – what are the MOST important facts or details in each box?
- **"Just a minute"** – time yourself for 60 seconds. **Can you talk about this topic or explain it to someone else without stopping for a whole minute?**
- **Draw images/symbol**s to represent the different concepts and vocabulary
- **Teach someone else** about this topic. Research suggests we retain even more information when we teach a topic than when we learn it or revise it.

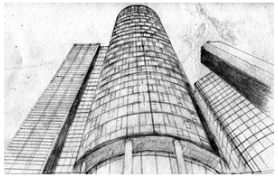
Tier 2 Vocabulary – General academic vocabulary for success across all subjects

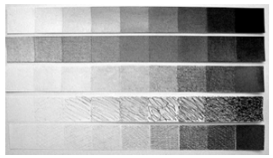
"The limits of my language are the limits of my world" - *Ludwig Wittgenstein*

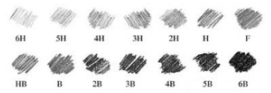
List 1		List 2		List 3	
alternative (n)	another option	**ensure (v)**	make sure of something	**principles (n)**	beliefs
annual (adj)	yearly	**ethnicity (n)**	race/background/culture	**prominent (Adj)**	famous/important
apparent (adj)	clearly understood	**excluded (v)**	left out	**promote (v)**	advertise/raise someone to a higher role
attributes (n)	qualities	**fund (n/v)**	a stock of money/to pay for	**restricted (adj)**	limited/controlled
authority (n)	the person in charge/expert/power	**imposter (n)**	Someone pretending to be someone or something they are not	**significant (adj)**	important
commitment (n)	promise	**justification (n)**	reason	**sought (v)**	Looked for/wanted
consent (v)	give permission	**legislation (n)**	laws	**summary (n)**	A brief statement of the main points
consumer (n)	customer	**labour (n)**	work	**subsequent (adj)**	coming after
core (n/adj)	The centre/central	**maintenance (n)**	repairs/upkeep	**technical (adj)**	Complicated/related to a particular subject
dimensions (n)	size/measurements	**maximum (n)**	The most	**undertake (v)**	take on/begin something
distribution (n)	the spread of something	**parameters (n)**	boundaries	**withstand (v)**	bear/survive
despite (prep.)	Even though/in spite of	**perceive (v)**	Think/believe	**valid (adj)**	factually correct/acceptable
economic (adj)	to do with wealth and money	**principal (adj)**	most important	**zeitgeist (n)**	what's currently popular

YEAR 9 KNOWLEDGE ORGANISER - BASIC SKILLS

Recording from Observation
Primary source observational drawing: drawing something real in front of you.
Secondary source observational drawing: drawing something from a picture.

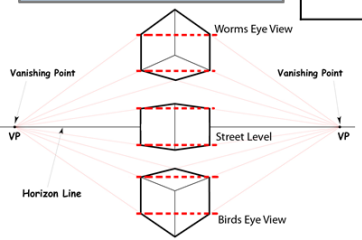


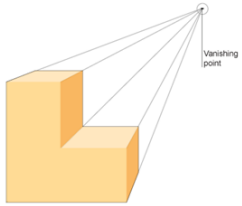


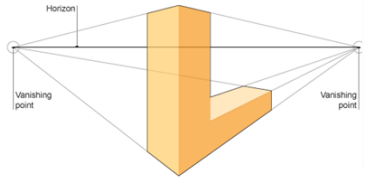


Grades of Pencils
Pencils come in different grades. The softer the pencil the darker the tone.
H = hard, B = black (soft)
In Art the most useful pencils are B, 2B and 4B.
If your pencil has no grade
it is likely to be an HB (hard black in the middle of the scale)

Tone	A tone is produced either by the mixture of a colour with grey, or by both tinting and shading..
Shade	The mixture of a colour with black, which increases darkness.
Tint	The mixture of a colour with white, which increases lightness
Mark making	Different lines, patterns, and textures we create in a piece of art. It applies to any art material on any surface, not only paint on canvas or pencil on paper.
Composition	The position and layout of shapes on the paper
One point perspective	A drawing has one-point perspective when it contains only one vanishing point on the horizon line. This type of perspective is typically used for images of roads, railway tracks, hallways, or buildings viewed so that the front is directly facing the viewer.
Two point perspective	A drawing has two vanishing points placed on the horizon line. This type of perspective is typically used for images of streets so you can see different angles.
Vanishing point	A point on the horizon line where the parallel lines converge.
Horizon line	The line that separates the sky from the land.
Birds eye view	An elevated view of an object from above, with a perspective as though the observer were a bird
Worms eye view	A view of an object from below, as though the observer were a worm; the opposite of a bird's-eye view.







YEAR 9 KNOWLEDGE ORGANISER - BASIC SKILLS

Annotation	A note by way of explanation or comment added to a text or diagram.
Artistic Independence	Be able to comment on a piece of artwork and understand how that piece o art work has been created. Identifying what materials have been used and the stages of creation.
Mixed Media	Mixed media is a term used to **describe artworks composed from a combination of different media or materials**.

Mixed media
Scan QR code to see how to create layers using a range of materials

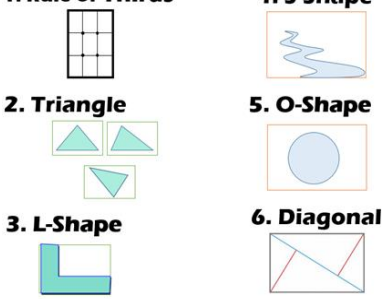
John Piper
- Born: 13th December 1903.
- Died: 28th June 1992
- Famous for painting and printmaking
- Was an official war artist in WW2. The bombed and damaged architecture is what he is most famous for.

What makes a successful photograph?
Rule of thirds: The guideline proposes that an image should be imagined as divided into nine equal parts by two equally spaced horizontal lines and two equally spaced vertical lines, and that important compositional elements should be placed along these lines or their intersections.

Scan here to view examples of artist research pages.

Types of Composition Structures

1. **Rule of Thirds**
2. **Triangle**
3. **L-Shape**
4. **S-Shape**
5. **O-Shape**
6. **Diagonal**



What makes a successful artist research page?
You must include:
- Artists name (title)
- Imagery of the artists work
- Annotation and your own opinion (facts about the artist as well as analysing the artists work)
- Your own drawings or 'mini studies' of the artists work.
- Consider presentation of your page. Try to make your page reflect the artists style (through use of colour or even media you choose to use).

Art

YEAR 9 KNOWLEDGE ORGANISER - ARCHITECTURE

Recording from Observation
Primary source observational drawing: drawing something real in front of you.
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Grades of Pencils
Pencils come in different grades. The softer the pencil the darker the tone.
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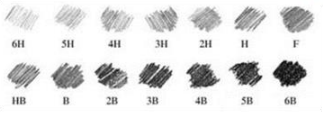
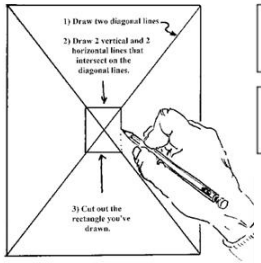
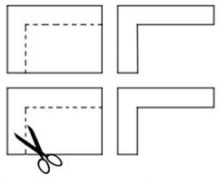


Scan here for an introduction to using watercolours.

Architecture	The art and practice of designing and making buildings
Tone	A tone is produced either by the mixture of a colour with grey, or by both tinting and shading.
Shade	The mixture of a colour with black, which increases darkness.
Tint	The mixture of a colour with white, which increases lightness
Mark making	Different lines, patterns, and textures we create in a piece of art. It applies to any art material on any surface, not only paint on canvas or pencil on paper.
Composition	The position and layout of shapes on the paper
Enlarge	Making something bigger. Usually you will select a small section and enlarge it to a larger scale.
Viewfinder	A viewfinder is a simple square or rectangle cut out of card that you can look through. Using a viewfinder **helps you to focus on something and not get distracted by what's around it**.





Viewfinder examples

YEAR 9 KNOWLEDGE ORGANISER - ARCHITECTURE

Mixed Media	The use of two or more media together.
Annotation	A note by way of explanation or comment added to a text or diagram.
Artistic Independence	Be able to comment on a piece of artwork and understand how that piece of art work has been created. Identifying what materials have been used and the stages of creation.

Ian Murphy:
- UK based artist
- Originally inspired by the northern industrial landscape that surrounded him.
- Creates, drawings, paintings and prints.

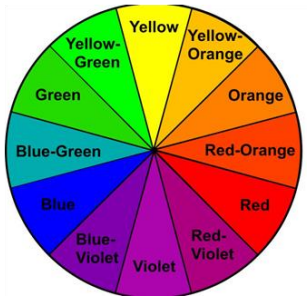
http://www.ianmurphyartist.com/

Exploring Ian Murphy's work
- Scan QR code to view Ian Murphy's work and watch him create a piece of work.

What makes a successful artist research page?
You must include:
- Artists name (title)
- Imagery of the artists work
- Annotation and your own opinion (facts about the artist as well as analysing the artists work)
- Your own drawings or 'mini studies' of the artists work.
- Consider presentation of your page. Try to make your page reflect the artists style (through use of colour or even media you choose to use).

When designing a piece of artwork you must:
- Use primary research (drawings/photographs) as starting points.
- Use artists styles to inspire you.
- Be creative with composition.
- Try and test every section of your piece before you create it.

Colour Theory:
- When mixing and blending colours and creating colour palettes for your work. Do not forget the colour wheel.
- Scan QR code to view complex colour mixing.



Art

Sustainable Building Materials

HempCrete

HempCrete is just what it sounds like – a concrete like material created from the woody inner fibres of the hemp plant. The hemp fibres are bound with lime to create concrete-like shapes that are strong and light. HempCrete blocks are super-lightweight, which can also dramatically reduce the energy used to transport the blocks, and hemp itself is a fast-growing, renewable resource.

Bamboo

Bamboo might seem trendy, but it has actually been a locally-sourced building material in some regions of the world for millennia. What makes bamboo such a promising building material for modern buildings is its combination of tensile strength, light weight, and fast-growing renewable nature. Used for framing buildings and shelters, bamboo can replace expensive and heavy imported materials and provide an alternative to concrete, especially in difficult-to reach areas, post-disaster rebuilding, and low-income areas with access to natural locally-sourced bamboo.

Wood

Plain old wood still retains many advantages over more industrial building materials like concrete or steel. Not only do trees absorb CO2 as they grow, they require much less energy-intensive methods to process into construction products. Properly managed forests are also renewable and can ensure a biodiverse habitat.

Recycled Plastic

Instead of mining, extracting, and milling new components, researchers are creating concrete that includes ground up recycled plastics and trash, which not only reduces greenhouse gas emissions, but reduces weight and provides a new use for landfill-clogging plastic waste.

Straw Bales

Straw bales are used to create a home's walls inside of a frame, replacing other building materials such as concrete, wood, plaster, fiberglass, or stone. When properly sealed, straw bales naturally provide very high levels of insulation for a hot or cold climate, and are not only affordable but sustainable as straw is a rapidly renewable resource.

Rammed Earth

The very walls of this house are built entirely of tightly packed soil that creates a well-insulated, well protected and low-cost home. The fused soil gives a smooth rock design to the walls and allows for a modern eco-friendly feel.

Grasscrete

As its name might indicate, Grasscrete is a method of laying concrete flooring, walkways, pavements, and driveways in such a manner that there are open patterns allowing grass or other flora to grow. While this provides the benefit of reducing concrete usage overall, there's also another important perk — improved stormwater absorption and drainage.

Typical Building Materials

Masonry (bricks, tiles or stone)

Masonry is a traditional wall construction system which uses different materials like bricks, tiles, or stones. They provide a rural and rustic look to a house.

Brick

Tile

Stone

Wood

We all know the beauty and quality of wood, as it is an extremely warm and welcoming option when it comes to cladding materials for buildings. Susceptibility to moisture, solar radiation and changes in temperature are just a few examples. Wood has to be treated correctly against elements such as fire, humidity, and insects, especially when used for exterior decoration.

Wood

Mortar Plaster

Plasters were traditionally used in construction and can also be decorative front for your house. Its low cost, various colours, and multiple finishes make it a perfect solution for homes built with brick walls. They also hide the cracks that usually appear in this type of coatings over time.

Concrete

These days, concrete façades are conquering the buildings of contemporary architecture. Made with different textures and shades of grey or white, this material does not need serious maintenance as it is very durable.

Glass

Glass is also a popular material when it comes to designing façades. Instead of creating multiple openings, these façades allow enough light into the building. Only the frames and partitions create enclosures in the structure.

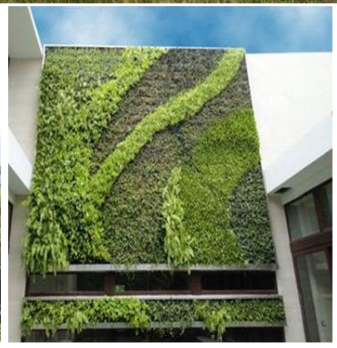
Metal façades

Metals such as steel Corten steel is one of the materials for modern façades or used in contemporary architecture.

Eco-Friendly Green Homes (Eco Houses)

Earthships
These homes really take eco-friendly to sky heights with its totally self-sustaining systems and natural sources of energy. These homes are made completely from natural or recycled material and heat the home naturally.

Choose materials that can absorb solar heat like natural or fabricated brick. Bricks made up of sand, lime, cement and others are good for they are fire-resistant, absorb sun's heat and have low water absorption. Some use ceramics for their walls which is also good for it is low in maintenance and could create an elegant look.



Solar panels can be used as your source of electrical energy. Solar panels are placed on the roof facing the east to west in order to make sure that you will get enough solar energy.

Natural Light
This eco-home allows for sunlight to warm the house naturally, meaning there is less need for central heating systems

Green roofing is cost efficient and attractive. Using a green roofing system can give extra insulation that helps keep energy consumption down. It can be used on some parts of the roof or for the entire roof.

Living wall
These new designs allow you to grow an entire green space on your roof or side of your house. While it provides great insulation for your home it will also reduce noise pollution and give your home a modernised and interesting appearance.
Unlike ivy, these walls are built through installation of packs of soil onto the wall and often come with a water delivery system. They reduce erosion to your brickwork and allow you to get green without having to water and mow a lawn every few days.

Rain Collection System
A fairly easy way to conserve water that you can use for your garden (and green roof) is to collect rainwater. You can collect rain water using rainwater catchment so that it can be used for washing clothes, flushing toilets, watering plants and irrigating landscapes. It'll save you getting the hose out to water the plants and will cut down your water bill .

The work of others: Architects

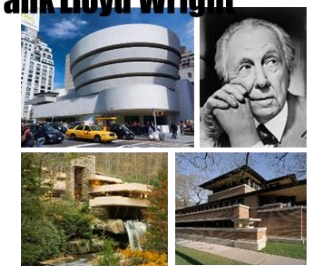
Norman Foster

Jeanne Gang

Renzo Piano

Zaha Hadid

Frank Lloyd Wright



Amanda Levette

Ian Simpson

Kazuyo Sejima

Santiago Calatrava

Frank Ghery

Daniel Leibskind

Antonio Gaudi

Assessment 2: Generating Design Ideas
Design Inspiration

What do you think has inspired the designs/shapes of these buildings?
What do the buildings look like? It's your opinion.

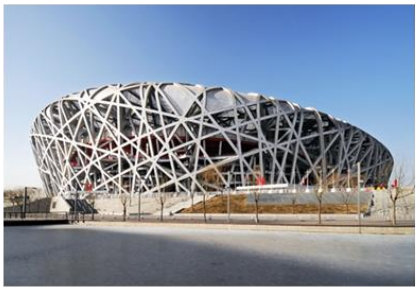
Olympic Pavilion - Barcelona

Ferrell Residences - Singapore

Thailand, Concept Building

National Aquatics Center - Beijing

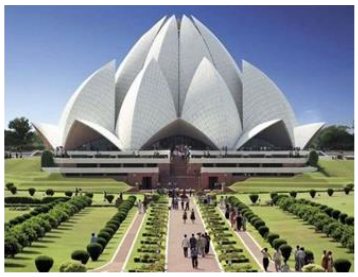
Center for Disease Control - Taiwan



National Stadium - Beijing

Burj Al Arab Hotel - Dubai

Aldar Headquarters - Abu Dhabi



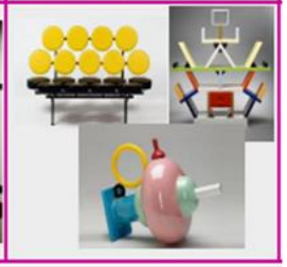
Temple - New Delhi, India.

Islands & Hotel complex - Dubai

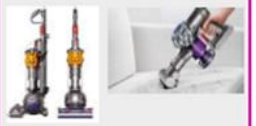
City Hall, London

Design and Technology

The work of others: Designers

Name	Facts	Logo	Examples
Raymond Templier	RAYMOND TEMPLIER (1891 - 1968) like many of his contemporaries in jewelry, was born to a family with a long tradition as jewelers.		
Gerrit Rietveld	Gerrit Thomas Rietveld; 24 June 1888 – 25 June 1964) was a Dutch furniture designer and architect. One of the principal members of the Dutch artistic movement called De Stijl, Rietveld is famous for his Red and Blue Chair.	Gerrit Rietveld	
Charles Rennie Macintosh	Charles Rennie Mackintosh (7 June 1868 – 10 December 1928) was a Scottish architect, designer, water colourist and artist. His artistic approach had much in common with European Symbolism. His work was influential on European design movements such as Art Nouveau and Secessionism.	CHARLES RENNIE MACKINTOSH	
Aldo Rossi	Aldo Rossi (3 May 1931 – 4 September 1997) was an Italian architect and designer who achieved international recognition in four distinct areas: theory, drawing, architecture and product design. He was the first Italian to receive the Pritzker Prize for architecture.	ALDO ROSSI	
Ettore Sottsass	Ettore Sottsass (14 September 1917 – 31 December 2007) was an Italian architect and designer during the 20th century. His work included furniture, jewellery, glass, lighting, home objects and office machine design, as well as many buildings and interiors.	SOTTSASS	

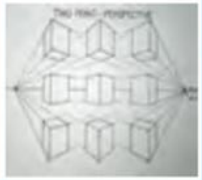
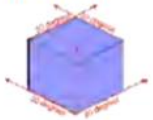
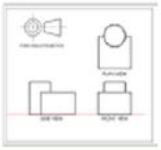
The work of others: Design Companies

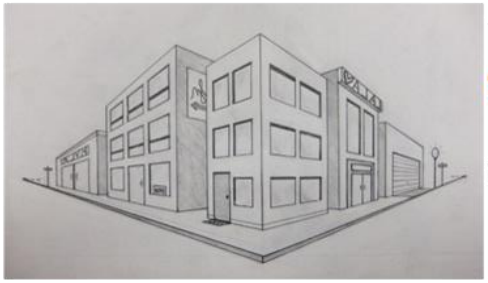
Company Name	Facts	Logo	Examples
Alessi	Alessi is a housewares and kitchen utensil company in Italy, producing everyday items from plastic and metal, created by famous designers.	ALESSI	
Apple	Apple Inc. is an American multinational technology company headquartered in Cupertino, California that designs, develops, and sells consumer electronics, computer software, and online services.		
Braun	Braun GmbH formerly Braun AG, is a German consumer products company based in Kronberg. From 1984 until 2007, Braun was a wholly owned subsidiary of The Gillette Company, which had purchased a controlling interest in the company in 1967.	BRAUN	
Dyson	Dyson Ltd. is a British technology company established by James Dyson in 1987. It designs and manufactures household appliances such as vacuum cleaners, hand dryers, bladeless fans, heaters and hair dryers.	dyson	
GAP	The Gap, Inc. commonly known as Gap Inc. or Gap, (stylized as GAP) is an American worldwide clothing and accessories retailer.	GAP	
Primark	Primark known as Penneys in the Republic of Ireland) is an Irish clothing and accessories company which is a subsidiary of AB Foods, and is headquartered in Dublin.	PRIMARK	
Under Armour	Under Armour, Inc. is an American company that manufactures footwear, sports and casual apparel.		
Zara	Zara is a Spanish clothing and accessories retailer based in Arteixo, Galicia. It is the main brand of the Inditex group, the world's largest apparel retailer.	ZARA	

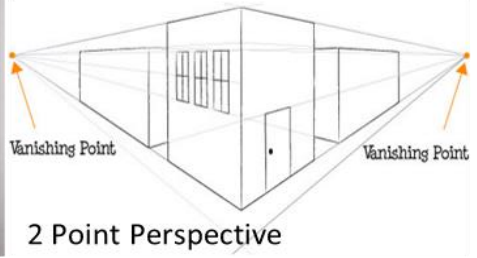
Design and Technology

Drawing Techniques.....

KEYWORDS & TERMS

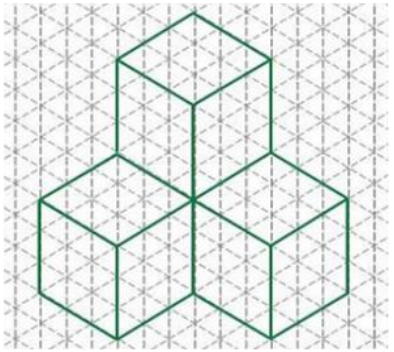
Two point perspective 	**two point perspective** drawing is a type of linear **perspective.** Linear **perspective** is a method using lines to create the illusion of space on a 2D surface. **Two point perspective** uses **two points** placed on the horizon line.
One point perspective 	A **drawing** has **one-point perspective** when it contains only **one** vanishing **point** on the horizon line. This type of **perspective** is typically used for images of roads, railway tracks, hallways, or buildings viewed so that the front is directly facing the viewer. These parallel lines converge at the vanishing **point.**
Isometric Projection 	**Isometric drawings** are 3D **drawings.** They show three sides, all in dimensional proportion, but none are shown as a true shape with 90 degree corners. All the vertical lines are drawn vertically but all horizontal lines are drawn at 30 degrees to the base line. **Isometric** is an easy method of **drawing** 3D images.
Oblique 	An **oblique sketch** puts more focus on the face or front of an object while an**isometric sketch** puts more focus on the edge of an object. To achieve this, **oblique** sketches are usually **drawn** using a 45 degree angle
Orthographic projection (3rd angle) 	**Third Angle projection** is a method of **orthographic projection** which is a technique in portraying a 3D design using a series of 2D views. An alternative method to **Third Angle Projection** is **First Angle Projection. .** **3rd Angle** project is where the 3D object is seen to be in the **3rd**quadrant.



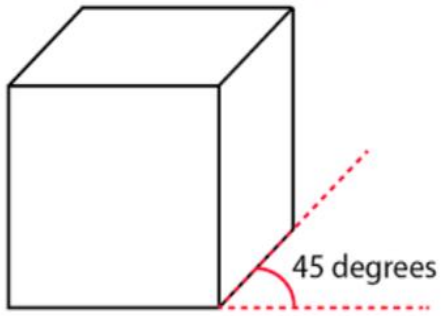


2 Point Perspective

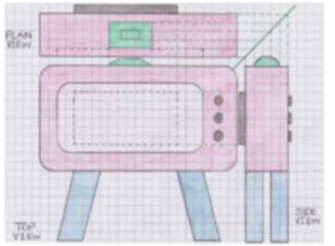
1 Point Perspective



Isometric



Oblique



Orthographic Projection

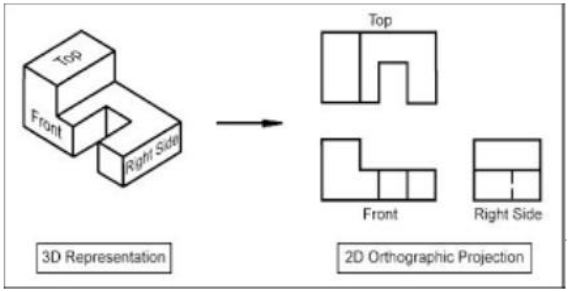
Line types used ;

Thick lines for visible edges and outlines.

Thin lines (half the thickness of thick lines) for hatching, leader lines, dimensions and projections.

Dashed lines to show hidden detail. 2-4mm dash with a 1mm gap in a thin line.

Centre lines to show the centre of a circle, cylinder or a line of symmetry.



Design and Technology

Year 9 Material Focus: Paper/Card

Scan the QR code to learn where paper comes from.....

1. Paper

Type	Description and uses
Layout paper	• lightweight, thin white paper • used for initial ideas • takes colour media well • low cost
Tracing paper	• thin, translucent paper • making copies of drawings • high cost
Cartridge paper	• good quality white paper • available in different weights • general purpose work • can be used to make simple models • medium cost
Bleedproof paper	• smooth, hard paper • used with water-based and spirit-based felt-tip pens • medium cost
Grid paper	• printed square and isometric grids in different sizes • a guide for quick sketches and working drawings • low cost

2. Selection of materials or components

When selecting materials and components considering the factors listed below:

- Functionality: application of use, ease of working
- Aesthetics: surface finish, texture and colour.
- Environmental factors: recyclable or reused materials, product mileage.
- Availability: ease of sourcing and purchase.
- Cost: bulk buying.
- Social factors: social responsibility.
- Cultural factors: sensitive to cultural influences.
- Ethical factors: purchased from ethical sources such as FSC.

What is the FSC? http://www.fsc-uk.org/en-uk/about-fsc/what-is-fsc/fsc-principles

3. Boards

Type	Description and uses
Corrugated card	• strong and lightweight • used for packaging protection and point of sale stands • available in different thicknesses
Duplex board	• large foam-based board • different finishes available including metallic and hologrammatic • used for food packaging, e.g. take-away pizza boxes
Foil lined board	• quality cardboard with a aluminium foil lining • ideal for ready made meals or take away meal cartons • The foil retains the heat and helps keep the food warm
Foam core board	• very light, very stiff and very flat. • It has a white, rigid polystyrene foam centre, with smooth white paper laminated onto both faces. • It is easy to cut with a knife, a mount cutter or on a wall cutter • great for modelling
Ink jet card	• Has been treated so that it will give a high quality finish with inkjet ink • available in matt and gloss
Solid white board	• top quality cardboard made from quality bleached wood pulp. • used for hard backed books and more expensive items • excellent print finish

4. Paper and Boards- Stock sizes and weights

Paper and board is available in sizes from A0 (biggest) to A7 (smallest). The most common size is A4.

Each size is half the one before, eg A4 is half the size of A3.

They are also sold by weight:

GSM – grams per square metre.

Card thickness or calliper is traditionally measured in **Microns**. 1000 **Microns** = 1mm, so the higher the value, the thicker the **card** or paper.

5. Properties of paper and boards.

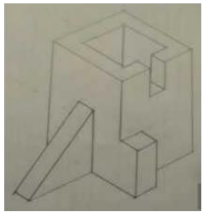
Type	Weight or thickness	Uses	Relative cost (10= high)
Newsprint	50gsm	Newspapers	1
Layout Paper	60gsm	Sketches and tracing	3
Tracing Paper	70 gsm	Tracing	4
Sugar Paper	90gsm	Cheap mounting work	2
Inkjet/Photo paper	150-230gsm	Photos/Presentations	9
Board (Card)	230-750 microns	Model-making	5
Mount Board	230-1000 microns	Model-making, High picture quality mounting	9
Corrugated Card	3000-5000 microns	Packaging protection	5

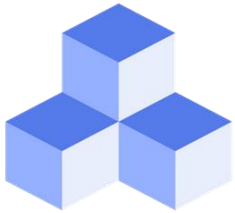
7: KEY WORD FOCUS

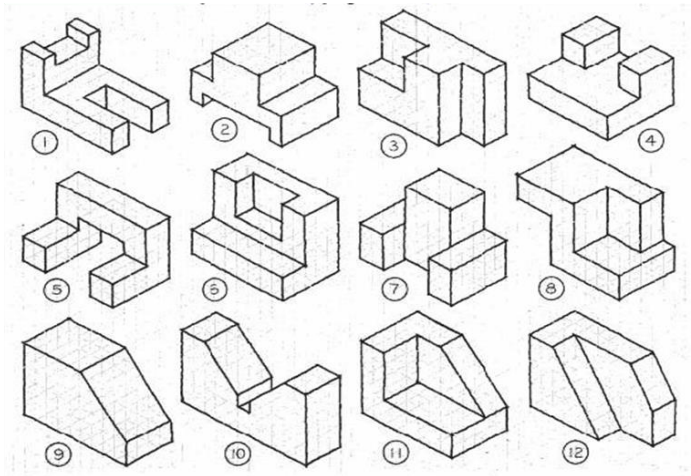
You should be able to explain the meaning of each of these words by the end of this rotation.

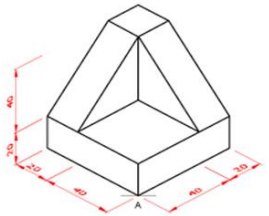
GSM	Grams per Square Metre
Microns	Thickness of paper or card. 1000microns =1mm thickness

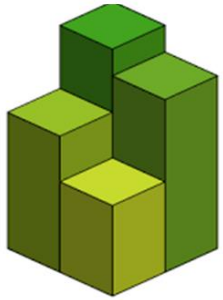
Isometric Drawing Practice

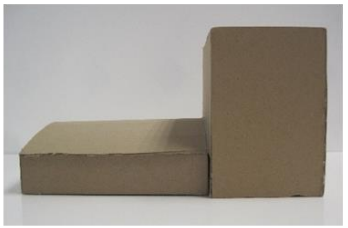


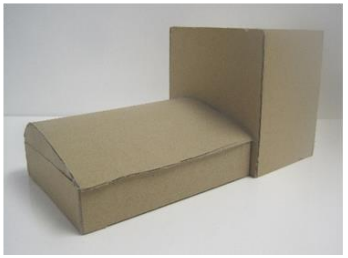




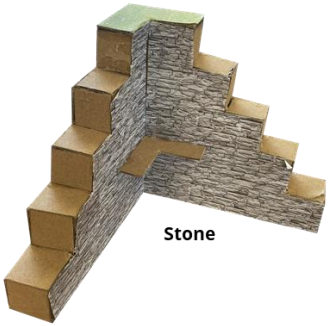


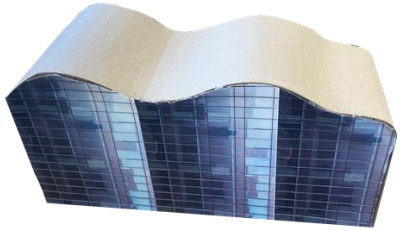


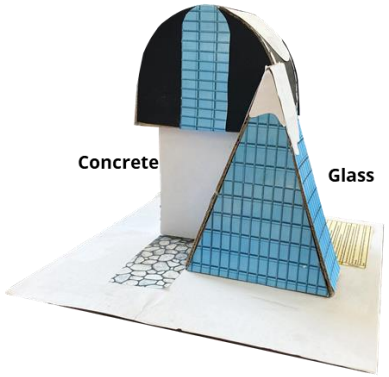




Model Enhancement Techniques







Design and Technology

Lord of the Flies Knowledge Organiser

English

Plot summary

1 **The Sound of the Shell** – During WW2, a plane carrying evacuees crashes on an island. Piggy (P) meets Ralph(R) and they find a conch shell. R made leader; Jack (J) is made leader of the hunters.

2 **Fire on the Mountain** – One of the littluns mentions seeing a 'beastie'. They use P's glasses to make a signal fire but it rages out of control and kills one of the littluns.

3 **Huts on the Beach** – P focuses on building the shelter; J and choir prefer hunting, J becomes fixated on hunting pigs. Simon (S) disappears and finds peaceful, aromatic part of island.

4 **Painted Faces and Long Hair** –Roger and Maurice bully the littluns on the beach. J and others paint their faces. A ship passes and R realises that the hunters have let the fire go out. J and the hunters return with a pig and they argue with R. J punches P. They cook the pig and have a feast.

5 **Beast from Water** – The beast is discussed. J starts to rebel against the rules/democracy and leaves the discussion with the hunters. P longs for adult intervention.

6 Beast from Air – Sam + Eric (S+E) mistake the parachutist for the beast. They hunt for the beast but cannot find it. R notices that the fire has gone out but none of the others, especially J, seem concerned.

7. Shadows and Tall Trees – The hunt for the beast continues. The boys come across a pig run and R sticks a boar in the nose with a spear. The boar escapes. The boys act out a pig hunt with Robert playing the part of the pig. J, R and Robert see the dead parachutist.

8 **Gift for the Darkness** – J suggests that R should no longer be leader but no one agrees. The boys separate. The hunters track down a pig and kill it. They chop off its head and offer it to the beast as a sacrifice. Flies swarm. S imagines the pig head is speaking to him and telling him that he cannot escape.

9. **A View to a Death** – The boys leave the camp to join J and the hunters. S is killed by the boys.

10 **The Shell and the Glasses** – P, R and Sam 'n Eric are the only ones left in the original tribe. P and R are horrified by S's murder. J and the hunters become increasingly savage and steal P's glasses.

11 **Castle Rock** – P+R take the conch and go to get P's glasses. P killed by Roger. J and the hunters throw spars at R as he runs away.

12 **Cry of the Hunters** – R runs for his life. Fire engulfs the island and a naval officer comes to investigate. The boys are rescued.

Historical Context

- The people of Britain had just been through WW2. It was feared that there might be a nuclear war between Western countries and the Soviet Union. References to bombs and fighting are made throughout the novel.
- In Golding's opinion, both sides of WW2 were equally to blame- both bombing civilians and mistreating prisoners.
- During the 20th Century, many nations were ruled by dictators: Spain, Italy, Germany, Russia, Uganda, Cambodia and China were all ruled at times by cruel and tyrannous despots. Mao in China, Hitler in Germany and Stalin in Russia were the most infamous.
- Food was still being rationed in Britain. Desire for food is a major part and motivation of LOTF.
- Golding served in the Navy during WW2. He fought in World War 2 and witnessed the inhumanity that happens when society breaks down.
- Public schools (where most of the boys on the island went to) still produced most of Britain's leaders and top professionals. They were very elitist and this is reflected in the attitudes of some of the boys.
- The class system was very much existent in Britain. Piggy stands out for being lower class; the others are upper class.
- Nazi Germany had adopted a system of rewarding the strong and attacking the weak. The same system appears to happen in the novel.
- The adults the boys wish could help them are the same ones who are fighting the war that has led to the boys being stranded.

Key Characters

Ralph –dominant, immature, naïve.

Piggy – nickname only (never learn his real name): vulnerable, intelligent, mature.

Jack – assertive, intimidating, violent.

Simon – attentive, imaginative spiritual.

Roger – secretive, sadistic, uncommunicative.

Sam 'n Eric – (twins) co-dependent, separate.

The biguns- collective name for the older boys.

The littluns – collective name for the younger boys.

Golden ideas

The innate evil of man	The concept that mankind and **humanity naturally holds an evil within it**. Part of our evolution as a society is how the 'beast' is tamed and humanity attains mastery over its base instincts. However, **Aristotle argued that morality is learnt;** that we are born with a blank slate or **'tabula rasa'** and it is life experience that informs our moral compass. 'man produces evil as a bee produce honey'
The sublime	The **sublime** in literature refers to use of language and description that **excites thoughts and emotions beyond ordinary experience.** Greatness beyond all possibility of calculation, measurement, or imitation, often inspired by nature.
Nature	The island as a **representation of the garden of Eden** and the scar symbolising mans' corruption and perversion of nature. Ultimately mankind destroys paradise. **Juxtaposition** of **daytime vs night**. Juxtaposition of inside vs outside.

Key Themes	Symbolism and Allegory
Power: Golding examines the way that political power is a driving force for some humans. Golding explores how power can corrupt (dictatorship) and also how power can be shared (democracy). **Civilisation vs savagery:** Golding suggests that civilisations only exist because of authority figures. In the absence of these, people cannot live within civilisations. Civilisation forces people to act responsibly but this is only temporary as people are, according to Golding, innately savage. **The loss of innocence:** Golding suggests that people lose their innocence when they believe there are no consequences for their actions. Golding also suggests that people lose their innocence when their realise the human capacity for savagery. **Spirituality:** Golding suggests that to be spiritual is to find answers and peace from within and to consider the world through quiet contemplation. **Individual vs community:** Golding explores the dilemma between contributing and working as part a community whilst also recognising the desire to pursue individual goals. **Human nature**: the innate desires we have in us to be selfish, savage and immoral.	**Symbolism: events/ objects/ places that represent a bigger, more important idea** **Conch –** civilization and democracy **Piggy's glasses –** science and technology **Fire –** hope of salvation **Pigs** – hunting and savagery **The beast –** human nature (the desire to be a savage) **The Lord of the Flies (pig's head) –** physical manifestation of the beast **Adults** – civilisation and social order **The ocean** – the unconscious mind; the desires and thoughts we have within ourselves **Allegory:** The representation of abstract ideas or principles by characters, figures, or events in narrative, dramatic, or pictorial form. A story that relates to another context. **<u>Religious allegory</u>** **The island -** Garden of Eden **The scar -** how man destroys paradise (the Fall of Man) **Simon** - Jesus Christ – ultimately killed by those around him out of fear of the unknown. The sacrificial lamb. **<u>War allegory</u>** **Piggy** - the Jews; victimized, vulnerable **Jack** - Nazi leader; manipulates and bullies

Golding's Methods	Definition & Example	Example
Simile	A descriptive technique that compares one thing with another, usually using 'as' or 'like'.	*'Jack was bent double. He was down like a sprinter, his nose only a few inches from the humid earth.'*
Personification	Describing an inanimate object as having human feelings.	'Small flames stirred at the trunk of a tree and crawled away through leaves and brushwood, dividing and increasing.'
Pathetic fallacy	A device in which emotions are given to a setting, an object or the weather, usually to convey a particular mood.	*'The sun slanted in and lay golden over half the platform.'*
Zoomorphism	A technique in which animal attributes are imposed upon non-animal objects, humans, and events.	*'Jack himself shrank at this cry with a hiss of indrawn breath and for a minute became less a hunter than a furtive thing'*
Foreshadowing	A structural feature where the writer hints/indicates of a future event.	*Piggy's death is foreshadowed when Jack breaks his glasses, this highlights his vulnerability in the early stages of the book.*
Biblical illusions	Words/situations that make reference to the bible.	*'Simon found for them the fruit they could not reach.'*
Irony	Expressing meaning that usually signifies the opposite.	*"We've got to have rules and obey them. After all, we're not savages.' (Jack)*
Hyperbole	Exaggerated statements, usually not meant to be taken literally.	*"When the war's over they'll be travelling to Mars and back."*

Year 9: True Crime

English

Structuring an answer: Consideration of different perspectives on the same issue i.e. the individual, the community and the societal impact.

Individual	Community	Society
This would be the **perspective of you personally** (the persona you are choosing to write from), e.g. a young person who has experienced this issue or knows a friend who has been impacted by it.	This would be the perspective of **the local community.** e.g. how does this issue affect young people locally? Consider schools, residents and groups in the area.	This would be the **perspective of society as a whole.** e.g. what is the long-term and nationwide impact of rising numbers of young people suffering with this issue? What impact does the lack of provision and poor attitudes to the problem have long-term and

Paragraph structure	Sentence examples
An idea that links to the question/ continues your argument.	Building on the latter idea.... Whilst this idea is important, it is also crucial that we consider....
An example that supports your point/idea.	This became clear to me when.... Consider the example of.... This is especially true of...
An explanation of how your example and point work together to support your argument.	This indicates that..... You must recognise that..... It is evident that....
Link back to the question.	Ultimately..... Considering the latter..... With this mind...

Connecting phrases: between paragraphs

I would implore you to consider...
Building on the latter idea....
Whilst this idea is important, it is also crucial that we consider....
Furthermore, we must acknowledge....
Not only.....but also....
Additionally, it is vital that we do not overlook....
Let's also reflect on the notion that....
It is widely accepted that...

The universal gold

Punishment as consequence for sin 	**An exploration of the consequences of sin** (crime and punishment). Allusion to **Faustian legend** –'sell your soul' in exchange for a fleeting moment of power. **Death as punishment for sin.** New Testament Biblical teaching emphasises the **importance of confession and absolution**. Old Testament Biblical teaching emphasises that **if we do not repent for our sins, we will suffer damnation.**
Redemption and rebirth 	There is the **potential to restore and reclaim** those who have sinned or have lost their way in society. Consider what life experiences have made mankind lose its way. Usually associated with **religious iconography and symbolism:** "I have blotted out your transgressions like a cloud and your sins like mist; return to me, for I have **redeemed** you." Isaiah 52:7
The innate evil of man 	The concept that mankind and **humanity naturally holds an evil within it**. Part of our evolution as a society is how the 'beast' is tamed and humanity attains mastery over its base instincts. However, **Aristotle argued that morality is learnt;** that we are born with a blank slate or **'tabula rasa'** and it is life experience that informs our moral compass. How does society and the justice system deal with evil?

Connecting words/ phrases: between sentences

However....	This is especially true of...
Consequently....	Significantly...
Moreover....	Likewise...
Additionally...	From this, it is clear that...
That last word is particularly significant because...	Evidently...
As much as...	Ultimately....
Except, of course....	Yes, you did hear that correctly....

Language Techniques	Definition	Example
Rhetorical question	A question asked in order to prompt further thought or to make a point rather than to get an answer.	If not me, then who? If not now, then when?
Allusion	A reference to another literary, artistic, historical, or musical work.	We must act as our own 'Inspector' in Priestley's famous play, and demand honesty, integrity and truth from those around us.
Satire	The use of humour, irony or hyperbole to expose and criticise people's weaknesses or vices, particularly in the context of contemporary topics.	It looked like society might just be capable of holding itself together until a five-year-old boy drove through the playground in an open-top Audi sports car. I watched Audi boy's parents as they walked behind their careering horror of a son, carefully checking he wasn't crashing into strangers' ankles but apparently oblivious to the trail of howling victims left in their wake
Simile	A descriptive technique that compares one thing with another, usually using 'as' or 'like'.	He is as determinedly dishonest as a politician attempting to cover his latest immoral decision.
Emotive language	Words or phrases deliberately used to evoke a powerful feeling from the reader i.e. sympathy, anger, outrage.	I find the notion that I am not worthy of voting for my country's next leader because of my age, both demeaning and deeply insulting.
Statistic	A fact that is supported by numerical data.	The Trussell Trust's foodbank network distributed 1,332,952 three day emergency food supplies to people in crisis, a 13% increase on the previous year. 484,026 of these went to children.
Flattery	Deliberately complimenting the reader.	The very fact that you are reading this article suggests that you are compassionate and understanding of the plight of your fellow man.
Hyperbole	Deliberately exaggerated language.	He was so obnoxious; I was hoping he would be arrested on the spot and given a very long prison sentence purely for not saying please or thank you.
Humour	Describing a surprising or unexpected reaction to an event, person orobject to create amusement	My brother may look angelic but do not be fooled by his toddler aesthetic: he is a tiny-but very real-psychopath.
Iron and sarcasm	When the literal meaning and the intended meaning are the opposite, typically for humorous or emphatic effect.	There is nothing I enjoy more than being chastised by a group of people who have no idea what they're talking about yet have the voice of an expert.
Eye-witness quotation/ expert quotation	Direct speech from a person who witnessed an event or direct speech from someone who has an in-depth understanding of the topic.	The British Nursing Association said the move was "hugely concerning" and a stark example of the "extreme workforce pressure" at NHS emergency services, which are facing rising demand while recruitment and retention of nurses gets harder.

Analytical verbs		
Amplifies	Elaborates	Highlights
Asserts	Embodies	Identifies
Characterises	Emulates	Illustrates
Claims	Enhances	Implies
Clarifies	Entails	Incorporates
Concludes	Establishes	Indicates
Confirms	Evokes	Informs
Connects	Exhibits	Insinuates
Diminishes	Facilitates	Magnifies
Discredits	Focuses	Negates
Displays	Foreshadows	Obscures
Disproves	Formulates	Outlines
Distinguished	Generates	Parallels

Word class	Definition
Verb	A verb is a word or set of words that shows action (runs, is going, has been painting); feeling (loves, envies); or state of being (am, are, is, have been, was, seem)..
Adverb	An adverb labels how, when or where something happens (and they often end in '–ly').
Noun	Nouns are names, places and things; they also signify imagined things like 'a ghost'; and ideas or concepts, such as 'love', 'guilt' or 'fate'.
Pronoun	Words used instead of a noun i.e. 'he', 'she', 'they', 'it'.
Adjective	An adjective is a describing word or phrase that adds qualities to a noun. It normally comes before a noun, or after verbs like 'am', 'is', 'was', 'appears' or 'seems'.
Preposition	Prepositions are short words and phrases that give information about place, time and manner

1. Food Hygiene

What is food hygiene?

Food hygiene is about preventing food poisoning. Food poisoning bacteria grow very quickly in food if it is not handled properly, cooked properly or stored properly.

There are laws which control how food manufacturers can prepare and sell food. Statistics show that you are more likely to get food poisoning from a home -made meal than you are from a bought one.

Food poisoning

The illness resulting from eating food or drinking food/drinks containing poisonous substances including bacteria, viruses, pesticides, or toxins.

Usually need millions of bacteria to cause a food poisoning illness.

The multiplication of bacteria within the food plays an important part in the disease

How bacteria grow

In ideal conditions where there is Moisture, Food and Warmth (37degrees centigrade is ideal), bacteria can double every 10 to 20 minutes. They do this by dividing in to two. This is called *Binary Fission*

In order to grow and multiply germs need:

- Time
- Moisture
- food
- Warmth

Food poisoning is more likely to affect people with lowered resistance to disease than healthy people who might show mild symptoms or none at all.

Food poisoning is more likely to affect people with lowered resistance to disease than healthy people who might show mild symptoms or none at all.

Vulnerable people

The following are particularly vulnerable to food poisoning: -

- Elderly or sick people
- Babies
- Young children
- Pregnant women

Food Hygiene and Safety:

Before Cooking:

1. Put your apron on
2. Roll your sleeves up
3. If you have long hair tie it back with a bobble
4. Wash your hands with warm and soapy water
5. Dry your hands – moisture harbours bacteria

When Using The Cooker:

1. Turn pan handles in away from edge of cooker
2. Always turn hob off when not in use
3. Never leave food cooking on the hob unattended
4. Be careful not to let food boil dry
5. Never touch an electric hob when turned off, it may still be hot
6. Don't leave metal spoons in pans when cooking as they can become very hot.
7. Always use oven gloves when removing food from the oven

The Tidy Tick List:

You should work as a team to make the food room clean and sparkling!

✓Clean and dry dishes
✓No streaks and residue left on the glass bowls
✓Clean dry work surfaces
✓Clean sparkling hobs
✓Clean cupboard doors and drawers
✓Clean and dry sinks with no suds or residue food

High risk foods

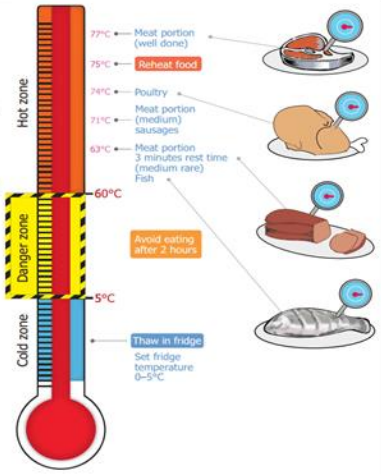
These foods tend to be high in protein and are moisture. They can include food like: raw and cooked **meat**, including **poultry** such as chicken and turkey, and foods containing these, such as **casseroles**, curries and lasagne. **dairy products**, such as custard and dairy-based desserts like custard tarts and cheesecake. eggs and egg products, such as quiche. smallgoods such as hams and salamis.

The 4C's for Good Food Safety

- Cooking
- Cleaning
- Chilling
- Cross contamination

Food Standards Agency
food.gov.uk

Core temperatures:



Buying and Storing Food

Tips on storing food

- ✓ Check the date mark on stored foods and throw away food that is out of date.
- ✓ Store food according to instructions on the packaging.
- ✓ Keep food covered.
- ✓ Store perishable food in a refrigerator that is operating at 5˚C or below – check by using a fridge thermometer.
- ✓ Store frozen food in a freezer that is operating
- ✓ at -18ºC or below and do not refreeze frozen food that has defrosted.
- ✓ Make sure food is as fresh as possible when it is bought, and that it is stored safely to reduce the risks of cross-contamination and deterioration.

Tips on buying food

- ✓ Check the date mark on food before buying it – make sure it is not out of date.
- ✓ Pack raw and cooked food separately to avoid cross-contamination.
- ✓ Pack chilled and frozen foods in a cool bag which is insulated to prevent heat loss.
- ✓ Store food as soon as you arrive home or at school.

Use-by dates are about safety

A use-by date on food is about safety. This is the most important date to remember. You can eat food until and on the use-by date but not after. You will see use-by dates on food that goes off quickly, such as meat products or ready-to-eat salads. After the use-by date, don't eat, cook or freeze your food. The food could be unsafe to eat or drink, even if it has been stored correctly and looks and smells fine.

Best before dates are about quality

The best before date, sometimes shown as BBE (best before end), is about quality and not safety. The food will be safe to eat after this date but may not be at its best. Its flavour and texture might not be as good.

Best before dates appear on a wide range of foods including:

- •frozen foods (such as peas, chips and ice cream)
- •dried foods (such as pasta and rice)
- •tinned foods (such as baked beans and canned tomatoes)

The best before date will only be accurate if the food is stored according to the instructions on the packaging.

Food safety advice when preparing and cooking foods

Many dangerous foodborne bacteria can be eliminated from foods through safe preparation and cooking methods. The following rules should be adhered to when preparing and cooking foods

Preparing

- •**Avoid cross contamination** – chopping boards should be coloured coded so that raw meat is never cut on the same board as fruit and vegetables. Utensils should be washed after being in contact with raw meat to avoid cross-contamination.
- •**Wash fruit and vegetables** – all fruit and vegetables (especially root vegetables that may have excess soil) should be thoroughly washed to prevent the risk of spreading harmful bacteria such as E. coli.
- •**Take care when defrosting foods** – ideally, plan ahead and leave enough time to defrost food. Safe thawing should be done in small amounts in the fridge. Ensure meat and poultry are defrosted on the bottom shelf. If meat is thawed in the microwave, cook it immediately. Foods should be thoroughly defrosted before being cooked.
- •**Keep work surfaces clean** – it is important for food safety that all worktops are kept clean and free of bacteria. Use a clean cloth and anti-bacterial sprays. Ensure any surfaces are wiped clear of cleaning residue before preparing food.

Personal Hygiene

Certain bacteria can remain active on our hands for up to three hours. During this time bacteria can spread to everything we touch. This is particularly dangerous in catering environments where germs can multiply on food.

PERSONAL HYGIENE

Always wear the appropriate head-gear when working with food and never brush or comb your hair. A single hair follicle can harbour tens of thousands of germs.

Make sure your clothing is cleaned thoroughly. If your clothing should become dirty, change it if possible.

Aprons should always be worn when protective clothing is not available.

Gloves can provide an extra barrier against germs when preparing food.

Remove all jewellery before preparing food. The areas under watches and rings are breeding grounds for germs!

Cover all cuts, burns and sores with a waterproof dressing. These should be blue and where appropriate metal detectable. If such dressings are not readily available, speak to your Health and Safety Manager.

Never work with food if you are ill. This is particularly the case if you are suffering from gastrointestinal problems such as diarrhoea.

Avoid touching your ears, nose, hair and teeth when working with food. We all get itches but if you should touch these areas, be sure to wash your hands afterwards.

Keep nails short and well scrubbed. Do not wear nail varnish or false nails as these can easily contaminate food.

Never cough, spit, sneeze or smoke near food. If you do cough or sneeze into your hands, be sure to wash them thoroughly afterwards.

Do not smoke in areas where food is prepared and stored.

WHEN TO WASH YOUR HANDS

Certain bacteria can remain active on our hands for up to three hours. During this time bacteria can be spread to everything we touch. This is particularly dangerous in catering environments where germs can multiply on food.

It is essential that you wash your hands regularly throughout the day and especially at the following times:

1. **Before handling or preparing food.**
2. **Between handling raw foods (eggs, meat, fish, poultry) and touching any other food or kitchen utensils.**
3. **After handling raw foods such as meat fish and poultry.**
4. **After touching rubbish / waste bins.**
5. **After coughing or sneezing.**
6. **After touching your nose, ears, teeth or hair.**
7. **Always make sure you wash you hands after using the toilet. The number of germs on the fingertips doubles after a visit to the toilet!**

HOW TO WASH YOUR HANDS

It is surprising how many do not know how to wash their hands properly. Rinsing the fingertips under a cold tap is simply not adequate. In order to ensure that your hands are thoroughly cleansed when washing them, follow these simple guidelines:

1. **Use warm water.**
2. **Remove any rings and jewellery.**
3. **Wet the hands thoroughly.**
4. **Apply soap.**
5. **Rub the palms together vigorously for at least 15 seconds.**
6. **Rub the fingers, thumbs and wrists.**
7. **Pay particular attention when washing the areas between the thumb and fingers.**
8. **Rinse until all traces of soap have been washed away.**
9. **Dry thoroughly with a clean paper towel or electric hand dryer. These methods are preferable to using a towel as it can be a breeding ground for germs.**

It is essential that you dry your hands thoroughly after washing. Remember that germs spread 1000 times more easily from damp hands.

The information contained in the poster is for guidance only and should not be used as a substitute for recognised training.

SFAP 250

Food Technology

Cooking

•**Temperature control when cooking food** – all foods should be cooked for the correct amount of time and temperature. A **food thermometer** is the only safe way to check the core temperature of a food to ensure safety - especially when cooking **meat, poultry** and **seafood**. The core temperature of a food should reach **75°C** instantaneously. The equivalent – for example **70°C** for two minutes – is acceptable.

•**Follow label instructions** – when cooking food it is important to follow the cooking instructions displayed on the label. This is especially important for foods cooked in the microwave as stirring and standing times are vital to ensure the core of the food has reached the required temperature.

•**Serving cooked foods** – when a food is cooked it must be kept at **63°C** and covered until it is ready to eat.

•**Reheating foods** – When reheating a food, it should reach a core temperature of **70°C** for two minutes. A food should not be reheated more than once.

Laws to protect the consumer in relation to food safety

There are organisations and laws devised by the government which protect consumers from buying food unfit for consumption through poor hygiene or safety standards.

Food Hygiene Rating

What the rating covers

Ratings are a snapshot of the standards of food hygiene found at the time of inspection. It is the responsibility of the business to comply with food hygiene law at all times. This includes:

- handling of food
- how food is stored
- how food is prepared
- cleanliness of facilities
- how food safety is managed

The business is then given a rating from **0 to 5** with 5 being the highest rating

Environmental health practitioner

Each local area has an **environmental health department** run by the council who work to support consumers in relation to food safety. They are responsible for the following:

•**Inspecting** a food business and auditing their food safety practices, ensuring legislation is being adhered to.

•**Enforcing** any action if required, such as improvement notices, prohibition orders or penalty notices.

•**Investigating** food complaints and allegations of food poisoning - also investigating complaints about labelling and ensuring labels do not mislead the consumer.

•**Educating** and providing food businesses with advice on correctly following food safety law.

•**Responding** to food alerts from the Food Standards Agency.

Laws to protect the consumer in relation to food safety

The Food Safety

This legislation ensures that all consumers achieve a high level of health protection when buying food. It protects consumers by making it an offense to sell food that:

•has been rendered injurious to health

•is unfit for human consumption

•is so contaminated that it would not be reasonable to expect it to be used for human consumption

•is not of the nature, substance or quality that consumers would expect

•is labelled, advertised and presented in a way that is false or misleading

The Food Hygiene Regulations

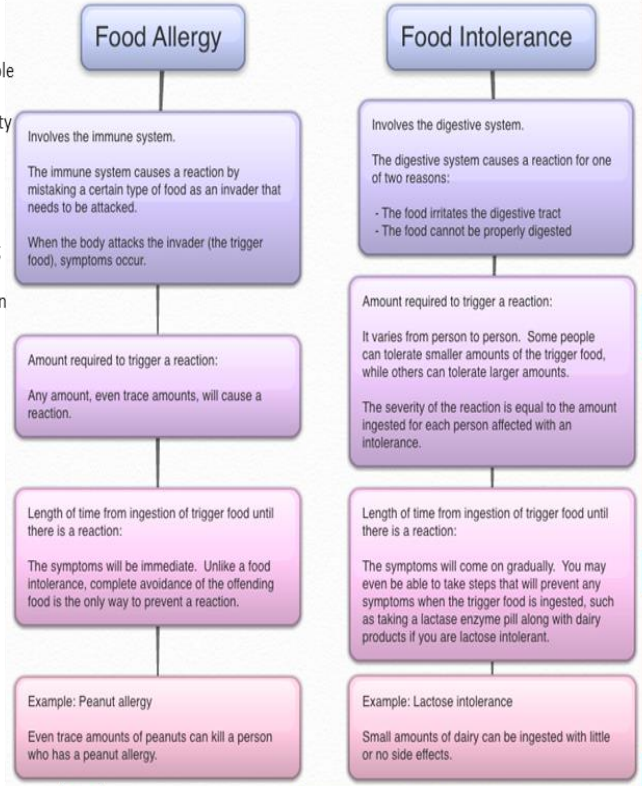
This legislation protects consumers by checking that food has been prepared, handled, processed, packaged, manufactured, stored, transported and distributed safely and hygienically.

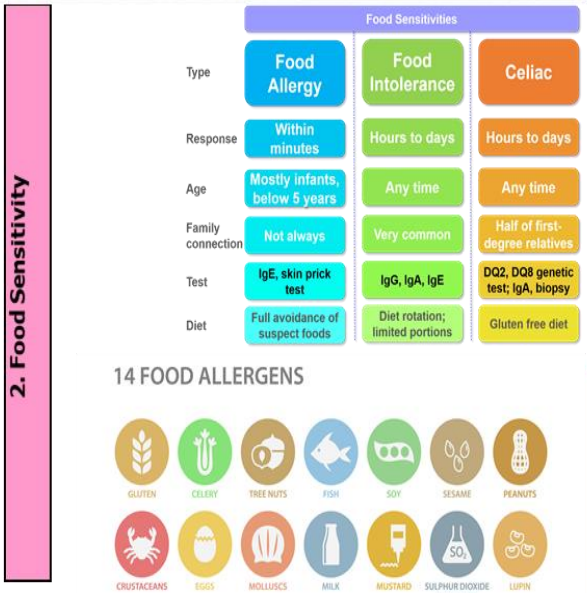
For example, this legislation will check that food is fit for consumption by ensuring that:

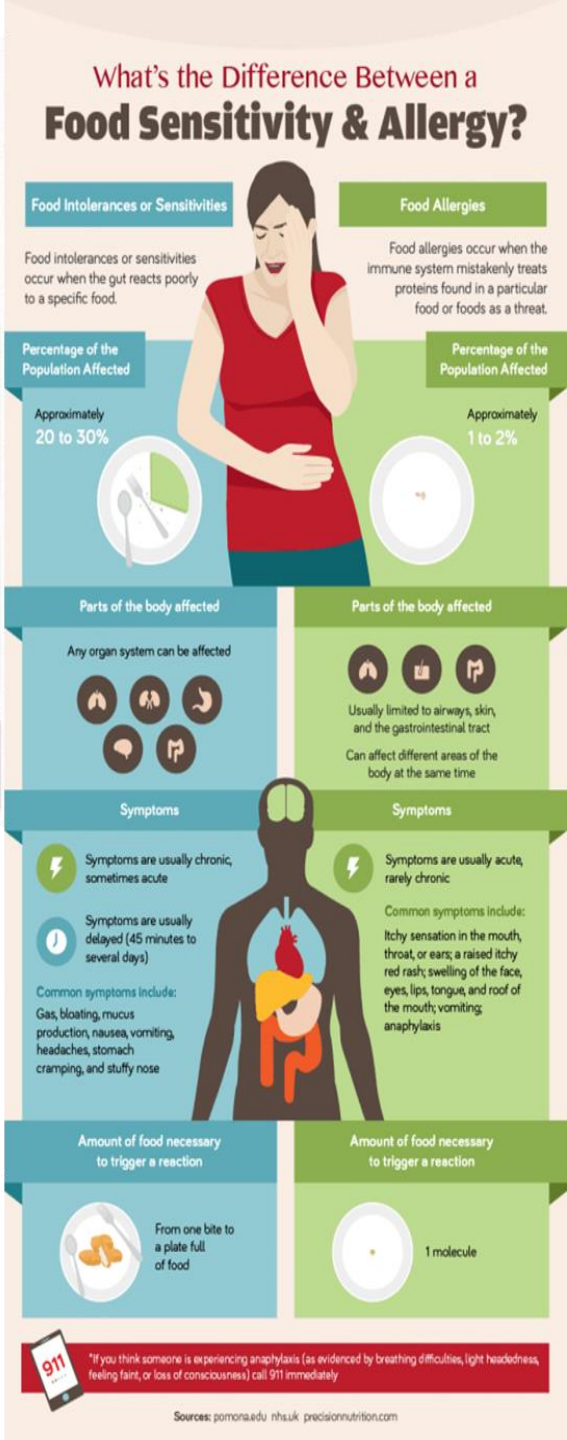
•Any food supplied follows safety requirements and any food sold is done so in a hygienic way. For example, inspectors will examine temperatures of cold storage or holding temperatures.

•A food business has identified any food safety hazards and has a **HACCP** (Hazard Analysis and Critical Control Points) procedure to ensure safety controls are in place, maintained and reviewed.

•The sale of raw, unpasteurised milk is prohibited. There must be a supply of clean drinking water to ensure food is not contaminated when washed.







3. Food Provenance

Food provenance – *the place of origin or earliest know history of something.*
Food provenance means:
•knowing where food was grown, caught or raised
•knowing how food was produced
•knowing how food was transported

Food that is grown
A wide variety of foods can be grown within the United Kingdom, e.g. include:
•apples – which are grown in orchards
•potatoes and carrots – which are grown in fields
•lettuce – which is often grown in polytunnels
In the UK we have the ideal soil and weather conditions suited to these crops, while crops like bananas or pineapples require a much hotter climate.

Farmers go through many steps in order to produce the best crops they can
Preparing the soil to ensure it is ready to grow crops.
Sowing seeds, this must be done at the correct time of year to get the best crop.
The area must be kept watered and free from weeds and pests which could damage the crops.
Crops are harvested when they are ready, and are inspected to ensure they are of a high standard.

Food that is caught
Foods that are caught within the UK are fish and shellfish.
In terms of ports, the boats which constitute the sea fishing industry.
Fish which can be caught in UK waters include: *mackerel, haddock, mussels, scallops, tuna*

There are a number of methods which can be used to catch fish, these include:
Trawling – a method where boats go out to sea and release nets which are pulled along the seabed, catching fish as they go.
Line caught – where a fishing rod, line and bait is used to catch fish.
Pots – used to catch lobster or crab, they are placed on the seabed and collected at a later date.
These are traditional fishing methods. However, wild fish numbers are decreasing. As a result, sometimes fish are intensively farmed. This means that they are kept in big pens. Fish that are farmed include salmon and rope-grown mussels.

Food that is reared
Farming is a massive part of the economy throughout the UK. It is one of Northern Ireland's most important industries.
There are two main types of farming, **intensive** and **organic**. Intensive is usually a large scale operation where the farmer is relying on it for his income. Organic is usually on a much smaller scale where the animals and environment are the priority.
Animals that are reared for food include:
- cows – for their meat and milk
- sheep
- pigs
- chickens – for their meat and eggs

Protected Designation of Origin (PDO): this designation covers products that are "produced, processed *and* prepared" in a specific area, using a particular, usually traditional, method

Food miles is the distance food is transported from the time of its making until it reaches the consumer. Food miles are one factor used when testing the environmental impact of food, such as the carbon footprint of the food.

A **carbon footprint** is the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions

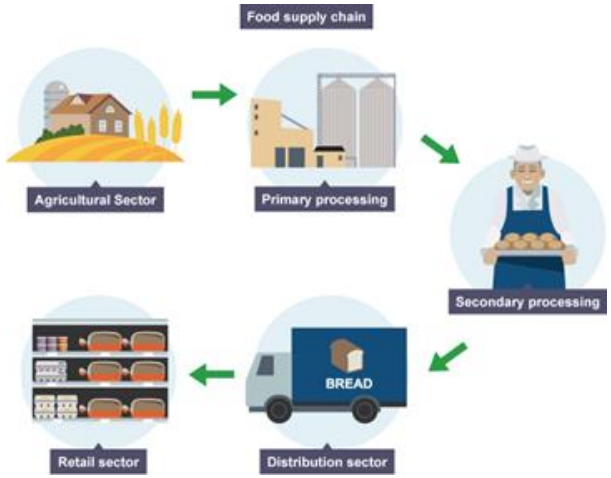
Animals can be reared indoors or outdoors.

Chickens farmed intensively indoors. This is often known as **battery hen** farming. Chickens are reared in large numbers indoors to produce a high income for the farmer.

Free range chickens. Chickens are allowed to roam outside during daylight hours and are given much more space. Animal welfare is the top priority. **Quality assurance**

There are a number of **quality assurance** schemes in place to help consumers recognise that they are buying a top quality product, where the animal has been reared in the best conditions possible. These schemes assure the consumer of the quality of the product. They also help to promote high standards within the food industry.

Food supply chain
It is important for us to understand the **food supply chain**.



All your food begins its journey on a farm. This is known as the **agricultural sector**.
Food is then transported to a factory to go through **primary and secondary processing**. Food may then be stored here for some time before it is required in the retail sector. From storage, food enters the **distribution sector**. This is where it is transported to the shops to be sold.
The **retail sector** is where food is sold to you, the consumer. The retail sector does not only include large supermarkets, but also small corner shops and local farmers' markets. Your fork is the final step for the food that started off life on the farm.

Food processing and production
Food processing refers to the stages raw ingredients go through in order to become something we can eat.
Food production refers to the three-part production of food – input, process and output.
Why do we process food?
Food processing must happen for a number of reasons, these include:
- ✓ making food safe to eat by killing harmful bacteria
- ✓ making food look and taste its best by adding colour after processing
- ✓ making foods become available that are out of season, like frozen raspberries and strawberries
- ✓ making foods easier to prepare, this is important for people who live busy lifestyles
- ✓ making foods have a longer shelf life by adding preservatives

4. Factors affecting Food Choice

Personal, social and economic factors that affect food choice

Personal factors

Personal factors that come into play when choosing food might include:

- **Likes and dislikes** – consumers tend to buy products that they like and avoid those that they don't.
- **Age** – adolescents may want to purchase a different variety of item than an adult, for example adolescents may prefer sugary chocolate sweets while adults may go for high quality dark chocolate bars.
- **Lifestyle** – consumers with children may purchase more child friendly products, for example those low in sugar, than consumers without children.
- **Occupation** – consumers with higher paid jobs may go for brand items, while those on a lower wage may opt for own brand choices like Asda Smart Price, Sainsbury's Basics or Tesco Everyday Value.

Social factors

As consumers we are influenced by those around us, therefore we may tend to purchase what our friends or family purchase.

For example, **adult consumers** may be influenced by advice from friends on where to shop for the best value, while **adolescent consumers** may want the latest fizzy drink that all their friends are buying.

Economic Factors

The amount of money we have influences our purchases.

Consumers with a high income can afford to spend money on luxury foods - like prawns or fillet steak. They may often shop at a high end retailer like Marks and Spencer.

Consumers on a tight budget due to a low income or large family, may tend to spend money in cheaper outlets such as Lidl or Asda. They may also buy own brand products in order to save money.

Religious and cultural factors

Religious factors can have a major influence on what foods we buy.

For example, Muslims will not eat meat such as beef or lamb that has not been slaughtered by the halal method, while those of the Jewish religion will only eat foods that are Kosher. Where we are from and our **culture** will also influence our food purchases.

Ethical and environmental factors that affect food choice

An **ethical consumer** will care deeply about where their food comes from and the welfare of the animals and people involved in making that food.

They will look for the following factors:

- **Organic produce** – ethical consumers tend to buy organic produce as it is produced in a way that protects the environment.
- **Fairtrade produce** – ethical consumers tend to buy Fairtrade produce, for example bananas or chocolate, as the farmers responsible for producing the product have been given a fair price for their produce.
- **Local produce** – ethical consumers often like to support local farmers.

Type of vegetarian	Animal foods excluded	Animal foods included
Lacto-ovo vegetarian	Meat, fish/ seafood, poultry	Dairy, eggs
Lacto vegetarian	Meat, fish/seafood, poultry, eggs	Dairy
Ovo vegetarian	Meat, fish/seafood, poultry, dairy	Eggs
Pesco/pesca vegetarian	Meat, poultry	Fish/seafood, eggs, dairy
Pollo vegetarian	Meat, fish/seafood	Poultry, eggs, dairy
Semi vegetarian (Flexitarian)	Meat, fish/seafood, and poultry most of the time	Dairy, eggs; on occasion meat, fish/seafood, poultry
Vegan	Meat, fish/seafood, poultry, eggs, dairy, honey, etc.	None
Fruitarian	Meat, fish/seafood, poultry, eggs, dairy	None; typically unprocessed and uncooked foods only

Ethical reasons

The main ethical reason for requiring a special diets is vegetarianism. There are two main types of vegetarians:

•Vegans believe it is ethically wrong to eat animals that are reared and slaughtered for the purpose of providing food for humans. They avoid all animal products including eggs, cheese or milk. They follow a strict diet that includes only plant foods – fruit, vegetables, pulses, grains and nuts.

•Lacto-ovo vegetarians will not eat the flesh of animals but they will drink milk and eat eggs because the animal does not suffer to produce these. They also eat all of the plant food eaten by vegans.

Cultural/religious considerations - It is also important when working in hospitality to have a knowledge of the impact of religion on food choices.

Islam

Muslims follow strict food laws and only eat food which is prepared and cooked in line with Islamic law. Animals are slaughtered in a way that their blood is drained away. Meat produced in this way is called Halal.

Judaism

Jewish people cannot eat anything which isn't 'kosher'. For meat to be kosher, the animal must be slaughtered according to Jewish law.

Before cooking, the meat must be clean of the animal's blood and the sciatic sinew (which runs down the spine to the leg) must be removed. They also have rules for which foods can be eaten together.

•Fish and meat cannot be cooked or served together

•Milk and meat cannot be cooked or served together

•Milk and milk products are usually only served at breakfast and avoided at other meals.

Hinduism

Hindus believe that the cow is a sacred animal and will not eat beef.

Health issues that affect food choice

Factors affecting the health of individual consumers can have a major influence on their choice of food.

For example, consumers who suffer from an **allergy or intolerance** will avoid purchasing foods that contain the product they are allergic to. Someone who is allergic to nuts will not buy food products that may contain nuts, while someone who has lactose intolerance will purchase dairy free products. Consumers who want to follow a **healthy balanced diet** and reduce their risk of dietary related disorders, such as **cardiovascular disease** or **hypertension**, may choose to purchase products that are low in fat or salt.

Diabetes-Diabetes is a condition that causes the body's blood sugar level to become too high. There are two types - type 1 and type 2. There are no changes to diet or lifestyle that will lower the risk of type 1 diabetes but type 2 is often linked to being overweight and inactive. It usually develops in middle age and depending on how serious it is can be controlled by medication and a low sugar diet. People with **diabetes** will have to lose weight and become more active. They should avoid food which is high in sugar as high levels of sugar in the blood can cause damage to the eyes, kidneys and blood vessels. A low sugar diet is essential and medication may also be required.

Heart conditions-A diet high in saturated fat can cause cholesterol to build up in the arteries leading to heart disease and even a heart attack. A low fat diet is essential. Where fat is included it must be unsaturated. Oils made from plants instead of animals should be used and low fat spread instead of butter. Wholemeal bread is also recommended. Red meat should be replaced with chicken, fish or pulses. Methods of cooking using fat should be avoided. Grilling, baking, stewing and poaching are recommended.

Marketing strategies

Marketing strategies are used by food retailers to influence the choices consumers make. These include financial incentives, strategic store layout and advertising.

Financial incentives

Food retailers employ a range of financial incentives to help them attract and retain customers. These include:

- ✓ **Special offers** – food retailers often advertise special offers in their store. For example 'buy one get one free'. This will attract a consumer into their store in the hope they will buy more than one item.
- ✓ **Loyalty cards** – many food retailers offer loyalty cards, such as Tesco's Clubcard or Sainsbury's Nectar card. Consumers scan these every time they shop in store and in return they will receive vouchers or points that will allow them to get money off. This encourages consumers to shop in these stores.
- ✓ **Price checking** – food retailers will advertise that their price is the same if not better than another big brand name. This will encourage consumers into their store as they feel they may be saving money.
- ✓ **Own brand products** – large food retailers often have their own food range which is significantly cheaper than big name brands. Consumers may be encouraged into their store as they can't purchase these products anywhere else. Examples include the Co-op Simply Value and Tesco Everyday Value ranges.

Being an effective consumer when shopping for food

Shopping option: Independent grocery shops
Examples: Local corner shop, Mace, Spar
Advantages
- ✓ range of local food products
- ✓ close to home and usually in residential areas
- ✓ often sell products in small quantities, which ultimately reduces waste
- ✓ personal and friendly service

Disadvantages
- ✓ often more expensive
- ✓ stock/choice of products may be limited and may not be rotated regularly
- ✓ range of products on sale may be limited
- ✓ parking may be limited

Shopping option: Supermarkets
Examples: Asda, Sainsbury, Tesco
Advantages
- ✓ wide range of products and brands available, including own brand
- ✓ special offers and promotions that may save consumers money
- ✓ economies of scale - selling more products for less and therefore saving consumers money
- ✓ range of services and facilities on offer for a wide range of consumer needs/wants
- ✓ may have longer opening hours, for example 24 hours a day

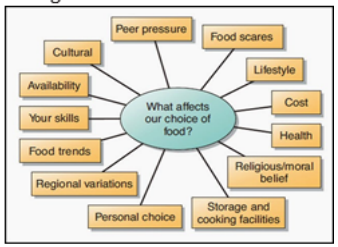
Disadvantages
- ✓ impersonal service - staff may not know customers by name
- ✓ customers may overspend and make impulse purchases because of the special offers available
- ✓ often situated out of town and therefore may be more difficult to access
- ✓ often very busy and noisier than a smaller shopping option
- ✓ often limited local produce

Shopping option: Markets
Examples: St George's Market in Belfast, Mourne Market in Newcastle
Advantages
- ✓ range of local produce available therefore helping the environment by reducing air miles and helping to support the local economy
- ✓ expert advice available
- ✓ may be cheaper than shops
- ✓ sociable experience for consumers

Disadvantages
- ✓ may only be available on certain days and possibly weather dependent
- ✓ may not have the range of products available from other shopping options
- ✓ packaging and labelling may not be available on the food products

Shopping option: Farm shops
There are dozens of farm shops across Northern Ireland. They mostly sell meat reared on the farm which the shop is attached to. They also sell a range of other local produce such as dairy, fruit and vegetables.
Advantages
- ✓ support local community
- ✓ local produce, less air miles therefore better for the environment
- ✓ wider range of organic produce

Disadvantages
- ✓ generally more expensive than supermarkets
- ✓ often situated in rural locations
- ✓ may only have seasonal vegetables compared to the range available at a supermarket
- ✓ limited opening hours



Shopping option: Online shopping
Examples: Asda, Sainsbury, Tesco
Advantages
- ✓ available 24 hours a day, seven days a week
- ✓ wide range of products available
- ✓ can purchase from the comfort of your own home

Disadvantages
- ✓ payment security issues (internet or payment card fraud)
- ✓ don't get to handle the product before purchasing it
- ✓ may have short sell by dates
- ✓ may have to pay postage or delivery charge
- ✓ don't get the product immediately

Shopping option: Shopping apps
Advantages
- ✓ create and manage shopping lists at home, on the go or in store
- ✓ find products through search, filter and barcode scanner
- ✓ compare the price of individual items or your entire list across a range of grocery stores
- ✓ find the best offers
- ✓ set price alerts so you never overpay on your favourite items
- ✓ prices updated daily
- ✓ get saving suggestions and exclusive cash back vouchers to save even more
- ✓ your shopping list is automatically synced to your account

Disadvantages
- ✓ don't get to assess the aesthetical quality of the food, for example texture and smell
- ✓ difficult to know/check date of food items
- ✓ consumers need to have access to the apps and know how to use them

5. Food Waste

Why do we waste food

Many of us buy more than we need, cook more than we are going to eat and don't use up food before it goes out of date.

Food ends up in the bin because:

- ❑ We buy more than we need.
- ❑ We cook and fill our plates with more than we are going to eat.
- ❑ We forget to use food up before it goes out of date.
- ❑ We do not store food correctly so it goes bad more quickly than it should.

What is bad about food waste?

- ❑ Producing food uses up **natural resources** like **water** and **energy**. This has an impact on **climate change**.
- ❑ In some countries, people go hungry because they do not have enough food.
- ❑ We spend a lot of **time** shopping for food and preparing it into meals.
- ❑ Wasting food costs us **money**.
- ❑ Food waste often ends up in **landfill**. This is harmful for our planet.

Ideas to prevent food waste

- ✓ **Plan meals** – talk about the dinners you would like to have for the week and buy only the ingredients needed.
- ✓ **Shopping list** – take a list to the supermarket and stick to it. Only buy what you need.
- ✓ **Buy wonky fruit and vegetables** – produce that is misshapen often gets left behind in the supermarket. It might look a little different but it tastes just as good!
- ✓ **Buy short shelf life food** – shops have to throw away food when it reaches its 'Use by' date so they sometimes reduce the price to sell it quickly. It can stop waste and save money if you will eat it before it is out of date.
- ✓ **Storing food** Storing food correctly can keep it fresher for longer. Here are some examples:
  - ✓ Bread needs to be stored in a cool, dark place to prevent mould.
  - ✓ Lettuce is best kept in the salad drawer of the fridge.
  - ✓ Cheese should be wrapped and chilled in the fridge.
  - ✓ Do not store highly gaseous produce, like bananas and avocados, with other fruits as they will make them turn bad quicker.
- ✓ **Fridge**-You should store milk, butter, yoghurt, meat, fish, and vegetables in the fridge to keep them cool and fresh.
- ✓ **Freeze** - store food in the freezer to keep it fresh and use it later leftover food and meat.
- ✓ **Cupboard**-You can store pasta, tins of soup and beans, cereal, bread, and jars in the cupboard. Once opened, tins and jars should be covered and kept in the fridge. Bread should be wrapped to stop it going stale.
- ✓ **Use all your food up** – use what you already have before you go shopping again. You can take leftovers for lunch or make banana bread from overripe bananas that would otherwise go to waste.
- ✓ **Get composting!** Sometimes even if we try not to waste, we are still left with food scraps. Before we bin them and send them to landfill, we should stop and think…**compost!**

What is composting?

- ✓ Composting is a natural process that **breaks down rotting food** and plants and turns it into **soil**.
- ✓ Compost bins can be as simple as a plastic bin with air holes in it.
- ✓ Fill your compost bin with scraps of **fruit**, **vegetables**, **cut grass** and **other garden waste**. You can even compost **teabags** and **scrunched up paper**.
- ✓ Food waste and scraps from **animal products** like meat cannot be put in most compost bins.
- ✓ Over time the waste will break down and become **nutrient-rich soil**.
- ✓ This soil is perfect for helping new plants grow. You could use your compost to **grow your own vegetables**.

The benefits and challenges of making sustainable food choices

Benefits

•By using sustainable food practices like reducing the amount of food we waste and making good decisions about the food we eat, we can **preserve the world's food supplies** and lessen our impact on the environment.

•By reducing food waste and planning your shopping, you can **save money**. The less food you buy and waste, the less money you spend.

•Composted food can be used to grow more food, or even **generate electricity**.

Challenges

•People might not know how to **plan meals** for a shopping list.

•People might be **too busy** to think about and plan the food they buy. Sometimes this can lead to buying too much and the food then goes to waste because it is past its sell by date.

•Composting and a lot of other recycling methods **take time and space**, which some people don't have. Others might not know how to get started.

6. Where food comes from

Different countries produce different types of food, which is often dependent on their . For example, Asian countries grow rice, African countries grow cocoa, South American countries produce , and European countries produce a lot of milk and fish. Of all in the world, around half is farmed.

Modern food production allows some, but not all, of the world's population to enjoy a varied diet throughout the year. For example, it is possible to eat strawberries in winter in the UK. This scale of food production can have negative impacts on people, animals and places.

Increasing adds to global . This is because fuel is required to move food between countries, which leads to increased .

What is sustainable fish and meat production?

food production involves farming the land whilst also protecting it for future generations.

Fish

Sustainable fishing involves allowing fish stocks to our seas. This means fewer fish are caught at any one time, ensuring there will be enough fish for the future. Catching fewer fish can be achieved through a better design of fishing nets that have holes that allow smaller fish to escape. Smaller fish can then grow and repopulate the oceans.

Meat

Some farmers feed to animals, as opposed to grass, as it increases their weight and heavier animals can be sold on for more money. This results in further in order to create the farms to grow the grain. Likewise, some cattle are given to make them grow more quickly. Sustainable meat production involves rearing animals on grass rather than grain, without using hormones.

How else can food supplies be increased sustainably?

As well as meat and fish, various other types of food can be produced in a sustainable way.

Organic farming-relies on natural products and processes. These include:

- ✓ natural , such as , rather than chemicals.
- ✓ using natural predators, such as ladybirds, to control like .
- ✓ which allows soils to recover

Urban and peri-urban horticulture (UPH)

involves growing food in and around cities. Small plots produce more food than the equivalent area of farmland. Urban plots also reduce food miles .

Eating seasonal foods

Importing food allows us to eat a wider variety of produce throughout the year. For example, strawberries grow in the UK during the summer months. Strawberries are imported to the UK during the winter so they can be bought in supermarkets throughout the year.

However, imported food has high food miles. In addition to this, growing food out of season in heated greenhouses or storing food generates . Eating locally grown food that is in season, therefore, helps to reduce carbon emissions.

Farming

Farms can be categorised according to **what** is being grown or reared, the **size** of the operation and the **agricultural techniques** being used.

Farming can be:

- ✓ sedentary or nomadic
- ✓ subsistence or commercial
- ✓ arable, pastoral or mixed
- ✓ extensive or intensive

Sedentary or nomadic?

- ✓ Sedentary farming is when a farm is based in the **same location** all the time.
- ✓ Nomadic farming is when a farmer **moves** from one place to another. This is common in some **LEDCs**.

Subsistence or commercial?

- ✓ Subsistence farming is when crops and animals are produced by a farmer to **feed their family**, rather than to take to market.
- ✓ Commercial farming is when crops and animals are produced to **sell** at market for a profit.

Arable, pastoral or mixed?

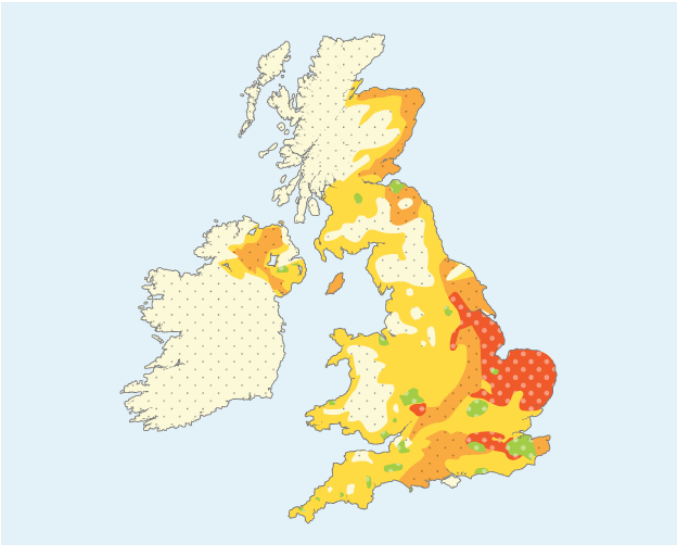
- ✓ Arable farms grow **crops**. Crops are plants that are harvested from the ground to be eaten or sold.
- ✓ Pastoral farms rear **animals** - either for animal by-products such as milk, eggs or wool, or for meat.
- ✓ Mixed farms grow crops **and** rear animals.

Extensive or intensive?

- ✓ Extensive farming is where a relatively **small amount** of produce is generated from a **large area** of farmland.
- ✓ Intensive farming is where a **large amount** of produce is generated from a relatively **small area** of land. Inputs will be **high** to achieve a high yield per hectare. Inputs could be either fertilisers, machines or labour.

Distribution of farming

Physical factors will determine which **type** of farming takes place in a particular **area**. **Climate** and **relief** are the dominant factors in determining which crops will grow and which animals are suited to the landscape. Human factors, such as proximity to markets, are important with some types of farming, such as market gardening.



Arable farming
Arable farming is common in the south east where the summers are warm and the land is low, flat and fertile. The south east also has good transport links and farms are close to markets in towns and cities such as London.

Market gardening
Human factors such as finance and proximity to markets are important to market gardening. It is common in East Anglia where fruit, vegetables and flowers are grown.

Hill sheep farming
Hill sheep farming takes place in the north and west of Britain in highland areas such as Snowdonia and the Lake District. There are cool summers and high rainfall. The climate and steep land make these areas unsuitable for growing crops.

Dairy farming
Dairy farming is common in the south west and the west of England where the climate is warm and wet. There are also good transport links and good access routes to markets in these areas. The land may be flat or hilly, but not too steep.

Mixed farming
Mixed farming is found in areas where the climate and relief suit both crops and animals. It needs to be warm, but not too wet, and the soils need to be fertile and flat. Mixed farms need good transport links and accessibility to markets.

Case study: Cambridgeshire
Cambridgeshire is one of the most agriculturally productive areas in Europe. The area is used for arable farming because of:
Physical factors
- Low lying land
- Well-drained soil
- Warm summers (18°C in July)

Human factors
- Good access to markets
- Large areas of farmland so larger machines can be used
- Investment by companies - farms are owned by large companies able to use **economies of scale**

Farm diversification
Farming in the UK today is no longer as profitable for everybody as it has been. Reasons for this are:
- ✓ Supermarkets buy in bulk and are driving down the price of the food
- ✓ Imported food is often cheaper
- ✓ **Mechanisation** and changes to grants have meant smaller farms and hill farms go out of business

Farms can **diversify** to try and keep making money. This means that the farm will start to create other areas of income, such as creating a tourist attraction, offering bed and breakfast or selling produce via a farm shop. Some farms may also close and start a different business on the land.

Organic farming
Organically farmed produce
Organic farming does not use chemical fertilisers or feed additives for livestock. It relies upon more natural forms of farming such as biological pest control and crop rotation. Using ladybirds which eat aphids is one example where a natural process replaces a chemical pesticide.
Organic farming is less efficient and so produce does cost more. The demand for organic produce is increasing in the UK. However people may go back to non-organically produced produce if their income falls.

Positive aspects of organic farming
- ✓ The environment benefits because natural habitats are less threatened.
- ✓ The soil can be in better condition because of the manure used.
- ✓ It can provide healthier food for people.
- ✓ **Biodiversity** increases with fewer chemicals which harm bees and other insects.
- ✓ The industry is worth over £1 billion a year.

Negative aspects of organic farming
- ✓ More produce is damaged by pests.
- ✓ Weed control is time consuming as weeds are often removed mechanically.
- ✓ Organic dairy farms produce more methane per animal than non-organically produced. This is because of the diet of the cattle.
- ✓ Some organic farming methods use more water than non-organicall produce methods.
- ✓ Yields from organic crops are usually lower than those from non-organically produced but the difference varies between types of cro and over time.
- ✓ Most of the organic food bought is actually imported.

7. Food Labeling

Mandatory and voluntary information
Food labels have both mandatory and voluntary information.
Mandatory – this means information that must be included by law.
Voluntary – this is information that the manufacturer includes as they feel it may be useful for the consumer. For example, **'suitable for vegetarians'**.

Ethical and environmental food labelling
The Fairtrade Foundation

You may recognize the Fairtrade logo from different foods such as bananas, chocolate, coffee and tea.
The Fairtrade logo is displayed on foods which have been grown using sustainable methods by farmers in developing countries. These farmers will have received a fair price for their product and have decent working conditions.
Fairtrade helps disadvantaged producers or farmers in developing countries by promoting fair trading conditions, combatting poverty and helping them take control over their own lives.
Fairtrade provides the following for farmers and producers:
- ✓ fair prices for their product
- ✓ good working conditions
- ✓ support for the communities where the farmers live
- ✓ protection for the environment farmers work in

In turn this means that more money can be invested in schools, healthcare and better sanitation for the community. All of which improves the standard of living.

The Soil Association
The Soil Association works through the food chain to set high standards for healthy, humane, sustainable and organic food production.
The association works with farmers, manufacturers and retailers to maintain high standards of organic food production.
The Soil Association aims to change food culture by working with schools and work places, while securing the future of farming by helping the government to implement policy changes.

8. Cake making methods and what went wrong & why?

What has gone wrong when…The cake sinks in the middle…The oven door was opened before the cake was set. The cake was removed from the oven too soon, the cake is under baked **The surface of the cake is covered with little air holes…**The cake was not placed in the oven quick enough. The oven temperature was too low. The raising agent was not evenly mixed through the batter **The cake has a thick crust…**The oven temperature was too high. The cake is overbaked **The top of the cake is domed and cracked…**The over temperature was too high **The cake has a sour flavour and odd colour…**Too much bicarbonate of soda was used

Preparing the tin The cake tin should be prepared before starting the recipe. Brush the tin lightly with vegetable oil. To line the base of the tin accurately use the tin as a template and draw around the outside of the base of the tin onto greaseproof paper or non-stick baking parchment with a pencil. Using scissors cut just inside the pencil mark and place into the tin

9. Practical Skills

Year 9 Half-Term 1 French Knowledge Organiser

Unit 1: Mon monde à moi

Point de départ

Quand je suis seul(e) ...	*When I'm alone ...*
Quand je suis avec mes copains ...	*When I'm with my friends ...*
Le weekend ...	*(At) the weekend ...*
Comme sports ...	*As for sports ...*
Sur mon portable ...	*On my phone ...*
J'aime (beaucoup)...	*I like (a lot)...*
J'adore ...	*I love ...*
Je n'aime pas (tellement) ...	*I don't (particularly) like ...*
Je n'aime pas du tout ...	*I really don't like ...*
Je déteste ...	*I hate ...*
le sport / le collège.	*sport / school.*
la lecture / la danse.	*reading / dancing.*
les animaux / les mangas.	*animals / mangas.*
lire des BD.	*reading comics.*
faire des promenades.	*going for walks.*
nager.	*swimming.*
prendre des selfies.	*taking selfies.*
faire du vélo.	*going cycling.*
aller à la pêche.	*going fishing.*
aller en ville.	*going in to town.*
aller au cinéma.	*going to the cinema.*
écouter de la musique.	*listening to music.*
bloguer / surfer.	*blogging / surfing.*
tchatter / poster.	*chatting (online) / posting.*
faire de la cuisine.	*cooking.*
faire du footing.	*jogging.*
faire des randonnées.	*going hiking.*
jouer au rugby.	*playing rugby.*
manger du popcorn.	*eating popcorn.*
regarder des clips vidéo.	*watching video clips.*
avec mon frère	*with my brother*

Unit 2 *Amis pour toujours!*

Ton ami(e) est comment?	*What is your friend like?*
Mon ami(e) s'appelle ...	*My friend is called ...*
Il/Elle est ...	*He/She is ...*
assez grand(e).	*quite tall.*
très petit(e).	*very short.*
de taille moyenne.	*medium height.*
Il/Elle a les cheveux ...	*He/She has ... hair.*
blonds / bruns.	*blonde / brown*
noirs / roux.	*black / red*
courts / longs.	*short / long*
mi-longs / raides.	*mid-length / straight*
bouclés / frisés.	*curly / very curly*
Il/Elle a les yeux ...	*He/She has ... eyes.*
bleus / gris.	*blue / grey*
marron / verts.	*brown / green*
Il a des taches de rousseur.	*He has freckles.*
Elle porte des lunettes.	*She wears glasses.*
Sur la photo, il y a un groupe d'amis.	*In the photo, there is a group of friends.*
Ils sont au parc.	*They are at the park.*
Ils ont l'air heureux.	*They look happy.*
Ils prennent une selfie.	*They are taking a selfie.*
à droite / à gauche	*on the right / on the left*
au centre / au fond	*in the centre / at the back*
Comment tu t'entends avec ton meilleur ami/ ta meilleure amie?	*How do you get on with your best friend?*
Je m'entends bien avec lui/elle.	*I get along well with him/her.*
Je me dispute avec lui/elle.	*I argue with him/her.*
Je me fâche contre lui/elle.	*I get angry with him/her.*
Il/Elle se fâche contre moi.	*He/She gets angry with me.*
Il/Elle a un bon sens de l'humour.	*He/She has a good sense of humour.*
sympa / drôle	*nice / funny*
impatient(e) / bête	*impatient / stupid*
arrogant(e) / égoïste	*too arrogant / selfish*

Unit 1 *Qu'est-ce que tu fais comme activités extrascolaires?*

Qu'est-ce que tu fais comme activités extrascolaires?	*What after-school activities do you do?*
Tous les lundis, ...	*Every Monday, ...*
Une fois par semaine, ...	*Once a week, ...*
Deux fois par semaine, ...	*Twice a week, ...*
Après les cours, ...	*After classes, ...*
Pendant l'heure du déjeuner, ...	*During lunchtime, ...*
Je joue au badminton.	*I play badminton.*
Je fais de la gymnastique.	*I do gymnastics.*
Je vais au club (de photographie).	*I go to (photography) club.*
Je participe au club (de danse).	*I participate in the (dance) club.*
Je joue dans l'orchestre.	*I play in the orchestra.*
Je chante dans la chorale.	*I sing in the choir.*
Je ne chante pas.	*I don't sing.*
Je ne danse jamais.	*I never dance.*
Je ne fais rien.	*I don't do anything. / I do nothing.*
C'est complètement nul.	*It's completely rubbish.*
C'est très amusant.	*It's very fun.*

Les réseaux sociaux

Je vais sur ma page perso.	*I go onto my home page.*
Je lis mes messages.	*I read my messages.*
Je poste des messages.	*I post messages.*
Je modifie mes préférences.	*I update my likes.*
J'invite mes copains.	*I invite my friends.*
Je fais des quiz.	*I do quizzes.*
Je joue à des jeux.	*I play games.*
Je regarde des photos.	*I look at photos.*
Je commente des photos.	*I comment on photos./ I leave comments on photos.*
Je passe des heures ...	*I spend hours ...*
On organise des sorties.	*We arrange to go out.*
On partage des photos.	*We share photos.*
On s'envoie ... des liens vers des vidéos	*We send each other ... video links*

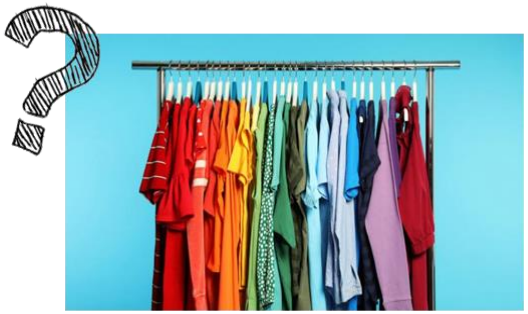
French

Unit 3 *Comment as-tu fêté ton anniversaire?*

Quand as-tu fêté ton anniversaire?	*When did you celebrate your birthday?*
J'ai fêté mon anniversaire le dix mai.	*I celebrated my birthday on the 10th of May.*
Comment as-tu fêté ton anniversaire?	*How did you celebrate your birthday?*
j'ai ouvert mes cadeaux	*I opened my presents*
j'ai reçu un tee-shirt	*I received a tee-shirt*
j'ai regardé mes cartes virtuelles	*I looked at my e-cards*
j'ai lu mes messages	*I read my messages*
je suis allé(e) en ville	*I went to town*
nous avons fait du bowling	*we did / went bowling*
j'ai mangé du gâteau	*I ate some cake*
j'ai bu du coca	*I drank some cola*
je suis resté(e) au lit	*I stayed in bed*
j'ai dormi	*I slept*
j'ai invité mes ami(e)s	*I invited my friends*
nous avons dansé	*we danced*
nous avons pris des selfies	*we took selfies*
C'était ... rigolo / délicieux.	*It was ... a laugh / delicious.*

Unit 4 *Qu'est-ce que tu vas porter?*

Qu'est-ce que tu vas porter pour ta fête d'anniversaire?	*What are you going to wear for your birthday party?*
Je pense que je vais porter ...	*I think that I am going to wear ...*
acheter ...	*to buy ...*
emprunter ...	*to borrow ...*
mettre ...	*to put on ...*
un chapeau	*a hat*
un costume	*a suit*
un jean / un pantalon	*jeans / trousers*
un pull / un sweat	*a jumper / a sweatshirt*
un tee-shirt	*a tee-shirt*
une casquette / une jupe	*a cap / a skirt*
une chemise	*a shirt*
une cravate	*a tie*
une robe / une veste	*a dress / a jacket*
des baskets / des bottes	*trainers / boots*
des chaussettes	*socks*
des chaussures	*shoes*



bleu / noir	*blue / black*
vert / gris	*green / grey*
blanc / violet	*white / purple*
rouge / jaune / rose	*red / yellow / pink*
orange / marron	*orange / brown*
ce matin / ce soir	*this morning / this evening*
cet après-midi	*this afternoon*
demain (soir)	*tomorrow (evening)*
(samedi) prochain	*next (Saturday)*
Comment tu trouves ça?	*How do you like that / it?*
Je trouve ça ... un peu / assez / très vraiment / trop complètement	*I find it ... a bit / quite / very really / too completely*
beau / cool	*beautiful / cool*
joli / super	*pretty / super*
démodé / ennuyeux	*old-fashioned / boring*
moche / nul	*ugly / rubbish*

Year 9 Half-Term 1 French Sentence Builders

Unit 1: Mon monde à moi

French

Point de départ Quand je suis avec mes copains (When I am with my friends)	J'adore … (I love…)	la danse (dancing) faire du vélo (going on a bike ride)				
Unit 1 Tous les lundis (every Monday)	Je joue au badminton (I play badminton) Je ne fais rien (I don't do anything)	C'est complètement nul. (It's completely rubbish) C'est très amusant. (It's very fun)				
Sur Facebook Sur Facebook	je poste des messages. on partage des photos.					
Unit 2 Mon ami(e) s'appelle … (My friend is called)	Il/Elle est … (He/she is…)	assez grand(e). (quite tall) très petit(e). (very small)	Il/Elle a les cheveux … (He /she has… hair)	blonds (blonde) bruns (brown)	Il/Elle a les yeux … (He/she has … eyes)	bleus (blue) marron (brown)
Unit 2 Je m'entends bien avec lui/elle. (I get on well with him/her)	Car (because)	Il/Elle a un bon sens de l'humour. (He/she has a good sense of humour)	Il/elle est (He/she is…)	sympa (nice) drôle (funny)		
Unit 3 L'année dernière, pour mon anniversaire… (Last year for my birthday…)	j'ai ouvert mes cadeaux (I opened my presents) j'ai reçu un tee-shirt (I got a t-shirt)	Et puis (and then)	je suis allé(e) en ville (I went into town) nous avons fait du bowling (we went bowling)	C'était … (It was…)	Rigolo (funny) Cool (cool)	
Unit 4 Je pense que je vais (I think that I am going…)	porter (to wear)	un jean (a pair of jeans) un pantalon (some trousers)	bleu (blue) noir (black)	Je trouve ça (I find it…)	assez (quite) très (very)	joli (pretty) super (super/great)

Year 9 Half-Term 2 French Knowledge Organiser

Unit 2: Bien dans ma peau

Les parties du corps • *Parts of the body*

la bouche	*mouth*
le bras	*arm*
le corps	*body*
le dos	*back*
l'épaule (f)	*shoulder*
les fesses (fpl)	*buttocks*
le front	*forehead*
le genou	*knee*
la jambe	*leg*
la main	*hand*
le nez	*nose*
les oreilles (fpl)	*ears*
le pied	*foot*
la tête	*head*
le visage	*face*
les yeux (mpl)	*eyes*

Le sport et le fitness • *Sport and fitness*

Pour arriver en forme, il faut ...	*In order to get fit, you must ...*
avoir un bon programme	*have a good schedule*
bien manger	*eat well*
bien dormir	*sleep well*
être motivé(e)	*be motivated*
faire du sport tous les jours	*do sport every day*
jouer dans une équipe	*play in a team*

On joue au paintball • *We go paintballing*

Qu'est-ce qui s'est passé?	*What happened?*
Tu es touché(e)?	*Have you been hit?*
Où est-ce que tu es touché(e)?	*Where have you been hit?*
le terrain	*grounds*
les billes (fpl)	*paintballs*
le casque	*helmet*
le matériel	*materials*
les règles (fpl)	*rules*
le fairplay	*fairplay*
le respect	*respect*

Tu aimes le sport? • *Do you like sport?*

Le sport ...	*Sport ...*
diminue le stress	*decreases stress*
est bon pour le moral	*is good for morale*
est important dans la vie	*is important in life*
Ça me fatigue.	*It makes me tired.*
Il faut apprendre à suivre les règles.	*You must learn to follow rules.*

Les opinions • *Opinions*

À mon avis, ...	*In my opinion, ...*
Moi, je trouve ça très ennuyeux de ... (+ inf).	*I find it very boring to ...*
Je crois fermement que ...	*I firmly believe that ...*

Manger sain • *Healthy eating*

les boissons gazeuses	*fizzy drinks*
les céréales (fpl)	*cereals*
les chips (fpl)	*crisps*
l'eau (f)	*water*
les fruits (mpl)	*fruit*
les gâteaux (mpl)	*cakes*
les légumes (mpl)	*vegetables*
les légumes secs	*pulses*
la nourriture salée	*salty food*
les œufs (mpl)	*eggs*
le pain	*bread*
le poisson	*fish*
les pommes de terre (fpl)	*potatoes*
les produits laitiers (mpl)	*dairy products*
le repas	*meal*
le sel	*salt*
les sucreries (fpl)	*sweets/confectionery*
la viande	*meat*
manger équilibré	*to have a balanced diet*

Pour être en forme ... • *In order to keep fit ...*

Je ferai du sport.	*I will do sport.*
Je ferai trente minutes d'exercice par jour.	*I will do 30 minutes' exercise a day.*
J'irai au collège à vélo et pas en voiture.	*I will go to school by bike and not by car.*
Je jouerai au foot.	*I will play football.*
Je mangerai équilibré.	*I will eat a balanced diet.*
Je marcherai jusqu'au collège.	*I will walk to school.*
Je ne boirai jamais de boissons gazeuses.	*I will never drink fizzy drinks.*
Je ne jouerai plus à des jeux vidéo.	*I won't play with video games any more.*
Je ne mangerai plus de frites/hamburgers.	*I will not eat chips/ hamburgers any more.*
Je ne prendrai pas le bus.	*I will not take the bus.*
Je prendrai les escaliers.	*I will take the stairs.*
Je prendrai des cours d'arts martiaux.	*I will take martial-arts classes.*

French

Sentence builders

A mon avis (*In my opinion*) Je n'aime pas (*I don't like*)	le sport (*sport*)	diminue le stress (*reduces stress*) est important dans la vie (*is important in life*) car ça me fatigue (*because it tires me out*) je préfère jouer aux jeux vidéo (*I prefer playing on video games*)			
Pour arriver en forme (*To keep fit*)	il faut (*you must*)	bien dormir (*sleep well*) manger bien (*eat well*) faire du sport tous les jours (*do sport every day*)			
Je joue (*I play*) fais (*I do/go*) Je mange (*I eat*) bois (*I drink*)	au tennis (*tennis*) du vélo (*cycling*) trop de (*too many*) beaucoup de (*lots of*)	depuis cinq ans (*for 5 years*) frites (*chips*) lait (*milk*)	C'est bon pour la santé (*it is healthy*) C'est mauvais pour la santé (*it is unhealthy*)		
A l'avenir (*In the future*)	pour être en forme (*to be fit*)	je mangerai (*I will eat*) je ne mangerai pas (*I won't eat*) je boirai je ne boirai jamais (*I won't drink*) je ferai (*I will do*) j'irai au collège à pied (*I will walk to school*)	cinq portions de fruits et des légumes par jour. (*5 portions of fruits an vegetables a day*) de chocolat (*chocolate*) plus d' (*more*) moins de (*less*) de coca (*coke*) tous les jours les activités physiques (*exercise every day*)	eau (*water*) boissons gazeuses (*fizzy drinks*)	
Je suis (*I am*) Je ne suis pas (*I am not*)	très actif / active (*very active*) en bonne santé (*healthy*)	parce que (*because*)	je joue (*I play*) je fais (*I do / go*) je bois (*I drink*) je mange (*I eat*)	au foot (*sleep well*) de la natation (*swimming*) beaucoup d'eau (*lots of water*) trop de sucreries (*too much sugary food*)	trois fois par semaine (*three times a week*)
Hier (*Yesterday*)	J'ai mangé (*I ate*) J'ai bu (*I drank*) J'ai pris (*I had*)	une salade (*a salad*) du café (*coffee*) une banane (*a banana*)	C'était bon pour la santé (*it was healthy*) C'était mauvais pour la santé (*it was unhealthy*)		

French

Year 9: Development

Key terms

Standard of living : the economic level of a person's daily life.
Quality of life :is a social measure of well being e.g. Life expectancy or Literacy Rates.

HIC : High Income Country (rich)
NEE : Newly Emerging Economies e.g. India/China.
LIC : Low Income Country (poor)

Measuring Development

Development is the progress of a country in terms of economic growth, the use of technology and human welfare. It suggests: advancement, growth, improvement, increase, maturity, progress, changes for the better.

Development Indicators:

GNI	Gross National Income (Money earned by residents of a country including money earned abroad).
GNI Per Capita	Total money earned by a country divided by its total population
HDI	Human Development Index. Calculated using life expectancy, adult literacy, and per capita income.
Infant mortality	How many children per 1000 die before they are 1.
Literacy rate	The % of adults that read and write acceptably.

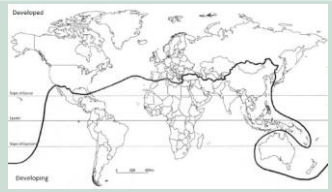
Some development indicators are more useful than others. GNI is an average economic measure so may not show the economic inequality within a country. It also doesn't include any social measures such as life expectancy. GNI Per Capita is more useful as it considers the population. The most useful one is HDI as this is a mixture of social and economic indicators.

Development Relationships

Development indicators are linked and show different relationships. They will change as a country develops. The table below shows how indicators change as countries become wealthier.

Indicator	Change	Why?
Birth Rate	Decrease	Government spends more money on family planning, access to contraception increases.
Death Rate	Decrease	Improved health care and access to clean water reduces disease and deaths.
HDI	Increase	Increase in life expectancy, literacy and GNI per capita
Literacy Rate	Increase	More schools are built, families prioritise education for children
Sanitation	Increase	More toilets and sewage systems are built

Classifying the World's Development



- An HIC has an GNI per capita of over $12,000.
- A NEE has an economy that is rapidly progressing.
- A LIC has a GNI per capita of below $800.
- How useful is the Brandt map today?

In the 1980's, Dr Brandt classified the world into the rich north and the poor south. He drew this line called the Brandt Line or the North-South Divide.
However, over time countries in the south began to develop e.g. Singapore and China, and the line became outdated.

Employment structures

Employment Structures: An overview of the type of jobs that people do in a country or area. LICS tend to have more people in Primary jobs, HICS more in tertiary and quaternary jobs. Employment structures change with development.
Primary: Extraction of raw materials from the ground or sea. E.g. mining, farming.
Secondary: When goods are made; also known as manufacturing. E.g. car industry
Tertiary: When a service is provided. E.g. teacher
Quaternary: High tech, research and development based.

Why are some places richer than others?

Physical Environment

- Hot dry climates mean food cannot be grown so it has to bought from other countries.
- Areas without fertile land, natural resources, water and energy suffer.
- Natural hazards make little progress with development e.g. Haiti.

Health

- Diseases can make people too weak to work or go to school.
- Lack of fresh water meads to illness.
- LIC's haven't got enough money to invest in good quality health care

Trade

- Primary products sold by LICs are sold for cheap prices. HICs make more expensive products so earn more.
- Poor infrastructure (roads/internet /power) or conflict means some people cannot sell their goods at all.
- Landlocked countries were unable to trade easily.

History

- Many countries in Asia, South America and Africa have spent a lot of time and money on conflicts since they became independent from HICs.
- Many LICs haven't had time to develop fully as they were colonised and exploited by HICs.

What is Aid and how can it help?

AID : Help given from country to another, typically from a richer country to a less developed country. It can also be from a charity or organisation.

Type	What it means
Short term/Emergency	Immediate relief in emergencies such as famines, earthquakes, floods and droughts. This includes money, food, blankets, tents and medical supplies.
Long Term	For economic and social development. Its aim is to improve the quality of life for people in LICs/NEEs

Reducing the Development gap 1: Fair Trade Bananas Case Study: The Windward Islands

What is it?	Positives	Negatives
Fair trade is a movement which aims to help producers in LICs improve their trading, working conditions and quality of life QOL. Fair trade typically includes primary products such as bananas that are exported from LICs to HICs.	• Improved, fairer wages paid to the producers. • Social premium (Community taxes) on products can be used to build schools and help improve QOL. •Improved working conditions for employees. •Small scale farmer have more control over prices.	•Can be expensive to get Fair Trade certification. •The poorest farmers can suffer as they don't have certification. •Fair trade products are more expensive to buy.

Reducing the Development gap 2: Fair Trade Footballs – Micro Finance Case Study: Pakistan

What is it?	Positives	Negatives
Microfinance loans are when money is lent to LICs to help them to develop. These are often small loans with reasonable interest rates. They are available to people and businesses who may normally struggle to get credit	• Prevents people becoming over reliant on fair trade. •Allows them to set their own business up •New businesses can provide jobs for people outside of fair trade •It is a loan so people feel they are not being given hand outs	• It is a loan so they have to pay the money back • If the business fails then fair trade loses the money • Only a limited amount of microcredit schemes available.

Reducing the Development gap 3: Case Study: Tourism in Jamaica

Sustainable Tourism: Sustainable tourism aims to support local communities socially and economically whilst causing no harm to the environment. It is expanding in more isolated regions of Jamaica, with people running small-scale lodges.

Background: Jamaica is one of the largest islands in the West Indies. It has a population of 2.7 million. Its economy is based upon minerals, agricultural products, manufacturing and tourism. Tourism is growing in Jamaica.

Attractions: Beach holidays with beautiful sandy beaches and clear seas in places like Montego Bay. It has a rich cultural heritage. Jamaica is a hub for cruises. Money spent in a hotel helps to create jobs in the hotel, but it also jobs indirectly elsewhere in the economy. E.g. The hotel buys food from local farmers, who may spend some of this money on fertiliser or clothes.

Positive Impacts	Negative Impacts
- Tourism counts for 24% of GDP; expected to be 32% by 2024. -Income from tourism is US$2 billion per year - The industry provides 200,000 jobs. - Investment in infrastructure has occurred in the North of the island.	- Economic: jobs in tourism are often poorly paid. Many hotels are owned by TNCs and much of the profit goes to HICs. - Social: Investment in water supplies and sanitation are focussed on tourist areas, not locals. - Environmental: Tourism generates waste and causes footpath erosion.

Year 9 - Ice on the land

Last Ice Age in the UK

Glacial processes have shaped the UKs landscape.

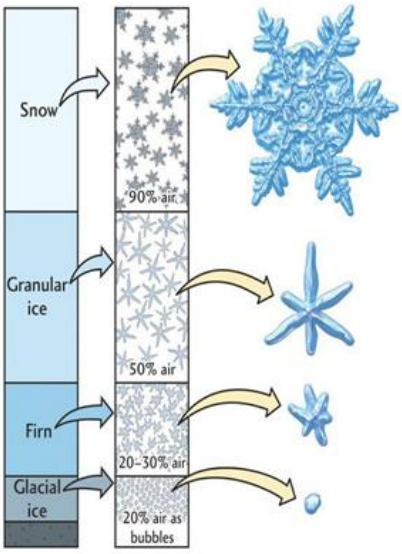
- Vast ice sheets spread over the UK from the north to cover all of northern Wales & northern England.
- Unglaciated areas in the south experienced frozen conditions (permafrost).

Extent of Ice today

Ice today covers 10% of the world's surface and is mainly found in Greenland, Antarctica and the Himalayas.

Glacier	A large mass of ice that flows very slowly under the force of gravity (like a river)
Glaciation	Effect on the land of being covered by ice
Ice Age	Period of long-term reduction in the temperature of Earth's surface and atmosphere
Ice sheet	A thick layer of ice that covers more than 50,000 sq km. E.g. Antarctic Ice sheet
Ice berg	Pieces of ice that formed on land and float in an ocean or lake.

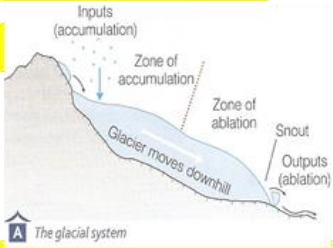
Formation of a glacier



1. Snowflakes accumulate in a hollow part of a mountain. Snowflakes are made up of 90% air.
2. Each years snowfall creates distinct layers
4. Continued snowfall compresses the snowflakes together due to the weight. This pushes out the air.
5. The continued compression turns snow into Firn.
6. After 20+ years the snow is so compressed over 80% of the air is removed turning it into glacial ice.

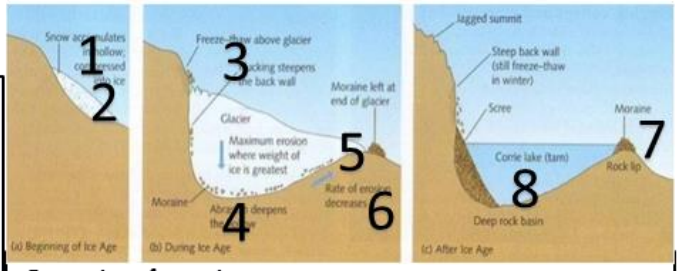
Glacial budget

Zone of Accumulation: The build up of snow and ice on a glacier.
Zone of Ablation: The loss of snow and ice due to melting.



Glacial Landforms created by erosion

Corries	Armchair-shaped hollow in the mountainside formed by glacial erosion, rotational slip and freeze-thaw weathering
Arêtes	a sharp, knife-like ridge formed between two corries cutting back by processes of erosion and freeze thaw
Pyramidal peaks	where several corries cut back to meet at a central point, the mountain takes the form of a steep pyramid
Truncated spurs	an former interlocking spur which has been sliced off by a valley glacier, forming steep edges
Glacial troughs	a steep-sided valley that was carved out by a glacier
Hanging valleys	a tributary glacial trough on the side of a main valley often with a waterfall
Ribbon lakes	a long narrow lake in the bottom of a glacial trough



Formation of a corrie:

1. Snow accumulates in north east facing hollows
2. Snow is compacted into ice and moves downhill
3. Freeze thaw and plucking creates a steep back wall and provides material for abrasion
4. Abrasion deepens the hollow and forms a rock basin
5. A rock lip is left where the rate of erosion is decreased
6. The height of the lip is increased by the deposition of moraine
7. The rock lip and moraine act as a dam
8. A corries lake (tarn) fills the rock basin when the ice melts
9. The typical shape is due to rotational slip by the way in which the ice moves

Geography

Glacial Processes:

Erosion:

Abrasion – rocks frozen to the base of the glacier scrapes the valley floor like sandpaper.

Plucking – The glacier freezes onto rocks. As glacier moves forward, these loose pieces of rock are plucked away from the valley sides.

Freeze-thaw weathering:
- Repeated cycles of freezing and thawing that can make cracks in rocks bigger.

Movement and Transportation:

Basal slip – meltwater helps to lubricate the glacier at the base, allowing it to slide downhill.

Rotational slip - In hollows up in the valley sides, the glacier flows along a curved axis due to gravity.

Internal deformation – slipping & deformation of individual ice crystals within the glacier

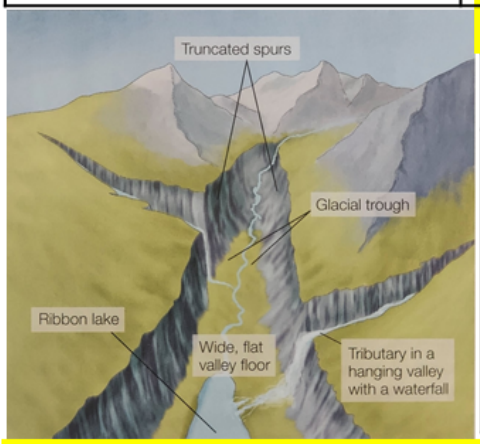
Bulldozing – rock debris is moved at the front of the glacier

Deposition:

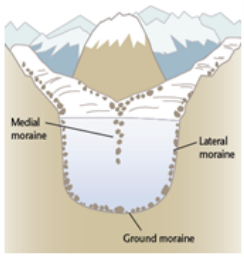
Till: Sediment that is deposited by a glacier that is unsorted and angular. Deposition occurs when the ice melts.

Melting at the snout means sediment (till) is dumped on the ground.

Meltwater from the snout carries sediment away depositing it in front of the glacier.



Glacial Landforms created by deposition

Erratics	Rocks transported and dumped by glacial ice to a different location, often hundreds of kms away – out of place.
Moraine 	Landforms made out of till, dropped a glacier as it melts. Types: **Lateral** – elongated ridge of till builds up at edge of glacier where it meets the valley side, fed by rocks from above **Medial** – when two tributary glaciers meet, two lateral moraines join together to form a single ridge in the centre of the main glacier **Ground** – uneven till deposits on the bedrock beneath the glacier **Terminal** – results from bulldozing, ridge at right angles to the valley forms at the snout of a glacier. Often marks its furthest extent

Opportunities and Challenges in Glaciated areas

	Opportunities	Challenges
Sheep Farming	Extensive grazing of sheep over large areas of land where soils are poor.	Grazing sheep remove vegetation from the landscape. Some conservationists want the landscape to be more natural.
Forestry	The planting and the management of forests e.g. Conifer tress in Scotland.	Coniferous forests don't support as many species as mixed woodland.
Quarrying	Extraction of rocks such as limestone, slate and granite for their economic value	Can lead to pollution of land and rivers and spoil the landscape.
Tourism	Spectacular glacial scenery attracts tourists who enjoy outdoor activities e.g. skiing, mountain biking, climbing.	Can cause conflict with local landowners over access to land. Local people may be affected by traffic congestion and rising house prices.

Living in Ice Environments

Almost **4 million people** live in the Arctic.

Life in the modern arctic:

In the 20th century immigration to the Arctic increased – people were drawn by new opportunities in industry. E.g. the Russian city of Norilsk, Siberia. This area mines Nickel which is stored within the permafrost.

Life in the traditional arctic:

Indigenous people account for 10% of the population and keep alive traditional ways of living while also adapting to the modern world. A lot of them live Nomadic lifestyles where they move from place to place and don't live in one place. They spend their lives hunting and herding. People have lived here for more than 20,000 years.

Some aspects of life have improved– e.g life expectancy, access to food. The increase in population has led to conflict in some places as modern and traditional ways of life clash and there is increased pressure on limited resources.

Year 9 Half-Term 1 German Knowledge Organiser

Die Ferien

Was hast du in den Ferien gemacht?	***What did you do in the holidays?***
Ich habe…	I have…
Musik gehört	listened to music
Volleyball gespielt	played volleyball
viele Souvenirs gekauft	bought lots of souvenirs
ein Buch gelesen	read a book
einen Bootsausflug gemacht	did a boat trip
Ich bin…	
windsurfen gegangen	I went windsurfing
schwimmen gegangen	I went swimming
Wakeboard gefahren	I went wakeboarding
an den Strand gegangen	I went to the beach

Wo hast du gewohnt?	***Where did you stay?***
Ich habe in…gewohnt = I stayed in…	I stayed in…
bleiben / wohnen = to stay	to stay
das Hotel = hotel	the hotel
die Jugendherberge = the youth hostel	the youth hostel
der Campingplatz = the campsite	the campsite
bei Freunden = with friends	with friends
das Ferienhaus = hotel house	the holiday house
die Ferienwohnung = holiday apartment / flat	holiday apartment / flat
Für wie lange? = For how long?	for how long?
einen Tag / zwei Tage = one day / two days	one day / two days
eine Nacht / zwei Nächte = one night/ two nights	one night / two nights
eine Woche / zwei Wochen = one week / two weeks	a week / two weeks
ein Wochenende = a weekend	a weekend
ein Monat / zwei Monate = one month / two months	one month / two months

<u>Wie bist du gefahren? = How did you get there?</u>

Ich bin … gefahren = I travelled…

mit dem Auto	by car
mit dem Schiff	by boat
mit dem Flugzeug = by plan	by plane
mit dem Reisebus = bu bus	by bus
mit dem Zug = by train	by train

es ist…	it is
es war…	it was..
toll	great
langweilig	boring
spitze	superb
furchtbar	awful

im Frühling	in the Spring
im Sommer	in the Summer
im Herbst	in the Autumn
im Winter	in the Winter

Das Wetter	***the weather***
Es ist… / es war…	it is… / it was…
sonnig	sunny
warm	warm
schön	nice
kalt	cold
es regnet	it is raining
es schneit	it is snowing
es hat geregnet	it rained
es hat geschneit	it snowed

German

Year 9 Half-Term 1 German Knowledge Organiser
Die Ferien

GRAMMAR

THE PERFECT (PAST) TENSE – used to tell someone what YOU HAVE DONE in THE PAST!! Learn and practise the following rules:

1) **YOU ALWAYS NEED 3 PARTS TO MAKE THE PAST TENSE** – the PERSON DOING THE VERB, THE HELPING VERB (HABEN OR SEIN) AND THE PAST PARTICIPLE (THE BIT YOU SEND TO THE END!)

2) Regular verbs with HABEN – to make the past participle, take the INFINITIVE, chop off the EN, add a "GE" to the beginning and a "T" at the end.

e.g. kaufen = gekauft; wohnen = gewohnt, machen = gemacht

3) Irregular verbs with HABEN – you need to learn the main irregulars including:

	Past participles
sehen (to see)	gesehen
lesen (to read)	gelesen
trinken (to drink)	getrunken
essen (to eat)	gegessen
finden (to find / think)	gefunden
übernachten (to stay overnight)	übernachtet

4) Verbs which use SEIN – any verbs which are linked with movement / travelling – the most common ones are:

gehen (to go)	gegangen
fahren (to travel)	gefahren
fliegen (to fly)	geflogen
bleiben (to stay)	geblieben
schwimmen (to swim)	geschwommen

High Frequency words

und	and
aber	but
oder	or
heute	today
gestern	yesterday
jetzt	now
oft	often
manchmal	sometimes
nie	never
selten	rarely
ab und zu	now and then
immer	always

Some examples to help:

Ich habe die Hausaufgaben gemacht	I have done the homework
Er hat eine CD gekaufT	He has bought a CD
Wir haben Pasta gegessen und Wasser getrunken	We have eaten pasta and drunk water
Ich bin nach Deutschland gefahren	I went to Germany

German

Year 9 Half-Term 1 German Sentence Builders

Die Ferien

Im Sommer (in the summer) Im Frühling (in spring) Im Herbst (in autumn) Im Winter (in Winter) In Deutschland (in Germany) In England (in England)	ist (is)	das Wetter (the weather)	kalt (cold) heiß (hot) neblig (foggy) windig (windy) schön (nice)	
Am Montag (On Monday) Letztes Wochenende (last weekend) Letzten Sommer (Last summer) Letztes Jahr (last year) In Spanien (In Spain)	habe ich (I have) haben wir (we have)	jeden Tag (every day) immer (always) oft (often) manchmal (sometimes) am Samstag (on Saturday)	mit meinen Freunden (with my friends) mit meiner Schwester (with my sister) mit Sophie (with Sophie)	Musik gehört (listened to music) Eis gegessen (eaten ice cream) ein Buch gelesen (read a book)
Ich bin (I) Wir sind (we) Er/Sie ist (he/she)	oft (often) gern (like) nie (never) selten (rarely)	mit dem Bus (by bus) mit dem Flugzeug (by plane) mit meiner Oma (with my grandma)	im Hotel geblieben (stayed in a hotel) nach Berlin geflogen (flew to Berlin) an den Strand gegangen (went to the beach	
Es ist (It is) Es war (it was) Ich finde es (I find it)	total (totally) ziemlich (quite) manchmal (sometimes) etwas (a little)	langweilig (boring) interessant (interesting) sonnig (sunny) aufregend (exciting) super (super)	aber auch (but also) doch auch (but also) und immer (and always)	schön (nice) furchtbar (terrible) spitze (top)

German

Year 9 German – Knowledge Organiser Half term 2 – Bist du ein Medienfan?

Im Kino

der Actionfilm(e)
das Drama (Dramen)
der Fantasyfilm(e)
der Horrorfilm(e)
die Komödie(n)
die Liebeskomödie(n)
der Science-Fiction-Film(e)
der Zeichentrickfilm(e)
Ich bin ins Kino gegangen.
Ich habe zu Hause eine DVD gesehen

At the cinema

action film
drama
fantasy film
horror film
comedy
romantic comedy, rom-com
science fiction film
cartoon
I went to the cinema.
I watched a DVD at home.

Im Fernsehen

Was siehst du gern?
Ich sehe (sehr/nicht) gern …
ich hasse
gucken/sehen
die Dokumentation(en)
die Gameshow(s)
das Musikvideo(s)
die Nachrichten (pl)
die Realityshow(s)
die Seifenoper(n)
die Sitcom(s)
die Serie(n)
die Sportsendung(en)

On TV

What do you like watching?
I (really/don't) like watching …
I hate
to watch
documentary
game show
music video
news
reality show
soap opera
sitcom
series
sports programme

Wie hast du den Film gefunden?

Ich habe den Film (furchtbar) gefunden.
der Schauspieler(–)
die Schauspielerin(nen)
blöd
gruselig
interessant
kindisch
langweilig
lustig
romantisch
schrecklich
spannend
unterhaltsam

What did you think of the film?

I thought the film was (awful).
actor
actress
stupid
creepy
interesting
childish
boring
funny
romantic
terrible
exciting
entertaining

Oft benutzte Wörter

weil
letzte Woche
am Wochenende
das nächste Mal
so
zu
total
gar nicht
immer
ab und zu
oft

High-frequency words

because
last week
at the weekend
next time
so
too
totally
not at all
always
now and then
often

German

Was liest du gern?	**What do you like reading?**
Ich lese gern …	I like reading …
Ich lese nicht gern …	I don't like reading …
Ich lese lieber …	I prefer reading …
Ich lese am liebsten …	I like reading … most of all
der Comic(s)	comic
der Roman(e)	novel
die Zeitschrift(en)	magazine
die Zeitung(en)	newspaper
die Website(s)	website
das Fantasybuch(-¨er)	fantasy book
das Sachbuch(-¨er)	factual/non-fiction book
die Biografie(n)	biography
das Blog(s)	blog

Wo liest du?	**Where do you read?**
im Bus	on the bus
im Zug	on the train
im Garten	in the garden
im Park	in the park
im Bett	in bed
im Schlafzimmer	in the bedroom
in der Pause	in the break, at breaktime
in der Schule	in school
in der Badewanne	in the bath
auf dem Sofa	on the settee
auf dem Klo	on the loo
auf dem Hof	on/in the school yard
auf dem Handy	on the mobile phone

Meinungen	**Opinions**
das finde ich (un)fair	I think that's (un)fair
das geht mir auf die Nerven	that gets on my nerves
das ist (un)gesund	that's (un)healthy
das ist aktiv	that's active
das ist passiv	that's passive
das macht (un)fit	that makes you (un)fit
das macht Spaß	that's fun
das stimmt (nicht)	that's (not) true
du hast recht	you're right
ich bin (nicht) süchtig	I'm (not) addicted
meiner Meinung nach …	in my opinion …
Unsinn!/Quatsch!	Nonsense!

Bist du süchtig?	**Are you addicted?**
eine Stunde pro Tag	an hour a day
zwei bis drei Stunden pro Tag	two to three hours a day
nicht mehr als drei Stunden pro Tag	no more than three hours a day
mehr als 20 Stunden pro Woche	more than 20 hours a week
nur am Wochenende	only at the weekend
nach den Hausaufgaben	after homework
von 20 bis 22 Uhr	from 8.00 to 10.00 pm

Classroom language:	
Darf ich…?	May I…
einen Kuli haben?	Have a pen?
auf die Toilette gehen?	Go to the toilet?
einen Klebstift haben?	Have a gluestick?
Danke schön	Thank you
Was ist das Datum?	What is the date?

German

Year 9 Half-Term 2 German Knowledge Organiser Sentence Builder

Bist du ein Medienfan?

Ich sehe gern (I like to watch) Ich sehe nicht gern (Idon't like to watch) Ich hasse (I hate) Ich liebe (Ilove) Ich mag (I like) Mein Bruder mag (My brother likes) Meine Freundin liebt (My friend loves)	Sportsendungen(sports programs) die Nachrichten (the news) Dokumentarfilme (documentaries)	wie	Match of the Day. News at 10. Planet Earth.	
Ich liebe (I love) Er liebt (he loves) Sie liebt (she loves) Wir lieben (we love)	Krimis (Krime programmes) Kindersendungen (cartoons) Filme (films)	weil sie (because they) obwohl sie (although they)	unterhaltsam (entertaining) spannend (exciting) romantisch (romantic) langweilig (boring) zu lang (too long)	sind. (are)
Ich sehe (I watch) Wir sehen (we watch) Er/Sie sieht (he/she watches)	am Wochenende (at the weekend) immer (always) jeden Tag (every day	mit meinen Freunden (with my friends) zu Hause (at home) im Kino (at the cinema)	Zeichentrickfilme. (cartoons) Komödien. (comedies) Actionfilme. (action films)	
Letztes Wochenende (last weekend) Gestern (yesterday) Letzten Sonntag (last Sunday)	habe ich (I have)	Spiderman gesehen (watched Spiderman)	Es war (it was)	super. (super) langweilig. (boring) zu laut. (too loud)

German

Why did the Great War start?: World wars begin for a number of different reasons that **build up over a number of years (long-term causes).** Many countries took pride in their country leading to rivalry between nations. Countries began building their armies and navies to make sure theirs was best. There was a race to gain control of other nations which led to more tension and rivalry. As countries felt more threatened, they began to join in alliances. **By 1914 Europe was like a barrel of gunpowder**, only needing a spark to make the whole thing explode.

German nationalism: After the Franco-Prussian war in 1870-1871 the German Empire was created with Kaiser Wilhelm I as its emperor, before this there had been many separate German states. **Pride in the German victory spread throughout German states.** These states shared a common language and traditions. This new nation in the middle of Europe and German politicians were aware that the **great powers might be suspicious** of their new country and ambitions, they **upset the 'balance of power'.**

Imperialism: The Great Powers of Britain, France, Germany and Austria-Hungary were all trying to gain and maintain colonies.
Colonies were important to them as they provided raw materials for growing industries and markets. **Colonies contributed to the wealth of the great powers** and therefore to their strength and importance. Britain had the largest empire in the world which was protected by the Royal Navy, they intended to keep their status. **Germany wanted to be a strong world power by building an empire, this was seen as a challenge by the British.** In order to protect their empires, the Great Powers needed to build their military and make alliances.

Alliances: As each country began to feel threatened, they looked for **friends to back them up in a time of war**—known as allies. Europe split into two alliances. Britain, France and Russia formed the Triple Entente, and Germany, Austria-Hungary and Italy formed the Triple Alliance. The idea was to put people off starting a war as it would mean fighting three nations as opposed to one. Although this made them more secure, it meant that **it would only take one small disagreement between two nations and all of them would be dragged into a war**. The German Kaiser believed Germany was deliberately being surrounded by hostile powers that were determined to stop Germany becoming a great power.

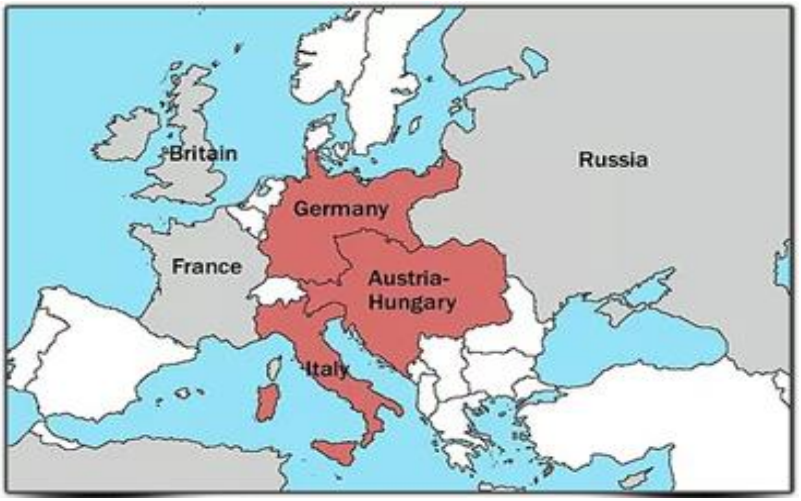
Militarism/Anglo-German arms race: Britain had ruled the seas without any challenge since 1805 (Battle of Trafalgar). **Kaiser Wilhelm II announced he would build a powerful German navy, in belief that to become a world power, it had to challenge the might of the British navy.** Germany passed the 1898 and 1900 Navy Laws, ordering the building of battle ships, the first 19 and the second 38. **The British response was to build the HMS Dreadnought.** Launched in 1906 it made all other battleships instantly out of date. **Germany built their own version SMS Rhineland.** By 1914 Germany had doubled its navy and was the second biggest naval power. **Britain was suspicious so developed relations with Russia and France.**

Nationalism and the Balkans: The Balkans began demanding independence as the Ottoman Empire lost power. Turkey began losing control of the Balkan states. **Austria-Hungary worried Serbs in their empire would demand independence too**. Russia took interest in the Balkans hoping to increase their own power. Serbia had grown stronger and the rise in **Serbian nationalism meant Serbia was a direct threat to Austria.**

Assassination in Sarajevo: nationalism: On the 28th June 1914, the heir to the Austro-Hungarian empire—Archduke Franz Ferdinand—arrived in the Bosnian city of Sarajevo. **Bosnia had been annexed by Austria in 1908—but many were unhappy about this.** They wanted to join their neighbours, Serbia. The 'Black Hand Gang' **wanted to unite Bosnia and Serbia and planned to assassinate the Archduke.** Gavrilo Princip successfully shot the Archduke and his wife Sophie. **Anti-Serb riots broke out in Austria and Austria declared war on Serbia.**

Schlieffen Plan: The two countries Germany feared most were France and Russia. **It was essential for Germany to avoid fighting them at the same time.** In 1897 Field Marshal Alfred von Schlieffen began to draw up a plan. The plan was to defeat both enemies quickly. If Germany was threatened with war, they **would attack and defeat France first, before turning to fight Russia.** It required the German army to mobilise early. **It was because of the Schlieffen plan, Germany declared war on France and invaded Belgium in August 1914.** Britain had promised to defend Belgium.

Year 9: Unit 1: Was WW1 Inevitable?



Alliances	Countries that are friendly towards each other make an agreement that benefits each of them and become allies.
Nationalism	Having pride in your country and thinking that it's better than others. This caused tension between countries in Europe.
Empire/ Imperialism	Some countries take over others and create an empire. The countries they take over become colonies. Lots of European countries were building up their empires which led to tension.
Militarism	To compete with others to have the strongest military. This can lead to an arms race where countries spend lots of money building up their armies and navies.

Assassination	The murder of someone famous or important. Archduke Franz Ferdinand was assassinated in Sarajevo on 28th June 1914.
Schlieffen Plan	A plan made to help Germany beat both France and Russia if necessary.
Mobilise	Prepare and organise troops for service – get ready to fight.
Kaiser	German word of 'emperor'.
Great powers	Countries that have international influence and military strength.
Colony	Land under the control of people from another country.
Balkans	An area of land in south-east Europe that included Bosnia, Serbia and Turkey. This is where nationalism grew and worried the great powers.
Annex	Seizing an area of land and making it part of your country.
Dreadnought	A large and fast battleship with large guns: the best warship at the time.
The Black Hand	A group of Serbian army officers who wanted to unite all Serbs in the Balkans, they called themselves ' Unification or Death'.

28 July: Austria-Hungary blames Serbia for killing the Archduke. It attacks Serbia.

29 July: Russia, who has promised to protect Serbia against attack, gets its army ready to attack Austria-Hungary.

1 August: Germany, who supports Austria-Hungary, hears about Russian preparations for war. Germany declares war on Russia.

2 August: Britain prepares its warships.

3 August: Germany, whose plan is to defeat France BEFORE attacking Russia, declares war on France.

4 August: Germany asks Belgium to allow German soldiers to march through their country to attack France. Belgium says 'no'. Germany marches in anyway. Britain, who has a deal to protect Belgium from attack (dating back to 1839), declares war on Germany.

6 August: Austria-Hungary declares war on Russia.

12 August: Britain and France declare war on Austria-Hungary.

History

Who fought and where? When war was declared, thousands of men **volunteered to join the 247,000 soldiers in the British army**. Men had to be 18 to join up and 19 to fight overseas, many lied about their age. **In the first year of war, 1.1 million men enlisted. In January 1916 conscription was introduced**, it became compulsory for single men aged 18-41 to join. Later in the year, this was extended to include married men. **Fighting took place across the globe, in Africa, France, Italy , Russia, The Middle East and at sea.**

Indian and Sikh contributions When war broke out in 1914, as part of the British Empire, India rallied to the support of Britain. **Over 1.4 million Indian soldiers and non-combatants served in the war,** including on the Western Front. **For many Sikhs, bravery on the battlefield was in itself an honourable act**, one soldier fighting on the Somme wrote, *"It is quite impossible that I should return alive. Don't be grieved at my death because I shall die arms in hand, wearing the warriors clothes. This is the most happy death that anyone can die"*. **But any Sikh soldiers who'd hoped that their loyalty during the war would be rewarded with greater autonomy back in their homeland were in for a shock.**

Trench warfare By December 1914 it was clear **the Schlieffen Plan had not worked**. British, French and Belgian troops had fought back stronger than anticipated. **Germany was faced with war on two fronts, the Western Front and the Eastern Front** where both sides had dug long lines of trenches. Neither side could move forwards, **it was stalemate.** Soldiers had to live with poor conditions. It was impossible to keep clean and healthy. **Constant shelling across No Man's Land and masses of mud made it harder**.

Impact of living in the trenches Armies were **forced to live underground for days on end leading to poor health conditions.** There were a range of physical, psychological, short-term and long-term impacts. Body lice swarmed men's clothing, the cold wet conditions led to trench foot and constant artillery fire led to shell shock. **Shell shock was largely misunderstood**. Some cases **resulted in men being court-martialled**, accused of being a coward or deserter and being shot by their own leaders. **In 1922 the British War Office Committee announced shell shock didn't exist. Today it is recognised as post-traumatic stress disorder (PTSD).**

Lions led by donkeys? WW1 was a made up of many different battle across the globe. Fighting was dragged out for four years, leading to many casualties and deaths. **Stalemate at the frontline was never broken** and fighting ultimately came to an end when food supplies were running out. This led to many **questions about how effective the leadership of the allied forces was and has become open to debate.** Even today, people hold strong opinions about the commanders of the British and Allied forces in the Great War.

Butcher of the Somme? The Allied Infantry attack on German trenches at the Somme began on 1st July 1916. By the end of **the first day, 57,470 Allied and 8,000 German soldiers were dead or wounded**. A week before the attack, the Allies had begun a bombardment, designed to destroy the German front-line trenches. The Germans knew about Allied preparations from reports by observer aeroplanes. Their troops retreated to dug-outs and waited as the Allies shelled empty trenches. **The Germans emerged unhurt and set up their machine guns when the Allied infantry attacked**. Even after the first disastrous day, the Allied commander, General Haig, saw no reason to change his tactics. **For his part, Haig was given the nickname 'the Butcher of the Somme'.**

Gains and losses of WW1 The **loss of 616,382 British servicemen** had terrible long-term effects, children without fathers, widows. The men who died or were injured could have been talented doctors, engineers, poets, teachers, plumbers or policemen. Some people call them **the lost generation**. There was a shortage of housing, two million unemployed by 1921 and reduced pay causing a general strike. **However, WW1 sped up change** in many areas. **Medicine and medical techniques developed from treating the wounded**, such as blood transfusions, x-rays and plastic surgery. **Aircraft design developed** and wireless radio as well as use of chemicals.

Was the end of WW1 the start of WW2? The Great War ended when the German Kaiser abdicated and the government **called for an armistice**. In 1919 the winning countries decided what should happen to Germany, resulting in the Treaty of Versailles. **The treaty was humiliating for Germany**.

Key term	Definition
Allied forces	*British troops and those fighting with and for Britain – e.g. France, Russia, India.*
Artillery	*Part of the armed forces that use large guns used to fire shells.*
Armistice	*An agreement made by opposing sides to stop fighting – a truce.*
Autonomy	*The right to be able to rule/govern your own country (as opposed to being ruled by another country).*
Bombardment	*A continuous attack with shells intended to destroy trench defences, especially barbed wire.*
Campaign	*Organised plan/action/fighting to achieve a goal.*
Conscription	*Forcing people to join the army rather than relying on volunteers – From 1916 conscription was introduced.*
Court Martial	*Going to court for offences against of military law - for being a coward or deserting - resulted in execution.*
Eastern Front	*The zone of fighting across Russa and parts of Romania. Over twice as long as the Western Front.*
Economic	*To do with money, resources and production of goods and services – how wealth is earned and spent.*
Enlist	*To join the armed services.*
Political	*Relating to the government, laws or decisions regarding a country, city or groups of people.*
Psychological	*Affecting or relating to the mind – mental or emotional state of a person.*
Shell Shock	*Psychological damage caused by exposure to war-especially being under bombardment.*
Social	*Relating to impacts on people and communities – e.g. death, medicine, housing and work.*
Treaty	*A formal agreement between countries or states. E.g. The Treaty of Versailles.*
Western Front	*The zone of fighting across France and Belgium – From Switzerland to the English Channel.*

The Somme was a joint operation between British and French forces intended to achieve a decisive victory over the Germans on the Western Front.

Short-term occurring over or involving a relatively short period of time

Long-term occurring over or involving a relatively long period of time

The Gallipoli campaign *(25 April 1915 - 9 January 1916)* was the land-based element of a strategy intended to allow Allied **ships to pass through the Dardanelles**, capture Constantinople (now Istanbul) and ultimately knock Ottoman Turkey out of the war. But Allied **plans were based on the mistaken belief that the Ottomans could be easily overcome**.

Lions led by donkeys? Interpretations of WW1 leadership

The commanders were 'donkeys'. **They were incompetent** and didn't take care of their soldiers, the 'lions'. **They sat in safety behind the lines** while they sent their troops charging against machine guns and barbed wire. **Their men resented them** and only obeyed because they would be shot otherwise.

The commanders **didn't do a great job** and the soldiers paid the price. However, we shouldn't blame only the military commanders, since the **politicians shared in the big decisions** and **technology** was not what it is now.

The commanders **did a remarkable job** while facing tremendous challenges. They had to create a **huge army from ordinary civilians in a short space of time.** They also learnt new tactics and used new weapons as they became available. **They took as much care of their men as they could** and relations between officers and men were good.

History

Computer science Digital Literacy HT1

Hacking is when someone accesses your computer or the data held on it without your permission or knowledge. Hackers generally come in one of three forms: Black Hat, White Hat, and Grey Hat.

White Hat — White-Hat Hackers are also known as Ethical Hackers.

- They are certified hackers who learn hacking from courses.
- These are good hackers who try to secure our data, websites. With the rise of cyberattacks, organizations and governments have come to understand that they need ethical hackers.

Black Hat — They hack systems illegally.

- They use their skills to deceive and harm people.
- They conduct various attacks, write malware, and damage system security.
- They steal users' passwords, data, and credit card information by damaging system security.

Grey Hat — These types of hackers find vulnerabilities in systems without the permission of owners.

- They don't have any malicious intent. However, this type of hacking is still considered illegal.
- They find issues and report the owner, sometimes requesting a small amount of money to fix it.

Virus
- Harms your computer in some way, usually by deleting or altering files and stopping programs from running.

Trojan
- Starts by pretending to be a trusted file, but gives **unauthorised access** to your computer when you run it.

Worms
- **Worms** are difficult to get rid of. They copy themselves over networks to **external storage devices**

Spyware
- Collects information from your computer and sends it to someone.

Scareware
- Tricks you into thinking it's software that you need to buy.

A well-designed workstation

A: 45cm between eyes & screen
B: adjustable screen at or slightly below eye level
C: chair supports lower back and shoulder blades
D: elbow angle between 90–120 degrees, keyboard within easy reach
E: wrist support for mouse hand to prevent wrist strain
F: chair is height adjustable
G: feet should touch the floor – add foot rest if too high

Health and safety regulations

The **law states** that an employer must:

- ✓ provide tiltable screens
- ✓ provide anti-glare screen filters
- ✓ provide adjustable chairs
- ✓ provide foot supports
- ✓ make sure lighting is suitable
- ✓ make sure workstations are not cramped
- ✓ plan work at a computer so that there are frequent breaks
- ✓ pay for appropriate eye and eyesight tests by an optician

Computer law

Computer Misuse Act

- The **Computer Misuse Act** attempts to discourage people from using computers for illegal purposes. There are three separate parts to the Act:
- It is illegal to access data stored on a computer unless you have permission to do so.
- It is illegal to access data on a computer when that material will be used to commit further illegal activity, such as fraud or blackmail.
- It is illegal to make changes to any data stored on a computer when you do not have permission to do so.

The **Copyright, Designs and Patents Act**

- When anyone creates something, they own it. What they create might include:
- a picture, drawing or photograph
- a video, television programme or film
- text, such as a book, article or report
- a game
- This applies to any copyrighted material, such as music, films, games and television programmes.

The impact of computer science technologies

Ethics are moral principles, or rules, which govern a person's attitudes and behaviour.

Ethical issues in computing include:
Ensuring public safety - the introduction of new technologies brings safety concerns. For example, driverless cars may soon be on the roads in the UK. The designers of driverless cars have not only had to ensure the safety of passengers, but also of other drivers and pedestrians.
Security of data - there are people that attempt to hack systems in order to gain access to other people's data. Social media accounts, phone mailboxes and networks that computers connect to are all prone to hacking.

IT : Computer Science

Data Representation computer science

Key terms	Definition
Encryption	Files that are encrypted have been altered using a secret code and are unreadable to unauthorised parties.
Caesar cipher	The **Caesar cipher**, also known as a shift cipher, is one of the oldest and simplest forms of encrypting a message.
Cryptography	The art of writing or solving codes.
Cipher	Put (a message) into secret writing; encode.
Plain text	Text that is not written in code.
Denary/decimal	Numbering system that uses base 10 (0-9) our normal numbers that we use every day.
Binary	Numbering system that uses base 2 (0s & 1s) this is the only language a computer understands.
Hexadecimal	Numbering system which uses base 16 (0-9 and A-F) these are used to represent colours and code.
Binary logic	Processing based on the binary numbering system.

Units of storage

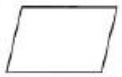
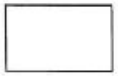
Name	Size	Typical examples
Bit (b)	1 binary digit	0 or 1.
Nibble	4 bits	Half an 8-bit sequence, used in hexadecimal.
Byte (B)	8 bits	Large enough to store one character (F, for example).
Kilobyte (KB)	1000 bytes	Small documents and text files.
Megabyte (MB)	1000 kilobytes	Computer documents, music files and images.
Gigabyte (GB)	1000 megabytes	High-resolution videos and games.
Terabyte (TB)	1000 gigabytes	Capacity of large backup storage drives.
Petabyte (PB)	1000 terabytes	International cloud storage systems.

Common pseudocode notation

There is no strict set of standard notations for pseudocode, but some of the most widely recognised are:

- **INPUT** – indicates a user will be inputting something
- **OUTPUT** – indicates that an output will appear on the screen
- **WHILE** – a loop (iteration that has a condition at the beginning)
- **FOR** – a counting loop (iteration)
- **REPEAT – UNTIL** – a loop (iteration) that has a condition at the end
- **IF – THEN – ELSE** – a decision (selection) in which a choice is made
- any instructions that occur inside a selection or iteration are usually indented

Standard Flow Chart Symbols

	Used at the start or end point of a flow diagram.
	Used to represent the input or output of data in a process.
	Used when a decision or choice must be made.
	A process symbol, used to indicate a process or computational task being carried out.
	Used to represent a sub-routine that can be called at various points of an algorithm.

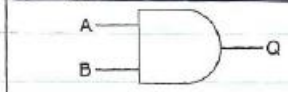
Caesar Cipher

Named after **Julius Caesar**, it is one of the oldest types of ciphers. It is considered a weak method of cryptography, as it is easy to decode the message owing to its minimum-security techniques.

Decimal (Base 10)	Binary (Base 2)	Hexadecimal (Base 16)
0	0000	0
1	0001	1
2	0010	2
3	0011	3
4	0100	4
5	0101	5
6	0110	6
7	0111	7
8	1000	8
9	1001	9
10	1010	A
11	1011	B
12	1100	C
13	1101	D
14	1110	E
15	1111	F

Logic Gates

AND gate



For an output at Q there must be an input at both A **AND** B.

A	B	Q
0	0	0
0	1	0
1	0	0
1	1	1

There is an output at Q only if there are inputs at A **AND** B.

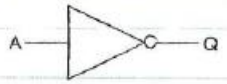
OR gate

For an output at Q there must be an input at either one of A **OR** B **or at both of them.**

A	B	Q
0	0	0
0	1	1
1	0	1
1	1	1

There is an output at Q if there is an input at A **OR** B or at both of them.

NOT gate



There is an output at Q only if there is **NOT** an input at A.

A	Q
0	1
1	0

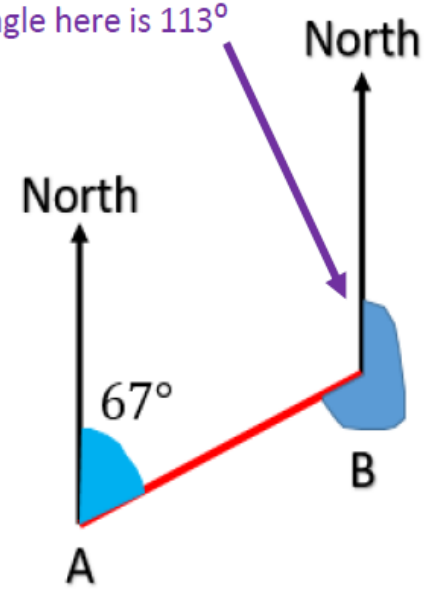
There is an output at Q only if there is **NOT** an input at A.

IT : Computer Science

Bearings:

1. 3 Figures
2. Measure from North (000°)
3. Measure Clockwise

Co-Interior Angles add up to 180°. The angle here is 113°



The bearing of **B from A is 067°**. The bearing of **A from B is 247°**

Recurring Decimals and Fractions

$x = 0.272727\ldots$

$100x = 27.272727\ldots$

$99x = 27$

$x = \frac{27}{99} = \frac{3}{11}$

$x = 0.35555\ldots$

$10x = 3.55555\ldots$

$9x = 3.2$

$90x = 32$

$x = \frac{32}{90} = \frac{16}{45}$

Standard Index Form:

Must be written in the form: $A \times 10^n$, where $\mathbf{1 \leq A < 10}$ and n **is an integer**

$2835000 = 2.835 \times 10^6$

$0.00065 = 6.5 \times 10^{-4}$

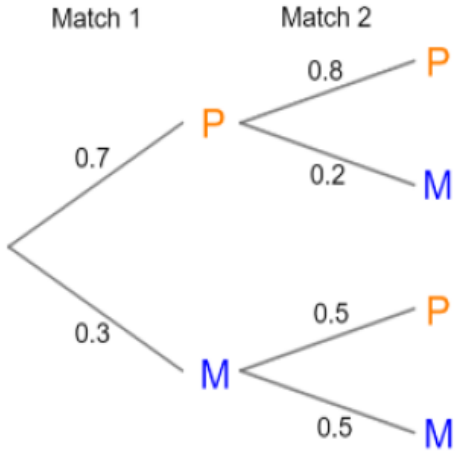
9A Half-term 1

Product Rule for Counting

A Meal Deal consists of 12 sandwiches, 13 snacks and 9 drinks.
The total number of possible meals is:

$12 \times 13 \times 9 = 1404$

Tree Diagrams



P(Peter wins both Games) $= 0.7 \times 0.8 = \mathbf{0.56}$

P(Peter wins both Games) $= 0.3 \times 0.5 = \mathbf{0.15}$

P(Peter wins exactly 1 game) = PM or MP

$= (0.7 \times 0.2) + (0.3 \times 0.5) = 0.14 + 0.15 = \mathbf{0.29}$

P(Peter wins at least 1 game) = 1 − P(Peter wins no games)

$= 1 - (0.3 \times 0.5) = 1 - 0.15 = \mathbf{0.85}$

Probability:

All probabilities must add up to 1

	Win	Lose	Draw
Probability	0.2	0.32	x

P(Draw) = $1 - 0.32 - 0.2 = 0.48$

If I play 450 games I would expect to win:

Expectation = $450 \times 0.32 = 144$

Adding and Subtracting Algebraic Fractions

Look for a common denominator (the easiest way is to multiply the two denominators. Find equivalent fractions and then add/subtract

$$\frac{4}{3a} + \frac{5}{8b} = \frac{32}{24ab} + \frac{15}{24ab} = \frac{37}{24ab}$$

$$\frac{4}{x-2} - \frac{5}{2x+1} = \frac{4(2x+1)}{(x-2)(2x-1)} - \frac{5(x-2)}{(x-2)(2x-1)} = \frac{4(2x+1) - 5(x-2)}{(x-2)(2x-1)} = \frac{3x+14}{(x-2)(2x-1)}$$

Maths

Triple Brackets

To expand triple brackets, expand any 2 sets of the brackets, simplify and multiply by the 3rd and simplify again

$$(2x-1)(3x+2)(4x-7)$$
$$=(6x^2+4x-3x-2)(4x-7)$$
$$=(6x^2+x-2)(4x-7)$$
$$=24x^3-42x^2+4x^2-8x-7x+14$$
$$=\mathbf{24x^3-38x^2-15x+14}$$

Negative and Fractional Indices

$$x^{-n}=\frac{1}{x^n}$$
$$x^{\frac{1}{n}}=\sqrt[n]{x}$$
$$6^{-3}=\frac{1}{6^3}=\frac{1}{216}$$
$$\left(\frac{4}{7}\right)^{-2}=\left(\frac{7}{4}\right)^{2}=\frac{49}{16}$$
$$121^{\frac{1}{2}}=\sqrt{121}=11$$
$$64^{\frac{1}{3}}=\sqrt[3]{64}=4$$
$$\left(\frac{25}{36}\right)^{3/2}=\left(\frac{5}{6}\right)^{3}=\frac{125}{216}$$

Solving Quadratics by factorising:

$$x^2-x-42=0$$

We require 2 numbers that **add to make the coefficient of x (-1)** and **multiply to make the constant term (-42).** The two numbers are -7 and 6. We then factorise the quadratic:

$$(x-7)(x-6)=0$$

Either: $x-7=0$ or $x+6=0$

$(+7)$ $(+7)$ (-6) (-6)

Solutions: $x=7$ or $x=-6$

Adding and Subtracting Algebraic Fractions

Look for a common denominator (the easiest way is to multiply the two denominators. Find equivalent fractions and then add/subtract

$$\frac{4}{3a}+\frac{5}{8b}=\frac{32}{24ab}+\frac{15}{24ab}=\frac{37}{24ab}$$

$$\frac{4}{x-2}-\frac{5}{2x+1}=\frac{4(2x+1)}{(x-2)(2x-1)}-\frac{5(x-2)}{(x-2)(2x-1)}=\frac{4(2x+1)-5(x-2)}{(x-2)(2x-1)}=\frac{3x+14}{(x-2)(2x-1)}$$

Solving Linear Equations:

Linear Equations can have fractional and negative solutions!

$$\frac{5x-3}{4}=\frac{2x+9}{3}$$

Multiply both sides by 12 as it is the LCM of 4 and 3

$$\frac{12(5x-3)}{4}=\frac{12(2x+9)}{3}$$

12÷4=3 and 12÷3=4

$$3(5x-3)=4(2x+9)$$

Expand the brackets

$$15x-9=8x+36$$
$(-8x)$ $(-8x)$
$$7x-9=36$$
$(+9)$ $(+9)$
$$7x=45$$
$(\div 7)$ $(\div 7)$

Solution: $x=\frac{45}{7}$

Remember to simplify your fractions if you can!

Index Laws:

$$x^a\times x^b=x^{a+b}$$
$$\frac{x^a}{x^b}=x^a\div x^b=x^{a-b}$$
$$(x^a)^b=x^{ab}$$

Sequences

Find the first 3 terms of the sequence with nth term: $3n^2-7$

$$n=1,\Rightarrow(3\times1^2)-7=-4$$
$$n=2,\Rightarrow(3\times2^2)-7=5$$
$$n=3,\Rightarrow(3\times3^2)-7=20$$

Find the first 3 terms of the sequence given by: $n(n-4)$

Remember: $n(n-4)=n\times(n-4)$

$$n=1,\Rightarrow1\times(1-4)=1\times-3=-3$$
$$n=2,\Rightarrow2\times(2-4)=2\times-2=-4$$
$$n=3,\Rightarrow3\times(3-4)=3\times-1=-3$$

Surface Area

Surface Area of Cylinder

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

9A Half-term 2

Perimeter and Area

$$Area\ of\ a\ Trapezium=\frac{1}{2}(a+b)h$$
$$Area\ of\ a\ Circle=\pi r^2$$
$$Circumference\ of\ a\ Circle=\pi d=2\pi r$$
$$Area\ of\ a\ Sector=\frac{\theta}{360}\times\pi r^2$$
$$Arc\ Length=\frac{\theta}{360}\times\pi d=\frac{\theta}{360}\times2\pi r$$

Volume

$$Volume\ of\ Prism$$
$$=Cross\ sectional\ area\times Length$$

$$Volume\ of\ Clyinder=\pi r^2h$$

Combining Ratios

In a field, the ratio is Cows to Pigs is 3:4 and the ratio of Pigs to Sheep is 6:1. The ratio of Cows to Pigs to Sheep is Given by:

C:P	P:S
3:4	6:1

We need to make the number of Pigs the same as they are common to both ratios

C:P	P:S
9:12	12:2

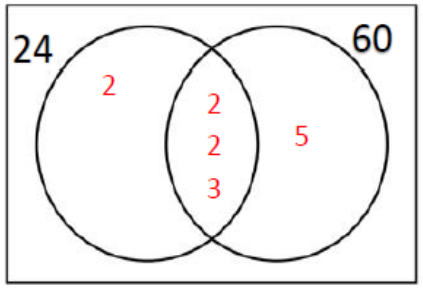
C:P:S

9:12:2

Maths

Prime Factor Decomposition

$24 = 2^3 \times 3$ and $60 = 2^2 \times 3 \times 5$



HCF is the product of numbers in the overlapping section

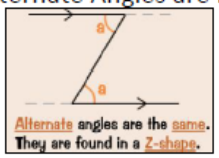
$HCF = 2 \times 2 \times 3 = 12$

LCM is the product of **ALL** numbers

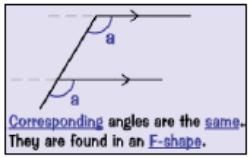
$LCM = 2 \times 2 \times 2 \times 3 \times 5 = 120$

Angles in Parallel Lines

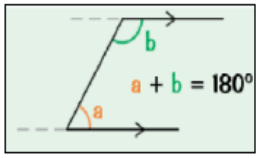
Alternate Angles are Equal



Corresponding Angles are Equal

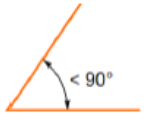


Co-interior Angles are Supplementary (Add up to 180°)

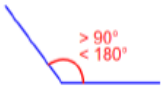


Angle Properties:

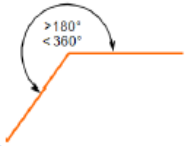
Acute angle: Less than 90°



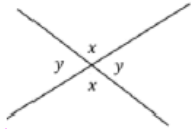
Obtuse angle: Greater than 90°, but less than 180°



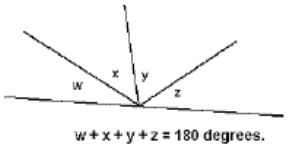
Reflex angle: Greater than 180°



Vertically Opposite angles are equal



Angles on a straight line add up to 180°



Expanding and Simplifying:

Expand both sets of brackets separately and then collect like terms.

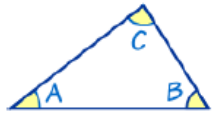
$4(2x - 5) - 2(3x - 1) = 8x - 20 - 6x + 2 = 4x - 18$

Expanding Double Brackets

Use FOIL (First Outside Inside Last) and then collect like terms

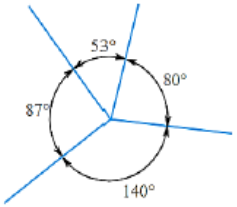
$(x + 7)(x - 3) = x^2 - 3x + 7x - 21 = x^2 + 4x - 21$

Angles inside a triangle add up to 180°

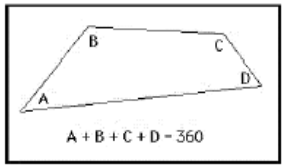


A + B + C = 180°

Angles around a point add up to 360°



Angles inside a quadrilateral add up to 360°



9B

Half-term 1

Factorising:

$10x - 25 = 5(2x - 5)$

$x^2 - 40x = x(x - 40)$

$16x^2y + 24xy^2 = 8xy(2x + 3y)$

Remember to check your answers by expanding the brackets!

Substitution

Find the value of $a^3 + 2b$, when $a = 2, b = 3$,

$2^3 + (2 \times 3) = 8 + 6 = 14$

If $y = 5x - 7$, find the value of y when $x = 1$

$y = (5 \times 1) - 7 = 5 - 7 = -2$

Find the value of $3xy^2$ when $x = 2, y = -4$

$3 \times 2 \times (-4)^2 = 96$

Polygons

$Interior\ Angle + Exterior\ Angle = 180°$

$Sum\ Of\ Interior\ Angles = 180° \times (n - 2)$, where n is the number of sides

For Regular Polygons (All sides and angles the same):

$Exterior\ Angles = \frac{360°}{n}$ and

$Number\ of\ Sides = \frac{360°}{Exterior\ Angle}$

Simplify:

$4x^2 - 7x - 2x^2 - 11 + 5x - 10$

$= 2x^2 - 2x - 21$

$4x^2 - 2x^2 = 2x^2$

$-7x + 5x = -2x$

$-11 - 10 = -21$

Maths

Plotting Linear Graphs:

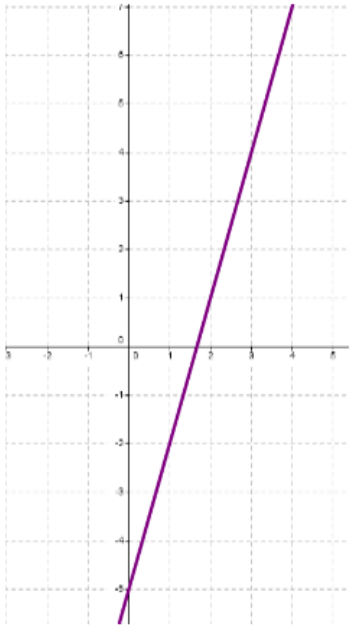
$y = 3x - 5$

When $x = 2, y = (3 \times 2) - 5 = 1$

x	-3	-2	-1	0	1	2	3
y	-14	-11	-8	-5	-2	1	4

Coordinates are (-3, -14), (-2,-11) etc.

Plot these coordinates on a coordinate grid and join them together to form a **STRAIGHT LINE**

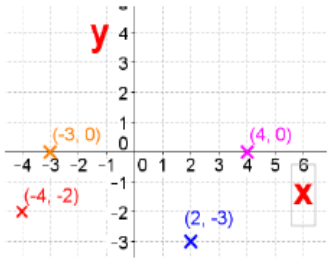


Coordinates

(x, y)

x value: Along the Corridor

y value: Up/down the stairs



Estimation

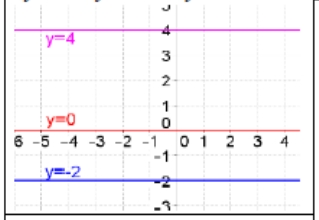
Round each number to 1 significant figure

$$\frac{8.15 \times 19.85}{3.75^2} \approx \frac{8 \times 20}{4^2}$$

$$= \frac{160}{16} = 10$$

Horizontal Line Graphs

$y = 4, y = -2, y = 0$ *etc.*



Vertical Line Graphs

$x = 3, x = -1,$

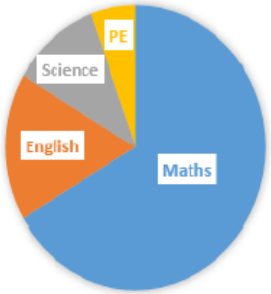
$x = 0$ *etc.*

Pie Charts:

Subject	Frequency	$Angle = Magic\ Number \times Freq.$
Maths	12	$18 \times 12 = 216°$
English	3	$18 \times 3 = 54°$
Science	2	$18 \times 2 = 36°$
PE	1	$18 \times 1 = 18°$
	Total = 20	

$Degreees\ Per\ Person = 360 \div Total\ Freqency$

$= 360 \div 20$



Sources of Data

Primary Data: Data that you have collected yourself

Secondary data: data that someone else has collected and you have used

Dividing by a Decimal:

Make the number we are dividing by an **INTEGER**

$\times 100$ ↻ $0.246 \div 0.02$, $24.6 \div 2$ ↻ $\times 100$

$$2\overline{)24.6} = 12.3$$

$\times 10$ ↻ $1.738 \div 0.5$, $17.38 \div 5$ ↻ $\times 10$

$$5\overline{)17.380} = 3.476$$

Remember that if you divide by a number between 0 and 1 your answer will be bigger!

Significant Figures

$352.6 \rightarrow 350 (1sf),$

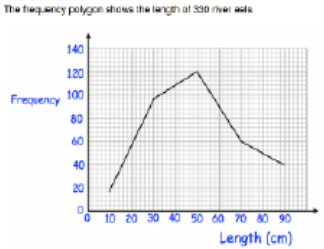
$0.0712 \rightarrow 0.07 (1sf)$

$419562 \longrightarrow 420000\ (3sf)$

Always look for the Important Digits!

Frequency Polygons

Plot the frequency against the midpoints of each class



9B Half-term 2

Types of Data

Qualitative Data (Categorical Data): Eye Colour, Favourite Colour etc.

Quantitative Data (Numerical Data) can be split into Discrete and Continuous

Discrete Data: Data can only take specific values (Number of bedrooms in house etc.)

Continuous Data: data that can take any value (Height, Weight etc.)

Maths

RAP Rhythm And Poetry. A genre of music that came out of the New York sub-culture with Hip-Hop.

Melody The main tune

Major A type of scale in Western music, the major gives a bright sound to the melody/harmony. A major triad has a major 3rd interval between the root note and the 3rd .

Minor A type of scale in Western music, the minor gives a dark sound to the melody/harmony. A minor triad has a minor 3rd interval between the root note and the 3rd .

Chord A cluster of notes played together, usually in the form of a triad (3 note chord). The chord is the harmony that supports the melody

Bassline A single line of harmony that is often prominent in RAP music.

Backing vocals the voices that support the lead vocal, often set in harmony ie not singing the melody.

Vocalisation Lyrics that are syllables not words, eg ooh/ahh/baa.

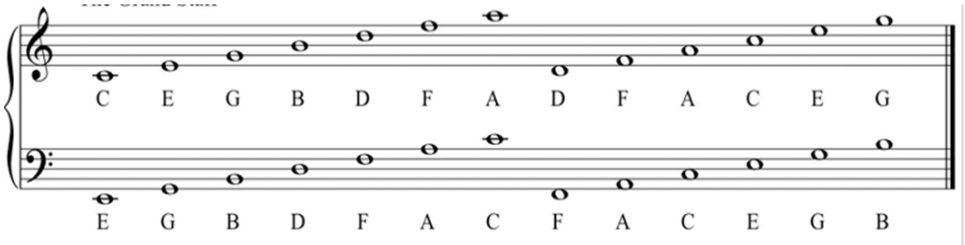
Syllabic A vocal line that has one note per syllable.

Melismatic A vocal line that has 2 or more notes per syllable.

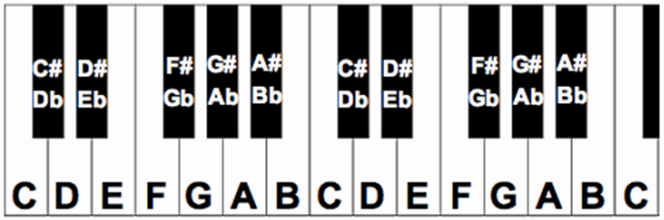
Layering Introducing each new sound one by one. The addition of each layer creates a thicker texture.

Y9 Music HT1 & 2 – Harmony and Tonality, Rhythm Metre and Tempo

Treble and Bass clef notation



Piano keyboard diagram



Bass Guitar String Notes

Religion & Conflict

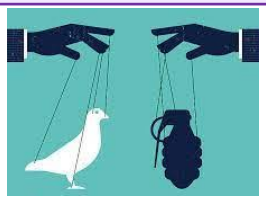
Year 9 Topic 1 - Religion, Philosophy & Ethics

Key Terms	Definition
Just War	a war which is fought for the right reasons and in a right way
Pacifism	the belief that all disputes should be settled by peaceful means
United Nations	an international body set up to promote world peace and cooperation
Weapons of Mass Destruction	weapons which can destroy large areas and numbers of people
World Peace	the ending of war throughout the whole world (the basic aim of The United Nations)
Lesser jihad	means defending Islam from threat, sometimes known as a holy war

"An eye for an eye only ends up making the whole world blind" Gandhi (Hindu)

"Put your sword back in its place' Jesus said to him, 'for all who draw the sword will die by the sword" Matthew 26 (Christian Bible teaching)

"If the enemy incline towards peace, do also incline towards peace, and trust in Allah" Surah 8 (Muslim Qur'an teaching)



Religious Studies

Causes of Conflict

> Religious differences e.g. Serbia invaded Kosovo to protect Christians from the Muslim majority
> Nationalism & ethnicity e.g. the Rwandan genocide was the ethnic majority trying to rid the country of the ethnic minority
> Resources e.g. some think Iraq was invaded because the West wanted access to its oil reserves however American said it was to check for weapons of mass destruction
> Ideals & Politics e.g. differences in political ideas lead communist North Korea to invade capitalist South Korea, in 1953 the UN went to protect the South and STILL there isn't peace.

The **United Nations** formed in 1948 after WW2 in order to bring world peace and prevent WW3. It also aims to promote of The Universal Declaration of Human Rights. The 193 member countries can vote on UN action in the General Assembly. The UN may act as "peace keepers" by preventing conflict through non-violent means, and "peace makers" through the use of force.

Pacifism

Christian pacifists refuse to fight in wars (e.g. Quakers & Pax Christi) because…
- Jesus said 'love your enemies' & turn the other cheek when attacked
- The 5th commandment teaches 'do not kill'
- Jesus wouldn't allow Peter to fight back when He was being arrested
- Modern warfare affects so many innocent people so can never be justified

BUT some Christians use Just War Theory to argue against pacifism

Islam is not a pacifist religion because it is accepted that sometimes fighting is necessary however Islam teaches the importance of striving for justice so when peace can be achieved without fighting it should be.
- "If you should raise your hand against me to kill me – I shall not raise my hand against you… I fear Allah" Surah 5 (Qur'an)

Hindus believe in non-violence in thoughts, words and actions (ahimsa) and good karma comes from avoiding violence. Because all-living things have equal worth they should not be harmed. Gandhi achieved equality laws in India through peaceful protests, reporting injustices, fasting protests, refusing to fight back and being imprisoned.

Religious Extremism

Extremist views are ones most people find unacceptable. All major religions reject the use of terrorism and religious extremism. Religious extremists may use bombings, suicide attacks, arson or hijackings**.**

Christianity

The version of the Ku Klux KLan (KKK) that used violence to punish those who didn't have the same Christian faith began in 1915. There are still KKK terrorism acts happening in the USA.
- All major Christian groups have denounced the KKK (said they are not true Christians)
- The KKK are not following the Greatest Commandment "love your neighbour"

Islam

In 2017, an Islamist extremist suicide bomber killed 22 people in the Manchester Arena bombing.
- The Muslim Council of Britain condemns terrorism
- "None of you are true believers until you love for your brother what you love for yourself" Prophet Muhammad

Just War Theory

This theory states that if fought for the right reasons and in the right way, war may be justified.

Christian St Thomas Aquinas created a set of principles as a guide for when a war is justifiable…

- The cause of the war is just (e.g. self-defense)
- The aim is to bring about peace
- It is a last resort, when all other ways of ending conflict have been tried and failed
- It has a reasonable chance of success
- No innocent civilians will be killed
- Methods used are proportional to the cause e.g. no weapons of mass destruction

Muslims who believe in Just war agree with the above principles but also believe a religious leader needs to declare the war to be just and that is has the support of the community.

Criticism – some religious people believe there is no way we could guarantee a war would meet these criteria e.g. it is likely innocent people may be killed so it is never truly just.

Holy War in Islam

Holy war is only justifiable in cases where the intention is to defend the religion. This can involve protecting the religious freedoms of Muslims, strengthening the religion of Islam if under threat and protecting Muslims against attack.

- When the prophet Muhammad was persecuted he fought in self-defense and so Muslims believe they can too.
- Some Muslims believe in the lesser jihad (fight against the enemies of Islam) is one of ten Obligatory Acts and therefore believe fighting is sometimes permissible.
- In defense of their religion, Muslims that die will go to heaven according to the Qur'an.
- Some Muslims believe peace and forgiveness are at the heart of Islam so no war can be justifiable.

Weapons of Mass Destruction (WMD)

Eight countries in the world have declared their possession of nuclear weapons including the UK which has 122 nuclear weapons.
The only country to have used WMD was the USA in WW2 – it dropped two nuclear bombs in Japan killing around 200,000 people, only half that number died on the first day and the rest took up to four months to die from the effects of the radiation.

Argument for WMD

- A strong and quick way to win a war
- Minimal or no people from the attacking country will be killed
- They are a strong threat to prevent or deter other countries from starting a war
- The principle of Utilitarianism says we should do what brings about the most happiness and maybe the use of WMD could do this

Arguments against WMD

- They can kill a huge amount of people including innocent people
- They destroy the environment
- There are dangers in creating and storing them
- Just War theory states methods of war should be proportional to the problem – WMD wouldn't meet this criteria
- WMD use goes against most major religious teachings

Religious Studies

Medical Ethics

Year 9 Topic 2 - Religion, Philosophy & Ethics

Key Terms	Definition
Sanctity of life	The belief that life is sacred, holy and belongs to God because God created it. Jews, Christians and Muslims believe in the sanctity of life.
Quality of life	A standard of health, comfort and happiness experience by an individual
Abortion	the purposeful ending of a pregnancy
Euthanasia	The painless killing of someone dying from a painful disease or suffering from a life-limiting and very painful condition
Embryo	A fertilized egg in the first eight weeks after conception
IVF	In-virto fertilization is the method of fertilizing a human egg in a test tube
Organ donation	Giving organs to be used in transplant surgery

"Do not kill" Commandment from Exodus (Bible)

"Love your neighbor" is the Greatest Commandment from Jesus (Book of Matthew in Bible)

"euthanasia is a grave violation of the law of God" Pope Francis

"Treat people the way you want to be treated" Golden Rule from the Bible

Sanctity of Life

Due to being create by a deity (God), most religions believe life is sacred and holy thus it should be respected and protected.

Jews, Christians & Muslims, Sikhs & Hindus all believe life was created by a God thus it is sacred

Buddhism believe life is rare and precious. Although it isn't sacred as no God formed it, it should be wholly respect.

Humanist atheists do not believe in a God so life isn't sacred. Instead it should be respected

Organ Donation after Death

Organ donation enables sick people to live healthier lives. On average 6500 people are awaiting donations in he UK at all times.

- **Most Christians believe agree with it as** a way of living out the Greatest Commandment "love your neighbor"

- **Most Hindus believe** organ donation is a virtuous (good) act and, since their soul lives on through reincarnation, not their body it is encouraged.

- **Most Muslims do not agree** with it because the Shari'ah (Islam's legal teachings) teach nothing should be removed from the body after death. Also some see it as playing God which is the greatest sin of shirk (idolatry).

However, the UK Muslim Law Council allows it as Islam teaches kindness is important

IVF Facts

IVF: egg is taken from the mother's womb, fertilized in a test tube and put back in the womb

Artificial Insemination can involve the donor sperm and eggs if the man and/or women do not have the ability to use their own

- 12.5% couples in UK have fertility problems
- Its part of human nature to want children, psychological problems may result by not having them
- In 2007, 12% births were results of fertility treatments

Some Christians are against IVF because it is "playing God". Also, fertilised eggs that are not needed are often thrown away which is killing a life as life starts at conception (when sperm meets the egg).

Some Christians allow IVF because they believe the purpose of marriage is to have children and it allows one to do this

Many Muslims allow IVF because they do not believe embryos (fertilized eggs) have been given souls yet so no killing occurs

Religious Studies

Abortion

Abortion is the deliberate termination of a pregnancy so the baby is not born.
In the UK abortion is legal up to 24 weeks (and sometimes after) if two doctors agree…

- The women's mental or physical health is in danger
- The women's life is at risk
- A pre-existing child's health is at risk
- The baby will be born severely disabled with low/no quality of life

The law was made in 1967 when babies never lived if born before 24 week, now babies can survive if born this early and so some believe the abortion law needs amending.

Pro-choice Argument (For legal abortions)

Some Christians believe…
- Life may not begin at conception
- Life is sacred (holy) but Jesus taught mankind to "love you neighbour" and abortion may be the most loving thing
- The bible teaches "treat people the way you want to be treated" if I was in their circumstance then I may want an abortion so we should let them decide.

There is no one atheist view but most Humanists believe…
- Abortion is a personal choice
- Life is not 'sacred' as God did not create life
- What is important is quality of life thus abortion may be used to prevent poor quality of life for the mother or baby
- Peter Singer believes life doesn't begin at conception, although an unborn baby may be a biological human it is not a person until it can reason and be self-aware, therefore ending a pregnancy isn't murder

Pro-life Argument (Against abortions)

Other Christians believe…
- Abortion is wrong as all life begins at conception thus it is murder
- Human life is sacred (holy) as we are made "mage of God" therefore only God can end life
- "before I formed you in the womb I knew you" Jeremiah suggesting God has a plan for all life
- Adoption is the better option when abortion is being considered

Some Jews accept abortion because a famous Rabbi called Rashi once said life doesn't begin until it has left the womb

Euthanasia

Euthanasia means "good death". It is the painless killing of someone suffering or dying from a painful disease
Laws : It is illegal in the UK. Helping someone to commit euthanasia is also a crime. Some countries allow euthanasia such as Switzerland.

Pro-choice Arguments (For euthanasia)

Liberal Christians…
- allowing someone in immense pain to die with dignity, pain-free, is the most loving thing and Jesus instructs Christians to "love your neighbour"

Humanist (atheist) view…
- There is no God which means there is no judgement of our actions, we should do what brings about the most amount of happiness and reduces suffering
- Quality of life is important, we should allow people to end their lives when they have no quality of life

Pro-life Arguments (Against euthanasia)

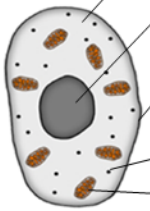
Catholic Christians…
- Palliative care is a more suitable alternative; support people in their final days don't end them
- It goes against the sanctity of life

Secular (non-religious) views…
- Euthanasia cannot be reversed and a cure may be found shortly after
- There is no way to guarantee someone doesn't feel pressure to end their life as they see their illness as a burden to others

Religious Studies

Year 9 Biology Term 1

Science



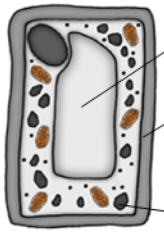
cytoplasm	*site of chemical reactions in the cell*	gel like substance containing enzymes to catalyse the reactions
nucleus	*contains **genetic material***	controls the activities of the cell and codes fro proteins
cell membrane	*semi permeable*	controls the movement of substances in and out of the cell
ribosome	*site of protein synthesis*	mRNA is translated to an amino acid chain
mitochondrion	*site of respiration*	where energy is released for the cell to function

animal cell

plant cell

Eukaryotes complex organisms

contains all the parts of animal cells plus extras



permanent vacuole	*contains cell sap*	keeps cell turgid, contains sugars and salts in solution
cell wall	*made of cellulose*	supports and strengthens the cell
chloroplast	*site of photosynthesis*	contains chlorophyll, absorbs light energy

how a cell changes and becomes **specialised**
Undifferentiated call are called **STEM** cells

Cell differentiation

animal cell differentiation

early stages of development only for repair and replacement

plant cell differentiation

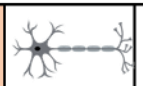
all stages of life cycle the stem cells are grouped together in meristems

Microscopy

magnification M = size of image I / real size of the object A

Specialised cells

specialised animal cells

nerve		*carry electrical signals*	long branched connections and insulating sheath
sperm		*fertilise an egg*	streamlined with a long tail acrosome containing enzymes large number of mitochondria
muscle		*contract to allow movement*	contains a large number of mitochondria long

specialised plant cells

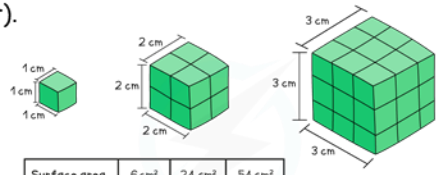
root hair		*absorb water and minerals from soil*	hair like projections to increase the surface area
xylem		*carry water and minerals*	TRANSPIRATION - dead cells cell walls toughened by lignin flows in one direction
phloem		*carry glucose*	TRANSLOCATION - living cells cells have end plates with holes flows in both directions

Diffusion
Diffusion is the movement of particles from a high concentration to a low concentration. For example oxygen diffuses into a cell. Diffusion is faster when:

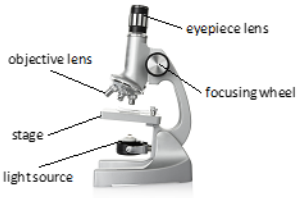
- Diffusion pathway is shorter
- There is a greater difference in concentration (a steeper concentration gradient).
- There is a greater surface area.
- The temperature is higher.

Surface area to volume ratio
Diffusion happens faster when the surface area to volume ratio is larger.

Surface area = area of face x 6
Volume = length x width x height

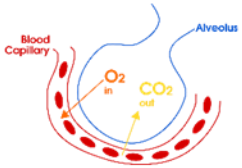


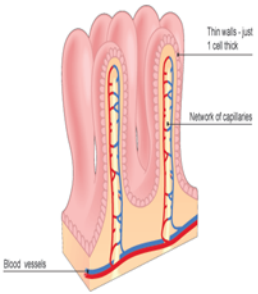
Surface area	6 cm²	24 cm²	54 cm²
Volume	1 cm³	8 cm³	27 cm³
Surface area : volume	6:1	3:1	2:1



Exchange surfaces
Exchange surfaces are where substances are moved across a membrane in an organism. Examples in humans include the alveoli in lungs, and the villi in the small intestine. Exchange surfaces have the following features:

- Moist lining
- Large surface area
- Short diffusion pathway
- Semi-permeable.





PREFIXES		
Prefix	Multiple	Standard form
centi (cm)	1 cm = 0.01 m	x 10 $^{-2}$
milli (mm)	1 mm = 0.001 m	x 10 $^{-3}$
micro (µm)	1 µm = 0.000 001 m	x 10 $^{-6}$
nano (nm)	1nm = 0.000 000 001 m	x 10 $^{-9}$

Year 9 Term 1 - Chemistry – Rates of Reaction

Calculating Rates of Reactions

Reactions happen at **varying rates**. For example, a firework exploding is a fast reaction whereas a piece of iron rusting would take place over a longer period of time.

The **rate of a chemical reaction** tells us how quickly a **product is formed** or how quickly a **reactant is used up**.

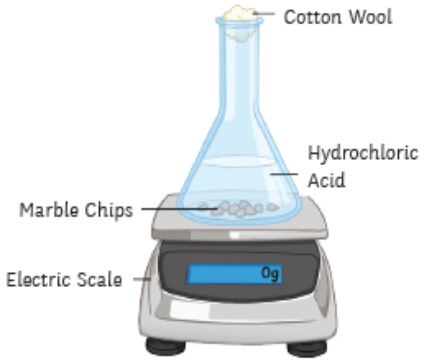
For a chemical reaction to occur, the reactant particles must collide with enough energy. Those collisions that produce a chemical reaction are called successful collisions.

$$\text{mean rate of reaction} = \frac{\text{quantity of reactant used}}{\text{time taken}}$$

$$\text{mean rate of reaction} = \frac{\text{quantity of product formed}}{\text{time taken}}$$

Measuring the Mass of a Reaction Mixture

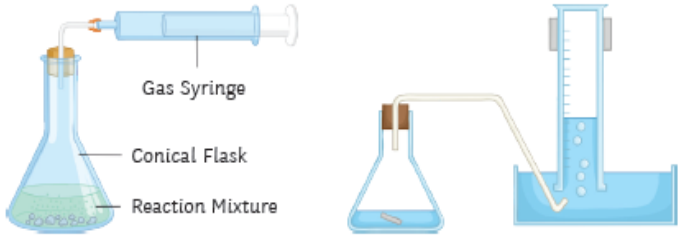
The changing mass of a reaction mixture can be measured during a reaction. This method is particularly useful when gases, such as carbon dioxide, are given off. **Gas escapes during the reaction and the mass of the reaction mixture decreases.** The mass can be measured at regular time intervals.



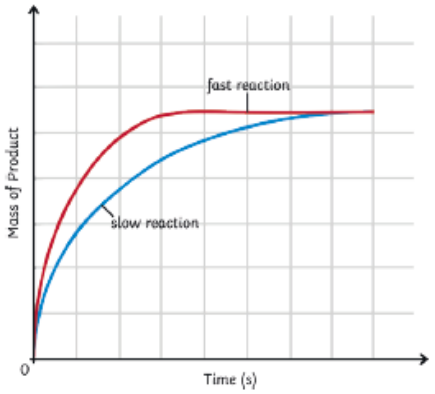
units – g/s or g/min

Measuring the Volume of a Reaction Mixture

The changing volume of a reaction mixture can be measured during a reaction. This method is particularly useful when gases, such as carbon dioxide, are given off. The gas can be collected and its volume measured at regular time intervals. Different types of measuring equipment can be used to collect the gas such as a gas syringe, measuring cylinder or upside-down burette.



units – cm^3/s or cm^3/min



Graphs are a useful way to **analyse** the results from a rate of reaction investigation. The graph above shows two lines, one red and one blue.

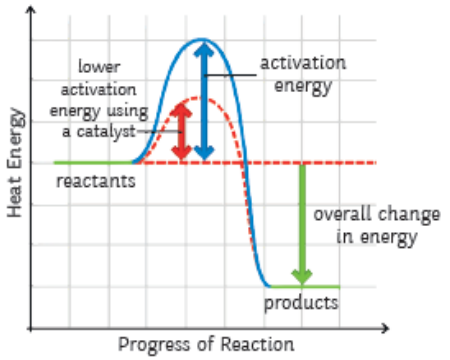
The red line represents a fast reaction and the blue line a slow reaction. We know the fast reaction occurs at a much faster rate as the line is steep. The fast reaction finishes before the slow reaction as the line plateaus sooner.

Factors Affecting the Rate of a Chemical Reaction

- concentration and pressure
- catalyst
- surface area
- temperature

The rate of a chemical reaction will be increased if there are more frequent successful collisions between reactant particles.

Catalyst



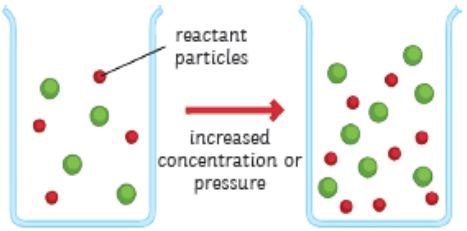
A catalyst is a **substance** that speeds up a chemical reaction without getting used up itself. Catalysts are able to offer an **alternative pathway** at a **lower activation energy**.

Biological catalysts are called **enzymes**.

When a catalyst is used in a chemical reaction (not all reactions have a catalyst that is suitable to use), the **frequency of collisions** is **unchanged**. More **particles** are able to react. The particles have **energy greater** than that of the **activation energy**. Consequently, there is in an **increase** in the **rate successful of collisions**.

Concentration and Pressure

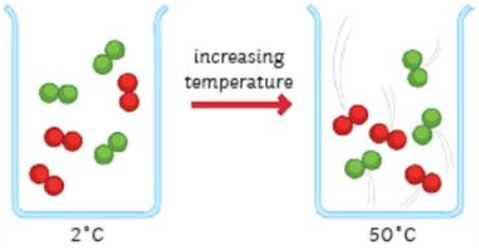
If the **number of reactant particles** in a given space is **doubled**, there will be **more frequent successful collisions** between reactant particles, therefore, **increasing the rate of reaction**.



Science

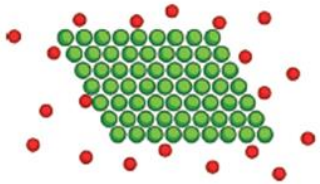
Temperature

When the temperature of the reaction mixture is increased, the reactant particles **gain kinetic energy** and move much more quickly. This results in **more frequent successful collisions** between the reactant particles, therefore, **increasing the rate of the reaction**.



Surface Area

Large lumps of a solid have a **small surface area to volume ratio**. If the solid is broken up into smaller lumps or crushed into a powder, this will increase the surface area to volume ratio.



A larger area of the solid is now exposed to other reactant particles. This increases the frequency of successful collisions thus increasing the rate of reaction.

Required Practical 5: Measuring the Production of a Gas

This method outlines one way to carry out an investigation to collect a gas from a chemical reaction.

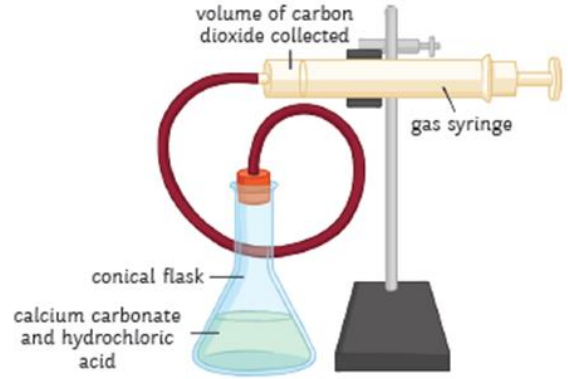
The practical involves changing the concentration of hydrochloric acid and measuring the volume of carbon dioxide gas produced when the acid reacts with calcium carbonate.

The word equation for the reaction is as follows:

calcium carbonate + hydrochloric acid → calcium chloride + water + carbon dioxide

The symbol equation for the reaction is:

$CaCO_3 + 2HCl \rightarrow CaCl_2 + H_2O + CO_2$



Method

Step 1 – Clamp a gas syringe to a retort stand using a boss and clamp. Ensure the syringe is a quarter of the way from the top of the stand. Place the delivery tube to the end of the gas syringe.

Step 2 – Measure out 50ml of hydrochloric acid using a measuring cylinder and pour into a conical flask.

Step 3 – Using a top pan balance, measure out 0.5g of powdered calcium carbonate and place in the conical flask.

Step 4 – Immediately connect the bung and delivery tube to the conical flask. Start the stopwatch.

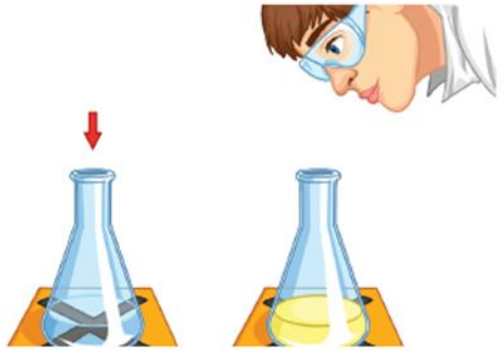
Step 5 – Record the volume of carbon dioxide gas produced every 10 seconds.

Step 6 – When the reaction has finished and there are no more bubbles of gas being produced, clean the equipment and repeat using four other different concentrations of hydrochloric acid.

When analysing the results from the practical investigation, plot a graph of Time (s) against Volume of Gas Produced (cm^3). Draw a curve of best fit through the points. A graph should be plotted for each concentration of acid.

Calculate the mean rate of reaction (cm^3/s) for each concentration of acid used. This can be calculated by dividing the total mass of gas produced (cm^3) by the reaction time (s).

Required Practical 5: Investigating a Change in Colour



This method outlines one way to carry out an investigation into the effect of increased temperature on the rate of a reaction.

The word equation for this reaction is as follows:

sodium thiosulfate + hydrochloric acid → sodium chloride + water + sulfur dioxide + sulfur

The symbol equation for this reaction is:

$Na_2S_2O_3 + 2HCl \rightarrow 2NaCl + H_2O + SO_2 + S$

The reaction between sodium thiosulfate and hydrochloric acid produces a **precipitate**. **Sulfur** is responsible for the formation of the precipitate. A precipitate is a **solid** that is formed in a solution. It is the formation of this precipitate that causes the reaction mixture to become **cloudy**; the cloudiness is a way to measure the **reaction time**.

Science

Year 9 Physics Term 1 – Energy

Energy Stores and Systems

Energy Stores	
kinetic	Moving objects have kinetic energy.
thermal	All objects have thermal energy.
chemical	Anything that can release energy during a chemical reaction.
elastic potential	Things that are stretched.
gravitational potential	Anything that is raised.
electrostatic	Charges that attract or repel.
magnetic	Magnets that attract or repel.
nuclear	The nucleus of an atom releases energy.

Energy can be transferred in the following ways:

mechanically – when work is done;

electrically – when moving charge does work;

heating – when energy is transferred from a hotter object to a colder object.

Conservation of Energy

Energy can never be created or destroyed, just transferred from one form to another. Some energy is transferred usefully and some energy gets transferred into the environment. This is mostly wasted energy.

Work Done

When an object is moved by a force, the force transfers energy to the object. The amount of energy transferred to the object is the work done.

The work done on an object depends on the size of the force and the distance moved. It can be calculated using the equation:

work done = force × distance

W = F s

One joule of work is done when a force of one newton causes a displacement of one metre.

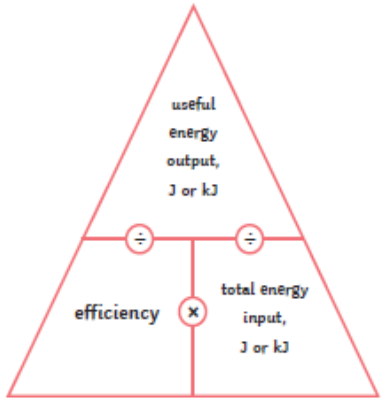
1 joule = 1 newton metre

Efficiency

When energy is transferred, some energy is wasted. The less energy that is wasted during the transfer, the more efficient the transfer.

There are two equations to calculate efficiency:

$$\text{efficiency} = \frac{\text{useful output energy transfer}}{\text{total input energy transfer}}$$

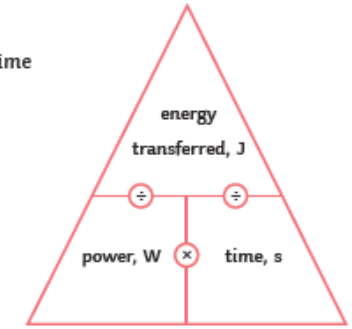


Power

Power is the rate of transfer of energy – the amount of work done in a given time.

power = energy transferred ÷ time

P (W) = E (J) ÷ t (s)



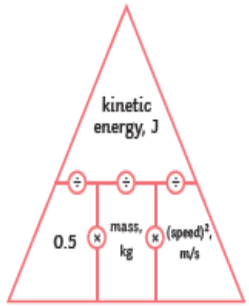
Kinetic and Potential Energy Stores

Movement Energy

kinetic energy = $\frac{1}{2}$ x mass × speed^2

$$E_k = \frac{1}{2}mv^2$$

(J) (kg)(m/s)

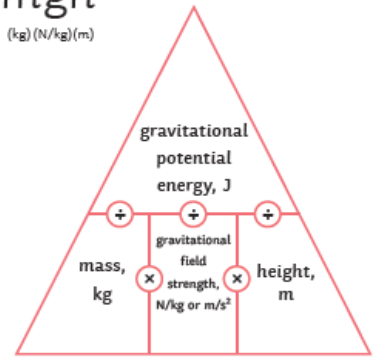


When something is off the ground, it has gravitational potential energy

gravitational potential energy = mass x gravitational field strength x height

$$E_p = mgh$$

(J) (kg) (N/kg)(m)



Electrical Power

power (W) = potential difference (V) × current (A) P = VI

power (W) = current^2 (A) × resistance (Ω) $P = I^2R$

Electrical Energy

Energy Transferred – this depends on how long the appliance is on for and its power.

energy transferred (J) = power (W) × time (s) E = Pt

Energy is transferred around a circuit when the charge moves.

Year 9 Knowledge Organiser - The Basics

El alfabeto

A - ah
B - beh
C - ceh
Ch - cheh
D - deh
E - eh
F - ef-fe
G - heh
H - ach-eh
I - ee
J - jota
K - kah
L - el-eh
LL - eh-jeh
M - em-eh
N - en-eh
Ñ - en-yeh
O - oh
P - peh
Q - cuh
R - er-e
S - es-eh
T - teh
U - ooh
V - veh
W - doob-leh-veh
X - eh-kis
Y - ee-gri-eh-gah
Z - se-tay

Una conversación

¡Hola! - Hello
¡Adiós! - Goodbye
Buenos días - Good day
¡Hasta luego! - See you later!
Buenas tardes - Good afternoon
¿Cómo estás? - How are you?
¿Qué tal? - How are you?
Bien/ fantástico/ fenomenal - Well/ fantastic/ excellent
Regular/ fatal/ mal - OK/ awful/ bad
¿Y tú? - And you?
¿Cuántos años tienes? - How old are you?
Tengo … años - I am … years old
¿Cuándo es tu cumpleaños? - When is your birthday?
Mi cumpleaños es el - My birthday is

Los números

1 uno	11 once	21 veintiuno
2 dos	12 doce	22 veintidos
3 tres	13 trece	23 veintitrés
4 cuatro	14 catorce	24 veinticuatro
5 cinco	15 quince	25 veinticinco
6 seis	16 dieciséis	26 veintiséis
7 siete	17 diecisiete	27 veintisiete
8 ocho	18 dieciocho	28 veintiocho
9 nueve	19 diecinueve	29 veintinueve
10 diez	20 veinte	30 treinta

En mi clase

Hay - there is
No hay - there isn't
El bolígrafo - the pen
El cuaderno - the book
La goma - the rubber
El estuche - the pencil case
El lápiz - the pencil
El libro - the book
La regla - the ruler
Las tijeras - the scissors
El sacapuntas - the sharpener
La hoja de papel - the sheet of paper

Los días de la semana

lunes - Monday
martes - Tuesday
miércoles - Wednesday
jueves - Thursday
viernes - Friday
sábado - Saturday
domingo - Sunday

Mis opiniones

Me gusta - I like
Me encanta - I love
Prefiero - I prefer
No me gusta - I don't like
Detesto - I hate
Odio - I hate

Los colores

amarillo - yellow
azul - blue
blanco - white
gris - grey
marrón - brown
morado - purple
naranja - orange
negro - black
rojo - red
rosa - pink
verde - green

oscuro/a - dark
claro/a - light

Meses

enero - January
febrero - February
marzo - March
abril - April
mayo - May
junio - June
julio - July
agosto - August
septiembre - September
octubre - October
noviembre - November
diciembre - December

El vocabulario importante

Escribir - to write
Leer - to read
Escuchar - to listen
Hablar - to talk
El/la amigo/a - friend
El nombre - name
El apellido - surname
La edad - age
El mundo - the world
El país - the country

Además - furthermore
O - or
Pero - but
Sin embargo - however
También - also
Y - and

IMPORTANTE

Grámatica importante

SPANISH PRONUNCIATION

VOWELS	CONSONANTS	LETTER COMBOS	GU / QU
A → ah	H → Silent	CH → CH sound	Gue → GAY
E → eh	J → H sound	LL → Y sound	Gui → GEE
I → ee	Ñ → NY sound	RR → RRR (roll)	Que → KAY
O → oh	V → B sound	Ge/Gi → H sound	Qui → KEE
U → oo	Z → S sound	Ce/Ci → S sound	Güe → GWAY
Y → ee (Means "and")	Z → TH sound (Only in SPAIN)	Ce/Ci → TH sound (Only in SPAIN)	Güi → GWEE
			ü → W sound

Remember that every noun in Spanish is masculine or feminine. Most masculine nouns ends in O or a consonant. Most feminine nouns end in A or ión. The and A/An must agree with these nouns.

	Definite		Indefinite	
	Singular	Plural	Singular	Plural
Masculine	el	los	un	unos
Femenine	la	las	una	unas
	the		a, an	some

The verb tener is used all the time in Spanish, make sure you know these off by heart …

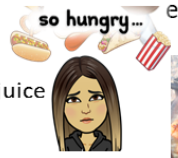
tener	to have
tengo	I have
tienes	you have
tiene	he/she/it has

Spanish

Year 9 Spanish Knowledge Organiser

Unit 1: Dieta y Salud

¡Qué hambre!	I'm so hungry!
almorzar	to have lunch
beber	to drink
cenar	to have dinner
comer	to eat
desayunar	to have breakfast
merendar	to snack (afternoon)
tomar	to have/take
la cena	dinner
la comida	lunch (also food)
el desayuno	breakfast
la merienda	(afternnon) snack
el agua	water
la bebida	drink
la leche	milk
el zumo	juice
el zumo de piña	pineapple juice
la cantina	canteen
la comida	food
vegetariano/a	vegetarian
el arroz	rice
la carne	meat
la ensalada	salad
la fruta	fruit
el marisco	seafood
las patatas fritas	chips
el pescado	fish
el pollo	chicken
el queso	cheese
las salchichas	sausages
el salmón	salmon
la sopa	soup
el tomate	tomato
las tostadas	toast
la verdura	vegetables
el yogur	yoghurt



¡Ñam Ñam!	Yum Yum!
mi plato favorito	my favourite dish
la cebolla	onion
el champiñón	mushroom
los guisantes	peas
el pimiento	pepper
el plátano	banana
el refresco	fizzy drink
amargo	bitter
asqueroso/a	disgusting
delicioso/a	delicious
dulce	sweet
insipido/a	bland/tasteless
picante	spicy
sabroso/a	tasty
salado/a	salty
tradicional	traditional
contener	to contain
el ingrediente	ingredient

Mi dieta sana	My healthy diet
la energía	energy
la grasa	fat
el mineral	mineral
el nutriente	nutrient
la porción	portion
la proteína	protein
diario/a	daily
grasiento/a	fatty
lácteo/a	dairy
nutritivo/a	nutritious
poco sano	unhealthy
saludable	healthy
sano/a	healthy
el aceite	oil
el caramelo	sweetie
la comida rápida	fast food
derivado/a de	derived from
la dieta	diet
las fajitas	fajitas
la hamburguesa	hamburger
el helado	ice-cream
el huevo	egg
la manzana	apple
el pan	bread
las sardinas	sardines
aconsejable	advisable
esencial	essential
ideal	ideal
importante	important
recomendable	recommended
variado	varied

¡Una de bravas, por favor!	A portion of bravas please!
¿qué desea?	what would you like?
¿qué va a tomar?	what are you going to have?
el primer/segundo plato	first/ second course
el postre	dessert
alérgico/a	allergic
el apetito	appetite
el/la camarero/a	waiter
la cuenta	the bill
el menú	menu of the day
la carta	the menu
servir	to serve
el/la vegano/a	vegan
fresco/a	fresh

SCAN ME

To revise this topic

Spanish

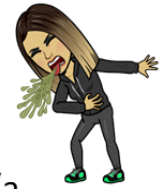
Year 9 Spanish Knowledge Organiser

Unit 1: Dieta y Salud

¡Ay, qué dolor	Ouch! That's sore!
me duele (n)....	my.... hurts
el brazo	arm
la cabeza	head
el codo	elbow
el cuello	neck
el dedo	finger
el dedo del pie	toe
la espalda	back
el estómago	stomach
el hombro	shoulder
la mano	hand
la nariz	nose
el pie	foot
la pierna	leg
la rodilla	knee
los oídos	ears
los ojos	eyes
el tobillo	ankle

To revise this topic

¡Ponte esta crema!	Put this cream on!
tengo.....	I have....
un brazo roto	a broken arm
gripe	flu
una picadura	a bite
una pierna rota	a broken leg
una quemadura de sol	sunburn
tos	a cough
vómitos	sickness (vomitting)
estoy....	I am ....
cansado/a	tired
mal	ill
mareado/a	dizzy
la crema	cream
el jarabe	cough syrup
la leche con miel	milk with honey
las medicinas	medicines
las pastillas	tablets, pills
la tirita	plaster
el zumo de limón	lemon juice



Spanish

Year 9 Spanish Knowledge Organiser

Unit 1: Dieta y Salud

Siempre (always) A menudo (often) Normalmente (normally) De vez en cuando (from time to time) A veces (sometimes) Nunca (never)	desayuno (I eat for breakfast) almuerzo (I eat for lunch) como (I eat) meriendo (I eat for an afternoon snack) ceno (I eat in the evening) bebo (I drink)	pollo con patatas fritas (chicken and chips) salchichas (sausages) pescado (fish) marisco (seafood) queso (cheese) verduras (vegetables) leche (milk) zumo de naranja/piña/ manzana (orange/ pineapple/ apple juice)	Me gusta (mucho) (I (really) like) No me gusta (nada) I (really) don't like) Me encanta (I love) Odio (I hate)	porque es / son (because it is/ they are)	mi plato favorito (my favourite dish) amargo/a (bitter) asqueroso/a (disgusting) delicioso/a (delicious) dulce (sweet) picante (spicy) sabroso/a (tasty)

Spanish

Year 9 Spanish Knowledge Organiser

Unit 2: Por fin vacaciones

2.1 ¡Allá voy!

el autocar	coach
el avión	plane
el barco	boat
la bicicleta	bicycle
el coche	car
la motocicleta	motorbike
el tren	train
voy...	I go/I'm going...
...a pie	on foot
...en autocar	by coach
...en avión	by plane
...en barco	by boat
...en bicicleta	by bike
...en coche	by car
...en motocicleta	by motorbike
...en tren	by train

Alemania	Germany
Egipto	Egypt
Escocia	Scotland
Estados Unidos	United States
Francia	France
Gales	Wales
Grecia	Greece
Inglaterra	England
Irlanda	Ireland
Italia	Italy
Turquía	Turkey
estar de vacaciones	to be on holiday
ir de vacaciones	to go on holiday
ir de visita	to pay a visit
una escapada a la ciudad	city break
unas vacaciones en la playa	beach holiday
un viaje cultural	cultural trip

2.2 Tengo mucho que hacer

alojarme en un hotel	to stay in a hotel
comer en restaurantes típicos	to eat in typical restaurants
ir de compras a mercados	to go shopping in markets
jugar al vóley-playa	to play beach volleyball
nadar en el mar	to swim in the sea
pasear por la playa	to stroll along the beach
sacar fotos	to take photos
tomar el sol	to sunbathe
visitar los monumentos históricos	to visit historical monuments

la arena	sand
la estrella	star
el plato	dish
el puerto	port

2.3 ¡Esto es la pera!

¡es flipante!	it's amazing!
¡es la pera!	it's incredible!
¡es muy guay!	it's very cool!
¡es un rollo!	it's a pain!
¡mola mucho!	it's out of this world!
¡qué aburrimiento!	what a bore!
¡qué chulo!	how awesome!
¡qué fastidio!	how annoying!
hacer un picnic	to have a picnic
hacer senderismo	to go hiking
montar en globo	to go up in a hot-air balloon
recoger conchas en los charcos	to collect shells in rock pools
visitar el museo arqueológico	to visit the archaeological museum
aproximado/a	approximate

arriesgado/a	risky
educativo/a	educational
estimulante	stimulating
peligroso/a	dangerous
relajante	relaxing

2.4 Te cuento qué pasó...

el año pasado	last year
el mes pasado	last month
en mis últimas vacaciones	on my last holiday
el verano pasado	last summer
al aire libre	in the open air
la barbacoa	barbecue
el camping	campsite
la isla	island
sacar selfis	to take selfies
salir con los amigos	to go out with friends
ver un partido	to watch a match

bailar en una discoteca	to dance in a night club
comprar recuerdos	to buy souvenirs
hacer ciclismo	to go cycling
nadar en la piscina	to swim in the pool
probar la gastronomía local	to try the local cuisine

la tribu	tribe
el tucán	toucan
el valle	valley

2.5 Mi aventura amazónica

hacer una visita guiada	to take a guided tour
observar la naturaleza	to observe nature
planear	to plan
subir una montaña	to climb a mountain
la capibara	capybara (large rodent)
la deforestación	deforestation
el delfín	dolphin
la experiencia	experience
el mono capuchino	capuchin monkey
la rana venenosa	poisonous frog
el río Amazonas	the Amazon river
la selva tropical	tropical rainforest

2.6 ¡El verano que viene vamos a flipar!

el año que viene	next year
el miércoles que viene	next Wednesday
la semana que viene	next week
el verano que viene	next summer
voy a...	I am going to...
alojarme en un hotel	stay in a hotel
dar de comer a las llamas	feed the llamas
dormir mucho	sleep a lot
no hacer nada	not do anything
hacer un crucero	go on a cruise
pescar en el río	fish in the river
planear mis vacaciones en Internet	to plan my holiday on the Internet

trabajar de voluntario/a	work as a volunteer
ganar la lotería	to win the lottery
ver muchos animales salvajes	to see many wild animals
viajar alrededor del mundo	to travel around the world
volar en un avión privado	to fly in a private plane
el comedor social	soup kitchen
incluido/a	included
el mar Mediterráneo	Mediterranean Sea
primera clase	first class
sin techo	homeless
el/la voluntario/a	volunteer
wifi	wi-fi

Spanish

Year 9 Spanish Knowledge Organiser

Unit 2: Por fin vacaciones

2.1 ¡Alla voy!

normalmente	normally	voy	I go	a Alemania	to Germany	en coche	by car	con	mi familia
siempre	always	va	he/she goes	a Italia	to Italy	en avión	by plane		mis padres
a veces	sometimes	vamos	we go	a España	to Spain	en autobús	by bus		mis amigos
nunca	never	van	they go	a Grecia	to Greece	en tren	by train		la familia de mis amigos
						a pie	on foot		

2.2 Tengo mucho que hacer

suelo	I usually	tomar el sol	sunbathe	y	visito	I visit	los mercado	the markets
suele	he/she usually	nadar en el mar	swim in the sea		vistamos	we visit	sitios de interés	interesting sites
solemos	we usually	jugar al voley-playa	play beach volleyball				los monumentos	monuments
suelen	they usually	ir de compras	go shopping				los museos	museums
		sacar fotos	take photos					

2.3 ¡Esto es la pera!

voy a I am going to	hacer senderismo	to go hiking	porque	¡es flipante! it's amazing
	recoger conchas en los charcos	collect shells in rock pools		¡es la pera! it's incredible
	montar en globo	to go up in a hot air-balloon		¡mola mucho! it's out of this world
	hacer un picnic en la playa	to have a picnic on the beach		¡es un rollo! it's a pain

2.4 Te cuento qué pasó .....

el año pasado	last year	fui a	I went to	España	y	
el mes pasado	last month	fuimos a	we went to	Grecia		
el verano pasado	last summer			Francia		
en mis últimas vacaciones	on my last holiday			los Estados Unidos		

2.5 Mi Aventura amazónica

fui a	I went to	Peru	primero hice una visita guida	first of all I did a guided tour	fue	fantástico	fantastic
fuiste a	you went to	Lima	luego observé las plantas exoticas	later I saw exotic plants	it was	increíble	incredible
fue a	he/she went to	Colombia	vimos delfines	we saw dolphins		estupendo	great
fuimos a	we went to		hizo sol	it was sunny		fenomenal	great
fueron a	they went to		hubo tormenta	there was a storm		peligroso	dangerous

2.6 ¡El verano que viene vamos a flipar!

el año que viene	next year	voy a	I'm going to	dormir mucho	sleep a lot
el verano que viene	next summer	va a	he/she is going to	ganar la lotería	win the lottery
la semana que viene	next week	vamos a	we are going to	planear mis vacaciones	plan my holidays
el martes que viene	next Tuesday	van a	they are going to	hacer un crucer	go on a cruise
		me gustaría	I would like to		

Spanish