LYMM
HIGH SCHOOL

#9

NAME:

Year 9 Knowledge Organisers Summer Term

(Half term 5 and 6)

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.

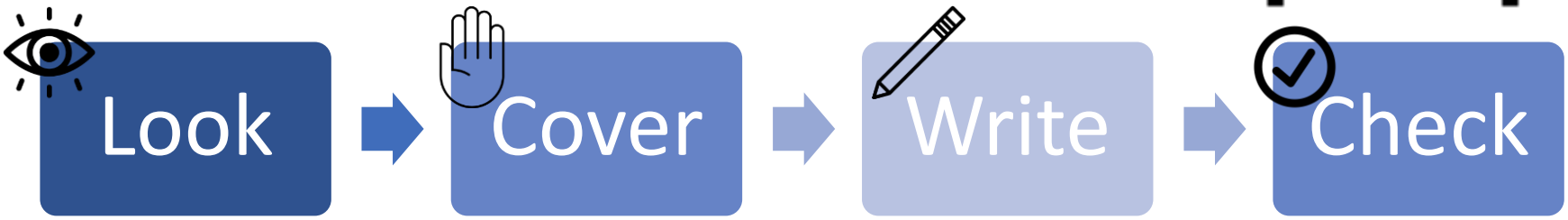
CONTENTS
(Subjects are arranged alphabetically)

3	How to use your Knowledge organiser
4	Tier 2 Vocabulary
5	Art
6	Design Tech
10	English
14	Food Tech
22	French
25	Geography
27	German
30	History
32	IT
37	Maths
41	Music
42	Religious Studies
44	Science
51	Spanish

LYMM
HIGH SCHOOL

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

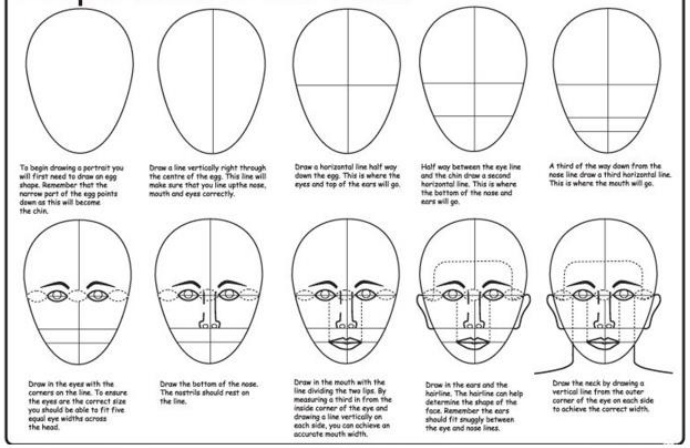
LYMM HIGH SCHOOL

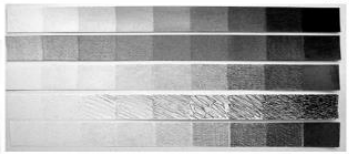
YEAR 9 KNOWLEDGE ORGANISER - PORTRAITS

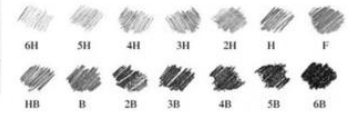
LYMM HIGH SCHOOL

YEAR 9 KNOWLEDGE ORGANISER - PORTRAITS

Proportions of the Face







Tone	A tone is produced either by the mixture of a colour with grey, or by both tinting and shading..
Portrait	A portrait is a representation of a particular person. A self-portrait is a portrait of the artist by the artist
Proportion	Proportion refers to the relative size of parts within a whole. In this case, the whole can be a single object like a person's face.
Scale	Scale refers to the size of an object (a whole) in relationship to another object (another whole).
Features	These are typically eyes, nose, mouth, ears (the senses). These can also be unique features i.e. freckles or a scar.
Characteristics	Traits of a persons i.e. friendly, chatty

Recording from Observation

Primary source observational drawing: drawing something real in front of you.

Secondary source observational drawing: drawing something from a picture.

Scan here to view drawing a portrait..

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).

Blending

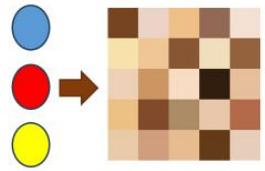
- Always start with the lightest colour and add the darker colour in small amounts
- Harmonious colours blend well together.
- Cross hatching is a good mark making method when blending dry materials.
- Wet materials should be mixed on a palette before blending.

Mixing paint

- Always start with the lightest colour and add the darker colour in small amounts.
- Use a palette to mix your colour.

Mixing skin tones Red, blue, and yellow as a base colour then add white to create a range of tones.

Scan here to view how to blend and create a smooth transition of two colours



Thomas Saliot

- Born 1968 in Paris
- All my work is oil on canvas
- I always liked the sound of Pop art and i think that is where i belong, a mildly modernized version.

Scan QR to link to his website and watch videos of creating his paintings.

Self portrait	A portrait that an artist produces of themselves.

For as long as there has been painting, there has been portraiture. Portrait paintings date back to at least 5,000 years ago to ancient Egypt

Scan below to view the 100 most famous portraits over time.

Bruno Del Zou

- French artist born in 1963
- Creates photo sculptures
- Uses phots taken from different angles and layers them

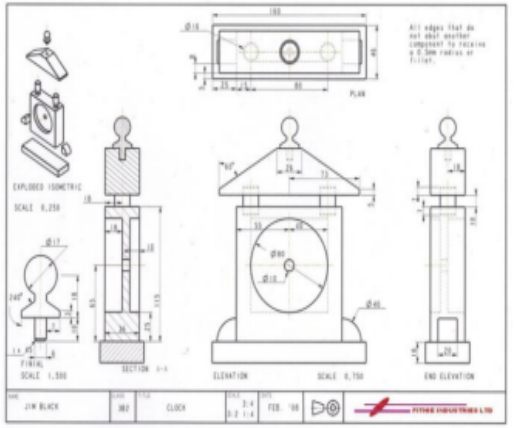
Art

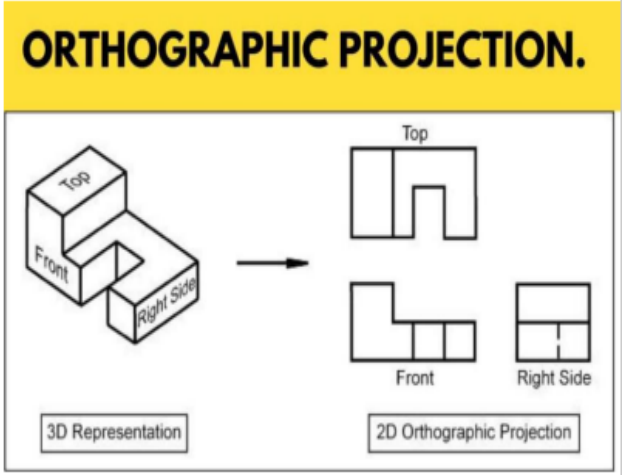
Orthographic Drawing

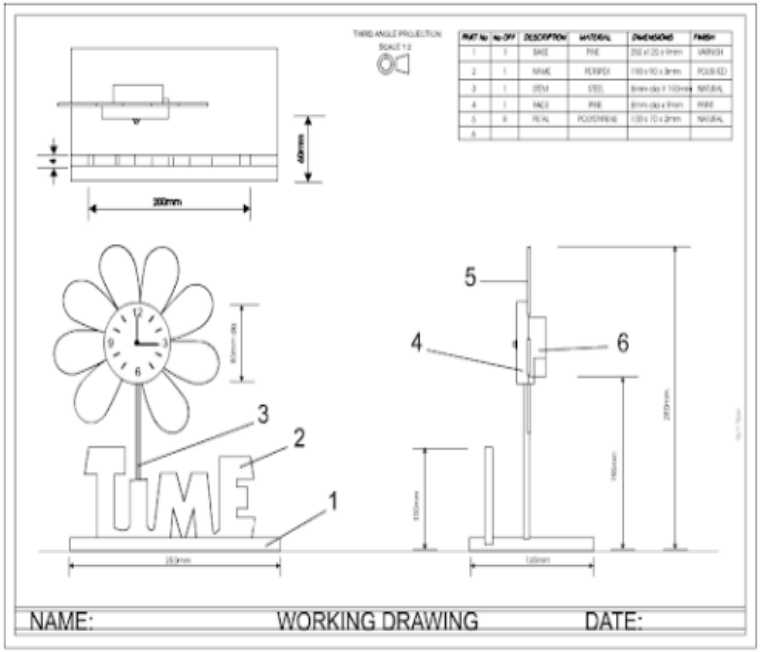
An orthographic drawing represents a three-dimensional object using several two-dimensional views of the object. It is also known as an orthographic projection. For example, you can see in the images below the front, top and side views of a clock.

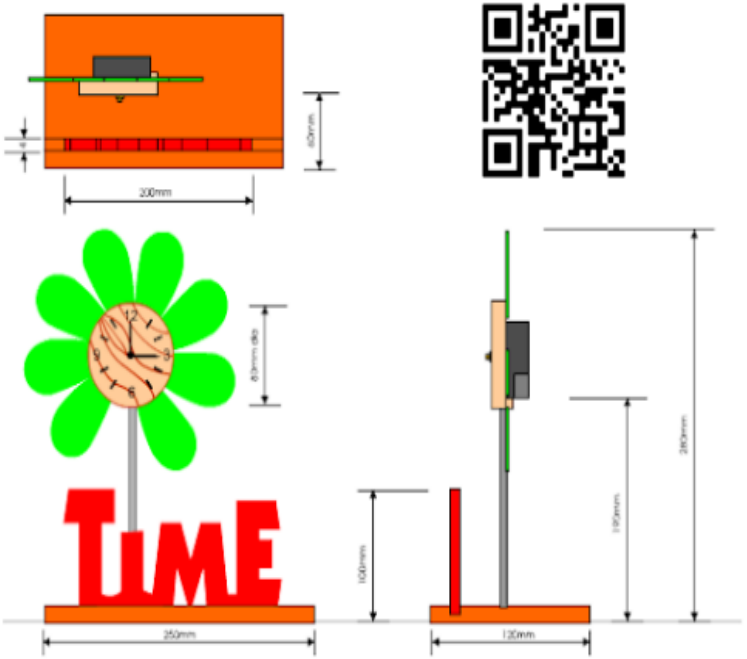
Take a minute and imagine you are shopping for a chair to go in your living room. You find the perfect one, but it is way too expensive. Fortunately, you have a cousin that builds furniture. Maybe he can build the chair for you! Describing the chair over the phone was more than a challenge. Your cousin suggests you send him pictures of the chair from multiple angles, along with the measurements.

This experience illustrates the process that a furniture designer must go through in order for the manufacturer to create the chair as intended. Three-dimensional drawings can be used to show the overall concept and design, but they are often not clear or detailed enough. Orthographic drawings can help to overcome those challenges.









CAD/CAM: What is it?

- CAD/CAM has developed the way we manufacture and design products within Design and Technology
- Can you name three products in the classroom that have been manufactured using the CAD/CAM process?
- Why is it relevant for the company who manufactured the products to use CAD/CAM processes for the specific products?

ICT: it has its purpose too

ICT can also be used in the following ways to aid the design and making process, identify what the activities or terms below mean:

Online Survey, Product Analysis, Research, Communication, Presentation and Analysis.

CNC: Making made easy

CNC is an important factor in producing an accurately made product within the CAM category:

- What does CNC mean?
- Do you have any CNC machines in your school, if so what are they?
- What projects have you used them for or to create?
- How to do they benefit the making process?

CAD: Why do we use it?

- What is meant by CAD?
- How can it save time in the drawing process?
- What are the advantages of using CAD in product development?
- How can it enhance communication during the drawing process?
- What problems might introducing CAD software have in the design process?

PiXL Technology
KnowIT
CAD/CAM/ICT

CAD/CAM: It has its benefits and its downfalls.

CAD/CAM as you know has radically moved designing and making forward, separate the terms below into advantages or disadvantages:

Quicker, Accuracy, Unemployment, Communication, Virtual, Physically seeing, 24/7, Maintenance, Cost, Training, Time Management and Traditional Skills.

Take it further and explain why they are in the category you have placed them in?

CAM: How it does it help with making?

CAM is now traditionally used to manufacture products:

- How can it improve the quality of a product?
- What effect can it have on the workforce?
- How can it aid making time?
- How is it better for batch making compared to human making skills?

CAD Software

What type of CAD software have you used form the list below? What have you used them for in your school projects?

- 2D Design
- Pro Desktop
- Solid Works
- Auto Desk
- Google Sketch Up
- Crocodile clips/Circuit Wizard

3D Printing: Its even easier to model

Over the past few years, 3D printing has evolved and become more cost effective to use in school:

- How does 3D printing help with the modelling process?
- How does it work?
- Do you have one in school? If so what have you seen it used for?

Exemplar Outcomes:

Below are exemplar outcomes of laser cut clocks made by previous students to help you understand the level of detail in your design ideas to achieve your target grade. The clocks are made from acrylic and plywood.

Bronze

Silver

Gold

Platinum

CAD

Computer Aided Design. This allows users to draw, design and model products using specialist software. Designers can create 2D and 3D models and manipulate their designs to test different ideas before manufacture.

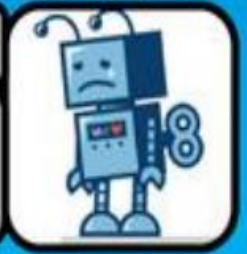
CAM

Computer Aided Manufacture. This uses Computer Numerical Control (CNC) to create CAD designs. The CAM machines, such as laser cutters and 3D printers interpret the coordinates to create the design.

ADVANTAGES

- *Increased efficiency and productivity.*
- *Fewer errors, improved accuracy.*
- *Reduced labour costs as fewer people.*
- *Can perform work that is dangerous for humans.*
- *Can be cheaper over time than using people.*

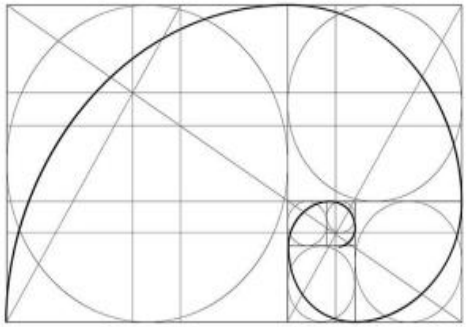
DISADVANTAGES

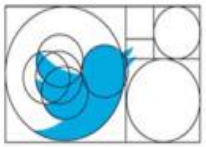


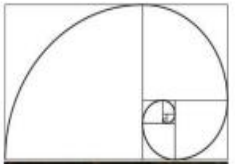
- *Expensive to set up and maintain.*
- *Replaces humans meaning job losses.*
- *No human judgement if something goes wrong.*
- *Required highly skilled people to operate them.*

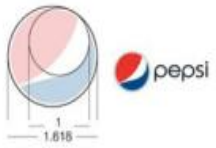
What is Design Thinking?
Design thinking is a non-linear, iterative process that teams use to understand users, challenge assumptions, redefine problems and create innovative solutions to prototype and test. Involving five phases—Empathize, Define, Ideate, Prototype and Test—it is most useful to tackle problems that are ill-defined or unknown.

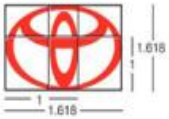
The Golden Ratio is a mathematical ratio that's commonly found in nature. It can be used to create visually-pleasing, organic-looking compositions in your design projects or artwork. Whether you're a graphic designer, illustrator or digital artist, the Golden Ratio, also known as the Golden Mean, The Golden Section, or the Greek letter phi, can be used to bring harmony and structure to your projects.











Design and Technology

1.1 Technology in Manufacturing

System 	A collection of parts that work together to do something. made up of **Input, Process** and **Output**
Smart Technology  	Machines communicating to carry out tasks without human input. Eg. Stock level checks. Online orders
Automation 	Machines doing tasks without much/any human input
	Adv. Speed, Cheap, Accurate. **Disadv.** Expensive. Jobs.
Communication Systems 	Smart machines communicate with no human input. Humans communicate with phone, email, video call etc.

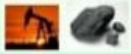
Manufacturing System

Input	Process	Output
All materials tools and equipment you start off with	What happens to the input eg. Measuring, cutting, forming.	The result of the system. (The finished product)

1.2 Production Systems

CAD 	**Computer Aided Design.** Eg. 2D design for graphics/ programming laser cutter. 3D modelling.
CAM 	**Computer Aided Manufacturing.** Eg. Laser cutting, 3D printing.
CNC 	Computer Numerically Controlled
Advantages of CAD/CAM	Quicker to produce many. Accurate. Shared easily. Save on shipping and labour costs.
Disadvantages of CAD/CAM	Expensive to set up and train staff.

1.3 Product Sustainability

Sustainability 	The impact of a process or product on the environment.
Sustainable 	A process or material that can be used without causing permanent damage to the environment or using finite
Finite materials 	Will run out and can not be replaced (eg. Metal/oil)
Non-finite materials 	Will not run out, can be replaced (eg. Wood)
Carbon Footprint 	Amount of greenhouse gas released into the atmosphere by making, using, and disposing of a product.
Global warming 	Average earth temperature rising, causing damage to habitats leading to extinction.
Obsolete 	No longer useful. Outdated.
Planned Obsolescence 	When a product is designed to become outdated or useless quickly.

The Tempest Knowledge Organiser

PLOT	
Act 1	**Scene 1:** Violent, windy storm attacks ship with King Alonso (King of Naples), Ferdinand (his son), Sebastian (his brother), Gonzalo (his counsellor) and Antonio (Duke of Milan) aboard. **Scene 2:** Miranda begs her father to "allay" the storm. He then tells her and the audience the backstory to them becoming stranded on the island. This includes his betrayal and usurpation by his brother Antonio as Prospero neglected his role as Duke of Milan to study magic. Prospero uses magic to make Miranda sleep and we meet Ariel, his spritely slave. We meet Caliban, whose mutual hatred of Prospero highlights their key differences (race, status). Ferdinand and Miranda meet and fall in love instantly.
Act 2	**Scene 1:** On another part of the island, we find the shipwrecked fleet. King Alonso is depressed that he has lost his son and cannot be cheered. Ariel appears (invisible) and puts all to sleep, except for Sebastian and Antonio. Antonio persuades Sebastian to kill his brother (Alonso) so he can have the power of the crown. However, Ariel wakes the King and Gonzalo before regicide can be achieved. **Scene 2:** Stephano (butler) and Trinculo (jester) get Caliban drunk for the first time. Caliban begs Stephano to become his new master.
Act 3	**Scene 1:** Prospero watches as Miranda and Ferdinand discuss their love for one another and agree to get married. **Scene 2:** Stephano enters, drunk and enjoying status of master over Caliban, which Trinculo thinks is ridiculous. Caliban tells them of the "tyrant" Prospero who they need to kill in order to rule the island (taking his books first as this will diminish his power). Ariel is invisible on stage and causes havoc, imitating voices to cause a humorous scene between Stephano and Trinculo. **Scene 3:** Prospero controls magical creatures to create an illusion of a great feast for the royal party. As they prepare to tuck in, Ariel reappears as a harpy and gives his "three men of sin" speech to Alonso, Antonio and Sebastian. Prospero praises Ariel.
Act 4	Prospero frees Ferdinand from his labours and blesses the union with his daughter Miranda. Prospero creates a magical masque in which the spirits of the Gods Iris, Juno and Ceres bless the union. Prospero dramatically interrupts the celebrations, remembering that Caliban, Stephano and Trinculo ore on route to kill him. Prospero orders Ariel to distract the conspirators with his fine clothing, which does have the intended effect on Stephano and Trinculo, much to Caliban's annoyance.
Act 5	Prospero announces that his plans are coming together and orders Ariel to bring forward the royal party. He promises to give up his magic when all is complete. Prospero forgives each in turn and reunites Alonso with his son, Ferdinand. The King is overjoyed and welcomes Miranda to the family. Prospero invites everyone back to his cell for the night before setting off for Naples the next morning.
Epilogue	Prospero speaks directly to the audience, discussing his loss of magical powers and need for the audience's applause to set him free.

Characters	
Alonso – King of Naples	Stephano – a drunken butler
Sebastian – Alonso's brother	Caliban – a savage and deformed slave of Prospero's; a native of the island
Ferdinand – Alonso's son	Prospero – the rightful Duke of Milan
Antonio – Prospero's brother. Antonio stole Prospero's title as Duke of Milan.	Miranda – Prospero's daughter
Gonzalo – the old counsellor to the King of Naples	Ariel – an airy spirit; a slave of Prospero's who earns his freedom
Trinculo – a jester	Spirits in the service of Prospero

The Gold	
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. The duality of human nature.
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.
Punishment as consequence for sin 	**An exploration of the consequences of sin** (crime and punishment). **Death as punishment for sin and subverting the Natural Order. Biblical teaching** emphasises the importance of **confession** and absolution. There is the belief that if we do not repent for our sins, we will suffer damnation. What does it mean to seek retribution?
Binary opposition of innocence vs experience 	**Binary opposition of innocence vs experience** – Childhood innocence as the face of suffering that transforms the older. Experiences in the world (childhood suffering) lead to sins, suffering, cynicism and regret.

English

Historical and Social Context

James I – The first King of England and Scotland, he styled himself as the 'king of Great Britain'. He was a strong advocate of royal absolutism – meaning the king received their power directly from God. This belief brought him into heavy opposition with Parliament and had dire consequences for his successors. The play was possibly written to celebrate the marriage of his daughter in 1611. James believed in, and despised, the supernatural.

The role of women in a patriarchal society- Jacobean England was a society controlled by men. Women were seen as the weaker sex and were expected to be ruled over by men. Women needed to be meek and mild, and most importantly, obedient to their fathers and later their husbands.

Jacobean Travel - The play draws on travel literature of the era as travel to the Americas became more common and frequent. Most notably the play draws on the accounts of a tempest off the Bermudas that separated and nearly wrecked a fleet of colonial ships sailing from Plymouth to Virginia.

Cultural attitudes - Shakespeare seems to have drawn on Michel de Montaigne's essay "Of the Cannibals," (1580) which explored how a Brazilian tribe apparently ate the bodies of their dead enemies out of honour. The name of Prospero's slave, Caliban, seems to be an anagram or derivative of "Cannibal."

Key Term	Definition
Dramatic Irony	A literary technique by which the full significance of a character's words or actions is clear to the audience or reader although unknown to the character.
Foreshadowing	A literary device in which a writer gives an advance hint of what is to come later in the story/play.
Comedy	A play characterized by its humorous or satirical tone and its depiction of amusing people or incidents, in which the characters ultimately triumph over adversity.
Tragedy	A play dealing with tragic events and having an unhappy ending, especially one concerning the downfall of the main character.
Foreboding	The feeling that something bad is going to happen: The gloomy weather gave me a sense of foreboding.
Pathetic fallacy	The attribution of human emotion and conduct to things found in nature that are not human. It is a kind of personification.
Usurp	To take a position of power or importance illegally or by force, such as overthrowing a king.
Colonialism	The policy or practice of acquiring full or partial political control over another country, occupying it with settlers, and exploiting it economically.
Tragicomedy	A play or novel containing/combining elements of both comedy and tragedy.

Key Themes

Social Status and Colonialism 	Jacobean society relied heavily on the feudal system, which placed wealthy Kings and noblemen above women and the working class. Being a black, deformed character from a foreign land would have made Caliban a member of the underclass, deserving no more respect than a beetle. The ignorance of Jacobean society meant there was little chance of moving up in social status, which is why Stephano is so excited to have a servant in Caliban. Colonisation made this possible, as men of varying classes went on explorations to New Worlds that they could take over and rule, imposing their own European cultures on natives.
Supernatural and Magic 	Prospero's thirst for knowledge about magic is what lost him his position as Duke of Milan. His cloak, books and staff symbolise his knowledge and power and are ultimately destroyed at the denouement of the play to symbolise his reintegration to civilised society. Prospero uses his knowledge to control the magical sprite Ariel to commit a number of magical acts in the name of justice, from starting the tempest to becoming a harpy. King James I would have been particularly interested, having written a book about the power of the supernatural in 'Deamonologie'.
Justice, Fate, Destiny, and Religion 	The play is focused around the key storyline of the protagonist seeking justice for being usurped by his own brother in Milan. However, Prospero is hypocritical as he finds no injustice in usurping Ariel and Caliban and enslaving them on the island. Prospero uses magic and manipulation to encourage the audience to sympathise with him and ultimately manages to achieve justice without any bloodshed by the denouement of the play. At this point, he embraces the Christian value of forgiveness before reasserting his place as Duke of Milan.

Dramatic devices

Dramatic Irony – The audience knowing something that a characters doesn't.

Soliloquy – One person speaking their thoughts aloud on stage but directed at themselves.

Foreshadowing – Giving a hint or allusion to a future significant event.

Genres

Comedy	Tragedy
• Confusion • Jesters • Weddings	• Catastrophe • Catharsis • Revenge • Tragic arc of the Lords

English

Poetry – The Impact of Conflict

Critical concept: Devolution is the literary opposite of evolution. The concept that man can mentally, or emotionally, regress from progress in some circumstances. We see this **devolution** and return to an animalistic state when confronted with war, savagery and lack of order.

Structural Features	Definition
Stanza	An separated section of text in a poem
Opening	The first mood/ image of the poem.
Cyclical	When end of the poem repeats an idea/ character/ setting from the opening.
Stanza	A 'paragraph' in a poem.
Enjambment	A sentence or phrase that runs onto the next line.
Rhyme	Correspondence of sound between words or the endings of words, particularly used at the ends of lines
Anaphora	The repetition of a word or phrase at the beginning of successive lines.
Volta	A turning point in a poem.
Juxtaposition	Two ideas/ images placed together for contrasting effect.
Change of mood/ tone	When the writer alters the overall feeling of the poem.
Refrain	A phrase, line or group of lines which is repeated throughout a poem.
Ending	The final mood/image of the poem.

Poetry TOOLS How we analyse and approach poetry	
Title	What does the title suggest? What can we infer from it? What are our associations and expectations?
Overview	What is the surface meaning of the poem? What's the deeper or metaphorical meaning?
Organisation	How has the writer used structure for effect? Opening – shift of tone- ending – impact of rhyme
Language	How has the writer used and crafted language? Use of imagery – meaning of metaphors – choice of adverbs/nouns/adjectives/verbs – impact on the reader
Speaker	Who is the speaker? What is the significance of this? What does it encourage the reader to consider?

Golden ideas	
The human condition	The **human condition** is all of the characteristics and key events that compose the essentials of human existence, including birth, growth, emotion, aspiration, conflict, and mortality. In literature it considers **the meaning of life and morality.**
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. The duality of human nature.
Binary opposition of innocence vs experience	**Binary opposition of innocence vs experience** – Childhood innocence as the face of suffering that transforms the older. Experiences in the world (childhood suffering) lead to sins, suffering, cynicism and regret.

Language Techniques	Definition	Example
Oxymoron	When a phrase is put together by two ideas which contradict one another.	'If in some smothering dreams'
Personification	Describing an inanimate object as having human feelings.	'the sun surfacing defiantly'
Metaphor	A descriptive technique that names a person, thing or action as something else.	'Sirens ripped open the warm silk of sleep'
Simile	A descriptive technique that compares one thing with another, usually using 'as' or 'like'.	'Bent double, like old beggars under sacks'
Alliteration	The occurrence of the same letter or sound at the beginning of adjacent or closely connected words	'For silver-swallow swords'
Superlative	An adjective/ adverb that indicates the most of something.	'Sweetest Love! I do not go For weariness of thee.'
Intensifier	A word, especially an adverb or adjective, that has little meaning itself but is used to add emphasis to another adjective, verb, or adverb.	'My friend, you would not tell with <u>such high</u> zest'
Minimiser	A word that is used to make another adjective, verb or adverb sound lesser.	'To children ardent for <u>some</u> desperate glory'
Imperative	A sentence that is a command.	'Let faxes butter-curl on dusty shelves.'
Exclamatory	A sentence that expresses a heightened emotion. They end with an exclamation mark.	'Gas! GAS! Quick, boys!'
Listing	When the writer includes several words/ phrases/ ideas, one after the other.	'And then I must scrub, and bake, and sweep.'
Repetition	When a word/ phrase is noticeably repeated throughout a sentence/ paragraph/ whole text.	'Rage, rage against the dying of the light.'
Imagery	A technique in which the author appeals to the senses i.e. seeing, hearing, touching.	'My thoughts hissed and spat on my scalp. My bride's breath soured, stank in the grey bags of my lungs.'
Polysemic reading	A word or phrase open to two interpretations.	It's not as if I'm holding out for frankincense or myrrh, just <u>change</u>.

Form

Blank Verse: A poem that uses a specific **metre** but doesn't have a set **rhyming scheme**

Dramatic monologue: A character speaking **their thoughts** aloud.

Elegy: A **funeral** song or poem

Epic: A long, often book-length poem. **Narrative** in verse that retells a **heroic journey** or story

Free Verse: An open form of poetry without rhyme, rhythm or set patterns.

Sonnet: A poem of **14 lines**, usually ending in a **rhyming couplet**

Lyric: A form of poetry usually set to **music**

Further reading and viewing:

War Horse - Michael Morpurgo
The Hunger Games – Suzanne Collins
I Am David – Anne Holme
Salt to the Sea – Ruta Sepetys
The Crucible – Arthur Miller
Dunkirk - 2017
Battle of Britain - 1969
Hacksaw Ridge - 2016

Wilfred Owen, WW1 English poet. Killed in action November 1918

Simon Armitage, modern poet laureate. Considers the impact of conflict on mental and emotional health

Siegfried Sassoon, English poet commended for bravery in WW1 on the Western Front

William Blake. Largely unrecognised during his life, now considered a seminal figure in the history of the poetry of the Romantic Age.

Isobel Thrilling, modern poet. Examines conflict through the perspective of children

Imtiaz Dharker, a Pakistan-born British poet who moved to Scotland. She explores the ideas of culture and identity.

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

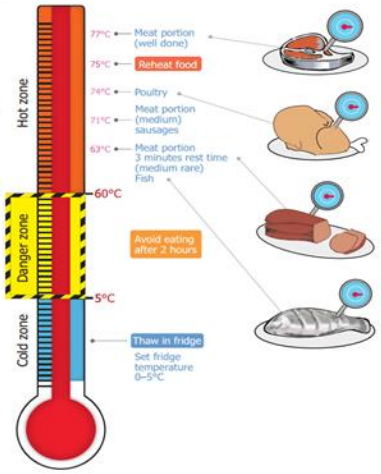
These foods tend to be high in protein and are moisture. They can include food like: raw and cooked **meat**, including **poultry** such as chicken and turkey, and foods containing these, such as **casseroles**, curries and lasagne. **dairy products**, such as custard and dairy-based desserts like custard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

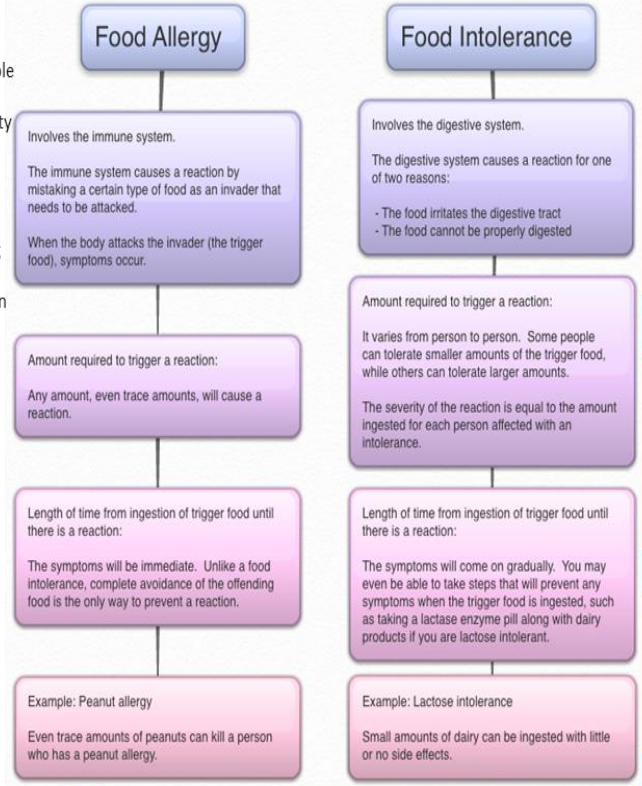
This legislation protects consumers by checking that food has been prepared, handled, processed, packaged, manufactured, stored, transported and distributed safely and hygienically.

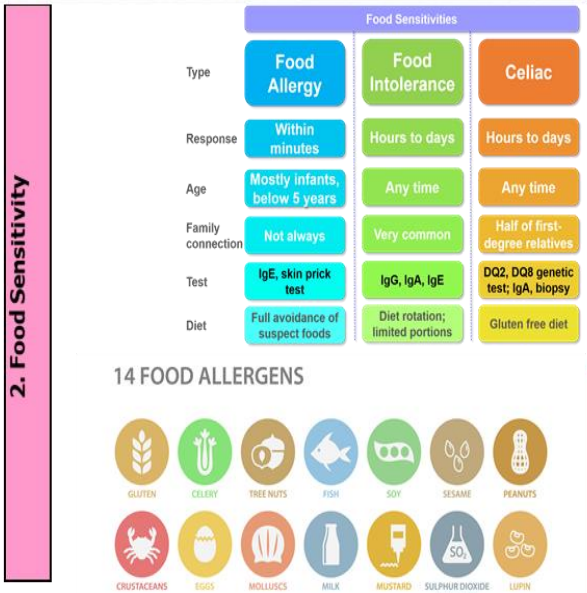
For example, this legislation will check that food is fit for consumption by ensuring that:

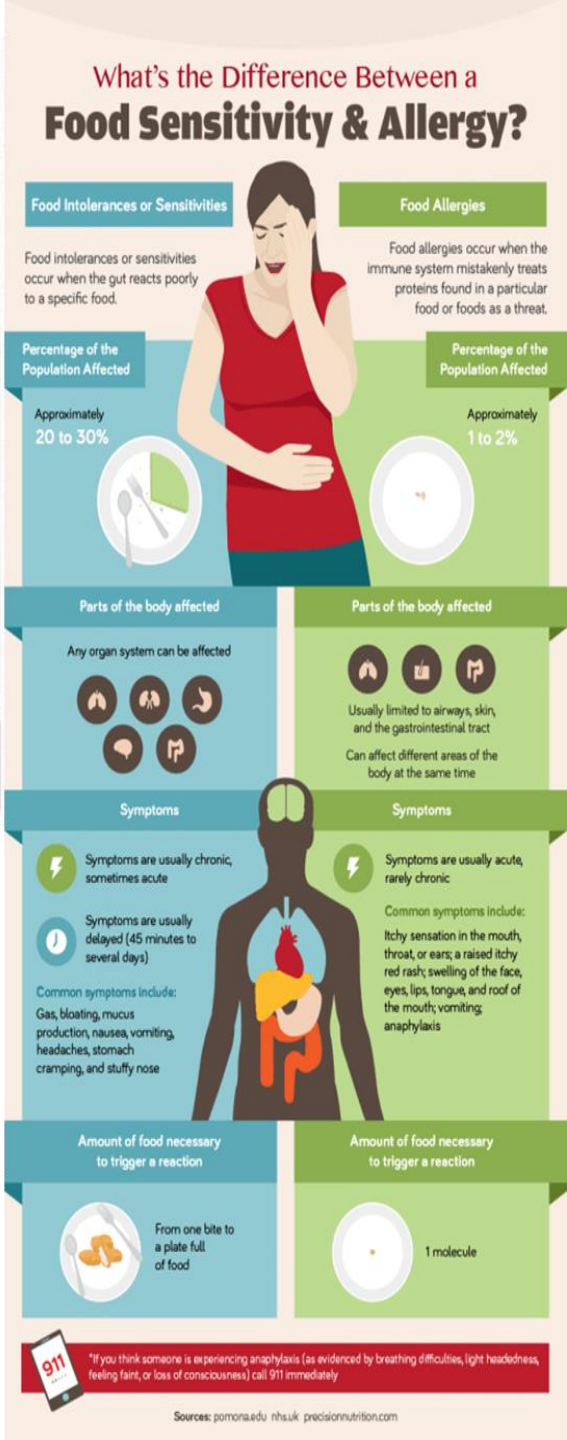
•Any food supplied follows safety requirements and any food sold is done so in a hygienic way. For example, inspectors will examine temperatures of cold storage or holding temperatures.

•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

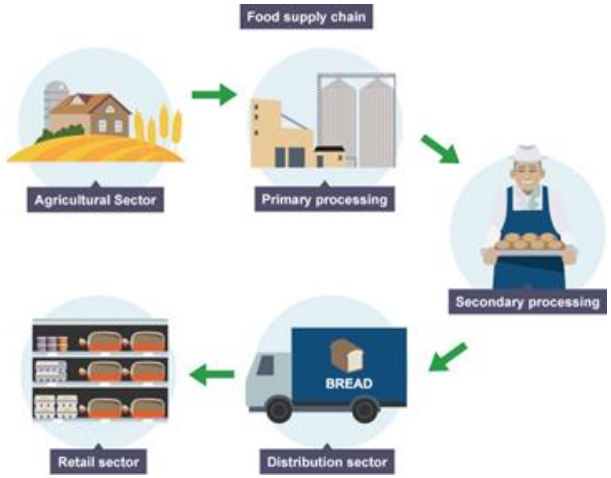
Animals can be reared indoors or outdoors.

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

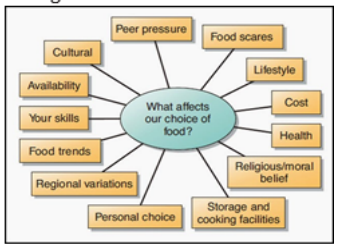
Disadvantages
- ✓ impersonal service - staff may not know customers by name
- ✓ customers may overspend and make impulse purchases because of the special offers available
- ✓ often situated out of town and therefore may be more difficult to access
- ✓ often very busy and noisier than a smaller shopping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

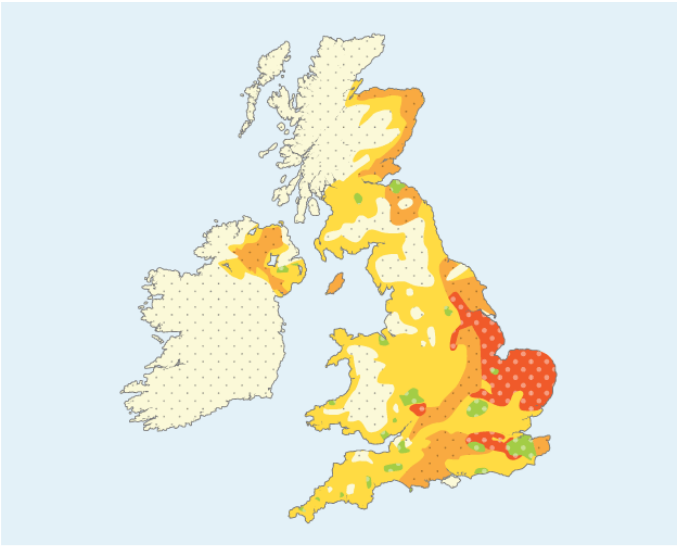
- ✓ Arable farms grow **crops**. Crops are plants that are harvested from the ground to be eaten or sold.
- ✓ Pastoral farms rear **animals** - either for animal by-products such as milk, eggs or wool, or for meat.
- ✓ Mixed farms grow crops **and** rear animals.

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 French Knowledge Organiser (HT5)

Unit 4: Moi dans le monde

Point de départ – Describing a photo

Qu'est-ce qu'on mange?	*What do you eat?*
Les élèves mangent …	*The pupils eat …*
du pain	*bread*
du poulet	*chicken*
du riz	*rice*
du yaourt	*yoghurt*
de la salade	*salad*
de la viande	*meat*
des haricots	*beans*
des légumes	*vegetables*
des pommes de terre	*potatoes*
un fruit	*a piece of fruit*
un petit gâteau	*a biscuit*
Ils/Elles boivent …	*They drink …*
du lait / de l'eau.	*milk / water.*
C'est …	*It is …*
équilibré.	*balanced.*
sain.	*healthy.*
savoureux.	*tasty.*
simple.	*simple.*
varié.	*varied.*
Sur la photo, il y a trois enfants et un(e) adulte.	*In the photo, there are 3 children and an adult.*
Ils sont à la plage.	*They're at the beach.*
Ils ramassent des déchets.	*They're collecting rubbish.*
ils portent ...	*they are wearing ...*
ils cherchent ...	*they are looking for ...*

Unit 1 – What you eat

Est-ce que tu manges de la viande?	Do you eat meat?
Je mange …	I eat …
de la viande.	meat.
du poisson.	fish.
des céréales.	cereals / grains.
des fruits de mer.	seafood.
des produits laitiers.	milk products.
des produits d'origine animale.	animal products.
Je ne porte jamais ...	I never wear …
de vêtements en cuir.	leather clothes.
Je ne refuse rien!	I refuse nothing!
Je suis pour le végétarisme.	I am in favour of vegetarianism.
Je suis contre le véganisme.	I am against veganism.
L'empreinte carbone de la viande est très grande.	The carbon footprint of meat is very big.
Il faut protéger l'environnement.	We must protect the environment.
Le régime végétarien est plus sain que le régime ordinaire.	A vegetarian diet is healthier than an ordinary diet.
On doit respecter les animaux.	We must respect animals.
Il est difficile de faire des repas variés quand on ne mange pas de viande.	It's difficult to make varied meals when you don't eat meat.
La viande, c'est très savoureux.	Meat is very tasty.
La viande apporte beaucoup de vitamines importantes.	Meat provides lots of important vitamins.

Unit 2 – Protect the animals!

Qu'est-ce qu'il faut faire pour protéger les animaux?	What must we do to protect animals?
Il faut …	We must…
ramasser les déchets.	pick up litter.
recycler.	recycle.
manger moins de viande.	eat less meat.
utiliser moins de plastique.	use less plastic.
consommer moins d'énergie.	consume less energy.
aller … à pied ou à vélo.	go … by foot or by bike.
Il ne faut jamais …	We must never…
acheter des souvenirs d'origine animale.	buy souvenirs made from animal products.
consommer des espèces de poisson menacées.	eat endangered fish species.
laisser des sacs en plastique sur la plage.	leave plastic bags on the beach.

Arguing!

Est-ce que tu es pour ou contre …?	*Are you for or against?*
Je suis pour / contre …	*I am for / against …*
À mon avis, …	*In my opinion, …*
Pour moi, …	*For me, …*
Je trouve que …	*I find / think that …*
Je pense que …	*I think that …*
Tu es d'accord?	*Do you agree?*
Je suis d'accord.	*I agree.*
Je ne suis pas d'accord.	*I disagree.*
Tu as raison!	*You're right!*
Tu as tort!	*You're wrong!*
Tu rigoles!	*You must be joking!*
par contre, …	*on the other hand, …*
cependant, …	*however, …*
d'un côté, …	*on one hand, …*
mais d'un autre côté, …	*but on the other hand,*

French

Year 9 French Knowledge Organiser (HT6)

Unit 5: Le monde francophone and cultural topic

Module 5: Unit 3 - Mission anti-plastique!

Il/Elle est né(e) …	He/She was born...
Il/Elle a voyagé .	He/She travelled by lorry.
Il/Elle est rentré(e)	He/She went home.
Il/Elle est allé(e)	He/She went to school.
Il/Elle est entré(e) …	He/She entered …
Il/Elle a retrouvé …	He/She met up with …
Il/Elle est devenu(e) …	He/She became …
Qu'est-ce que tu fais pour réduire le plastique?	What do you do to reduce plastic?
On peut	We can
recycler le plastique	recycle plastic
refuser les sacs en plastique	refuse plastic bags
organiser des campagnes anti-plastique	organise anti-plastic campaigns
acheter des produits recyclés	to buy recycled products
utiliser une bouteille réutilisable / un sac réutilisable	to use a reusable bottle / reusable bag
La semaine dernière, j'ai organisé …	Last week, I organised …
Quand j'étais plus jeune, j'utilisais …	When I was younger, I used to use …
À l'école primaire, je ne faisais rien.	At primary school, I didn't do anything / did nothing.



On va manger …	We are going to eat …
une spécialité.	a speciality.
du couscous.	couscous.
du poisson.	fish.
du poulet.	chicken.
de la glace.	ice cream.
des frites.	chips.

Module 5: Unit 4 – What would you like to do?

Qu'est-ce que tu voudrais faire pour changer le monde?	What would you like to do to change the world?
Je voudrais / J'aimerais…	I would like …
acheter moins de vêtements.	to buy fewer clothes.
manger moins de viande.	to eat less meat.
consommer plus de produits bio.	to consume more organic products.
refuser le plastique à usage unique.	to refuse single-use plastic.
faire du travail bénévole.	to do voluntary work.
devenir membre d'un groupe écologique.	to become a member of a green group.

Unit 1 – Where would you visit?

Quel pays voudrais-tu visiter?
Which countries would you visit?

Je voudrais visiter …	I would like to visit …
Je veux visiter …	I want to visit …
parce que j'adore …	because I love …
le surf.	surfing.
la plongée avec masque et tuba.	snorkelling.
la plage.	the beach.
les poissons exotiques.	exotic fish.
les fruits de mer.	seafood.
Il y a …	There is/are …
un musée (d'art).	a museum (of art).
un monument.	a monument.
des champs.	fields.
On va aller …	We are going to go …
au parc national.	to the national park.
à la montagne.	to the mountains.
à la mer.	to the sea.
aux grottes.	to the caves.
aux temples.	to the temples.

Unit 2 – What we are going to see

On va voir des choses extraordinaires!
We are going to see extraodinary things.

C'est …	It's …
un pont …	a(n) … bridge.
une montagne …	a(n) … mountain.
une tour …	a(n) … tower.
une île …	a(n) … island.
une église …	a(n) … church.
impressionnant(e).	impressive
mystérieux/mystérieuse	mysterious
célèbre.	famous
magnifique.	magnificent
magique.	magical
romantique.	romantic

C'est un amphithéâtre magnifique.
It is a magnificent amphitheatre.
Ce sont des arènes magnifiques.
They are magnificent arenas.

C'est plus … que …	It's more … than …
C'est moins … que …	It's less … than …
grand(e) / petit(e)	big / small
haut(e) / mauvais(e)	high / bad
bon(ne)	good
beau/belle	beautiful
nouveau/nouvelle	new
vieux/vieille	old

French

Year 7 French Knowledge Organiser (HT6)
Revision

The POWER of the INFINITIVE
You can add an infinitive to these phrases to:
1) give an **opinion** *or*
2) say something in the near **future** tense
3) say what we have to do

Opinion phrases:
J'aime – I like — J'aime **jouer**. – I like to play.
Je déteste – I hate — Je déteste **regarder** la téle. – I hate to watch the TV.
Je veux – I want — Je veux **boire** un coca. – I want to drink a cola.
Je voudrais/J'aimerais - I would like — Je voudrais **acheter** moins de vêtements. – I would like to buy fewer clothes.

Near future: (See below for *aller*)
Je vais – I am going — Je vais **aller**. – I am going to go.
Je vais **manger**. – I am going to eat.

Saying what we have to do
On doit - We have to — On doit faire des repas variés. – We have to make varied meals.
Il faut - It is necessary to — Il faut proteger l'environement. – It is necessary to protect the environment.

The Past Tense
You can add an infinitive to these phrases to:
1) the one-word 'Imperfect' Past
2) the 'Perfect' Past, which needs two parts:
   1) The person doing the thing in the past plus the matching form of either *avoir* or *être* (you can find these to the right).
   2) The past participle of the verb that is happening in the past.

Infinitive	English	Present – I do now	Imperfect – I used to	Past Participle – I have done
manger	to eat	je mange	je mangeais	j'ai mange
porter	to wear	je porte	je portais	j'ai porté
organiser	to organise	j'organise	j'organisais	j'ai organisé
faire	to do	je fais	je faisais	j'ai fait

avoir	to have
j'ai	I have
tu as	you have
il/elle a	he/she has
on a	we have
nous avons	we have
vous avez	You have
ils/elles ont	they have

être	to be
je suis	I am
tu es	you are
il/elle est	he/she is
on est	we are
nous sommmes	we are
vous êtes	You are
Ils/elles sont	They

Infinitive	English	Present – I do now	Imperfect – I used to	Past Participle – I have done
aller	to go	je vais	j'allais	je suis allé(e)
rentre	to return/go home	je rentre	Je rentrais	je suis rentré(e)
devenir	to become	deviens	devenais	je suis devenu(e)
naître	to be born	-	-	je suis né(e)

aller	to go
je vais	I go / I'm going
tu vas	you go
il/elle va	he/she goes
on va	we go
nous allons	we go
vous allez	You go
ils/elles vont	they go

Recurring vocabulary

il y a	there is
il n'a pas	there is not
c'est	it is
ce n'est pas	it is not
et	and
mais	but
parce que	because
car	because
aussi	also
très	very
assez	quite
trop	too
ma/mon/mes	my
ta/ton/tes	your
sa/son/ses	his/her

Negatives
ne ... pas
On ne mange pas – we don't eat
ne ... jamais
Ce n'est jamais – it is never
ne ... rien
Ce n'est rien – It is nothing

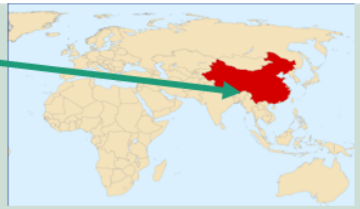
Comparatives
moins ... que – more ... than
plus... que – more ... than

French

Asian Giant - China

Location of China

South East Asia
East of India
South of Mongolia
Yellow Sea to the East
Himalayas to the South West
Gobi Desert
Kun Lun Mountain range



How is China developing?

China has the worlds fastest growing economy. This economic growth is being powered by massive fossil fuel consumption and a large workforce. The government is spending money on improving Quality of Life in China and there is a growing, wealthy middle class. There are still large areas of the country which are poor; these tend to be in the rural areas.

Development Indicators - Trend

GNI per capita	$15 500	Growing
HDI	**0.74**	Growing
Infant mortality	9 (per 1000 live births)	Falling
Literacy rate	96.4%	Growing
Life expectancy	76 years	Increasing

China is classed as a **NEE** Country **– Newly Emerging Economy .**

Population

China was the first country in the world to record a population in excess of 1 billion; it is now over 1.4 billion. This was largely due to past governments encouraging large families. In the 1960s the growth spiralled out of control and the country experienced widespread famine. In 1979 the government introduced the controversial **One Child Policy.**

- Couples had to be married to have a child
- Couples had to apply to the government to have a child
- Those who had one child received benefits and free health care
- Forced abortions were given if pregnant with 2nd child.

It led to a number of unplanned side effects:

- Baby boys were favoured over girls; this led to a gender imbalance.
- The poorest became reliant upon the benefits
- Babies being abandoned or dumped in orphanages.

+ The policy was so successful that the government is now actively encouraging larger families. There are concerns that some areas will be underpopulated and industry will suffer in the future and they will struggle to fund the elderly population
The policy was formally phased out in 2015.

Population pyramids show the structure of the population in a country in any one year. A narrow base means low birth rates. A wide top means people are surviving to old age like in China. They worried they won't be able to adequately support their elderly population now.

What is China like?

China has gone through massive economic, social and cultural change since it opened its trading borders in 1978. China is also the world's largest exporter and second-largest importer of goods. They are now an **economic super power**. The government has invested heavily in transport systems in order to allow trade to take place easily and quickly.
This wealth is filtering down to the population and today only 10% of the Chinese population lives below the poverty line of US$1 per day, down from 64% in 1978.
This economic growth has seen an huge rise in urbanisation and rural to urban migration.
Mandarin is the most widely spoken of 292 Chinese dialects.
China's climate is dominated by dry seasons and wet monsoons, which lead to temperature differences between winter and summer.

TNCs in China – Apple and Foxconn

Why are TNCs located in China?
There are a number of reasons why so many TNCs are choosing to locate factories in China (secondary Industry).
1. Low Wages – reduced costs and increased profits.
2. Cheap land – cheaper to buy land here than in HICs.
3. Resources – lots of energy resources means reliable power.
4. Big population – means plenty of workers for factories.
5. Little Health and safety – factories can be up and running quickly.
6. Roads – products can be transported and exported easily and quickly.
7. Flat land- suitable and cheaper for construction.
8. Cities specialise
9. Special Economic Zones – financial incentives offered by the government in certain areas of the country.

What are they?	Positives	Negatives
TNCs are also known as Multi National Companies. They are companies that operate in a number of different countries. They often locate their factories in NEE/LIC countries and have their headquarters in HICs. They have helped to increase **globalisation.** spoken.	•Employment is provided for local people. •Roads and infrastructure are built by the TNCs. •Increased taxes for the government can be spent on improving education/health/sanitation. • Other local businesses benefit as people have more money to spend.	•Very long working hours. •Wages are low. •There is no job security. •Health and safety regulations are not as stringent as in HICs •Most of the profit goes back to HICs. •Suicide rates amongst workers are very high. •Poor quality of live amongst workers.

Environmental Issues

Air pollution – In 2010 over 250 000 people died due to air pollution. 1/3 of global lung cancer cases were recorded in China in 2012. Acid rain triggered by combustion of fossil fuels (which releases sulphur dioxide and nitrous oxides) has devastated forests and ecosystems throughout China.
Water pollution - Coastal pollution is widespread, leading to declines in habitat quality and increasing harmful algal blooms. This algae is poisonous to all life, and it uses all the oxygen in the water so fish die.Tests on tap water have found Benzene present at 200 micrograms of per litre of water. The national safety standard is 10 micrograms

Powering Chinas' future Economic Growth

The 3 Gorges Dam
Rising from the waters of the Yangtze River, the Three Gorges Dam stands more than 40 storeys high. The dam stretches for over 2km (1.25 miles), took tens of thousands of workers over a decade to build and cost more than $40bn (£25bn
Why was it needed?
If China is to sustain its economic growth into the future then they need a reliable source of energy. They government knows that they need to reduce the amount of fossil fuels they currently consume (namely coal).

Benefits	Negatives
Reduced risk of flooding . Water stored behind the dam is available for irrigation. Hydroelectric Power (HEP) is generated by turbines in the dam. It's the worlds largest capacity HEP station. The electric produced means China saves 31 million tonnes of coal each year, reducing their greenhouse gas emissions.	Good farmland has been lost Over 1.3million people were forced to move their homes Archaeological sites were lost. These is an increased risk of landslides in some places. The project was very expensive. US$22.5 billion Downstream areas been more at risk from flooding.

Panda Solar Farm - 248 acres in size, located in northern China . One of two built in the shape of a giant panda! There are plans to build another 98 around the country. China will become the worlds largest producer of solar energy . Construction created 1000s of jobs and reliable renewable energy.

Investment in Africa – China has invested billions of dollars throughout Africa, funding more than 1000 projects in Nigeria, South Africa and Zambia. They have become Africa's most important trading partner.

Positives	Negatives
New transport links enables better trade links and public transport Jobs created in new mines Quality of Life increases for locals who now access improved facilities such schools/healthcare	Valuable natural resources are exported out of Africa Dangerous working conditions in copper mines Lots of jobs go to Chinese workers

Geography

Environmental issues: Waste

Global production of waste

Globally **waste** generation rates are rising. Currently **worldwide municipal solid waste** generation stands at over 2 billion metric tonnes and is expected to have increased to 3.4 billion metric tons by 2050. This is due factors such as population growth, urbanisation, and economic growth, as well as consumer shopping habits. As humans produce more and more waste, it is increasingly becoming a major issue worldwide and something which countries need to manage. However, less than 20 % of waste is **recycled** each year, with huge quantities still sent to **landfill** sites. Waste is also often disposed of at hazardous open dump sites, especially in developing nations. Richer countries produce more waste than poorer countries, but typically have better waste management to help deal with these issues.

How does Waste affect the land?

Ghana is located in West Africa and is situated on the coast of the Gulf of Guinea. Lots of Europe's **E-waste** ends up in Ghana. This trade is illegal.

Social Impacts:

- The working environment is hazardous.
- The toxins released from burning waste can cause breathing problems and even cancer.
- People suffer from burns, back problems and infected wounds.

Environmental Impacts:

- Scrap metal is burned which releases toxic substances into atmosphere creating air pollution.
- The ground also gets polluted.

Economic impacts:

- Both the people of Ghana and the Ghanaian economy can make money from sorting through and selling on parts of the E-waste for re-use.

E-waste is only likely to increase in the future as more and more people want the most up to date forms of electronics. Also, people in the developing world are getting richer and can afford to buy electrical items, so the market is expanding.

Key term definitions

Waste	Unwanted or unusable material, substances, or by-products.
Municipal Solid Waste (MSW)	Includes household waste and waste similar in nature and composition to household waste consisting of everyday items that are discarded by the public.
Waste stream	the complete flow of waste from its domestic or industrial source through to recovery, recycling or final disposal.
Landfill	The disposal of refuse and other waste material by burying it and covering it over with soil.
Incineration	Incineration is a waste treatment process that involves the combustion of organic substances contained in waste materials. It can reduce the volume of waste by up to 90% leaving only ash that still needs to be disposed of.
E waste	Electronic products that are unwanted, not working, and nearing or at the end of their "useful life." E.g. Computers, televisions.
Marine debris	is litter that ends up in oceans, seas, and other large bodies of water.
Microplastics	extremely small pieces of plastic debris in the environment
Waste hierarchy	Ranks waste management options according to what is best for the environment. (see diagram below)

How does Waste affect the oceans?

Plastic is made from fossil fuels and has only existed for around 100 years, however it can exist for 100's of years before breaking down. About 8 million tons of plastic end up in the ocean every year, and plastic makes up 80% of all marine debris. Most plastic which ends up in the oceans come from land, especially via rivers. This waste can then be moved around the planet by **ocean currents**. Marine species ingest or are entangled by plastic debris, which causes severe injuries and death.

The Great Pacific Garbage Patch is a collection of marine debris in the North Pacific Ocean. The amount of debris in the Great Pacific Garbage Patch is not biodegradable and is mainly mad up of tiny bits of plastic, called **micro plastics**. The Great Pacific Garbage Patch is so far from any country's coastline that no country will take responsibility or provide the money to clean it up.

Ways to reduce plastic:

- Use re-usable drinks bottles/cups rather than single use plastic ones
- Avoid takeaways and make meals at home
- Use re-usable cutlery and straws.
- Store leftovers in glass jars
- Buy products in cartons or glass jars.

Waste in the UK

The UK produces approximately 225 million tonnes of waste each year. 12% of this is created by households. UK residents throw away 15-20% of the food they buy, costing families £800 per year. England's recycling rates are 45% and typically London is the worst at recycling.

Lots of the UK's waste gets shipped abroad. Previously most waste went to China, but they put a ban on this in 2018, so Malaysia is now the largest export destination of the UK's waste.

Waste disposal in the UK

Landfill	Approx. 45% of UK's waste ends up in landfill. There are more than 500 landfill sites across the UK many of which will be full in the next few years. + It's an easy way of disposing of waste - Can cause ground, water and air pollution
Incineration	Waste is burned and the heat created can be used to heat water and create electricity. + Deals with a lot of waste and can create electricity. - Costly and does release some toxins to locally area.
Recycling	Converting waste into re-usable materials. Recycling rates in the UK are increasing. + Reduces the needs for new products to be made from scratch. - Relies on individual households to sort own waste into categories – can be confusing.
Composting	Organic waste e.g. food or garden waste can be composted and treated to produce soil conditioner. + Easy to do and reduces carbon emissions - Can take time, takes up space and can create smells.

Geography

Year 9 German Knowledge Organiser (HT5)

Unit 4: Klassenreisen machen Spaß!

In der Jugendherberge	*In the youth hostel*
die Hausordnung	*rules of the house*
Man muss vor 22:00 Uhr ins Bett gehen.	*You have to go to bed before ten o'clock.*
Man muss das Bett machen.	*You have to make the bed.*
Man muss das Zimmer sauber halten.	*You have to keep the room clean.*
Man muss vor acht Uhr aufstehen.	*You have to get up before eight o'clock.*
Man muss abwaschen.	*You have to wash up.*
Man darf nicht rauchen.	*You must not smoke.*
Man darf nicht im Zimmer essen.	*You must not eat in the room.*
Man darf keine laute Musik hören.	*You are not allowed to listen to loud music.*

Der Tagesablauf	*Daily routine*
Ich stehe auf.	*I get up.*
Ich wasche mich.	*I get washed.*
Ich dusche mich.	*I have a shower.*
Ich ziehe mich an.	*I get dressed.*
Ich frühstücke.	*I have breakfast.*
Ich gehe aus.	*I go out.*
Ich komme zurück.	*I come back.*
Ich esse zu Abend.	*I have dinner/the evening meal.*
Ich gehe ins Bett.	*I go to bed.*

Wie komme ich zum/zur ...?	*How do I get to the ...?*
Geh/Geht/Gehen Sie ...!	*Go ...!*
(nach) links	*(to the) left*
(nach) rechts	*(to the) right*
geradeaus	*straight on*
Nimm/Nehmt/Nehmen Sie ...!	*Take ...!*
die erste Straße links	*the first street on the left*
die zweite Straße rechts	*the second street on the right*
Geh an der Ampel links!	*Go left at the lights.*
Geh an der Kreuzung rechts!	*Go right at the crossroads.*
der Bahnhof	*station*
der Park	*park*
die Bushaltestelle	*bus stop*
die Kirche	*church*
das Schwimmbad	*swimming pool*
das Hallenbad	*indoor swimming pool*
das Museum	*museum*
der Markt	*market(place)*
der Lehrer	*teacher (male)*
die Lehrerin	*teacher (female)*
das Souvenirgeschäft	*souvenir shop*
die Imbissstube	*snack bar*
das Eiscafé	*ice cream parlour*
vor dem/der ...	*in front of the ...*

Auf einem Fest	*At a festival*
der Umzug(¨-e)	*procession, parade*
der Festwagen(-)	*float (in a parade)*
die Band(s)	*band, group*
das Kostüm(e)	*costume, outfit*
der Hut(¨-e)	*hat*
die Fahne(n)	*flag*
die Kirmes(sen)	*funfair*
das Fahrgeschäft(e)	*ride (at funfair)*
der Imbiss(e)	*snack*
bunt	*colourful*
traditionell	*traditional*
der Trick(s)	*trick*
das Handy(s)	*mobile phone*
die Haare (pl)	*hair*
die Schuhe (pl)	*shoes*

German

Year 9 German Knowledge Organiser (HT5)

Unit 4: Klassenreisen machen Spaß!

Entschuldigung/Bitte, …	*Excuse me/Please, …*
Danke (sehr/schön)./ Vielen Dank	*Thank you very much.*
Bitte (sehr/schön).	*You're welcome.*
Nichts zu danken.	*Don't mention it.*

Oft benutzte Wörter	***High-frequency words***
weil	*because*
sein/seine	*his*
ihr/ihre	*her*
zu	*too*
sehr	*very*
ziemlich	*quite, fairly*
ein bisschen	*a bit*
nicht	*not*
haben	*to have*
sein	*to be*
in	*in*
an	*at, by, on (wall)*
auf	*on (top of)*
neben	*near, next to*
heute	*today*
morgen	*tomorrow*
vor	*before*
nach	*after*

und	*and*
(und) auch	*(and) also*
aber	*but*
sehr	*very*
ziemlich	*quite*
nicht	*not*
Was denkst du?	*What do you think?*
Ich denke, …	*I think …*
Ich auch!	*Me too!*
Ich nicht!	*Not me!*
Was? Du spinnst!	*What? You're joking!*

Um wie viel Uhr?	***At what time?***
um … Uhr	*at … o'clock*
um fünf/zehn/zwanzig nach …	*at five/ten/twenty past …*
um fünfundzwanzig vor …	*at twenty-five to …*
um Viertel nach …	*at quarter past …*
um Viertel vor …	*at quarter to …*
um halb acht	*at half past seven*

Die Monate	***The months***
Januar	*January*
Februar	*February*
März	*March*
April	*April*
Mai	*May*
Juni	*June*
Juli	*July*
August	*August*
September	*September*
Oktober	*October*
November	*November*
Dezember	*December*

German

Year 9 German Knowledge Organiser (HT5)
Revision and Culture

The POWER of the INFINITIVE
You can add an infinitive at the end of the clause after these phrase to:
1) give an **opinion** *or*
2) say something in the **future** tense
3) say what we have to do/want to do

Opinion phrases:
Ich mag – I like — Ich mag schwimmen gehen. – I like to go swimming.
Sie mag Toast essen. – She likes to eat toast.

Future: (See below for *werden*)
Ich werde – I will — Ich werde Obst essen. – I will eat fruit.
Ich werde Bonbons kaufen. – I will buy sweets.

Saying what we have to do/want to do/are allowed to do
Ich muss – I have to — Ich muss das Bett machen. – I have to make the bed.
Ich will – I want to — Ich will das Zimmer sauber halten. – I want to keep the room clean.
Ich darf – I am allowed to — Ich darf laute Musik hören. – I am allowed to listen to loud music

The Past Tense
You can add an infinitive to these phrases to:
1) the one-word 'Imperfect' Past
2) the 'Perfect' Past, which needs two parts:
   1) The person doing the thing in the past plus the matching form of either *haben* or *sein* (you can find these on the right).
   2) The past participle of the verb that is happening in the past at the end of the clause.

Infinitive	English	Present – I do now	Imperfect – I used to	Past Participle – I have done
essen	to eat	ich esse er isst	ich aß	ich habe ... gegessen
kaufen	to buy	ich kaufe er käuft	ich kaufte	ich habe ... gekauft
tragen	to wear	ich trage er trägt	ich trug	ich habe ... getragen
sich duschen	to shower	ich dusche mich	ich duschte mich	ich habe mich ... geduscht

Infinitive	English	Present – I do now	Imperfect – I did	Past Participle – I have done
gehen	to go	ich gehe er geht	ich ging	ich bin ... gegangen
fahren	to go (by vehicle)	ich fahre er fährt	ich fuhr	ich bin ... gefahren
bleiben	to stay	ich bleibe er bleibt	ich blieb	ich bin ... geblieben

haben	to have
ich habe	I have
du hast	you have
er/sie hat	he/she has
wir haben	we have
ihr habt	y'all have
sie haben	they have
Sie haben	You have

sein	to be
ich bin	I am
du bist	you are
er/sie ist	he/she is
wir sind	we are
ihr seid	y'all are
sie sind	they are

werden	will
ich werde	I will
du wirst	you will
er/sie wird	he/she will
wir werden	we will
ihr werdet	y'all will
sie werden	they will
Sie werden	You will

Recurring vocabulary

es gibt	there is
es gibt kein	there is no
es ist	it is
es ist nicht	it is not
und	and
aber	but
weil	because
denn	because
auch	also
sehr	very
ziemlich	quite
zu	too
mein	my
dein	your
sein/ihr	his/her

mit	with
ohne	without

Comparatives
besser als – better than
schlechter als – worse than
weniger als – less than

***Weil* ist vile!**
Remember: *weil* sends the verb to the end.
..., weil es sehr lecker ist.
-..., because it is very tasty.
..., weil es zu salzig ist.
-..., because it is too salty.

German

Y9 Unit 4: The Holocaust

The history of Jewish persecution in Europe

1096-1881: Unfortunately, **anti-Semitism** has been common in Europe for hundreds of years. As far back as 1096, we see records of Jewish people being massacred by crusading Christians, while **rumours about Jews practising magic and working with the devil** are common throughout European history. In late Medieval times Jews were barred from certain jobs and some would lend money to others to get by, this unfortunately led to a **stereotype of Jews as moneylenders.** Many people resented being in debt and wrongly blamed their debts on Jews. Whilst untrue, rumours of Jews carrying out ritual murders *(blood libel)* were common. **Some of Europe's most famous and important 20th century figures were Jewish**, including physicist Albert Einstein, psychologist Sigmund Freud and the writer, Franz Kafka. Despite this, **the early 20th century saw a growth in political antisemitism** as politicians took advantage of anti Jewish prejudices to win votes. Much of this **prejudice was based on false rumours that Jews were involved in a secret conspiracy to take over the world**, rumours that were based on a forged book called "The Protocols of the Elders of Zion." Forged in Russia and published in 1905, the book claimed to contain the details of a meeting of Jewish leaders who were discussing their planned take over of the world. The Nazis used antisemitism to gain power in Germany and carry out the Holocaust. The Holocaust, or Shoah in Hebrew, refers to **the mass murder from 1941-145, of at least 6 million Jews, Slavs, homosexuals, disabled people** and other groups considered inferior by the Nazi regime that held power in Germany from 1933-1945.

How and why was the holocaust able to happen?

As a result of German expansion in WW2, Germany found themselves with many more Jews under their control than before. Reinhard Heydrich, Reich Security officer, ordered that these Jews be moved to **ghettos**. These ghettos were overcrowded (Warsaw ghetto had at least 400,000 Jews living over 1.3 square miles) and were rife with disease and starvation. In 1941, the Nazis invaded the Soviet Union. They believed the Slavic people who lived in the areas East of Germany were an inferior race and orders were given for the German army to kill any Slavs or Communists they saw. **Nazi killing squads called Einsatzgruppen were set up, they killed more than a million Jews,** usually by firing squad, this is sometimes called the **"Holocaust by bullets."** In Summer 1941, a Nazi called Herbert Lange was asked to find an efficient way to kill Jews. He drove some Jews from a village called Chelmno to a nearby mansion and told them to get showered. Lange locked the doors and gassed them. Lange's use of gas led to the creation of **the first Nazi death camp** (Chelmno). Following the Wannsee Conference in 1941, death camps were built. **Mass murder using gas chambers were the Nazis "final solution".** Germany was suffering economically and many Germans were desperate for someone to blame for the loss of WW1 and and **the Jews were a convenient scapegoat**. **The Nazis controlled public opinion through propaganda, controlling education, trying to convince people of the 'science' behind their ideals (eugenics), creating reward programmes such as "strength through joy"** and their feared police and **security forces; the Gestapo and the SS**. It is also true, that many Germans believed the Nazis lies because they had antisemitic views.

Life for Jews in Nazi Germany

Even before the outbreak of WW2, Hitler and the Nazis encouraged hatred of Jews in Germany. Anti-Jewish propaganda was published, portraying Jews as greedy, mysterious, untrustworthy and not part of the German race. **Several laws were passed which limited the rights of Jewish people.** They were banned from joining sports clubs, working in certain professions (lawyers and teachers) and Jewish children were barred from attending German schools. In 1935 **the Nuremburg race laws** were passed which banned Jews from being German citizens, they had no protection under the law. One of the most shocking incidents was **Kristallnacht** which took place on 9th November 1938. Following the murder of a German diplomat in Paris, the Nazis stormtroopers (The SA) along with some ordinary Germans, **attacked and destroyed 7,000 Jewish businesses in Berlin.** Synagogues were burned and **between 91-250 Jews died as a result.** The Nazis made the Jews pay for any damages and began arresting Jews without cause, many historians consider Kristallnacht to be the beginning of the Holocaust in Europe.

The Police State – Consent VS Coercion

The Nazis established a controlling police state. Central to this were **the Gestapo, the Nazi secret police**. **Their job was to spy on the German people**, gathering information in secret from friends and neighbours. The Gestapo could arrest and send people to concentration camps without trial or explanation. Equally feared, were **the SS or Schutzstaffel**, Hitler's ruthless security force led by Heinrich Himmler. They would attack Jews and other groups and intimidate political opponents. In 1933 approximately 200,000 political opponents were sent to Nazi concentration camps. The Nazis also won support by creating jobs and reducing unemployment, **many Germans felt the future was bright under the Nazis**. There were groups who openly opposed the Nazis. One of these was **the Edelweiss pirates,** a group of youth who sang anti Nazi songs and made fun of Hitler Youth. By the 1940s they were being sent to concentration camps, some were executed. Another important group – **The White Rose Group**, a group of University students and a professor. **They published thousands of pamphlets exposing the Nazi regime as a "dictatorship of evil"** and labelling its leaders as "criminals." The leaders of the White Rose Group were given up to the Gestapo in 1943 and were executed.

Concentration Camps

The Nazis began building concentration camps early in the 1930s to hold political opponents. Prisoners in the camps were given **basic food and shelter and forced to work in squalid conditions**. Dissenters or would be escapees could be executed and guards had a reputation for brutality. By 1941, the Nazis had begun building extermination camps or death camps. Jews would be rounded up from ghettos, concentration or labour camps and sent to the death camps. Prisoners were undressed and sent straight to gas chambers where they were murdered, their possessions were taken and their bodies were burned. In total, **the Nazis killed almost 3 million Jews using death camps**, The most infamous of all was **Auschwitz Birkenau, where over 1 million Jews were murdered by gas**. Most camps were built in Poland, but there were also camps in places such as Serbia, Croatia, Belarus.

Jewish resistance

Fighting back against the Nazis was very difficult. They were well trained and heavily armed while Jews in camps and ghettos were rarely armed or trained at all. Nazi officers would execute any rebels and even kill their families to discourage resistance. Still, there were more than 100 organized Jewish resistance movements in camps and ghettos from 1941-1943. The most well-known resistance movement was **the Warsaw Ghetto uprising in April-May 1943**. A group of Jews living in the ghetto led by 23-year-old Mordecai Anielewicz smuggled weapons into the ghetto and fired on German guards, resisting their removal to a death camp for almost a month. The fighters barricaded themselves into buildings, the Nazis responded by burning down the whole ghetto, building by building. Eventually the rebels were rooted out and **7,000 Jews were killed including Anielewicz**. Still, the uprising was the fiercest resistance operation ever staged against the Nazis and inspired subsequent uprisings in camps and ghettos across Europe.

Key terms	Definition
Jew	A follower of Judaism. Jews and Christians both have the same God but have different beliefs about the message of the bible. For example, Christians believe that Jesus was the Son of God and saviour of mankind. Jews respect Jesus as a leader, but do not believe he was the saviour or the Son of God.
Aryan	In the 19th and 20th Centuries, some people believed that Europeans were descended from the ancient 'Aryan' race, who were racially superior to other races. There is no real evidence for an 'Aryan' race actually existing – Hitler referred to them as the 'master race'.
Nazi	A member or supporter of the Nazi Party who governed Germany from 1933-1945. The Nazis were led by Adolf Hitler.
Holocaust / Shoah	Mass murder (genocide) of Jews and other minority groups including Slavs, gypsies and homosexuals which took place 1941-1945. The Jewish word for the holocaust is "Shoah" which means catastrophe.
Concentration camp	A camp in which people are held under harsh conditions, usually for being part of a group that a country has decided are "undesirable." First used by the British in the Boer War.
Boycott	To withdraw support for something as a protest. One of the first things that the Nazis did to persecute the Jews was to encourage the people of Germany to boycott Jewish businesses (refuse to buy from them).
Einsatzgruppen	Nazi death squads. Their job was to round up Jews and other undesirable groups and shoot them; this included non combatants. They killed around 2 million people.
Anti-Semitism	Hostility towards or prejudice against Jewish people.
Ghetto	A part of a city or an area in which members of a minority group live together. Jews in Nazi occupied countries were forced to live in ghettos before the Nazis started moving them to concentration camps.
Pogrom	A violent riot with the aim of expelling or massacring a group of people, usually Jewish people. Pogroms against Jews have taken place throughout history, most notably in Russia from 1881 onwards, when Jews were blamed for the assassination of Tsar Nicholas II. In 1905, over 2,500 Jews were killed in Russia.
Police State	A country in which the Government has total control and uses the police to enforce that control, not for the benefit and protection of the people, but to control them and crush political opposition.
Gestapo	The Nazi Secret Police force. They would gather information about people who were suspected of opposing the Nazi leadership. They spied on people and collected information from communities.
Genocide	Acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group.
Stereotype	A widely held, simplified and often untrue view of something or someone.

What was the Holocaust?

During the Second World War, the Nazis murdered nearly six million European Jews. This genocide is called the Holocaust. The Holocaust has a number of causes. Its direct cause is the fact that the Nazis wanted to exterminate the Jews. But their lust for murder didn't come out of nowhere. The antisemitic Nazi ideology must be considered in the broader context of the age-old hostility towards Jews, modern racism, and nationalism.

Interpretations of the holocaust:

Since the fall of Nazi Germany in 1945, the holocaust has become one of the most debated aspects of 20th century history. This is, in part because it is so important but also **because the Nazis destroyed much of the evidence for what they were doing,** so it is still unclear how much of the Holocaust was planned, who was actually involved (was it mainly carried out by the Nazis or ordinary Germans too?) and even Hitler's own level of involvement is debated (did he order and oversee the holocaust himself or were lower ranking Nazis more responsible for key decisions?). **Some Historians argue that Hitler planned the Holocaust from the start and the Nazis were heavily involved in it's execution;** these historians are called "intentionalists."
Another group are the "**functionalists." These historians argue that the Holocaust was not closely planned in detail** and was carried out because of the initiative of other groups such as the SS or ordinary Germans. The most common view today is a mixture of these two, best summarized by Historian, Ian Kershaw who believes that Hitler's violence and anti-Semitisim were vital in causing the holocaust, though he probably didn't plan it in detail himself, and left it to his followers to do most of the planning and arranging.

1933:	1935	1938	1939	October 1939	1941	Summer 1941	January 1942	1942-1945	1945
Hitler passes the enabling act in Germany, giving him the power to make laws. Germany is under Nazi control.	The Nuremburg Laws: Jews are banned from being German citizens or marrying non Jews.	Kristallnacht; A night of Nazi perpetrated violence against Jews, 91-250 Jews killed, 7,000 businesses destroyed, the Holocaust begins.	Hitler invades Czechoslovakia and Poland, WW2 breaks out, the Nazis now control many more European Jews than they did before war.	The first Jewish ghettos established in Nazi occupied countries. Conditions are squalid, there is poverty, starvation and isolation.	Germany begin their invasion of the Soviet Union, Einsatzgruppen Death Squads are used to kill Jews by firing squad.	The first use of gas to kill Jews by a low ranking Nazi, Herbert Lange and Chelmno in Poland,	The Wannsee Conference is called to find a "final solution" to the "Jewish problem." The Nazis begin to build death camps around Europe.	More than 2 million Jews are moved from concentration camps and ghettos to death camps where they are killed using poisonous gas.	WW2 ends and Nazi Germany is defeated, America, British and Russian troops discover the camps, exposing the holocaust to the world.

IT : Computing

What is a network?

A network is two or more computers (or other electronic devices) that are connected together, usually by cables or Wi-Fi. Some computer networks will have a server. A server is a powerful computer that often acts as a central hub for services in a network, e.g. emails, internet access and file storage. Each computer connected to a server is called a client.

What problems can occur with a network?

If we connect computers or devices together in a network we can expose ourselves to some problems. If the network breaks, this can make a number of tasks it is used for quite difficult. For example, it might not be possible to share photographs and opinions with friends. If computers and devices are networked together, we can expose ourselves to hackers and viruses. Most viruses are spread over a network and most hackers use a network to access other people's computers. Without a network connection, a hacker would have to physically get to your computer

Data Packets

The main purpose of networking is to share data between computers. A file has to be broken up into small chunks of data known as data packets in order to be transmitted over a network. The data is then re-built once it reaches the destination computer. Networking hardware is required to connect computers and manage how data packets are communicated. Protocols are used to control how data is transmitted across

IP Address to Domain Name Server to Uniform Resource Locator

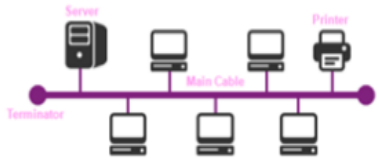
When we type in www.google.co.uk we are typing in the URL (Uniform Resource Locator) – this is easy to remember!

What we are actually connecting to, is Google's IP Address where the website is stored and this is a series of numbers, 173.194.34.95 – harder to remember!

The system that converts the IP Address (173.194.34.95) to www.google.co.uk is known as the Domain Name Server

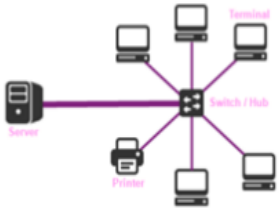
Within this, there are then 3 subtypes of networks which are shown below

Bus network



Ring network

Star network

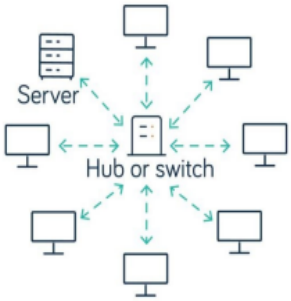


Types of Networks - There are two main types of networks: LAN and WAN

Local area network (LAN)

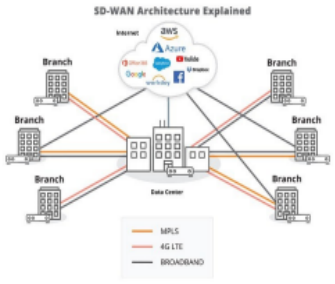
A local area network is when computers or devices are connected together over a small geographical area, such as within a home, a building or one site. **A LAN** can be created to share data or hardware such as a printer, or to share an internet connection.

A computer that is not connected to a network is called a standalone computer



Wide area network (WAN)

A wide area network is when computers or devices are connected together over a large geographical area. For example, a company with an office in London and another in Beijing would use **a WAN** to allow the employees to share one network. Some companies will connect a number of LANs in different areas together to create a WAN. **The biggest WAN we know is the internet.**



Client-server networks

This type of network separates computers into one of two classifications - servers and clients. A server is a computer that manages and stores files, or one that provides services to other computers on the network. They control the network and allow other computers to share and communicate. In effect, they serve other computers. Typical servers include:

- file servers - hold and maintain user files
- applications servers - allow programs to be run over a network
- web servers - hold and share web pages
- print servers - manage printing across a network

Peer-to-peer networks

In a peer-to-peer (P2P) network, all computers have equal status - no computer has control over the network. There are no servers or clients. Instead, each computer is known as a peer. Peers store their own files, which can be accessed by other peers on the network. Therefore, a peer is both a client and a server. P2P networks are best suited to smaller organisations that have fewer computers, or where fewer computers need access to the same data.

HT5: Networks

Key vocabulary	
Network	A group of interconnected computers/devices.
LAN	Local area network. A network of computers that covers a small area, eg a school or college.
WAN	Wide area network. A network that spans across a building, buildings or even countries, eg the internet.
Client-server	A relationship in which data or web application is hosted on a server and accessed by client computers.
Peer to peer	A relationship where all computers on the network share responsibility and there is no one central server.
WAP	A device that connects computers to a network using Wi-Fi.
Switch	A device for connecting computers and other network capable devices together to form a network.
NIC	**Network Interface Controller** -A circuit board that is installed in a computer so it can be connected to a network.
Transmission media	How data is carried from point A to point B physically, either by cable or wirelessly.
Ethernet	A set of protocols used in a wired local area network that describes how data is transmitted within it.
Wi-Fi	A method of connecting to the internet wirelessly using radio waves.
Bluetooth	Wireless technology used for transmitting data over short distances.
DNS	**Domain name server** - an internet service that translates IP addresses into website domain names. All websites have equivalent IP addresses.
Host	A server that stores files for other computers to access.
Cloud	A term often used to describe a location on the internet from which software applications are run and where data is stored.

Common protocols	
TCP/IP	**Transmission Control Protocol/Internet Protocol** - enables communication over the internet.
HTTP	**Hypertext Transfer Protocol** - governs communication between a webserver and a client.
HTTPS	HTTPS **(secure)** includes secure encryption to allow transactions to be made over the internet.
FTP	**File Transfer Protocol** - governs the transmission of files across a network and the internet.
POP	**Post Office Protocol** – governs the transmission of emails to devices. Once downloaded to the device is deleted from the server.
IMAP	**Internet Message Access Protocol** – governs the transmission of emails. Stored on server and accessed by devices.
SMTP	**Simple Mail Transfer Protocol** - governs the sending of email over a network to a mail server.
Layering	In networking, the concept of breaking up communication into separate components or activities.

Key vocabulary	
Encryption	Files that are encrypted have been altered using a secret code and are unreadable to unauthorised parties.
IP address	A unique address for each computer device on a network.
MAC address	Media access control - each unique piece of hardware on a network has a MAC address.
Standard	An agreed way of doing things.
Protocol	A set of rules for how messages are turned into data packets and sent across networks.

HT6: Digital Imaging

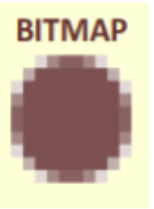
Adobe Photoshop software

Adobe Photoshop is a powerful bitmap/raster graphics editor widely utilized for various digital imaging tasks. It offers a multitude of tools and features tailored for image manipulation, photo editing, graphic design, and digital painting. Photoshop allows users to perform tasks such as cropping, resizing, colour correction, retouching, and compositing with precision and flexibility. Its extensive array of filters, layers, masks, and adjustment options empowers users to achieve complex and professional-looking results. Beyond basic image editing, Photoshop is also instrumental in creating web graphics, advertisements, illustrations, and even 3D artwork. Its versatility and comprehensive toolset make it a go-to software for graphic designers, photographers, web developers, and artists seeking to bring their creative visions to life.

File Type	Description	Classification
JPEG	Common format for digital photos and web images. It uses lossy compression, which may result in some loss of image quality.	Bitmap
PNG	Lossless compression format often used for web images. It supports transparency and is suitable for images with sharp edges	Bitmap
GIF	Supports animations and transparent backgrounds. It uses loss-	Bitmap
TIFF	High-quality format commonly used in printing. It supports mul-	Bitmap
BMP	Simple bitmap format widely supported by various applications. It does not compress image data, resulting in larger file sizes.	Bitmap
SVG	Scalable Vector Graphics format. It defines graphics in XML format, allowing for scalable and resolution-independent images.	Vector
AI	Adobe Illustrator format. It is a proprietary vector graphics format used primarily by Adobe Illustrator for creating and editing	Vector
EPS	Encapsulated PostScript format. It is a versatile vector format commonly used in printing workflows and supporting both vec-	Vector
PDF	Portable Document Format. It is a versatile format capable of containing both vector and bitmap images, along with text and interactive elements.	Both (can contain both vector and

Types of Graphics

Bitmap graphics are made up of pixels. Each pixel is stored on the computer as a series of 1s and 0s. When you take a photo with your smart phone it stores the digital image as a bitmap.



Vector graphics do not have any pixels. Instead they are made up of lines and shapes. When a vector is enlarged the lines and shapes are redrawn; making them great for resizing.

Editing tools

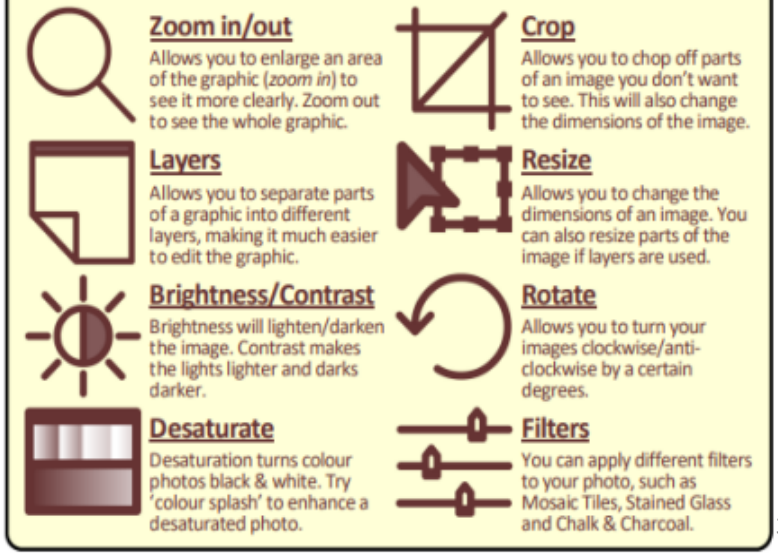


Image Optimisation

Digital images can take up a lot of space on your computer hard drive. To make digital images smaller you can compress them, which reduces the file size (*taking you less space on your computer*). Some file types, like JPG, compress digital images without it being obvious they have been compressed. A special algorithm is used to remove some of the detail; reducing the file size along with the quality of the digital image.

Types of compression

LOSSY

Lossy compression removes some of the detail. The quality of the digital image will be reduced. Great for digital images you intend to post online, but no so great if you intend to print your digital image to put in a photo album or photo frame.

LOSSLESS

Lossless compression doesn't remove any of the detail. The quality of the digital image will be really good. Great for digital images you intend to print, to put in a photo album or photo frame, but no so great if you intend to post your digital image online.

How images are represented by binary

What is a pixel?

The word pixel comes from 'picture element'. A pixel is a tiny coloured square. Digital images are made up of lots of pixels. Each pixel in a digital image will need to be converted into binary.

What is binary?

Binary is a 2-base number system of 1s and 0s. The 1s and 0s represent electrical signals, 1 = on and 0 = off. All computer data (including digital images) is converted into binary in order for it to be processed.

Representing images

Digital images are converted into binary so that the computer can process them. Each pixel in a digital image is made up of binary numbers. These binary numbers are processed by the CPU.

How pixels are drawn on a screen

All digital images are output to the screen as pixels. This is because the screen itself is made up of loads of pixels; each pixel can be a particular colour from millions of possible colours. The digital image is drawn on the screen in the form of a grid; the computer will instruct each pixel on the screen to display a certain colour. Millions of coloured pixels create a digital image on the screen for you to view.

Resolution

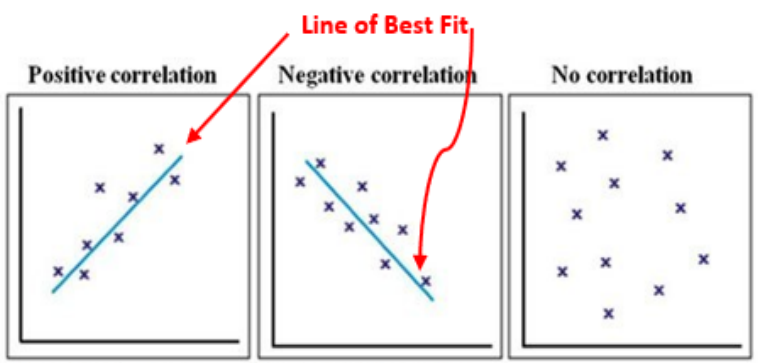
The quality of a digital image is determined by the resolution. Resolution is a measure of how many pixels are used in a given area (*e.g. 1 square inch*). The resolution of a digital image can tell you how detailed the image is and whether it's a good quality image or not.

My Notes

HT6: Digital Imaging

Keyword	Description
Photo Editing	Photo editing involves altering or enhancing digital photographs to improve their appearance or convey a specific message. This can include adjusting colors,
Illustration	Illustration refers to creating visual representations of concepts, ideas, or stories. Unlike photographs, illustrations are often stylized or drawn by hand. They
Vector/Bitmap	Vector graphics are composed of geometric shapes such as points, lines, and curves, making them scalable without loss of quality. Bitmap (or raster) graphics consist of a grid of pixels, and resizing them can result in loss of quality. Understanding the difference between these formats is crucial for selecting the appro-
File Types	File types refer to the formats used to store digital images. Common file types include JPEG, PNG, GIF, TIFF, BMP, SVG, AI, EPS, and PDF. Each format has its
Image Optimization	Image optimization involves adjusting various parameters to achieve the best balance between image quality and file size. This typically includes compression
Compression	Compression is the process of reducing the size of a digital image file by removing redundant or non-essential data. There are two main types of compression:
Quality	Image quality refers to the overall visual fidelity and clarity of a digital image. Factors affecting image quality include resolution, colour accuracy, sharpness, and absence of artifacts such as noise or distortion. Balancing quality with file size is essential for achieving optimal results in various digital imaging applica-
Zoom In/Out	Zooming in/out allows users to magnify or reduce the size of an image on-screen for detailed inspection or broader context. This functionality is particularly
Layers	Layers are individual elements within an image that can be independently edited, arranged, and manipulated. Layer-based editing enables non-destructive
Brightness/Contrast	Brightness and contrast adjustments are fundamental image editing techniques used to control the overall luminance and tonal range of an image. Increasing
Desaturate	Desaturation is the process of removing colour from an image, converting it to grayscale or black and white. Desaturating an image can evoke a sense of nos-
Crop, Resize & Rotate	Crop, resize, and rotate are basic image manipulation operations used to modify the composition and dimensions of an image. Cropping involves removing unwanted parts of an image, resizing adjusts its dimensions, and rotating changes its orientation. These operations are essential for refining composition and
Filters	Filters are predefined image effects or adjustments applied to alter the appearance of an image. They can enhance colors, add texture, simulate artistic styles, or apply corrective adjustments such as sharpening or noise reduction. Filters provide a quick and convenient way to achieve specific visual effects in digital
Image Restoration	Image restoration involves repairing or enhancing old, damaged, or degraded images to restore their original appearance or improve their quality. This pro-
Pixel	A pixel is the smallest unit of a digital image, representing a single point of color within the image grid. Pixels collectively form the visual elements of an image, and their density determines the image's resolution and level of detail. Understanding pixels is essential for image editing, resizing, and optimizing digital im-
Binary	Binary refers to a digital image representation where each pixel is either black or white, typically denoted as 0 (black) or 1 (white). Binary images are common-
Resolution	Resolution denotes the level of detail and clarity in a digital image, typically measured in pixels per inch (PPI) or dots per inch (DPI). Higher resolution images contain more pixels per unit area, resulting in sharper and more detailed representations. Resolution is crucial for determining print quality, display clarity, and overall image fidelity.

Scatter Graphs and Correlation



The points lie close to a straight line, which has a positive gradient.

This shows that as one variable **increases** the other **increases**.

The points lie close to a straight line, which has a negative gradient.

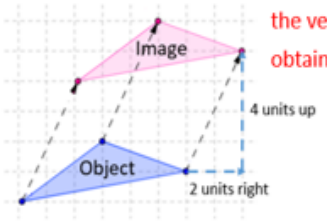
This shows that as one variable **increases**, the other **decreases**.

There is no pattern to the points.

This shows that there is **no connection** between the two variables.

Translations:

Translation Vectors: $\begin{pmatrix} x \\ y \end{pmatrix}$ ↔ ↕



The object has been translated by the vector $\begin{pmatrix} 2 \\ 4 \end{pmatrix}$ to obtain the image

Compound Measures

Speed(S), *Distance*(D) *and Time* (T)

$$S = \frac{D}{T}, \quad D = S \times T, \quad T = \frac{D}{S}$$

Pressure(P), *Force*(F), *and Area* (A)

$$P = \frac{F}{A}, \quad F = P \times A, \quad A = \frac{F}{P}$$

Density(D), *Mass*(M) *and Volume*(V)

$$D = \frac{M}{V}, \quad M = D \times V, \quad V = \frac{M}{D}$$

Units:

Speed: m/s, km/h, mph

Pressure: N/m², N/cm²

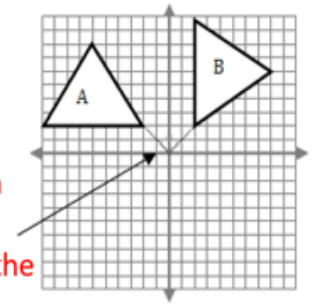
Density: kg/m³, g/cm³

Rotations

Angle (90^0, 180^0 or 270^0)

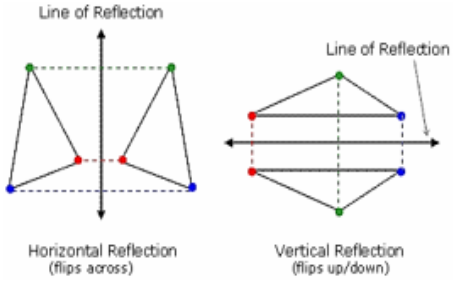
Direction (Clockwise or Anti-Clockwise)

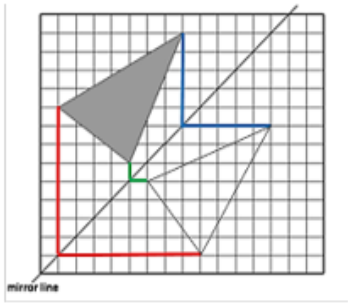
Centre of Enlargement



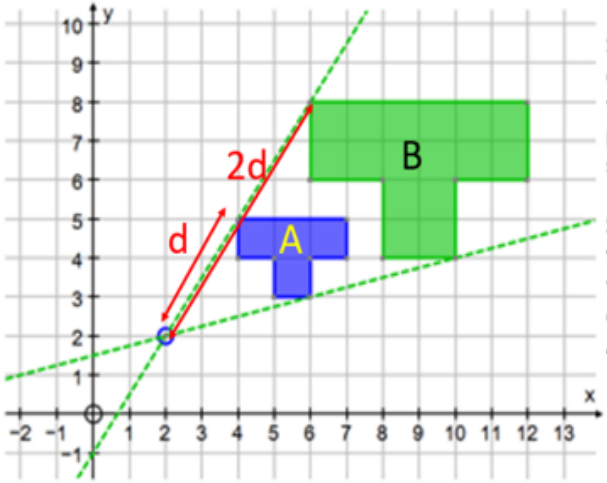
Shape A has been rotated 90^0 Clockwise about the Origin (0,0)

Reflections





Enlargements



Shape A has been enlarged by a scale factor 2 about the point (2,2) to obtain shape B

Shape B is also twice the distance from (2,2) compared to Shape A

9 Core & Extension

Half-term 5

Maths

Solving Linear Equations 1:

To solve equations use the **BALANCING METHOD**

$4(2x - 3) = 36$

Expand the brackets

$8x - 12 = 36$

$(+12)$ $(+12)$

$8x = 48$

$(\div 8)$ $(\div 8)$

Solution: $x = 6$

$7x - 11 = 2x + 34$

Subtract $2x$ from both sides as it is the smallest

$(-2x)$ $(-2x)$

$5x - 11 = 34$

$(+11)$ $(+11)$

$5x = 45$

$(\div 5)$ $(\div 5)$

Solution: $x = 9$

$\frac{x}{4} + 7 = 11$

(-7) (-7)

$\frac{x}{4} = 4$

$(\times 4)$ $(\times 4)$

Solution: $x = 16$

Solving Linear Equations 2:

Linear Equations can have fractional and negative solutions!

$18 - 7x = 3(2x - 8)$

Expand the brackets

$18 - 7x = 6x - 24$

Add $7x$ from both sides as it is the smallest

$(+7x)$ $(+7x)$

$18 = 13x - 24$

$(+24)$ $(+24)$

$42 = 13x$

$(\div 13)$ $(\div 13)$

Solution: $x = \frac{42}{13}$

$\frac{3x + 8}{2} = 1$

$(\times 2)$ $(\times 2)$

$3x + 8 = 2$

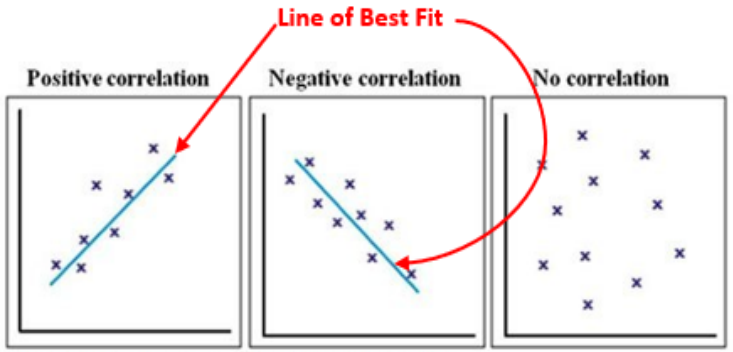
(-8) (-8)

$3x = -6$

$(\div 3)$ $(\div 3)$

Solution: $x = -2$

Scatter Graphs and Correlation



The points lie close to a straight line, which has a positive gradient.

This shows that as one variable **increases** the other **increases**.

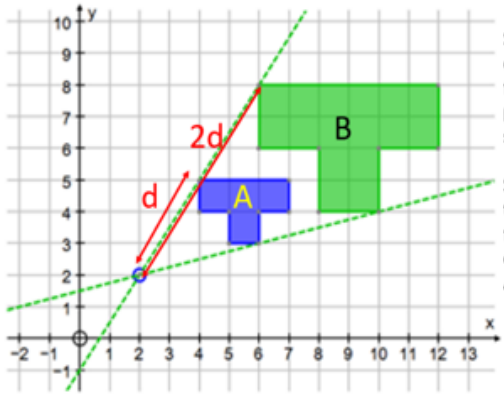
The points lie close to a straight line, which has a negative gradient.

This shows that as one variable **increases**, the other **decreases**.

There is no pattern to the points.

This shows that there is **no connection** between the two variables.

Enlargements

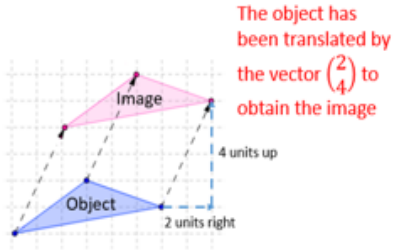


Shape A has been enlarged by a scale factor 2 about the point (2,2) to obtain shape B

Shape B is also twice the distance from (2,2) compared to Shape A

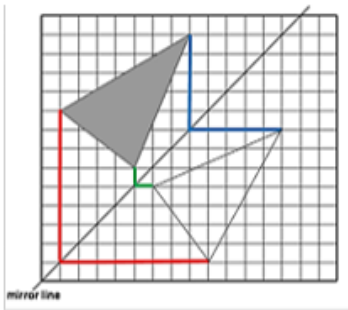
Translations:

Translation Vectors: $\binom{x}{y}$ ↔ ↕



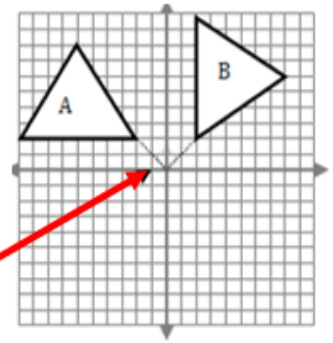
The object has been translated by the vector $\binom{2}{4}$ to obtain the image

Reflections



Rotations

- Angle (90^0, 180^0 or 270^0)
- Direction (Clockwise or Anti-Clockwise)
- Centre of Rotation



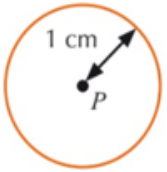
Shape A has been rotated 90° clockwise about the point (0,0)

9 core & Support Half-term 5

Maths

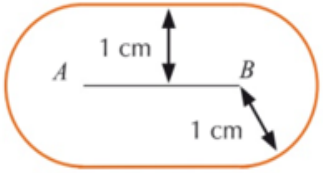
Loci

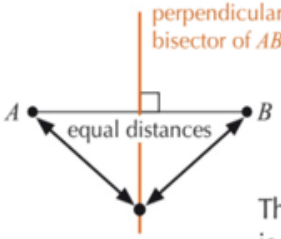
A **locus** (plural **loci**) is a **set of points** which satisfy a particular condition. The types of loci you need to know are the sets of points that are a **fixed distance away** from a point or a line (or another kind of shape), and the sets of points that are **equidistant** (i.e. the **same distance**) from two points or two lines.



The locus of points that are a fixed distance, e.g. 1 cm, from a **point** P is a **circle** with radius 1 cm centred on P. To construct this, set your **compasses** to the given distance and draw a circle around the point.

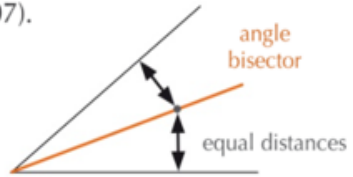
The locus of points that are a fixed distance from a **line** AB is a 'sausage shape'. To construct this, use your compasses to draw the ends, which are **semicircles**, then join them up with your ruler.



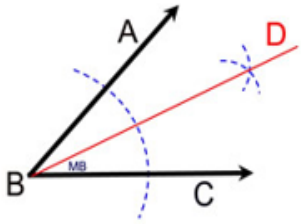


The locus of points equidistant from **two points** A and B is the **perpendicular bisector** of AB (see page 307).

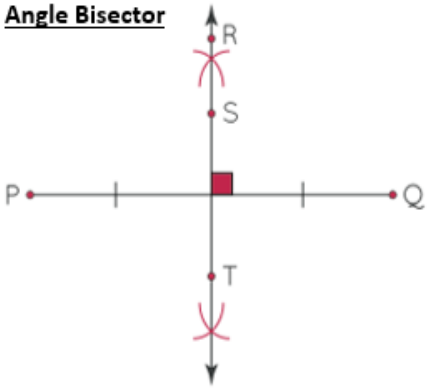
The locus of points equidistant from **two lines** is their **angle bisector** (see page 308).



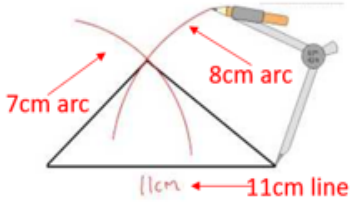
Angle Bisector



Angle Bisector



SSS Constructions



Negative and Fractional Indices

$$x^{-n} = \frac{1}{x^n}$$

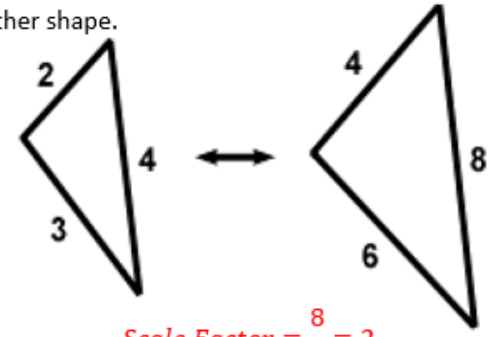
$$x^{\frac{1}{n}} = \sqrt[n]{x}$$

$$\left(\frac{4}{7}\right)^{-2} = \left(\frac{7}{4}\right)^{2} = \frac{49}{16}$$

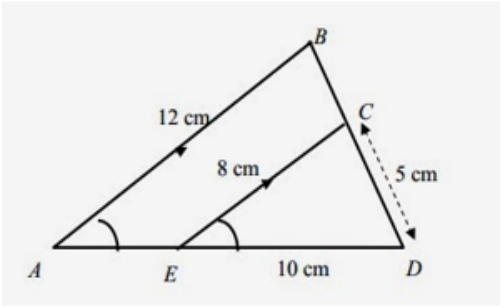
$$64^{\frac{1}{3}} = \sqrt[3]{64} = 4$$

Similarity:

Two shapes are similar if one is an enlargement of the other. To find the **scale factor**, we divide the one side by its corresponding side on the other shape.



$$Scale\ Factor = \frac{8}{4} = 2$$



$$Scale\ Factor = \frac{12}{8} = 1.5$$

Surds:

Any number that cannot be square rooted to give an integer answer is a **Surd.**

Eg. $\sqrt{2}, \sqrt{110}, \sqrt{75}$ *etc.*

Rules of Surds:

$$\sqrt{ab} = \sqrt{b} \times \sqrt{b}$$

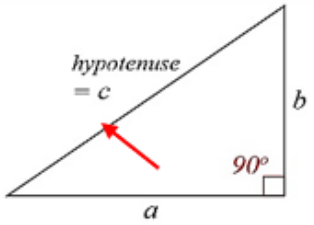
$$\sqrt{\frac{a}{b}} = \sqrt{a} \div \sqrt{b}$$

$$\sqrt{a} \times \sqrt{a} = a$$

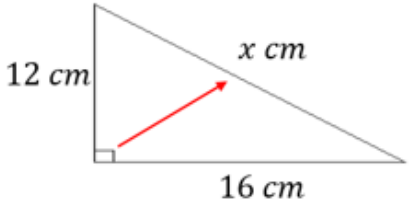
9 Core & Extension Half-term 6

Maths

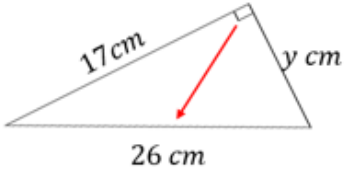
Pythagoras' Theorem:



$$c^2 = a^2 + b^2$$

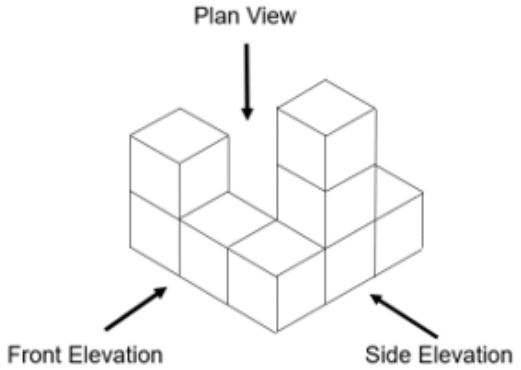


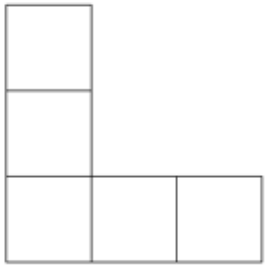
$a^2 + b^2 = c^2$
$12^2 + 16^2 = x^2$
$144 + 256 = x^2$
$x^2 = 400$
(√) (√)
$\boldsymbol{x = 20cm}$



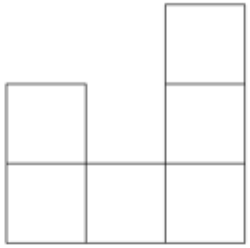
$a^2 + b^2 = c^2$
$y^2 + 17^2 = 26^2$
$y^2 + 289 = 676$
(-289) (-289)
$y^2 = 387$
(√) (√)
$\boldsymbol{y = \sqrt{387}\ cm}$ **or** $\boldsymbol{y = 19.7cm(3sf)}$

Plans and Elevations

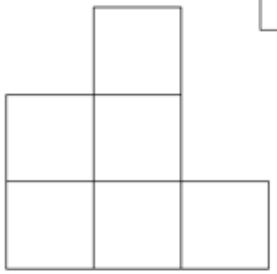




Plan



Front Elevation



Side Elevation

9 Core & Support

Half-term 6

Maths

Y9 Music HT5&6 – Analysis

Dynamics:

the volume and volume changes in a piece of music

Rhythm, Metre and Tempo:

Rhythm – a pattern of sound

Metre – the number of beats per bar

Tempo – the speed of the piece of music BPM

Context:

The background information

Structure:

the order of the different sections

Melody:

The main tune

Instrumentation:

The instrument sounds and how they ae used

Texture:

The layers of sounds and how they interact

Harmony and Tonality:

Harmony – the chords used

Tonality – the key; Major/Minor

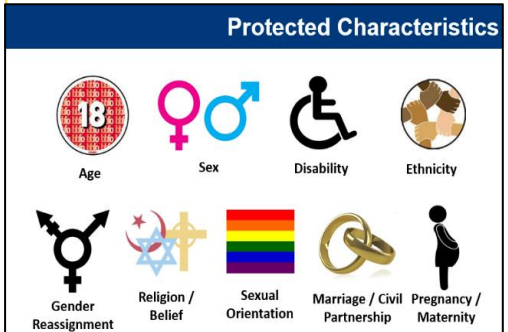
Equality & Society
Religion, Philosophy & Ethics

Key Terms	Definition
Equality	Is the state of being equal, especially in statue, rights or opportunities.
Human Rights	are rights that every person has. The 1948 United Nations Declaration of Human Rights lists all the basic human rights everyone is entitled to.
Equality Act 2010	A UK law that defines nine protected qualities. Discriminating against someone because of these qualities is illegal.
Hate Speech	Speech that harms or attacks someone based on their race, religion, ethnicity, sexual orientation, disability, age or gender.
Prejudice	are opinions that we form without knowing all the facts.
Discrimination	means treating someone unfairly as a result of prejudice.
Stereotypes	A view that is commonly believed but oversimplifies the situation e.g. girls love pink.
Islamophobia	A dislike or prejudice against Islam or Muslims.
Persecution	Treating someone badly because of their race, political views or religious beliefs.
Freedom	is the right to act, think or speak as you want, without interference from an individual, organisation or government.

Equality Laws

- Every human being deserves to be treated equally, fairly and with respect, regardless of anything that may make them "different".
- Laws have been passed and agreements made in order to promote equality such as:
  - The 1948 United Nations Declaration of Human Rights lists 30 basic human rights everyone is entitled to such as; the right to life, the right to education, the right to freedom of speech etc.
  - The 2010 UK Equality Act recognizes nine characteristics that should be protected from discrimination such as; gender, sexual orientation, race, religion etc.
- Despite the laws in place to protect the most vulnerable in society there is often conflict and debate over how these laws should be applied.

Positive discrimination is where a particular group is given special privileges to compensate for a perceived disadvantage. For example, disabled people can often access parking spaces closest to a building's entrance.



Religious Equality

- For centuries people have been persecuted due to their religious belief; one of the most commonly known about acts of religious discrimination is World War II where Hitler's Nazi party sought to irradicated Judaism.
- Since the 2001 9/11 terror attacks, and more recent terror attacks claimed by supposed Muslims, there has been a rise in Islamophobia and racism towards the Muslim community.
- The media is often the cause of such prejudice as "click bait" or misleading newspaper headlines are created to encourage people to read their articles which in fact do not evidence the headline. E.g., in 2015, The Sun newspaper was force to apologise over a headline that was completely untrue and very misleading. The headline suggested 1 in 5 British Muslims have sympathy for terrorists.
- To tackle religious discrimination and misunderstandings many individuals, charities and interfaith groups have tried to create community cohesion. They may do this by creating opportunities for people to learn about religions, by acting as role models or by creating positive events for different faith groups to come together.

Mohammad Salah has had an unprecedented effect on people as a famous Muslim footballer – a famous chant was created by fans of the Liverpool football team in support of Salah and his Muslim faith.

Animal Equality

Animal rights refers to the idea that animals should be entitled to live lives that are free from **abuse** by humans. In the UK, there are laws designed to protect animals from **cruelty**...

- It is a crime to neglect or mistreat an animal, including when an animal is being transported or slaughtered.
- It is also **illegal** to stage fights between animals for entertainment, or to test cosmetics on animals.
- Some forms of hunting are also illegal
- People can be fined or face imprisonment if they cause unnecessary suffering to animals.

An increasing numbers of people are turning to **vegetarian** or **vegan** ways of living. This may be due to the belief that animals deserve rights, the most basic being the right to life, or due to environmental concerns about eating meat.

Jewish and Christian holy books teach that humans are superior to animals, that we should rule over them. Thus, so long as humans are not cruel to them, animals can be used for our benefit.
Some atheists believe that humans evolved just as all other animals have – as such, we are no more important than other animals and so any rights you give to a human should be given to animals too.

Religious Studies

Gender Equality

Inequality between men and women is still present in today's society.

Inequality against women - recent figures suggest, only 34% of UK Members of Parliament are women, in businesses around the world only 31% of senior management are women and only 17% of engineers are women. Additionally, on average, women earn 16% less than men for working the same job – this is called the 'gender pay gap'. These figures highlight the fact that there is a significant gender divide in certain high paying professions.

Inequality against men – many workplaces don't offer men extended parental leave or part-time working once they become a parent whilst they may offer this to women.

Danger of gender stereotyping…

Both genders have stereotypes which may appear harmless but, when adopted by society, may lead to prejudice, discrimination and people trying to conform to the stereotype even though it may be harmful to them. For example, an old-fashioned stereotype is that after having children a women should give up caring about her career to look after her family and a father be devoted to providing financially for the family. Some workplaces will allow women to change their jobs to part-time after having children but not men which discriminated against men. Some workplaces have also been accused of not promoting women who are likely to get pregnant or have a small family assuming they won't be able to make time for their work, discriminating against women.

Feminism

Feminism is the advocacy of women's rights on the ground of the equality of the sexes, in recent years there have been many movements by groups and individuals to challenge the gender divide, for example a ban on adverts featuring "harmful gender stereotypes" or those which are likely to cause "serious or widespread offence" has come into force. The ban covers scenarios such as a man with his feet up while a woman cleans, or a woman failing to park a car. The UK's advertising watchdog introduced the ban because it found some portrayals could play a part in "limiting people's potential".

Most Jews, Christians and Muslims all believe men and women are equal as the bible teaches that God created humans "in his image" so everyone is made the same, equal. However, there are some who take certain religious teachings and use them to promote the idea of men having authority over women.

"Homosexual people have a right to be in a family. The are children of God" Pope Francis (Catholic Christian)

"When the whole world is silent, even one voice becomes powerful" Malala Yousafzai (Muslim human rights activist)

"In suffering the animals are our equals" Peter Singer (atheist Humanist)

LGBTQ+ Equality

Members of the LGBTQ+ community have faced years of persecution and harassment, notable events throughout history include…

- Criminal Law Amendment Act in 1885: homosexual relationships are an offence which could result in a prison sentence
- 1967 the Sexual Offences act stopped the criminalisation of homosexual relationships however it placed strict conditions on LGBT interactions which lead to more arrests,
- the first Gay Pride took place in 1972 and has grown every year since
- in 1988 the government introduced 'Section 28' it banned the "promotion" of homosexuality by local authorities and in Britain's schools for example councils were forbidden from stocking libraries with literature or films that contained gay or lesbian themes and schools for unable to discuss LGBT issues with students
- in 2010 the Equality Act was introduced stating LGBTQ+ individuals had equal rights
- In 2014 the Equal Marriage Act made LGBTQ+ relationships recognisable by law

Some believe certain religious groups do not believe in LGBTQ+ equality thus many individuals and religious organisations having points to make about this…

- **Pope Francis (Head of the Catholic Christian Church)** believes that God gives us our sexual orientation, so no one chooses who they are attracted to. He also believes that loving relationships, between any genders, are a good thing because the Bible suggests we are all made equal. However, the Catholic Church believe that one purpose of sex is to have children within a marriage and therefore any sex that doesn't have the potential to have children and isn't within a marriage is wrong thus… LGBTQ+ sexual relationships are wrong (just like all sexual relationships that either don't have the potential for a child or are outside of marriage).
- On the other hand, there are some religious groups that protest LGBTQ+ relationships in all forms**. Westboro Baptist Church** is a small church in Kansas, America. They believe that suffering is a punishment from God for sinning (doing something wrong). The Church believe homosexuality goes against God's plan for families and therefore it is a sin so, they think they have a duty to spread this belief to stop people sinning and prevent God's punishments. Their actions are very offensive to LGBTQ+ individuals.

Keywords

Biodiversity - the variety of living organisms.

Carrion - decaying flesh and tissue of dead animals.

Community - made up of the populations of different species living in a habitat.

Competition - the negative interaction between two or more organisms which require the same limited resource.

Consumers - feed on other organisms for their energy. Can be primary, secondary or tertiary.

Decomposers - organisms which feed on dead and decaying organisms. They break down the biomass and release nutrients into the soil.

Deforestation - the removal and destruction of trees in forest and woodland.

Ecosystem - the interaction between the living organisms and the different factors of the environment.

Global warming - the increase of the average global temperature.

Habitat - where a living organism lives.

Interdependence - the interaction between two or more organisms, where it is mutually beneficial.

Population - the number of individual organisms of a single species living in a habitat.

Predators - organisms which kill for food.

Prey - the animals which are eaten by the predators.

Producers - convert the sun's energy into useful compounds through photosynthesis. They are green plants or algae.

Scavengers - organisms which feed on dead animals (carrion).

Species - organisms of similar morphology which can interbreed to produce fertile offspring.

Abiotic and Biotic Factors

Abiotic factors are the non-living factors of an environment. E.g. moisture, light, temperature, CO_2, wind, O_2 or pH.

Biotic factors are the living factors of an environment. E.g. predators, competition, pathogens, availability of food.

Adaptations

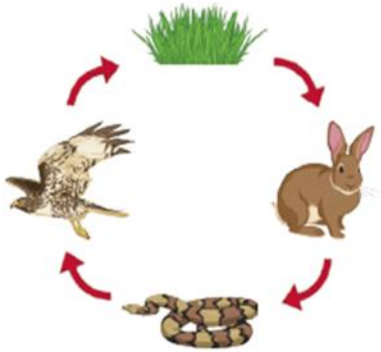
Adaptations are specific features of an organism which enable them to survive in the conditions of their habitat.
Adaptations can be structural, behavioural or functional:

- **Structural adaptations** are features of the organism's body e.g. colour for camouflage.
- **Behavioural adaptations** are how the organism behaves e.g. migration to a warmer climate during colder seasons.
- **Functional adaptations** are the ways the physiological processes work in the organism e.g. lower metabolism during hibernation to preserve energy.

A plant or animal will not physically change to adapt to its environment in its lifetime. Instead, there is natural variation within the species and only organisms whose features are more advantageous in the environment survive. The survivors then go on to reproduce and pass on their features to some of their offspring. The offspring who inherit these advantageous features are better equipped to survive. Charles Darwin described this process as 'survival of the fittest'.

Food Chains

The source of all energy in a food chain is the sun's radiation. It is made useful by plants and algae which produce organic compounds through photosynthesis.

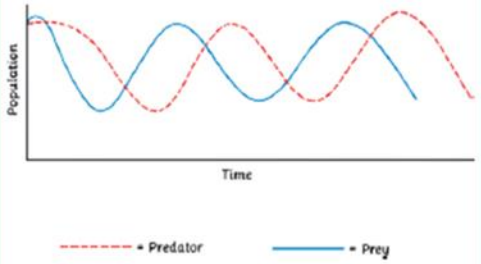


The living organisms use the energy to produce biomass and grow.

When a living organism is consumed, some of the biomass and energy is transferred. Some of the energy is lost.

Remember: the arrow in a food chain indicates the direction of the flow of energy.

Populations of predators and prey increase and decrease in cycles. The size of the predator population depends on the size of the prey population and vice versa. Overall, there is a stable community.



Competition

Species will compete with one another and also within their own species to survive and to reproduce.

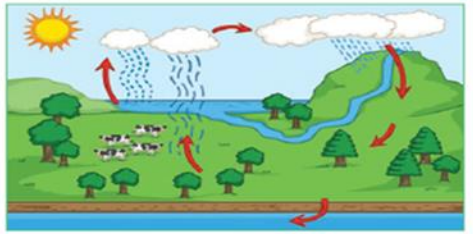
Mutualism occurs when both species benefit from a relationship.

Parasitism occurs when a parasite only benefits from living on the host.

Animals compete for resources such as food, water and space/shelter. They may also compete within their own species for mates.

Plants compete for resources including light, water, space and minerals. All these resources are needed for photosynthesis so the plant can make its own food. Plants do not need to compete for food.

Water Cycle



Convection is the movement caused within a fluid as the hotter, less dense material rises and colder, denser material sinks under the influence of gravity. This results in the transfer of heat.

Evaporation occurs when heat energy from the surroundings (or a heat source) is transferred to water particles as kinetic energy. The particles begin to move more rapidly and can turn from a liquid into a gas.

Condensation occurs when moving particles transfer kinetic energy to the surroundings. The particles begin to move even more slowly and can turn from a gas into a liquid.

Precipitation occurs when rain, snow, sleet, or hail falls to (or **condenses** on) the ground.

Transpiration is the process by which water is carried through plants from roots to the stomata on the underside of leaves and it evaporates into the surroundings.

RPI: Field Techniques Quadrats and Transects

The distribution of an organism is affected by the environment and abiotic factors.
Quadrats can be used to measure the frequency of an organism in a given area e.g. the school field. You could count the individual organisms or estimate the percentage cover. You must collect data from at least two areas to make a comparison. Quadrats should always be placed randomly.

Transects are used to measure the change of distribution across an area e.g. from the edge of a river and moving further from the water's edge. You could either count the number of organisms touching the transect at regular intervals or use a quadrat placed at regular intervals along the transect.

$$\text{mean} = \frac{\text{total number of organisms}}{\text{number of quadrats}}$$

Biodiversity and Waste Management

Biodiversity is the variety of living organisms on the earth or in an ecosystem. It is important in helping to maintain stable ecosystems. Organisms are often interdependent, relying on others as food sources, or to create suitable environmental conditions to survive. Human survival is also dependent on this biodiversity.

The global human population has exceeded 7 billion.
Human population has increased due to modern medicine and farming methods, reducing famine and death from disease.
This means a greater demand for food, resources and water.
It also means more waste and emissions are created.

Sewage, toxic chemicals, household waste and gas emissions pollute the water, land and air, killing plants and animals and reducing biodiversity.

Maintaining Ecosystems and Biodiversity

There are many ways that biodiversity and ecosystems are maintained:

- Breeding programmes can help to protect endangered species from extinction.
- Conservation programmes can help to protect and preserve specialised ecosystems and habitats such as peat bogs and coral reefs.
- Reintroduction of hedgerows and field margins on agricultural land can help improve biodiversity by breaking up the monoculture crops.
- Sustainable forestry programmes help to manage the woodlands and reduce the deforestation to a sustainable rate.
- Societies actively encourage recycling and reusing of products and packaging to reduce the household waste going to landfill sites.

Unfortunately these programmes can be difficult to manage. They are often expensive and are difficult to regulate. People who are employed in certain areas, e.g. tree felling, cannot always transfer their skills to an environmentally friendly role and so become unemployed. It is difficult to maintain biodiversity whilst preventing crops being overrun with pests and weeds, which would affect food security for the human population.

The Periodic Table of Elements

1	2											3	4	5	6	7	0
							1 H hydrogen 1										4 He helium 2
7 Li lithium 3	9 Be beryllium 4											11 B boron 5	12 C carbon 6	14 N nitrogen 7	16 O oxygen 8	19 F fluorine 9	20 Ne neon 10
23 Na sodium 11	24 Mg magnesium 12											27 Al aluminium 13	28 Si silicon 14	31 P phosphorus 15	32 S sulfur 16	35.5 Cl chlorine 17	40 Ar argon 18
39 K potassium 19	40 Ca calcium 20	45 Sc scandium 21	48 Ti titanium 22	51 V vanadium 23	52 Cr chromium 24	55 Mn manganese 25	56 Fe iron 26	59 Co cobalt 27	59 Ni nickel 28	63.5 Cu copper 29	65 Zn zinc 30	70 Ga gallium 31	73 Ge germanium 32	75 As arsenic 33	79 Se selenium 34	80 Br bromine 35	84 Kr krypton 36
85 Rb rubidium 37	88 Sr strontium 38	89 Y yttrium 39	91 Zr zirconium 40	93 Nb niobium 41	96 Mo molybdenum 42	[98] Tc technetium 43	101 Ru ruthenium 44	103 Rh rhodium 45	106 Pd palladium 46	108 Ag silver 47	112 Cd cadmium 48	115 In indium 49	119 Sn tin 50	122 Sb antimony 51	128 Te tellurium 52	127 I iodine 53	131 Xe xenon 54
133 Cs caesium 55	137 Ba barium 56	139 La* lanthanum 57	178 Hf hafnium 72	181 Ta tantalum 73	184 W tungsten 74	186 Re rhenium 75	190 Os osmium 76	192 Ir iridium 77	195 Pt platinum 78	197 Au gold 79	201 Hg mercury 80	204 Tl thallium 81	207 Pb lead 82	209 Bi bismuth 83	[209] Po polonium 84	[210] At astatine 85	[222] Rn radon 86
[223] Fr francium 87	[226] Ra radium 88	[227] Ac* actinium 89	[261] Rf rutherfordium 104	[262] Db dubnium 105	[266] Sg seaborgium 106	[264] Bh bohrium 107	[277] Hs hassium 108	[268] Mt meitnerium 109	[271] Ds darmstadtium 110	[272] Rg roentgenium 111	[285] Cn copernicium 112	[286] Nh nihonium 113	[289] Fl flerovium 114	[289] Mc moscovium 115	[293] Lv livermorium 116	[294] Ts tennessine 117	[294] Og oganesson 118

Key: relative atomic mass / **atomic symbol** / name / atomic (proton) number

* The Lanthanides (atomic numbers 58 – 71) and the Actinides (atomic numbers 90 – 103) have been omitted.

Relative atomic masses for **Cu** and **Cl** have not been rounded to the nearest whole number.

Year 9 Term 3 Chemistry – Chemistry of the Atmosphere

The Early Atmosphere

Approximately **4.6 billion years ago** the Earth was formed. Scientists have lots of ideas and **theories** about how the atmosphere was produced and the gases within it, but due to the lack of evidence, they cannot be sure.

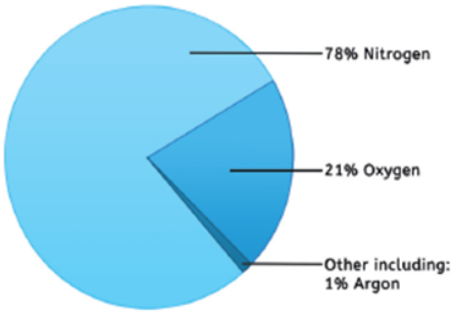
One theory suggested that **intense volcanic activity** released gases that made **Earth's early atmosphere** very similar to that of Mars and Venus. These planet's atmospheres mainly consist of carbon dioxide with little oxygen.

Nitrogen gas would have also been released from volcanoes and would have built up in the atmosphere.

Water vapour in Earth's early atmosphere would have **condensed** to create the **seas and oceans**. Carbon dioxide would have dissolved into the water, decreasing the level in the atmosphere.

Percentage of Gases in the Atmosphere

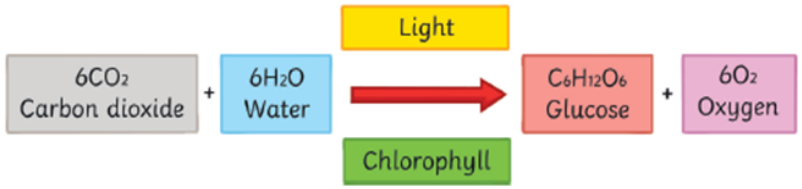
The pie chart below shows the abundance of each gas in our atmosphere.



How Did the Levels of Oxygen Increase?

2.7 billion years ago, algae first produced oxygen. Gradually over time, the levels of oxygen in our atmosphere increased as plants evolved. This was followed by animals as the levels of oxygen increased to a level that would sustain more complex life.

Oxygen is produced by plants in the process of **photosynthesis**.



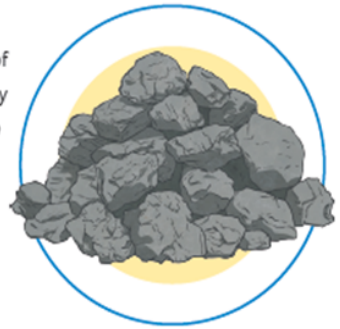
How Did the Levels of Carbon Dioxide Decrease?

Carbon dioxide **dissolves** in water. As water vapour condensed and the oceans and seas formed, the carbon dioxide gas dissolved producing **carbonate compounds**. This process reduced the amount of carbon dioxide in the atmosphere. Carbonate compounds were then **precipitated**: limestone is an example of a sedimentary rock; it has the chemical name calcium carbonate.

Plants in the oceans absorbed **carbon dioxide** gas for **photosynthesis**. The organisms from the food chains that the plants supported were turned into fossil fuels. **Fossil fuels** are **non-renewable** and consist of **coal, crude oil, and gas**, all of which contain carbon.

Crude oil was formed millions of years ago. When aquatic plants and animals died, they fell to the bottom of the sea and got trapped under layers of sand and mud. Over time, the organisms got buried deeper below the surface. The **heat and pressure** rose, turning the remains of the organisms into crude oil or natural gas. Oxidation did not occur due to the lack of oxygen.

Coal is a fossil fuel formed from **giant plants** that lived hundreds of millions of years ago in swamp-like forests. When these plants died, they sank to the bottom of the swamp where dirt and water began to pile on top of them. Over time, pressure and heat increased and the plant remains underwent chemical and physical changes. The oxygen was pushed out and all that remained was coal.



The Human Impact and the Greenhouse Effect

Scientists believe that human activities have resulted in the **increased** amount of greenhouse gases in the atmosphere. Activities such as **farming cattle** and **farming rice** release huge amounts of **methane** into the atmosphere.

Burning **fossil fuels** in cars and power stations releases large amounts of **carbon dioxide**. With large areas of the rainforest being cut down through **deforestation**, the excess carbon dioxide is not being absorbed by photosynthesis.

However, not everyone believes that humans are causing the rise in greenhouse gases. Some believe that the rise in global temperatures is associated with cycles of climate change and natural factors.

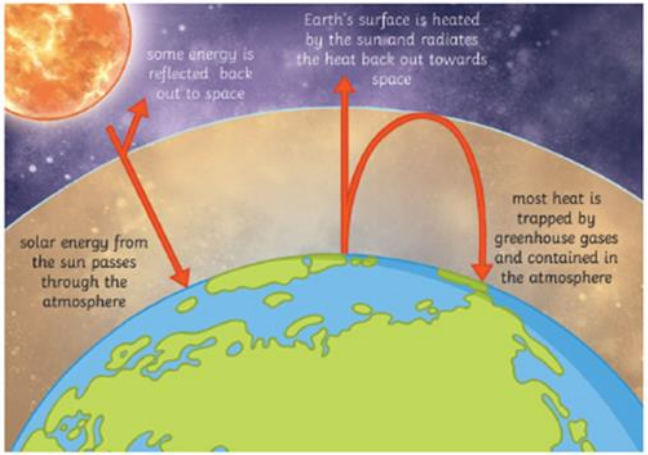
Climate science is often complicated as there are **difficulties** associated with **predicting future global temperatures**. The media present information that can be biased, inaccurate or lacks substantial evidence.

After reading an article on global warming, consider the trustworthiness of the source by considering these factors:

- Is the research done by an expert in that field and do they have the right skills and qualifications to report on the issue?
- Which organisation is reporting the evidence? If it is a newspaper, some stories are sensationalised in order to sell papers.
- Was the research funded by a legitimate organisation and was it conducted in a non-biased way? Think about the methods that were used to obtain the data and the impact the collection and analysis of this data had on the overall result.

Science - Chemistry

The Greenhouse Effect



A greenhouse is a house made of glass and is commonly used by gardeners to help grow plants and keep them warm. As the sun shines through the greenhouse, the air is heated up and becomes trapped by the glass and is prevented from escaping. During daylight, a greenhouse stays quite warm and this lasts into the night.

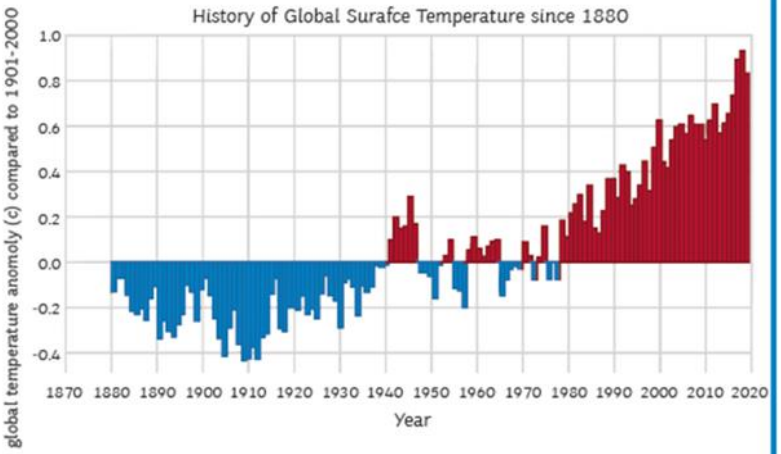
The earth and its atmosphere are very similar to that of a greenhouse. The greenhouse gases in the atmosphere trap the heat and keep the earth warm. The main greenhouse gases are **carbon dioxide, water vapour and methane**. During the daylight, the sun warms up the earth's surface. During the night, as the earth begins to cool and release the heat back into the atmosphere, some of the heat is trapped by the greenhouse gases in the atmosphere.

If the **greenhouse effect** becomes too **strong**, the earth will get too warm and melt the Arctic ice. As we burn more fossil fuels, the levels of **carbon dioxide** and the other greenhouse gases **increase** in our atmosphere which makes the greenhouse effect stronger.

What is the Difference Between Climate Change and Global Warming?

Since the Earth was formed over 4.6 billion years ago, its climate has constantly been changing with several ice ages followed by warmer temperatures. Changes in the Sun's energy reaching the Earth and volcanic eruptions were responsible for the changes until about 200 years ago.

Global warming is different to climate change and is used to explain how the earth's climate has warmed up over the past 200 years. Scientists believe that the warming of the climate is due to the activities of humans.



Carbon Footprint

The carbon footprint is the total amount of **carbon dioxide** and other greenhouse gases emitted over the full life cycle of a product, service or event.

An individual's carbon footprint is a calculation of all the activities that that person has taken part in throughout the year.

These activities might involve flying abroad or **travelling** by bus or rail. Each of which might be powered by petrol or diesel. **Heating a home** in winter by using a gas-powered boiler and using electricity to power lights and electronic devices. **Food** also has a **carbon footprint**, for example, beef and rice produces huge amounts of methane when farmed.

Sulfur Dioxide

Sulfur dioxide is an **atmospheric pollutant**. It is a gas that is produced from the burning of **fossil fuels**. Sulfur dioxide is able to dissolve in rainwater and produces **acid rain**. Acid rain causes damage to forests, kills plants and animals that live in aquatic environments, and damages buildings and statues as the acid rain erodes the stone that they are made from.

sulfur + oxygen ⟶ sulfur dioxide

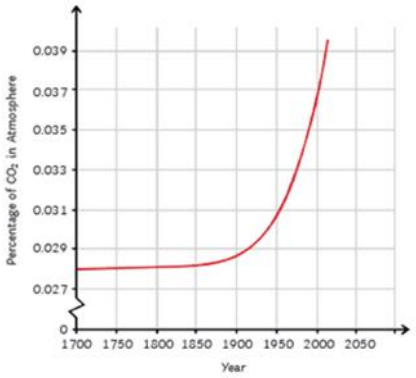
$S + O_2 \longrightarrow SO_2$

Sulfur dioxide can be further oxidised to form sulfur trioxide.

What is the Link Between Carbon Dioxide and Global Warming?

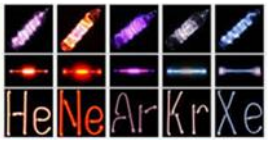
There is a strong correlation between the percentage concentration of carbon dioxide in the atmosphere and increased global temperatures.

The impact of this is that the polar ice caps are melting, sea levels are rising and habitats and rainfall patterns are changing. The impact of which is already being felt around the globe. The consequences of human activity will affect us all.



Group 0

The group 0 elements are also known as Noble Gasses. They are all unreactive gasses as they have a full outer shell of electrons. They get denser and their boiling points get higher down the group. They have important uses. For example radon is used in cancer treatment as it is radioactive and argon is used to fill lightbulbs as it wont react with the filament. Noble gasses give off light when a current is passed through them.



Science - Chemistry

Year 9 Term 3 Physics – States of Matter

Required Practical

Measuring the density of a regularly shaped object:

- Measure the mass using a balance.
- Measure the length, width and height using a ruler.
- Calculate the volume.
- Use the density (ρ = m/V) equation to calculate density.

Measuring the density of an irregularly-shaped object:

- Measure the mass using a balance.
- Fill a eureka can with water.
- Place the object in the water - the water displaced by the object will transfer into a measuring cylinder.
- Measure the volume of the water. This equals the volume of the object.
- Use the density (ρ = m/V) equation to calculate density.

Density

Density is a measure of how much mass there is in a given space.

Density (kg/m^3) = mass (kg) ÷ volume (m^3)

A more dense material will have more particles in the same volume when compared to a less dense material.

Particles

Solids have strong forces of attraction. They are held together very closely in a fixed, regular arrangement. The particles do not have much energy and can only vibrate.

Liquids have weaker forces of attraction. They are close together, but can move past each other. They form irregular arrangements. They have more energy than particles in a solid.

Gases have almost no forces of attraction between the particles. They have the most energy and are free to move in random directions.

Particles

Gas particles can move around freely and will collide with other particles and the walls of the container. This is the pressure of the gas.

If the temperature of the gas increases, then the pressure will also increase. The hotter the temperature, the more kinetic energy the gas particles have. They move faster, colliding with the sides of the container more often.

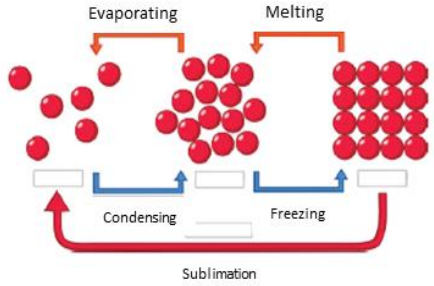
Specific Latent Heat Equation

The amount of energy needed/released when a substance of mass changes state.

energy (E) = mass (m) × specific latent heat (L)

E = mL

Changing State

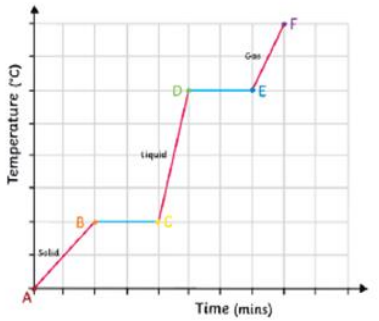


If a system gains more energy, it can lead to a change in temperature or change in state. If the system is heated enough, then there will be enough energy to break bonds.

When something changes state, there is no chemical change, only physical. No new substance is formed. The substance will change back to its original form. The number of particles does not change and mass is conserved.

Specific Latent Heat

Energy is being put in during melting and boiling. This increases the amount of internal energy. The energy is being used to break the bonds, so the temperature does not increase. This is shown by the parts of the graph that are flat.



Specific latent heat is the amount of energy needed to change 1kg of a substance from one state to another without changing the temperature. Specific latent heat will be different for different materials.

- solid → liquid - specific latent heat of **fusion**
- liquid → gas - specific latent heat of **vaporisation**

Specific heat capacity

Heating a material transfers the energy to its thermal energy store - the temperature increases.

E.g. a kettle: energy is transferred to the thermal energy store of the kettle. Energy is then transferred by heating to the waters thermal energy store. The temperature of the water will then increase.

Some materials need more energy to increase their temperature than others.

change in thermal energy = mass × specific heat capacity × temperature change

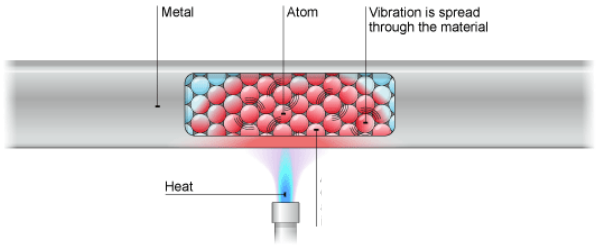
$$\underset{(J)}{\Delta E} = \underset{(kg)}{m} \times \underset{(J/kg^{\circ}C)}{c} \times \underset{(^{\circ}C)}{\Delta\Theta}$$

Specific heat capacity is the amount of energy needed to raise the temperature of 1kg of a material by 1°C.

Science - Physics

Conduction

Conduction is the transfer of heat through solids. When particles are heated, they vibrate more. These vibrations are transferred through the particles. Metals are good conductors of heat because they have free electrons which also pass on the vibrations.

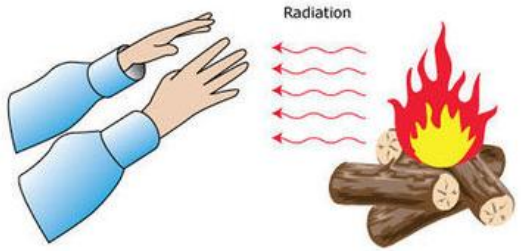


Convection

Convection is the transfer of heat energy through liquids and gases. Hotter liquids and gases rise, give off their heat energy, cool back down, and sink. This creates a convection current

Radiation

Heat also travels as a wave through all substances and even a vacuum (such as space). This is known as infrared radiation.



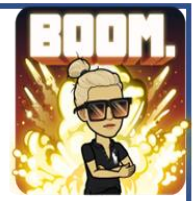
Year 9 Spanish Knowledge Organiser

Unit 4: Adict@s a la moda

4.1 Esto es lo que llevo

llevo...	I wear...
los calcetines	socks
la camisa	shirt
la camiseta	t-shirt
la chaqueta	jacket
la corbata	tie
la falda	skirt
la gorra	cap
el jersey	jumper
los pantalones	trousers
el uniforme	uniform
los vaqueros	jeans
el vestido	dress
las zapatillas (de deporte)	trainers
los zapatos	shoes
bonito/a	pretty
cómodo/a	comfortable
elegante	smart, stylish
guay	cool
tradicional	traditional
este/esta	this
estos/estas	these
ese/esa	that
esos/esas	those
aquel/aquella	that (further away)
aquellos/aquellas	those (further away)

4.2 Estrellas con estilo



los estampados	patterns
amplio/a	baggy
corto/a	short
de cuadros	checked
estampado/a	patterned
estrecho/a	tight
de flores	floral
hortera	tacky
largo/a	long
liso/a	plain
de lunares	spotted
de rayas	striped
apropiado/a	appropriate
distinto/a	different
la blusa	blouse
la cinta para el pelo	headband
el cinturón	belt
el estilo	style
el pijama	pijamas

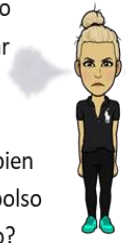
4.3 De tiendas

la carnicería	butcher's
la chocolatería	chocolate shop
la joyería	jewellery shop
la panadería	baker's
la papelería	stationery shop
la perfumería	perfume shop
la pescadería	fishmonger's
la tienda de disfraces	fancy dress shop
la tienda de ropa	clothes shop
la zapatería	shoe shop
el abrigo	coat
abrir	to open

4.4 En el centro comercial

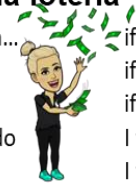
los centros comerciales	shopping centres
por Internet	online
las tiendas pequeñas	small shops
la agencia de viajes	travel agency
las alfombras	rugs
la alimentación	food
la azotea	rooftop
el juguete	toy
la juguetería	toy shop
el hogar	homewares/home
la moda deportiva	sportswear
los muebles	furniture
la planta baja	ground floor
la relojería	watch shop
el anuncio	advert
devolver	to return
en línea	online
hacer clic	to click (the mouse button)
la oferta	offer
el ratón	mouse
la variedad	variety
primero	first
segundo	second
tercero	third
cuarto	fourth
quinto	fifth
sexto	sixth
séptimo	seventh
octavo	eighth
noveno	ninth
décimo	tenth

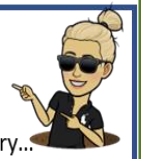
4.5 ¡Es imposible comprar así!



tiene un agujero	it has a hole
está roto/a	it is broken
cambiar	to (ex)change
el cambio	exchange
funcionar	to work/function
pedir	to ask for
probar	to try on
quedar bien	to suit/fit
el reembolso	refund
¿en serio?	really?
lo siento	I'm sorry
el tique de compra	receipt
vale	right, good, OK
vender	to sell

4.6 Si ganara la lotería





si fuera millonario/a...	if I were a millionaire...
si fuera posible...	if it were possible...
si ganara la lotería...	if I were to win the lottery...
cambiaría de peinado	I would change my hairstyle
compraría...	I would buy...
un montón de ropa de marca	lots of designer clothes
unas gafas de sol de marca	designer sunglasses
iría a la peluquería	I would go to the hairdresser's
tendría un asistente personal	I would have a personal assistant
tendría un teléfono móvil	I would have an expensive de lujo mobile phone
viajaría por todo el mundo	I would travel around the world
el coche cuatro por cuatro	4x4 vehicle
el equipamiento	equipment
propio/a	own
la ropa de marca	designer clothes
salir de fiesta	to go out partying

Spanish

Year 9 Spanish Knowledge Organiser

Unit 4: Adict@s a la moda

4.1 Esto es lo que llevo

normalmente	normally	llevo	I wear	una camisa	a shirt	rojo/a/os/as	red	de rayas	striped
siempre	always	llevé	I wore	una falda	a skirt	azul/es	blue	de manga corta/ larga	short/long sleeved
a veces	sometimes	llevaba	I used to wear	unos zapatos	shoes	blanco/a/os/as	white	estrecho /amplio	tight / baggy
nunca	never	llevaré	I will wear	unas botas	boots	verde/s	green	elegante	elegant

4.2 Estrellas con estilo

este/esta	this	la falda	skirt	es		más	more	cómodo/a/os/as	comfortable	que		este/esta	this	camisa	shirt
estos/estas	these	la gorra	cap	is		menos	less	elegante/s	elegant	than		estos/estas	these	falda	skirt
ese/esa	that	el jersey	jumper	son				feo/a/os/asa	ugly			ese/esa	that	zapatos	shoes
		los pantalones	trousers	are				caro/a/os/as	expensive					botas	boots

4.3 De tiendas

Este fin de semana	this weekend	tengo que ir de compras	I have to go shopping	a		la panadería	baker's	la pescadería	fishmonger's
La semana que viene	next week	iré de compras	I will go shopping	to the		la papelería	stationery shop		
El sábado	On Saturday					la perfumería	perfume shop		

4.4 En el centro comercial

En la planta baja	on the ground floor	se puede comprar	you can buy	las alfombras	rugs	
En la primera planta	on the first floor			la alimentación	food	
En la segunda planta	on the second floor			juguetes	toys	
En la tercera planta	on the third floor			la moda deportiva	sportswear	
				los muebles	furniture	

4.5 ¡Es imposible comprar asi!

Tengo un problema	este/esta	this	camisa	shirt	tiene un agujero	it has a hole	Quiero un reembolso	I want a refund
I have a problem	estos/estas	these	falda	skirt	está roto/a	it is broken	quiero cambiarlo/la/las	I want to exchange it/them
			zapatos	shoes	no me quedar bien	doesn't suit/fit me		
			botas	boots				

4.6 Si ganara la lotería

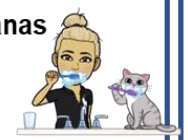
si fuera millonario/a...	if I were a millionaire...	compraría...	I would buy...	tendría un asistente personal	I would have a personal assistan
si fuera posible...	if it were possible...	un montón de ropa de marca	lots of designer clothes	tendría un teléfono móvil	I mobile phone
si ganara la lotería...	if I were to win the lottery...	unas gafas de sol de marca	designer sunglasses	viajaría por todo el mundo	I would travel around the world
		iría a la peluquería	I would go to the hairdresser's	el coche cuatro por cuatro	4x4 vehicle

Spanish

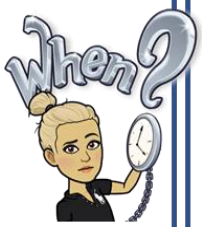
Year 9 Spanish Knowledge Organiser

Unit 5: Yo y Mi Mundo

5.1 Lo que hago por las mañanas



la rutina	*routine*
desayunar	*to have breakfast*
despertar(se)	*to wake up*
duchar(se)	*to have a shower*
ir al instituto	*to go to school*
lavar(se) los dientes	*to brush your teeth*
levantar(se)	*to get up*
peinar(se)	*to brush/comb your hair*
vestir(se)	*to get dressed*
a menudo	*often*
a veces	*sometimes*
antes	*first, before*
después	*after, afterwards*
durar	*to last*
inmediatamente	*immediately*
luego	*then, later*
mientras	*while*
nunca	*never*
raras veces	*rarely*
siempre	*always*
deprisa	*fast, quickly*
tener prisa	*to be in a hurry*



5.2 Lo que hago por las tardes y por las noches

acostar(se)	*to go to bed*
cambiar(se) de ropa	*to get changed*
cenar	*to have dinner*
hacer los deberes	*to do homework*
merendar	*to have a snack (afternoon)*
pasear al perro	*to walk the dog*
relajar(se)	*to relax*
volver a casa	*to return home*
cuando llego a casa	*when I arrive home*
cuando me apetece	*when I feel like it*
si mis padres me dejan	*if my parents let me*
si tengo tiempo	*if I have time*
siempre que puedo	*whenever I can*
al final del día	*at the end of the day*
aproximadamente	*approximately*
el proyecto	*project*
temprano	*early*
(no) tener tiempo	*to (not) have time*

5.3 ¡Te he dicho que no!

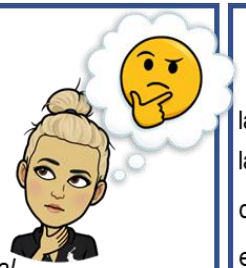
aguantar(se)	*to stand/bear*
criticar	*to criticise*
discutir	*to argue, quarrel*
enfadarse	*to get angry*
gritar	*to shout*
llegar a casa	*to arrive home*
llevarse bien con	*to get on well with*
llevarse mal con	*to get on badly with*
pelearse	*to fight/argue*
respetar	*to respect*
volver a casa	*to return home*
estar de acuerdo	*to be in agreement*
estar en contra	*to be against*
estricto/a	*strict*
incompatible	*incompatible*
injusto/a	*unfair*
justo/a	*fair*
razonable	*reasonable*
a todas horas	*all the time*
el conflicto	*conflict*
el lío	*mess*
el permiso	*permission*
la regla	*rule*

Spanish

Year 9 Spanish Knowledge Organiser

Unit 5: Yo y Mi Mundo

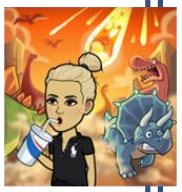
5.4 Sueño con otra vida

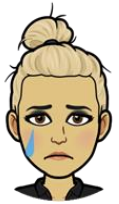


ambicioso/a	*ambitious*
el canal	*canal*
cansar	*to tire*
igual	*same, equal*
el pensamiento	*thought*
el puente	*bridge*
la quinceañera	*15th birthday party*
recoger	*to collect/pick*
el sentimiento	*feeling*
tardar	*to take (time)/be late*
traer	*to bring*
últimamente	*recently, lately*
vender	*to sell*
comenzar/empezar a	*to start doing*
dejar de	*to stop doing*
depender de	*to depend on*
hablar con	*to talk to*
hablar sobre	*to talk about*
pensar en	*to think about*
soñar con	*to dream about*
volver a	*to do something again*

5.5 Tengo inquietudes

la basura	*rubbish*
la contaminación	*contamination, pollution*
contaminante	*contaminating, polluting*
el crecimiento	*growth*
el desperdicio de plástico	*plastic waste*
la destrucción	*destruction*
la extinción	*extinction*
los hábitats naturales	*natural habitats*
las inundaciones	*floods*
las lluvias torrenciales	*torrential rain*
los mares	*seas*
medioambiental	*environmental*
el medio ambiente	*environment*
la sequía	*drought*
la tala de árboles	*tree felling*
alarmante	*alarming*
en peligro	*in danger*
preocupante	*worrying*
por todas partes	*everywhere*
trágico/a	*tragic*
me enfurece	*I'm furious about*
me da miedo	*I'm scared of*
me da pena	*I'm saddened by*
me da rabia	*I'm angry about*
me preocupa	*I'm worried about*





5.6 En busca de un mundo mejor

cuidar (de)	*to care (for)*
proteger	*to protect*
se puede/se debe…	*you can/you must…*
reciclar…	*recycle…*
…cartón	*…cardboard*
…latas	*…cans*
…papel	*…paper*
usar el transporte público	*use public transport*
ir a pie	*go on foot*
ir en bicicleta	*go by bike*
no comprar envases de plástico	*not buy plastic containers*
comprar productos locales	*buy local products*
ducharse	*take a shower*
no malgastar agua	*not waste water*
ser miembro de un grupo de presión	*be a member of a pressure group*
a diario	*daily*
el compromiso	*obligation/commitment*
la concentración	*gathering/rally*
la conciencia	*awareness*
las donaciones	*donations*
el espacio verde	*green space*
la prioridad	*priority*
todo lo posible	*everything possible*

Spanish

Year 9 Spanish Knowledge Organiser

Unit 5: Yo y Mi Mundo

5.1 Lo que hago por las mañanas

normalmente	normally	antes del instituto	before school	me levanto	I get up	depués	then	me visto	I get dressed
siempre	always	por la mañana	in the mornings	me ducho	I shower	luego	later	me peino	I brush my hair
a menudo	often			me lavo los dientes	I brush my teeth			voy al instituto	I go to school
nunca	never			desayuno	I eat breakfast				

5.2 Lo que hago por las tardes y por las noches

Cuando llego a casa	me cambio de ropa	I get changed	y	si mis padres me dejan	if my parents let me	me relajo	I relax
when I arrive home	hago los deberes	I do homework	and	si tengo tiempo	if I have time	me acuesto	I go to bed
	meriendo	I have a snack (afternoon)		siempre que puedo	whenever I can		
	paseo al perro	to walk the dog		al final del día	at the end of the day		

5.3 ¡Te he dicho que no!

Por lo general	In general	discuto con mis padres	argue with my parents	y	mi madre me grita	my mum shouts at me
A veces	Sometimes	me peleo con mis hermano/a	fight with my brother/sister	and	mi padre no nos permite salir	my dad doesn't allow us
nunca	I never	me enfado con mi madre	get angry with my mother	a veces		to go out
Siempre	I always	grito a mi major amigo/a	shout at my best friend	sometimes		

5.4 Sueño con otra vida

Mi rutina diaria	me aburre	bores me	bastante	quite a bit	sueño con	vivir en las montañas	living in the mountains
My daily routine			mucho	a lot	I dream of	comprar un coche rápido	buying a fast car
			un poco	a bit		no hacer nada	doing nothing

5.5 Tengo inquietudes

Me preocupa	I worry about	las inundaciones	*floods*	y	la basura	*rubbish*
Para mi el problema más grande	For me the biggest problem is	las lluvias torrenciales	*torrential rain*	and	la contaminación	*contamination, pollution*
Me da rabia	I am angered by	los mares	*seas*	también	el desperdicio de plástico	*plastic waste*
Me da pena	I am saddened by	el medio ambiente	*environment*	also	la extinción	*extinction*

5.6 En busca de un mundo mejor

Para proteger el medio ambiente	se debe	you should	reciclar…	*recycle…*	y	usar el transporte público	*use public transport*
In order to protect the environment	se puede	you can	…cartón	*…cardboard*	and	ir a pie	*go on foot*
			…latas	*…cans*	también	ir en bicicleta	*go by bike*
			…papel	*…paper*	also	comprar productos locales	*buy local products*
						no malgastar agua	*not waste water*

Spanish