

Haggerston School



Year 9 Knowledge Organiser Term 2

2024

Aspiration Creativity Character

Knowledge Organiser - Guidance

- You must bring your Knowledge Planner to school every day in your school bag.
- You should place your Knowledge Planner on your desk at the start of every lesson so that you can refer to it when instructed by your teacher.
- If you lose your Knowledge Planner, you will need to purchase a replacement one from Student Services.
- **In the Study Centre**, you will use your Knowledge Planner to study the relevant subject's Knowledge Organiser and learn the information provided.
- Use your blue exercise book to make notes to help revise and learn the information provided in each Knowledge Organiser.

KS3 Knowledge Organiser - Contents

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Term 2

1

Aspiration Creativity Character

William Morris (1834 – 1896) artist research

- William Morris, born in London in 1834, was an artist, designer and craftsman as well as a writer and social activist.
- Morris trained as an architect, but his working life was spent trying to improve the way that people's homes looked inside, and he was interested in doing this in an affordable way.
- Morris's designs were usually patterns based on flowers and leaves and sometimes animals. He created intricate, interlocking designs which were very detailed. He was inspired by his gardens and walks in the countryside.
- After his marriage, Morris commissioned an architect friend to design and build him a house in Bexleyheath. It was called the Red House, and he moved in there in 1860. He spent two years furnishing and decorating it along with his artist friends. What they achieved was so successful that Morris set-up a company producing decorative items for the home including wallpaper, textiles, tiles and stained glass.
- Morris was a founding member of the **Arts and Crafts Movement** in the 1880s. The members of this movement were concerned about the decline of rural handicrafts brought about by the industrial revolution and the use of machines to mass produce decorative items. They wanted to fight against the loss of traditional skills and creativity.

The original Morris & Co. designs from his company are still available



Task 1

Answer the following questions in **full sentences**.

1. When and where was William Morris born?
2. What kinds of objects did Morris design?
3. What inspired Morris' designs?
4. What is the name of the movement which Morris helped to establish in the late 19th century?
5. Why did artists and designers in the movement fear the decline in traditional craft skills?
6. Looking at the examples of Morris' work, list 6 words to describe his style.



William Morris, photograph by Frederick Hollyer, 1874

"Have nothing in your house that you do not know to be useful, or believe to be beautiful." William Morris

Practical application of art history:

1. Using the grid method accurately re-create the artwork by W. Morris
2. Write your initials in the style of W. Morris by adding a pattern around the letters.
1. Write in full sentences WWW and EBI.

The shoe industry is one of the largest industries in the world. But, it is also one of the largest contributors to the worldwide carbon dioxide emissions.

There are more than 20 billion pairs of shoes manufactured each year. However, there are many environmental impacts of shoe industry that cannot be ignored much longer.

Shoe manufacturing poses many threats to the wellbeing of our planet as many toxins, chemicals and fossil fuels are produced and leaked into the environment during the first and last steps in the shoe life cycle. These chemicals are harming both the wildlife and humans that come in contact with them. Also, shoe manufacturing produces large amounts of carbon dioxide which contributes to the already serious effects of climate change and global warming.

Task: Answer the following questions using full sentences in as much detail as you can:

- Which are the two key stages of shoe production that are harmful to the environment?
- Which type of fuel is used to manufacture shoes and why does it have a negative impact on the environment?
- What is bad about throwing away your old shoes?
- How might we improve the shoe manufacturing process so that it isn't harmful to the environment?
- How can we improve our own behaviour that contributes towards the negative impact of the shoes that we wear?

Task: Inspired by the work of Ghica Popa, create your own trainer design for a green future - what design features can you include that will reduce waste? Your design is a fantasy design, so it may include features that would not be possible to make in real life. Think about how we impact the environment and how the trainers can be part of the solution, rather than the problem.

MANUFACTURING:

One of the largest environmental impacts of shoes come from the **manufacturing stages** of the shoe life cycle.

- large amounts of machinery and chemicals are required to produce shoes.
- To power these machines, a great amount of fossil fuels are needed, which produce greenhouse gases when burned.
- On average, the production of one shoe produces 30 pounds of carbon dioxide and there are more than 15 billion shoes produced each year!

TRANSPORT:

Another aspect that is regularly overlooked and also contributes to the carbon dioxide emissions from shoes is the **transportation**. This is because most footwear manufacturing companies choose to build factories in countries where they can access cheap labour. Since these factories are situated far away from the countries where the shoes are sold, transportation such as ships, airplanes and trucks are needed in order to deliver the goods to the retailers.



CHEMICALS:

Chemicals used in the manufacturing process also contribute to the negative impact that shoes have on the environment. Many chemical adhesives and tanning chemicals are used to process different parts of the shoe. These chemicals are easily leaked into the environment and water through the waste disposed of by the factories. These chemicals can harm the wild life who may consume infected water or plants.



Task: Can you summarise the key points from the texts on this sheet? What are the important points to remember?



Artist Ghica Popa makes artwork that combines trainers with vehicles, constructions, space and robotics.

Task: Recreate one of these artworks using pencil and colouring pencil.



Basic Network Terms

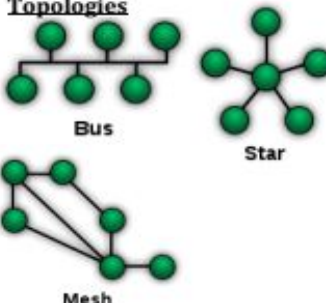
Client Server Network: A network that has a server that provides services for other connected computers (Clients)

Peer to Peer Network: A Network without a server where all devices are equal. Computers share services

Local Area Network (LAN): Covers a small geographical site. The company owns all the hardware for the network

Wide Area Network (WAN): Covers a large geographical site. The company doesn't own all the hardware for the network – some are hired

Personal Area Network (PAN): A network that is local to your device. E.g. Blue tooth headphones and phone

Topologies**Advanced Terms 2****Uniform Resource Locator (URL):**

A web address made up of http (protocol) www (world wide web) and Domain (bbc.co.uk)

MAC address: Hardcode into NIC. 48 or 64 bit. Represented by 6 pairs of Hexadecimal digits. IP addresses are assigned to MAC addresses

Internet Protocol (IP): Every device on a WAN has an IP address. IP addresses can be dynamic – they change each time a device connects to a network. Some are static (e.g. Server)

Domain Name Service (DNS): Computers don't understand URLs so a DNS translates them into IP addresses

Network advantages: Can share data, work together, communicate and centrally manage

Network Disadvantages: Over reliance on central devices (servers). Malware and Hackers

Advanced Terms

Bandwidth: The amount of data that can pass down a particular medium. Normally measured in *bits per second (bps or mbps)*

Latency: The amount of time it takes to travel between 2 destinations. Several different things could affect how Late the data will arrive. Factors inc. Distance, Traffic, Faults, Media etc

Basic Hardware

Ethernet / CAT5: Common cable for creating networks. Cheap and fairly fast (100mbps)

Coaxial: Older cable, not often used anymore. Slow speeds (10 - 15mbps)

Fibre Optics: Uses glass and light to transfer data. Very fast! (5gbps)

Wi-Fi: Radio waves that travel through the air. Take up less room and easy to connect to
Slow speeds (10 – 15 mbps)

Data packages and transfer over a network:

Data is broken into packets. The packet is A Header; with the senders IP address, the recipients IP address, the packet number and total number of packets. A Payload; the actual data. A Checksum; used to check if the data is corrupted. The packages are sent from one router to the next. Each router calculates the quickest route for the data to take and sends it on. This helps data beat traffic and hardware failures. When the package arrives it is verified using checksum and re-assembled. If any packages are missing a requested is sent to the original computer for a copy to be re-sent.

World Wide Web (WWW): All the web pages on the internet make up the World Wide Web. They are linked using hyperlinks

**Advanced: Hardware**

Router: Connects different networks together

Hub: A device that connects computer devices together on a network by broadcasting data to all connected devices. It shares the bandwidth

Advantages: Its cheap and easy to set up.

Disadvantages: It creates lots of traffic and data collisions

Switch: A device that connects computer devices together by sending data to the specific device. Creates less traffic and data collisions. Gives the full bandwidth.

Advantages: Efficient and smart!

Disadvantages: Expensive and difficult to set up

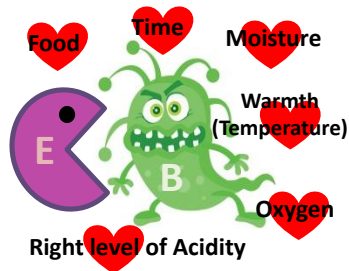
Server: Powerful central computer that provides services to other client computers. Example services inc. File access, Internet, Print, Security and Application Server.

Advantages: Takes the load off client PCs. Allows central management. **Disadvantages:** Expensive and difficult to maintain

Cooking & Nutrition

Food Spoilage

When a food deteriorates in quality or becomes unsafe to eat it is called **spoiled**. This can happen through natural **decay** caused by **enzymes** or **bacterial contamination**. Both **enzymes** and **bacteria** need the right **conditions** to work. If these conditions are changed then the rate of food spoilage will change. Speeding up if in excess or slowing down if reduced.



Above: **Conditions** needed to cause Food Spoilage (**FAT-TOM**)

Enzymes: Biological catalysts in living things that speed up chemical reactions. Depending on the circumstance the chemical reaction could start the process of decay, ripening and also browning*.



***Enzymic Browning:** The discolouration (browning) in fruit and veg due to the reaction of enzymes with cut flesh (e.g half an apple) and oxygen.

Consider where would you store vegetables to make them last longer?

Food Poisoning: an illness that is caused by consuming food or water that has been contaminated by specific **pathogenic bacteria** (examples of which are below)

Campylobacter: found in raw poultry and meat, milk and untreated dirty water

E. Coli: found in beef (especially mince beef) raw milk (milk that has not been heat treated), dirty water.

Salmonella: found in raw and undercooked poultry, eggs and raw milk

Listeria: soft cheeses, cheese made from unpasteurised milk, salad vegetables and pates

Staphylococcus Aureus: found on people (especially on hands, nose, mouth, skin, in cuts and skin infections), raw milk, cold cooked meats and dairy products

When foods become spoiled they change texture, shape, taste and their aroma will become more pungent. Strawberries will become very soft, furry, they may start to grow fur, shrink in size whereas bread becomes dry and starts to grow mould



Contamination: The transfer and subsequent presence of harmful bacteria or chemicals in food or preparation area. There are 4 types of contamination:



Biological Contamination: Any transfer of bacteria from human, animal or food to food or preparation area. Including sneezing, coughing, blood, pus/transfer of bacteria from animal to their food product -meat, eggs, milk/transfer of bacteria from unclean hands

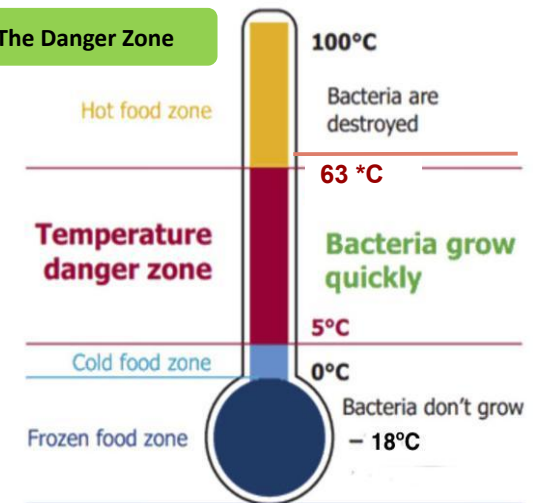
Cross contamination: is an example of biological contamination, it refers to the transfer of bacteria from raw meat to ready to eat foods

Physical Contamination: when a tangible object (you can see or feel) falls into food eg. hair, finger nails, plasters, plastic, dirt. Physical contaminants can act as vehicles to transfer of bacteria

Chemical Contamination: any transfer of chemicals eg, bleach, pesticides, cleaning product and perfume.

- The **temperature danger zone** is between 5°C and 63°C, when it is easiest for harmful bacteria to grow in food
- Minimise the time that food spends at these temperatures in order to keep food safe
- Refrigerated food needs to be kept at 5°C or below
- Hot food needs to be kept at 63°C or above

The Danger Zone



High Risk Foods



High Risk Foods are foods that have the ideal conditions for the growth of bacteria. They often are high in protein and moisture. Preventing **cross contamination** is especially important when using high risk foods.

NB: The risk is reduced when food is cooked thoroughly however can return unless consumed or stored correctly. Think **FAT-TOM!**

Food Science: Carbohydrates in Cooking

Dextrinization



When **dry** (toaster, oven, grill) heat is applied to a **starchy** food (bread/pizza dough, cake, biscuit), the **starch molecules** are broken down into sugars called **dextrins**. This is called **Dextrinization**. The dextrins change the colour (brown) and taste of the food. If the food is overcooked the **starch** turns to **carbon**

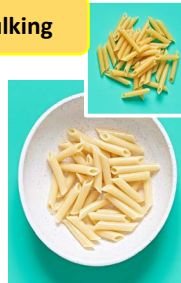
Gelatinisation



When **starch molecules** are heated and surrounded by a liquid (like milk) they begin to absorb the liquid, eventually bursting and thickening. This is called **Gelatinisation**. Potatoes are used to thicken soups, cornflour or flour for sauces eg. Cheese sauce, gravy, custard

The absorption of water by starchy Foods causing the volume to increase (and becomes softer in texture) eg. Pasta and potatoes. This is known as **Bulking**.

Bulking



When **flour** and **water** are mixed **gluten** is formed. Through **kneading**, gluten is stretched and the dough is more **elastic**. It also creates gluten networks which trap CO2 released by the yeast.

Caramelisation



When dry heat reacts with **sugar** it caramelizes causing a **sweeten taste** and some change in colour.



Viscosity

Viscosity refers to the flow and thickness of a sauce. The viscosity will be determined by the amount of starch, liquid & level of heat. Using a ratios will help to balance the ingredients

Food in the Wider World: Food Waste

Minimising food waste not only saves the consumer money but also reduces the impact on the environment.

Ways to reduce food waste:

- Plan meals in advance
- Use a shopping list when buying food
- Freeze any leftovers
- Use leftovers in other dishes
- Understand the difference between best before dates and use by dates so to ensure food is eaten in time

Packaging also should be considered to reduce wastage eg. buying food with minimal packaging or packaging that can be easily recycled

Rather than putting old (not spoiled) food in the bin, it can be reused in other dishes for instance 'bendy' veg could be used in a stew or soup.

Leftovers can also be saved to make other meals for instance the beef ragu from a bolognese could be used to make a cottage pie or lasagne. Again not wasting food!

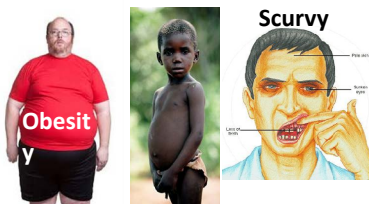


Nutrition & Malnutrition

Food provides your body with the nutrients it needs to work.

Malnutrition is a serious condition that happens when your diet does not contain the right amount of nutrients, this could be too few or too many. Somebody who suffers from malnutrition is malnourished.

Too many nutrients consumed through too much food can result



Too little protein (macronutrient) can result in the condition Kwashiorkor and too little vitamin C (micronutrient)

MACRONUTRIENTS:

Needed by the body in large amounts

Nutrient	Function
Carbohydrates Bread, Pasta, Potatoes, Rice, Cereals	-Broken into Starch and Sugar -Starch foods are called complex carbohydrates and release energy over a long period of time. -Sugar are called simple carbohydrate. They release energy quickly. Lactose, Fructose and Sucrose are all Sugars.
Fibre Whole grain products, skins of fruit & veg	-Prevents constipation -Absorbs poisonous waste from digestive food -Stays undigested but helps move digested food through our system
Protein Meat, Dairy, Eggs, Beans, Chickpeas	-Helps repair and grow new cells (muscles and body tissue) -Acts a secondary source of energy
Fat Dairy, Meat, Oily Fish, Avocados, Olive Oil	-Insulates the body from the cold -Cushions your bones and organs from any damage caused by knocks. -Stores energy
Vitamins Fruit & Veg	They are generally used to: -Controls chemical reactions -Keeping the body healthy and preventing some diseases linked to a poor diet -Regulate the function and repair of cells
Minerals Fruit, Veg, Meat	They are generally used to: -Turn the food we eat into energy -Build strong bones and teeth -Control body fluids
Water	-Our bodies are 65% water. It is vital for our body to stay hydrated. -Chemical reactions in our cells take place in water. -Waste products are passed out of our bodies in water. -Our blood transports substances that are dissolved in water. -Water is in sweat that cools us down

MICRONUTRIENTS:

Needed by the body in small amounts

Y9, Chalk Farm KO, Drama, Cycle 3/ Term 3

Chalk Farm – Plot Summary

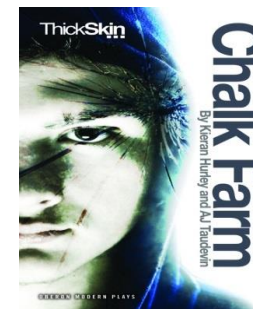
1. Jamie and his mum live in a tower block on the Chalcots Estate, Chalk Farm, North London
"This is where we are going to live son. Me and you, looking out on the world."
2. Jamie watches the riots.
"I'm standing there in the middle of the streets watching it all play out... There's crowds all standing around and there is like mad electricity in the air, and in their eyes, everyone all totally buzzing, like wired"
3. Jamie and his friend, Junior, join in the riots. Jamie steals some wine and a cash register.
"And suddenly before I've even got time to catch up with myself, I'm running in there with them, and it's almost like I'm watching myself do it, like it's not real."
4. Jamie's mum is suspicious.
"He's acting all weird, like he's hiding something. It's like I can't see him and he can't see me."
5. Jamie's mum discovers the stolen good and goes to the police station to confess to the theft.
"And it's right then and there that I decide. Do the right thing. Try to fix it."
"It's me. It was me. I was there."
6. Jamie reflects on why it happened but doesn't regret his involvement.
"I would do it again though. Why not? Best day of my life."

The London Riots 2011

The 2011 England riots (more widely known as the London Riots) were a series of riots between the 6th August and 11th August 2011, when 13-15000 people rioted in cities and towns across England. There was widespread looting, arson, violence and mass deployment of police. Peaceful protests started in Tottenham, London, following the death of Mark Duggan, a local man who was shot dead by police on 4th August. The protest was organised by friends and relatives of Duggan to demand justice for the family. The protest began peacefully but soon several violent clashes with police ensued, along with the destruction of police vehicles, a double-decker bus and many homes and businesses, thus rapidly gaining attention from the media. By 10 August, more than 4000 arrests had been made across England.



Chalk Farm is a play written by Kieran Hurley and AJ Taudevin. The play explores the themes of love, responsibility and the culture of blame and retribution surrounding the 2011 London riots. There are only two characters: Jamie and his mum, Maggie. Jamie takes part in the riots and Maggie lies to the police to protect him.
Retribution: the punishment inflicted on someone who commits a criminal act.

Drama Techniques

You will be asked to perform either a **monologue** or a **duologue** where you will need to learn some lines from the play and act as either Jamie or Maggie for an audience.

Monologue

One performer, performs a speech to the audience. This is a solo performance.

Duologue

Two performers share speaking roles and perform as a pair for the audience.

Cross cutting

Performers on stage at the same time but in different places/ time periods. The audience's focus 'cuts' between these using a range of techniques.

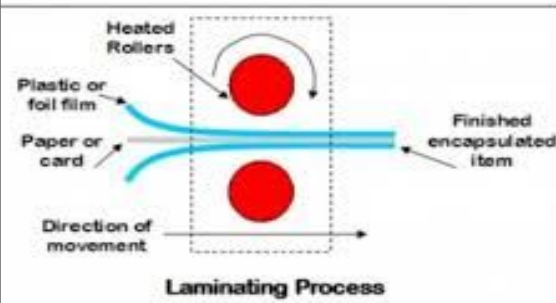
Self Quiz – LOOK, COVER, WRITE, CHECK & CORRECT

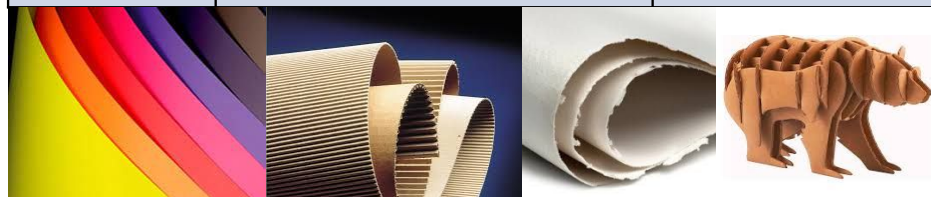
Make sure you understand the events in the story, the details about the riots, the drama techniques you will be asked to use.

Task 1: Learn your lines! How to learn lines from a script?

1. Write your lines out by hand. Look, copy, check and correct.
2. Break them down into small sections and learn the first part of each section as a prompt.
3. Rehearse the lines with a partner
4. Record yourself saying the lines and listen to it.

MATERIALS - PAPERS and BOARDS and their PROPERTIES

PAPERS			BOARDS		
USES	PHYSICAL and WORKING PROPERTIES	ADVANTAGES and DISADVANTAGES	USES	PHYSICAL and WORKING PROPERTIES	ADVANTAGES and DISADVANTAGES
Layout Paper - for tracing design ideas to develop them further	Smooth finish and some transparency, able to see the image or drawing underneath to further develop a sketch.	Strong, low cost but can smudge if altering a drawing with eraser	Mounting Board - for mounting work and pictures, model making	Coloured surface with white board behind, thick, strong and lightweight	Good quality and available in many colours, but expensive and does not bend easily
Copier Paper - for inkjet printing, photocopying	White or coloured with a smooth finish, lightweight and inexpensive in bulk	Readily available and can be printed on easily but not strong and lacks quality	Folding Boxboard - for food box packaging	Good printing surface, can be scored, bent and creased easily	Relatively inexpensive but not very strong
Tracing Paper - for tracing images to copy them	Smooth finish and very transparent, easy to see the image and trace	All sizes readily available but can be expensive for better quality types	Corrugated Board - for packaging boxes, the protection of parcels	Layered card with crimped structure inside, good strength with the option of different thicknesses	Readily available with good impact resistance, but bends easily in one direction and is not water resistant
Recycled Paper - for toilet paper, paper towels, paper bags	Rough surface, grainy and flexible, can be printed on and coloured	Benefits to the environment and inexpensive but not very strong	 <p>THE FIVE MATERIAL AREAS Papers and Boards Timbers and Manufactured Boards Thermoforming and Thermosetting Plastics Metals Natural and Synthetic Fabrics and Fibres</p>		



PHYSICAL PROPERTIES		WORKING PROPERTIES	
Absorbency	The ability of a material to be heated and joined to another material when heated, eg webbing is fusible and can be ironed onto fabrics.	Strength	Being able to bend or shape easily would make a material easily malleable, eg sheet metal such as steel or silver is malleable and can be hammered into shape.
Density	The ability to conduct heat, eg steel is a good heat conductor, whereas pine is not.	Hardness	The ability to be stretched and then return to its original shape, eg elastane in swimming costumes is a highly elastic material.
Electrical Conductivity	The ability to soak up moisture, light or heat, eg natural materials (such as cotton or paper) tend to be more absorbent than man-made materials (such as acrylic or polystyrene).	Toughness	Materials that can be stretched are ductile, eg pulling copper into wire shows it is ductile.
Fusibility	How solid a material is. This is measured by dividing mass (grams) by volume (cm ³), eg lead is a dense material.	Malleability	Materials that are hard to break or snap are tough and can absorb shock, eg Kevlar in bulletproof vests is a very tough material.
Thermal Conductivity	The ability to conduct electricity, eg copper is a good conductor of electricity.	Ductility	The ability of a material to withstand compression, tension and shear, eg in woven fabrics cotton isn't as strong as wool when pulled.

Size	A10	A9	A8	A7	A6	A5	A4	A3	A2	A1	A0	2A0	4A0
Length (mm)	37	52	74	105	148	210	297	420	594	841	1189	1682	2378
Width (mm)	26	37	52	74	105	148	210	297	420	594	841	1189	1682

most common sizes used by designers

Social and Ecological Issues

A great number of trees have to be cut down in order to manufacture 'virgin' paper. Paper and board can only be recycled seven times before it has to be mixed with new fibres. It is important to recycle paper and boards as this will have less impact on the environment through factors such as deforestation, which can then lead to soil erosion.

Deforestation has a huge effect on the ecosystem and the people and specific breeds of animals that rely on them, affecting the biodiversity.

Design Context - Situation that creates opportunities for design.

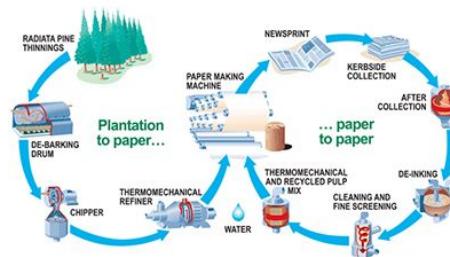
Design Brief - An instruction from a client to a designer. A short statement of intention.

Stakeholders - Anyone interested in, connected to, involved with or affected by a design situation.

Primary User - The person who will need and use the product the most. The person with the greatest design need.

Design Specification - A list/set of design requirements that come researching the needs of stakeholders or primary users.

Pulp and Paper Manufacturing Process



Pulp and Paper Industry

Tools and Equipment

Craft Knives,
Safety Rulers,
Cutting Maps,
Masking Tape,
Paper Fasteners.

DESIGN CONSIDERATIONS

- Cost
- Availability
- **Aesthetic**
- Functionality
- Environmental
- Social
- Cultural
- Ethical

Sources and Origins

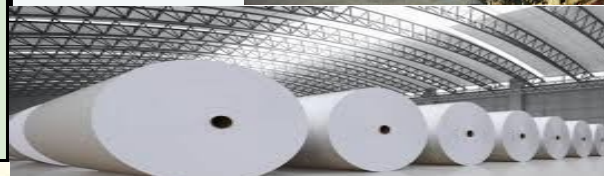
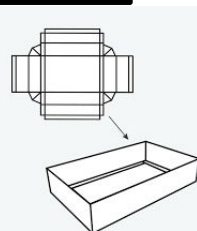
Paper is made from new fibres or recycled material. Wood pulp is obtained by cutting down trees and breaking down the wood. The bark and chippings are then removed and ground down or cooked with chemicals to extract the cellulose fibres. Softwood trees are traditionally used to create wood pulp as the fibres are longer, making stronger paper; some manufacturers plant new trees for each one they chop down.

The pulp is filtered, squeezed, bleached and pounded before other materials, such as chalk or chemicals, are added to change the opacity and absorbency of the paper. The excess water and chemicals are drained out of the pulp by pushing it through sets of rollers, called 'calenders', before being shaken and blown to dry out the fibres. This process is repeated until the pulp is fully dried, and then it is pressed to create a smooth finish.

mechanical pulp - by **mechanically grinding** the wood chips down into paper pulp, used for lower grade papers such as newspapers.

chemical pulp - uses **chemicals** to reduce the wood chips down and dissolve into cellulose fibres to make the paper pulp, used for higher quality paper.


Additional treatments, or 'coatings', can be added to give the paper different aesthetics.



Plot by Chapter		Character	Vocabulary	Context
1	Jane's cousin hits Jane. She fights back and is sent to the red-room.	Jane Eyre	Orphan - a child without parents	Gothic - A genre characterised by common stylistic features, including: haunted settings, supernatural events and characters.
2	Jane is locked in the red-room. She hears and sees something odd.	Mrs Reed – Jane's aunt	Oppress - control and bully	Bildungsroman - a novel that tells the story of a child's maturation (growing up)
3	Jane is miserable. There is talk of Jane going to school.		Corporal punishment - physical punishment e.g. the cane	Gender - 'Jane Eyre' was unusual when it was published because it is written in the first-person from a female perspective. Parts of 'Jane Eyre' were influenced by Bronte's experiences at school and as a young woman.
4	Jane and Mrs Reed argue and Jane says she will never call her 'aunt' again.	Helen Burns – Jane's friend	Hypocrite - behaving one way but saying you believe another	Feminist - 'Jane Eyre' includes ideas, practices and actions based upon the belief of the equality of women and girls.
5	Jane travels to Lowood School. She meets Miss Temple, a kind teacher, and Helen Burns, another pupil.			
6	Helen and Jane discuss punishments at the school and Helen explains that it's better to forgive than seek revenge.	Mr Brocklehurst - school governor	Tuberculosis - an infectious lung disease	Women in Victorian society - especially working-class women, were disadvantaged. Once married, women had few legal rights, including rights to own property such as houses, their belongings and other valuables.
7-8	Mr Brocklehurst visits Lowood School and calls Jane a liar in front of everyone.			
9	Typhus breaks out at Lowood School and many die, including Helen Burns.	Miss Temple	Obstinate - stubborn	Marriage - was a necessity to most women in Victorian England. A working-class woman's wage was below subsistence level: she could not live on her income alone. Women typically stayed in the family home until they were married.
10	Eight years pass. Jane applies to be a governess at Thornfield Hall.			
11	Jane arrives and meets Mrs Fairfax and Adele. She hears eerie laughter.	Edward Rochester	Otherness - quality of being different	Victorian attitudes to childhood: <ul style="list-style-type: none"> A child is a blank slate and can be trained to develop into a rational being A child is born completely innocent and pure. They are only contaminated by contact with corrupt forces. The child is born evil and must therefore be controlled and punished in order to submit to the rules of God and society.
12	Jane meets Mr Rochester when he falls from his horse and hurts his ankle.			
13-14	Rochester asks Jane if she finds him handsome and she says no.	Bertha Mason	Morality - how we decide what is right and wrong	Attitudes towards mental health: At this time mental health treatment had not been developed. Those displaying mental health symptoms were locked away from society and very often left to die inhumane conditions. Over time society would use asylums as places to lock away those who they felt weren't "like them".
15	There is a fire in Rochester's bedroom and Jane saves his life.			
16	Jane realises she has feelings for Rochester and becomes jealous of Blanche.	The Rivers siblings	Hierarchy - a system ranked according to status or authority	Byronic Hero A type of Romantic literary character that is usually dark, intense, mysterious, troubled, moody, arrogant, and unconventionally attractive
17-18	Rochester returns with Blanche and other guests. Jane's jealousy grows.			
19-20	Rochester secretly asks for Jane's help in the night; a man has been stabbed.	Themes	Virtuous - having high moral standards	
21	Jane finds out that a rich relative is leaving her his fortune. Mrs Reed dies.			
22-23	Jane tells Rochester she loves him and he proposes. They kiss.	Education and Childhood	Fate - events outside of our control. Our future is predetermined	
24	Jane prepares for the wedding but gets a feeling that it won't happen.			
25	Jane has a disturbing dream. Rochester tells her it is half dream half reality.	Society and Class	Techniques	
26	Rochester's secret is revealed; he is already married to someone who is mad.			
27	Rochester tells Jane his life story but she decides to leave Thornfield.	The Supernatural	Juxtaposition	
28	Jane runs out of money, begs for help and is taken in by the Rivers siblings.			
29-30	Jane lives with Diana, Mary and St John Rivers. She gets a new teaching job.	Mental Health	Foreshadowing	
31-32	Jane teaches at Morton school and her friendship with St John develops.			
33	Her uncle dies. Jane inherits the money which she decides to share with the Rivers siblings as it is revealed that they are her cousins.	Religion and Morality	Symbolism	
34-35	St John asks Jane to marry him. She says no, because they are not in love.			
36	Jane travels to Thornfield. There has been a fire; the house has burnt down and Bertha died during the fire when she threw herself from the roof.		Pathetic fallacy	
37	Rochester, who lost a hand and went blind in the fire, asks Jane to marry him.			
38	They have a baby and Rochester regains some sight. They live peacefully.			

Jane Eyre

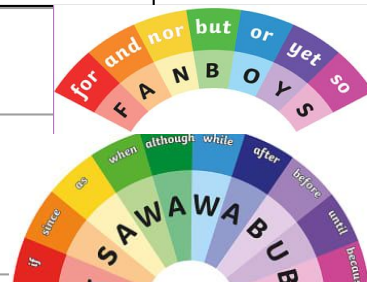


Descriptive techniques (DPRO1)			Persuasive techniques AFOREST (DPRO1)			Features of Gothic Literature		Sentences (DPRO 3,4)	
Technique:		Example:	Technique:		Example:			Can you write an example of each?	
Personification - a metaphor attributing human feelings to an object.		<i>Thunder roared in the dark skies.</i>	Alliteration – when more than one word in a row starts with the same letter.		<i>Perilous people persecuted.</i>	1. Wild and remote places		Sentence Type	
Onomatopoeia - words that sound a little like they mean.		<i>“cheeping feebly” and “grunting”</i>	Facts		<i>Animal Farm was written in 1944.</i>	2. Gloomy weather (pathetic fallacy)		Simple Sentence: One clause. Contains a subject and verb. Makes sense by itself.	
Pathetic fallacy - using the weather to create or reflect a certain mood.		<i>“Day after day, a vast heavy veil had been driving over London from the East” (Great Expectations)</i>	Opinion (the opinion of an expert)		<i>Professor Clark, of Oxford University, says “...”</i>	3. Dark and gloomy settings		Compound Sentence: two sentences joined by FANBOYS (for, and, nor, but, or, yet, so) or a semicolon	
Metaphor - a descriptive technique that names a person, thing or action as something else.		<i>“There was a stormy debate over the correct retiring age of each animal.”</i>	Repetition – repeating a word or phrase.		<i>“Jones would come back, yes Jones would come back.”</i>	4. Graveyards, tombs and corpses		Complex sentence: main clause (makes sense on its own) and subordinate clause (does not). Includes a comma. The subordinate clause can be moved.	
Simile - a descriptive technique that compares one thing with another, usually using 'as' or 'like'.		<i>“She felt like a prisoner in her own mind”</i>	Emotive Language – appealing to your audience’s emotions.		<i>“a society of animals set free from hunger and the whip”</i>	5. Family curses and dark secrets		Minor Sentence: An incomplete sentence missing a subject or verb used for effect.	
			Statistics – using numbers and percentages (invent them).		<i>Approximately 70 billion farm animals are reared for food in the world each year.</i>	6. Supernatural powers			
			Three (rule of) – using three descriptive words or repeating three times.		<i>"Our lives are miserable, laborious and short."</i>	7. Mysterious and frightening creatures, people or ghosts			
						8. Old, ruined, isolated castles and mansions, often with secret passages and mysterious towers			
						9. Nightmares, madness and mental torment			
						10. Science used for evil or disastrous purposes			
						11. Worrying and unusual natural events (storms, full moons, etc.).			
									
Sombre (adj) Dark or dull	Bleak (adj) Miserable and hopeless	Raw (adj) 1. Fresh/uncooked 2. Painful/tender	Morose (adj) sulky and bad tempered	Decrepit 9adj) worn out or ruined	Sordid (adj) dirty and neglected	Debauched (adj) immoral, excessive behaviour	Macabre (adj) Disturbing and sinister	Howling (v) loud disturbing animal like cry	Obscene (adj) offensive and immoral

1.Drop Start in the middle of exciting action		3.Flash Change the time or place of your story	
<i>In that moment... All around, I could feel... A sudden gust of hot air blew, pushing... The music pounded louder and louder until...</i>		<i>It had only been a few hours ago when... Earlier that morning... The streets had been deserted when... Back at home...</i>	
2.Zoom Choose something that you will 'zoom in' on and describe in detail		4.Echo Bring it back to where you were at the start. What has changed?	
<i>Immediately, the colours of the ____ caught my eye... The subtle shades of</i>		<i>The _____ grew louder than ever before... Repeat a word / phrase / image from the opening of the piece</i>	

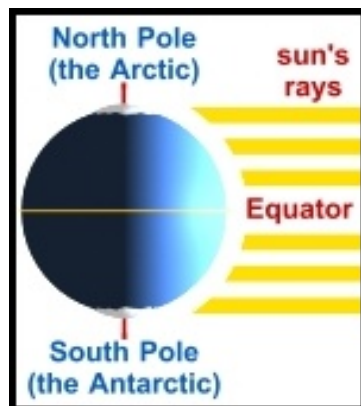
Coordinating Conjunctions - words that join two main clauses to create a compound sentence

Subordinating Conjunctions - start subordinate clauses which help create complex sentences.



Year 9 Spring Term - Is all human interaction in the Arctic harmful?

Links: [BBC Iplayer: Frozen Planet](#); [BBC Bite Size](#)



Where is the Arctic and why is it so cold?

- The Arctic is located in the region that surrounds the North Pole
- Winter temperatures average at -40c
- Its climate is **cold and dry** with long winters and short summers

The countries located in the Arctic are Canada, Greenland, Iceland, Norway, Sweden, Finland, Russia, and the United States of America.

The tilt of the earth means the Arctic doesn't get any direct sunlight. The sun hangs low in the horizon. In winter months there can be 6 months of 24hrs of darkness.

The Arctic is warming up at **twice the rate** as the rest of the world due to human caused **climate change**.

Key words

Indigenous people- People who originate in a particular place and have a strong connection to their ancient culture.

Inuit people- A group of indigenous people who have lived in the Arctic areas of Canada, Alaska and Greenland for over 4000 years.

Colonialism- When a nation takes direct control over another group of people and their land

How do plants and animals adapt to the Arctic?

Animals and plants need to **adapt (change)** to sub-zero conditions and the absence of liquid freshwater:

Pressures for animals	Adaptations	Pressures for Plants	Adaptations
<ul style="list-style-type: none"> - Cold and short growing seasons so there is less food for herbivores - No direct sunlight for some months so it is very cold - Water is frozen so it is difficult for animals to hydrate - Animals are forced to travel large distances to reach their food source - Some animals like birds migrate to warmer climates to reproduce 	<p>Seals:</p> <ul style="list-style-type: none"> - Large eyes with a spherical lens to hunt underwater where light is scarce - Seals have slits for nostrils that naturally close underwater - They have a thick layer of blubber (fat) which keeps them warm - They can hold their breath for up to 2 hours while swimming to hunt. 	<ul style="list-style-type: none"> - Cold and short growing seasons - No direct sunlight for some months which limits plant growth - Lack of mineral nutrients in the soil - Permafrost (frozen soil) means the roots cannot grow deep into the soil - Low precipitation (rain) so more difficult to produce large leaves and many branches 	<p>Cotton Grass:</p> <ul style="list-style-type: none"> - Small seeds that can easily be dispersed by the wind to ensure its survival - Low lying to protect it from cold winds - Thin leaves to reduce water loss by transpiration. - Cotton grass grows and produces seeds quickly in the short summer so it can survive

Who are the Indigenous people of the Arctic and how did colonialism affect them?

There are 4 million people living in the Arctic. 10% (400,000) people living in the Arctic are indigenous people. They have lived in the Arctic for up to 30,000 years. We will be looking at 1 group called **The Inuit**. The Inuit have lived in Arctic areas of Canada, Alaska and Greenland for over 4000 years. European colonialism changed Inuit people's culture and lives:

Inuit culture in the past	Inuit culture today	Reasons why their culture changed
Inuit people travelled by dog sleds for thousands of years. These dogs helped them hunt.	Most people now mainly use trucks and snowmobiles to travel and hunt.	From the 1950s-1970s, the Royal Canadian Mounted Police killed thousands of sled dogs.
People only ate raw meat e.g. seal, caribou (reindeer), fish and whales.	People now eat a mix of expensive western food from supermarkets and hunted meat.	Without sled dogs, Inuit people are less able to hunt for food so they need to buy food in the supermarket.
People only wore clothes made from animal skin, mainly from reindeer and seals.	Inuit people mainly western style clothing but sometimes wear traditional clothes.	Inuit people were sent to residential schools by the Canadian government, where they were forced to wear Western clothes.
Inuit women practiced throat singing in pairs.	Women still practice throat singing but it is less common.	Inuit women were banned from practicing throat singing by the Canadian government.
Inuit people were nomadic and followed reindeer migration, living in seal skin huts.	They now live in permanent wooden homes	The Canadian government forced Inuit people to live in urban areas instead of moving around.

What impact has climate change caused in the Arctic? Wildfires in the Arctic

Scientists have found that fires in the Arctic tundra are higher today than at any point in the last 10,000 years. In 2019, as many as **3.3m hectares burned** - an area bigger than Belgium. The majority of the blazes were caused by lightning strikes and rising temperatures due to **global warming**. This has led to the destruction of habitats and vegetation, affecting the spread of plant species such as lichens, an fungi-algae species. A recent study has shown that the lichen cover in burned tundra areas was less than 5% at 30 or 35 years post-fire. Caribou (reindeers) forage lichens and rely on them for food in the winter. This level of lichen cover is not enough for the caribou to survive on and the Caribou are changing their migration patterns to search for other food sources. The fires also contribute to the climate crisis by releasing carbon dioxide (CO₂) into the atmosphere. They emitted an estimated 100 megatons of CO₂ between 1 June and 21 July 2019, almost the equivalent of the carbon output of Belgium in 2017. This soot can be harmful to humans and animals, entering the lungs and bloodstream.

The Holocaust

Summary: The Holocaust was one of the greatest human tragedies in world history. Through the use of primary sources, we will study the experiences of those who were targeted during the Holocaust and draw out important lessons around persecution, discrimination, bystanders and resistance.

Key concepts		Key developments	Key words	
1	World War Two - long running resentment, ideological clashes and desperation to avoid another world war all contributed to the outbreak of World War Two in 1939. The war would go on for 6 years, once again devastating much of Europe.	1933 - Adolf Hitler comes to power.	1	Holocaust The mass murder of 6 million Jews in Nazi occupied Europe 1939-45
2	Holocaust 1939-45 - The Holocaust was a genocide that took place during World War II, in which up to 17 million people were systematically exterminated by Nazi Germany and its collaborators. Around 6 million Jews were killed, in addition to Romani peoples, ethnic Poles and Slavs, homosexual men, and many other groups.	1935 - The Nuremberg laws took away the rights of Jews.	2	Auschwitz Auschwitz was the largest camp - over 1.1 million men, women and children lost their lives there in the Holocaust.
3	The Nuremberg Laws - (1935) meant that Jews were fired from jobs, forced to wear a yellow Star of David, stripped of German citizenship, and banned from German schools, amongst many other measures .	1939 - The Germans occupy Poland, and force Jews to leave their homes. WWII begins.	4	Concentration Camp A prison camp where persecuted groups are made to engage in forced labour or to await execution.
4	Kristallnacht - A massive, coordinated attack on Jews throughout the German Reich on the night of November 9, 1938 into the next day, has come to be known as Kristallnacht or The Night of Broken Glass.	1940 - Jews put into concentration camps. Mass murder begins.	5	Final Solution The plan for and process of mass murder agreed by the Nazis to eliminate the Jewish population of Europe
5	Einsatzgruppen - Death squads ordered to kill Jews using machine guns 1941-44. Babi Yar - September 1941 - Jews were told to gather at a meeting point in Ukraine on September 29, by 8 o'clock in the morning. -34,000 Jews were shot and killed Final Solution -The mass extermination of European Jews by the Nazis to try and solve the "Jewish Problem"	1941 - Germany attacks the Soviet Union. Jews across Western Europe are forced into ghettos..	6	Einsatzgruppen Death squads - they were ordered to kill Jews using machine guns 1941-44
6	Concentration Camps -They were often dirty and full of diseases such as typhoid (caused by mites). -People often wore rags or prison uniforms for clothing. - People living there were very thin, there was often little or no food. - Children were forced to do hard labour and were not sent to school.- Jews often faced brutal violence in the camps.	1942 - Nazis discuss the 'Final Solution' of killing all European Jews	7	Nazi The political party in charge of Germany 1933-1945
7	Resistance - Sobibor Uprising - 1943 . -Jewish prisoners at the Sobibor death camp begin an armed revolt. About 300 escape, the camp is shut down in 1944. Warsaw Uprising - 1943 - Jewish residents inside the Warsaw ghetto resisted Nazi efforts to deport them to death camps. This was the largest uprising by Jews during World War II.	1944 - Nazis take over Hungary and begin deporting 12,000 Jews a day.	8	Aryan White Western and Northern European race (includes Germans)
9	Liberation: As Allied and Soviet troops moved across Europe against Nazi Germany in 1944 and 1945, they encountered concentration camps, mass graves, and other sites of Nazi crimes. The unspeakable conditions the liberators confronted shed light on the full scope of Nazi horrors. Nuremberg War Crimes Trials followed to punish the perpetrators.	1945 - The Nazis are defeated by the Allies to end WW2. The concentration camps are liberated.	9	Persecution oppression, hostility and ill treatment of a group based on their race, religion or political beliefs
			10	Discrimination The unjust treatment of a certain group
			12	Berlin Olympics Olympic Games held in Germany in 1936 that Hitler used to show superiority of the Aryan race
			13	Anti-Semitism Hostility toward or discrimination against Jews as a religious, ethnic, or racial group.
			14	Hitler Leader of the Nazi Party
			15	Ghetto a section of a city where a minority group lives, in this case by force, living conditions were very poor
			16	Perpetrator Someone involved in persecution

KS3 History - Power to the People










Summary: Over the last 400 years, people have protested across the globe for various reasons. We will investigate the why people protested, how they protested and what they managed to achieve. This module has really important links to what we are all living through at the moment, and will give you a crucial understanding of why we fight for our rights and what we can achieve when we do. This half term we will be studying the following movements: Chartism, Suffragists, Suffragettes, Gandhi's peace movement,

Key concepts	
Chartist	Aim; To obtain equal voting rights for working class men Method: The 6 Point charter, Petitions, mass gatherings, pamphlets and posters Achievements: Inspired other movements and did ultimately achieve aim but 50 years later
Suffragists	Aim; To obtain equal voting rights for women Method: Peaceful protest, petitions to Parliament, Achievements: Progress was slow and had to pause movement due to the war, they inspired the more successful Suffragettes
Suffragettes	Aim; To obtain equal voting rights for women Method: "Deeds not Words," protests which clashed with police, hunger strikes, damaging churches and government buildings, Emily Davison throwing herself in front of a horse, chaining to railings Achievements: In 1918 some middle class women got the vote, in 1928 all women over 21 won the right to vote.
Gandhi's peace movement	Aim: To win independence for India Method: non-violent satyagraha, hunger strikes, Mass marches e.g. Salt March, Achievements: India achieved independence in 1948 however the Partition of India and Pakistan caused long-lasting issues.
Key Individuals	
Millicent Fawcett	Leader of National Union of Women's Suffrage Societies (NUWSS). Fawcett led the Suffragist movement who campaigned peacefully to win the right to vote for women.
Emmeline Pankhurst	Emmeline Pankhurst and her daughters Christabel and Sylvia set up the WSPU (Women's Social and Political Union) and pushed for more militant methods of protests. Pankhurst went on hunger strike to protest the issue of women's right to vote
Mahatma Gandhi	Gandhi grew up in an India that was under British rule and became increasingly frustrated with British rule. He worked for many years to win independence for India and force the British out permanently. His aim was for this to be achieved peacefully and without the destabilization of India.

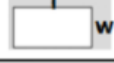
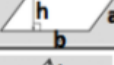
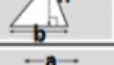
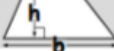
Key words	
Non-violent resistance	Protesting oppression using peaceful but active methods
Decolonisation	Process of gaining independence from colonising country.
Segregation	Separation of people into racial or other ethnic groups in daily life.
Discrimination	The unfair treatment of groups of people based on their race, age or sex
Suffrage	The right to vote.
Civil Rights	Guarantees under the law of equal social opportunities and protection under the law, regardless of race, religion, or other characteristics
Liberation	Setting someone free from imprisonment, slavery, or oppression
Campaign	A series of organised actions which are carried out for a purpose
Activist	A person who campaigns to bring about social or political change
Strike	Refusing to work

Key Events	
People's Charter (1837)	A document detailing the demands of the those working class people who wanted reform - they became known as the Chartists <ul style="list-style-type: none"> • a vote for all men over 21 • a secret ballot • equal electoral districts • no property qualification to become an MP • payment for MPs • annual parliaments
First World War (1914-1918)	Paused the fight for Suffrage as women had to support the war effort
Representation of the People Act (1918)	All men over the age of 21 and all women over 30 who owned a home, or were married to a homeowner, were allowed to vote in elections
The Salt March (1930)	Protest against the high tax that Britain had placed on salt in India. Gandhi and 78 other leaders marched 240 miles from the Sabarmati Ashram to Dandi. They were joined by thousands of people who wanted to protest against British rule.
Partition (1947)	The Indian Independence Act divided British India into two countries, India and Pakistan, declaring both countries free and independent states




1. Angles

	Angles on a straight line add up to 180°
	Angles around a point add to 360°
	Vertically opposite angles are equal
	Angles in a triangle add up to 180°
	Angles in a quadrilateral add up to 360°
	Base angles in an isosceles triangle are equal
	Corresponding angles are equal
	Alternate angles are equal
	Co-interior angles add up to 180°

2. Area

	Rectangle	$l \times w$
	Parallelogram	$b \times h$
	Triangle	$\frac{b \times h}{2}$
	Trapezium	$\frac{1}{2}(a + b) \times h$

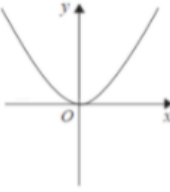
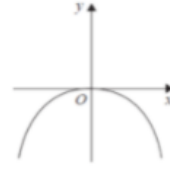
3. Circle Definitions

Area of a circle	πr^2
Circumference of a circle	πd or $2\pi r$
	Diameter
	Radius
	Circumference

4. Angles in Polygons

Sum of interior angles	$(n-2) \times 180$
Each interior angle in regular polygon	$\frac{(n-2) \times 180}{n}$
Sum of exterior angles	360°
Each exterior angle in regular polygon	$\frac{360^\circ}{n}$
Number of sides in a regular polygon	$\frac{360}{\text{exterior angle}}$
Interior + exterior angle	180°

5. Quadratic graphs (Higher Only)

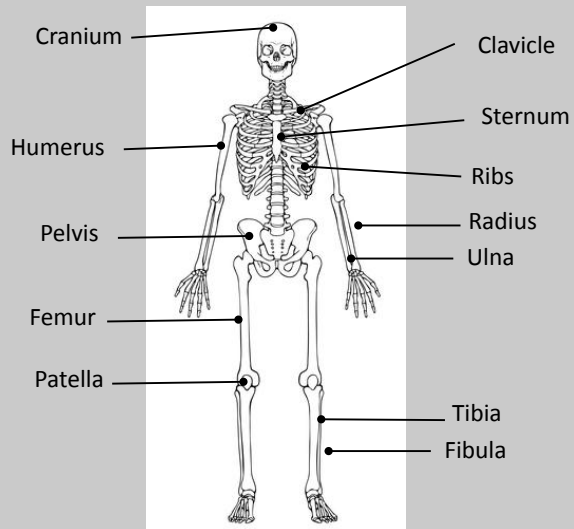
	$y = x^2$
	$y = -x^2$

Hip Hop / Electronic Music

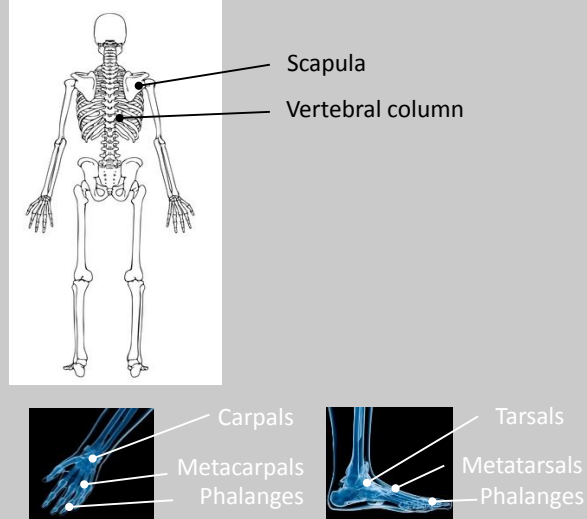
Element	Core knowledge [this will be in your assessment]	Hip Hop Context
Melody	<ul style="list-style-type: none"> • Rap - <i>rhythmically reciting words over a beat</i> • Stepwise - <i>a melody moving in steps</i> • Leaps - <i>a melody moving in leaps</i> • Bassline - <i>the lowest part of a song</i> 	<ul style="list-style-type: none"> • Rap • MC • DJ <p>Recommended Listening:</p> <ul style="list-style-type: none"> • Tribe Called Quest - People's Instinctive Travels and the Paths of Rhythm • J Dilla - Donuts
Articulation	<ul style="list-style-type: none"> • Flow - <i>a combination of rhythm and rhyme that makes rap sound good</i> • Legato - <i>smooth, joined-up notes</i> • Staccato - <i>spiky, detached notes</i> 	
Dynamics	<ul style="list-style-type: none"> • Diminuendo - <i>gradually getting softer</i> • Crescendo - <i>gradually getting louder</i> • Velocity - <i>how hard a note is hit in a MIDI sequence</i> 	
Texture	<ul style="list-style-type: none"> • Polyphonic - <i>many layers of sound</i> • Monophonic - <i>one layer of sound</i> • Homophonic - <i>melody and accompaniment</i> 	
Structure	<ul style="list-style-type: none"> • Sampling - <i>Taking music from other tracks</i> • Verse, chorus, bridge, intro, outro, middle 8 - <i>sections of a song</i> 	Electronic Music Context
Harmony	<ul style="list-style-type: none"> • Major / minor - <i>happy/ sad sounding chords</i> • Triad - <i>a three note chord with a root, 3rd and 5th</i> • Primary chords - <i>the three most common chords in a key - (I, IV V)</i> 	<ul style="list-style-type: none"> • Drum 'n' Bass • Ambient • Jungle • Techno <p>Recommended Listening</p> <ul style="list-style-type: none"> • Kraftwerk - Computer Love • Aphex Twin - Selected Ambient Works • Squarepusher - Be Up A Hello
Instrumentation	<ul style="list-style-type: none"> • Synthesiser - <i>an electronic musical instrument</i> • Drum machine - <i>a device that simulates drums</i> • DAW - <i>digital audio workstation - ie Garageband or Ableton</i> 	
Rhythm	<ul style="list-style-type: none"> • Break beat - <i>a drum beat sampled from another song</i> • 4 to the floor - <i>a kick drum on every beat</i> • Backbeat - <i>a snare drum on beats 2 and 4</i> 	
Tempo / Time Signature	<ul style="list-style-type: none"> • 4/4 - <i>a regular time signature with 4 beats</i> • Rubato - <i>slowly and expressively</i> 	

The structure and functions of the skeletal system

Structure of the skeletal system



Structure of the skeletal system

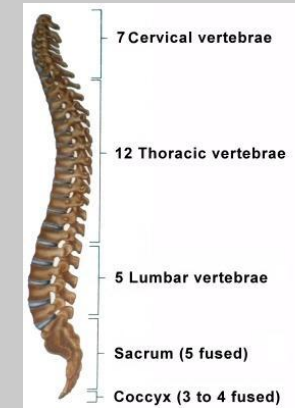


Vertebral Column

The vertebral column is divided into 5 sections. It is made up of irregularly shaped bones called vertebrae.

Each vertebra is protected with cartilage to prevent friction.

The vertebrae protects the spinal cord.



Function of the skeleton

- Protection of vital organs
- Muscle attachment
- Joints for movement
- Blood cell production (platelets, red and white)
- Storage of calcium and phosphorus

Classification of joint

- Pivot (neck – atlas and axis)
- Hinge (elbow and knee)
- Ball and socket (hip and shoulder)
- Condyloid (wrist)



Connective tissue

Ligaments – attaches bone to bone to add joint stability.

Tendons – attaches muscles to bone and contributes to joint movement as a result of muscle contraction.

Classification of bones

Long (leverage)	Short (weight bearing)	Flat (protection + muscle attachment)	Irregular (protection and muscle attachment)
Clear shaft region to the bone. <i>i.e. femur, humerus & phalanges</i>	Light, small and very strong. <i>i.e. carpals, tarsals</i>	Broad surface area for muscle attachment. <i>i.e. cranium</i>	Assist the functioning of certain joints. <i>i.e. Patella/vertebrae</i>

Joint movements

Flexion	Adduction	Rotation	Dorsi-Flexion (ankle joint)
Decreasing the angle at a joint (bending)	Limbs moving towards the midline of the body.	A twisting/turning action around a joint.	When the toes are turned up to the body.
Extension	Abduction	Circumduction	Plantar-Flexion (ankle joint)
Increasing the angle at a joint (straightening)	Limbs moving away from the midline of the body.	A combination of flexion, extension, adduction & abduction.	When the toes are pointed away from the body.

Year 9: Science and Religion Half term 4

Key Terms		Key Concepts	Key Questions
Red Shift Effect	Evidence through latent gases of the continued expansion of the universe	<u>Evolution</u> : This is a theory created by Charles Darwin, An English Christian. He theorised that all living species are descended from earlier more simplistic life forms. He travelled the world observing key differences in creatures around the world that had changed over millions of years dependent on their environment. With this discovery came the idea that Humans had been descended from apes. Those species that had dies out such as the Dodo did so as they failed to adapt to a changing world, Darwin would label this survival of the fittest. His work was published in a book called “the origin of species”	Why is it surprising that Darwin is Christian? How might this theory be seen as a threat to the Biblical account? Have all species evolved? How might someone criticise the theory?
Origin of species	Darwin’s book in which he published evolution for the first time		
Survival of the fittest	Those species that had evolved to better suit their environment were more likely to survive and pass on their genes to the next generation		
Cause and effect	A Newtonian law that states that all things in the world as an effect of an earlier cause	<u>Creationism</u> : A view held by a minority of Christians that says that the creation of the Earth happened exactly as described in the bible. This dates the Earth and universe as being only 7000 years old contrary to what is commonly accepted by the scientific community that the earth is between 14-16 Billion years old. This theory also suggests that anything omitted from the creation in the Bible did not happen so many creationists do not believe in dinosaurs .	Why is this view only held by a minority of Christians? How might someone criticise this view? What evidence exists for its truth? Out of Evolution and creationism which offers greater truth?
First cause (cosmological argument)	everything can be traced back to a first cause and in the case of the universe the first cause was God.		
		Sources of Wisdom and Authority	
Sufficient Reason	This is a cause that is powerful enough to create a respective effect. Eg hitting your head is sufficient reason to have a bump afterwards	‘Your Guardian-Lord is Allah, Who created the heavens and the earth in six periods (ayyams), then He established Himself on the Throne (of authority): He draweth the night as a veil over the day, each seeking each other in rapid succession: He created the sun, the moon, and the stars, all governed under His command’ (Surah 7:53)	
		“Do not the disbelievers realise that the heavens and earth were a solid mass, then We split them asunder, and We made from water every living thing? ... He it is Who created the night and the day, and the sun and the moon each gliding freely in its orbit.” Surah 21:31-34	
Astronomers	Scientists who study the stars	“I have created men, high and low, that they may worship Me. I desire no support from them, nor do I desire that they should feed Me. Surely, it is Allah who is the great sustainer, the Lord of Power, the Strong.” (Surah 51:56)	

Year 9: Science and Religion Half term 3

Key Terms		Key Concepts	Key Questions
Cosmology	The study and debate of the origins of the universe	<p>Big Bang theory: The Big Bang theory is the prevailing cosmological model for the observable universe from the earliest known periods through its subsequent large-scale evolution. The model describes how the universe expanded from a very high-density and high-temperature state, and offers a comprehensive explanation for a broad range of phenomena, including the abundance of light elements, the cosmic microwave background, large scale structure and Hubble's law (the farther away galaxies are, the faster they are moving away from Earth). If the observed conditions are extrapolated backwards in time using the known laws of physics, the prediction is that just before a period of very high density there was a singularity which is typically associated with the Big Bang</p>	<p>What existed before the big bang? Is it just a theory? Could God have caused it? What's the evidence? Does it contradict religious belief? Do only atheists believe in this? Why is it called "Big Bang"?</p>
Genesis story	The account of the worlds creation according to the old testament		
Ex nihilo	To come from nothing; For example the universe was Ex nihilo		
Humanity	The collective term for humans as well as the quality of being human; for example benevolence	<p>Design argument: This is a theory created by William Paley that states that the world is too perfect to have been an accident and that within nature and creation we see evidence of a deliberate and intelligent design, since the only force powerful enough to design a universe is God then, God must have been the designer</p>	<p>Is the world really perfect? Where is the greatest source of evidence? Does it negate evolution? Does this compliment religion?</p>
Evolution	The theory that all life is descended from earlier more simplistic life forms and through a process of survival of the fittest small changes occur over the space of millions of years.	<p>Cosmological argument: An argument popularised by Saint Thomas Aquinas states that the universe had a first cause, a cause that in itself did not have to be an effect of an earlier cause. God is the only entity that is eternal and has therefore always existed therefore God is the uncaused causer, the first cause the source of all creation</p>	<p>How can God be eternal? Must God be the cause? Is infinite regression possible? Is this observable? Do Muslims support it?</p>
Creationism	A fundamentalist Christian view that creation happened exactly as described in the Bible, if its not in the Bible it didn't happen; this negates evolution and the big bang theory	<h3 style="text-align: center;">Sources of Wisdom and Authority</h3>	
		<p>"We are just an advanced breed of monkeys on a minor planet of a very average star. But we can understand the universe. That makes us something very special." Stephen Hawking, scientist (1942-2018)</p>	
Solar system	The group of planets that orbit around any particular sun.	<p>"In the beginning God created the heavens and the earth." (Genesis 1:1)</p>	
		<p>"Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish of the sea and the birds of the air and over every living creature that moves on the ground." (Genesis 1:28)</p>	

Chemistry - Groups on the periodic table and states of matter

Groups in the Periodic Table Knowledge Grid					
	Question	Answer			
1	Group 1	Alkali metals	17	Test for chlorine	Damp litmus paper bleaches white
2	Group 7	Halogens	18	Halogens react with metals to form....	salts.
3	Group 0	Noble gases	19	metal + halogen →	metal halide
4	Elements in the same group have...	the same number of electrons on their outer shell and similar properties.	20	Fluorine reacting with iron	Cold iron wool burns to produce white iron(III) fluoride
5	Properties of alkali metals	soft and relatively low melting points.	21	Chlorine reacting with iron	Hot iron wool burns vigorously to produce orange-brown iron(III) chloride
6	Reaction of lithium with water	Fizzing	22	Bromine reacting with iron	Hot iron wool burns quickly to produce red-brown iron(III) bromide
7	Reaction of sodium with water	Fizzing and floats on surface on a cushion of hydrogen gas	23	Iodine reacting with iron	Hot iron wool reacts slowly in iodine vapour to produce grey iron(II) iodide
8	Reaction of potassium with water	Fizzing, floats on the surface, purple flame.	24	When halogens dissolve in water...	form acidic solutions.
9	Trend in reactivity of group 1	Group 1 gets more reactive down the group.	25	hydrogen + halogen →	hydrogen halide
10	Group 1 gets more reactive down the group because...	further down the group the elements have more electron shells, so the outer shell electron is more easily lost because it is less attracted to the positive nucleus.	26	When hydrogen halides dissolve in water...	They form acidic solutions.
			27	Redox reactions	Reactions that involved oxidation (loss of electrons) and reduction (gain of electrons)

11	Chlorine	Pale green gas	28	Displacement reactions	Redox reactions when a more reactive chemical displaces a less reactive chemical from a compound.
12	Bromine	Brown liquid	29	Properties of noble gases	inert (unreactive), low density, non-flammable.
13	Iodine	Purple-black solid	30	Noble gases are inert because...	They have full outer shells of electrons.
14	Trend in reactivity of group 7	Group 7 gets less reactive down the group.	31	Uses of noble gases	balloons, shield gas in welding, filament lamps
15	Group 7 gets less reactive down the group because...	further down the group the elements have more electron shells, so it is harder to attract an electron to the outer shell because it is less attracted to the positive nucleus.	32	As you go down group 0, boiling point...	increases.
16	Trend in melting and boiling points of group 7	Boiling points increase down the group because the molecules are larger so have stronger intermolecular bonds.	33	As you go down group 0, density...	increases.

States of Matter and Mixtures Knowledge Grid

	Question	Answer		Question	Answer
1	Particles in a solid	Low energy, regular arrangement in rows, fixed volume, fixed positions, tightly packed	17	Filtration is used to separate	insoluble solid from a liquid
2	Particles in a liquid	Medium energy, random arrangement, tightly packed, take the shape of the container	18	Crystallisation is used to separate	soluble solid from liquid
3	Particles in a gas	High energy, random arrangement, fill the container, moving at a range of speeds	19	Paper chromatography is used to separate	different colour/solubility liquids
4	Melting	Solid > liquid	20	Paper chromatography	the separation of mixtures of soluble substances by running a solvent through the mixture
5	Boiling	liquid > gas	21	On a chromatogram, a pure substance will show	One dot
6	Freezing	liquid > solid	22	On a chromatogram, a mixture will show	More than one dot
7	Condensing	gas > liquid	23	R _f value calculation	R _f = distance travelled by solute ÷ distance travelled by solvent
8	Sublimating	solid > gas	24	Ground water	Impure water found in lakes and rivers.
9	Evaporating	liquid > gas (without boiling)	25	Waste water	Used water from sewage, factories and farms.
10	Physical changes	The material recovers its original properties if the change is reversed, like in changes of state	26	Potable water	Water that is safe to drink, with only low levels of microbes and dissolved ions.
11	Melting point	The temperature at which a solid melts or freezes.	27	Stages of making potable water	Sedimentation, filtration and chlorination.
12	Boiling point	The temperature at which a solid boils or condenses.	28	Desalination	Removing salt from water (by distillation)
13	Pure substance	A substance that is made up of only one chemical (whether than is a compound or element)	29	Water used in analysis must not contain...	any dissolved salts.
14	How to use melting point to find a pure substance:	Will have a sharp melting point, not a range.	30	Sedimentation	Solid particles settling at the bottom of water tanks.
15	Simple distillation is used to separate	Liquid from a soluble solid (or two liquids)	31	Chlorination	Using chlorine to kill harmful microbes.
16	Fractional distillation is used to separate	A mixture of liquids with different boiling points			

Physics

Conservation of Energy Knowledge Grid

	Question	Answer			
1	Law of conservation of energy	Energy cannot be created or destroyed, just transferred or dissipated	17	Equation for kinetic energy	$KE = \frac{1}{2} mv^2$
2	8 Stores of energy	Chemical, kinetic, gravitational potential, elastic potential, nuclear, magnetic, thermal, electrostatic.	18	Power	Rate of energy transfer
3	4 Transfers of Energy	By heating, by radiation, by electrical work, by mechanical work	19	Power Equation	Power = energy ÷ time $P = E/t$
4	Chemical Energy	Energy stored in chemical bonds between elements of an object	20	Unit for Power	The Watt; one watt is one joule per second
5	Kinetic Energy	Energy stored in a moving object	21	Work done equation	Work done = force x distance $E = Fd$
6	Gravitational Potential Energy	Energy stored in an object raised up against the pull of gravity	22	Unit for work done	The Joule
7	Elastic Potential Energy	Energy stored in a stretched or compressed object	23	Efficiency equation	efficiency = useful energy ÷ total input energy
8	Nuclear Energy	Energy stored in the nucleus of the atoms of an object	24	Two ways to reduce unwanted energy transfer	Lubrication and thermal insulation
9	Magnetic Energy	Energy stored in magnetic objects when their poles are separated or brought together against the magnetic force	25	Two factors that affect the rate of cooling of a building	Thickness and thermal conductivity of walls
10	Thermal Energy	Energy stored in a hot object	26	Energy resources	Fossil fuels, nuclear fuel, bio-fuel, wind, hydroelectricity, tidal power, solar power.
11	Electrostatic Energy	Energy stored in charged objects when they are separated or brought together against the electrostatic force	27	Renewable resources	Resources that can be replenished as they are used.

12	Closed system	When there is no wasted energy in a system, there is no net change to the total energy.	28	Non-renewable resources	Resources that cannot be replenished as they are used.
13	Open systems	In real life, there are no closed systems because energy is always wasted/dissipated.	29	Energy resources that are unreliable because they depend on the weather	wind, tidal, solar
14	Dissipated	When thermal or sound energy is released into the air.	30	Reliable energy resources	fossil fuels, nuclear fuel, bio-fuel, hydroelectricity
15	Sankey Diagram	A scaled flow chart used to represent energy transfers	31	Disadvantage of fossil fuels	Releases carbon dioxide which causes global climate change
16	Equation for gravitational potential energy	$\Delta GPE = mg\Delta h$	32	Advantage of bio-fuels	Carbon neutral (overall doesn't release much carbon dioxide)
17	Equation for kinetic energy	$KE = \frac{1}{2}mv^2$	33	Advantage of wind, tidal and solar	Do not produce carbon dioxide, so don't cause global climate change
18	Power	Rate of energy transfer	34	Disadvantage of nuclear fuel	Produces radioactive waste that is difficult to dispose of

Energy Savings and Resources

	Question	Answer
1	Two ways to reduce unwanted energy transfer	Lubrication and thermal insulation
2	Two factors that affect the rate of cooling of a building	Thickness and thermal conductivity of walls
3	Energy resources	Fossil fuels, nuclear fuel, bio-fuel, wind, hydroelectricity, tidal power, solar power.
4	Renewable resources	Resources that can be replenished as they are used.
5	Non-renewable resources	Resources that cannot be replenished as they are used.
6	Energy resources that are unreliable because they depend on the weather	wind, tidal, solar
7	Reliable energy resources	fossil fuels, nuclear fuel, bio-fuel, hydroelectricity
8	Disadvantage of fossil fuels	Releases carbon dioxide which causes global climate change
9	Advantage of bio-fuels	Carbon neutral (overall doesn't release much carbon dioxide)
10	Advantage of wind, tidal and solar	Do not produce carbon dioxide, so don't cause global climate change
11	Disadvantage of nuclear fuel	Produces radioactive waste that is difficult to dispose of

Y9 Cycle 2 (F) KO Family & Friends: Las relaciones con la familia y los amigos (THEME 1- Family & friends)

2.1. ¿Cómo son tus amigos? / Describe a tu familia (What are your friends like?/ Describe your family) [Quizlet 2.1.](#)

<p>Pienso que mi amigo/a es <i>I think that my friend is</i></p> <p>Mi hermano/a puede ser <i>My brother/sister can be</i></p> <p>Lo mejor de mi amiga Eva es que es <i>The best thing about my friend Eva is that is</i></p> <p>Lo peor de mi padre/ madre es que es <i>The worst thing about my father/mother is that is</i></p>	<p>generoso/a = <i>generous</i> simpático/a = <i>nice</i></p> <p>abierto/a = <i>open-minded</i></p> <p>cerrado/a = <i>close-minded</i></p> <p>sociable = <i>sociable</i> arrogante = <i>arrogant</i></p> <p>hablador(a) = <i>talkative</i> / animado/a = <i>cheerful</i></p> <p>perezoso/a = <i>lazy</i> / tonto/a = <i>silly</i></p> <p>trabajador(a) = <i>hard working</i> / tímido/a = <i>shy</i></p> <p>travieso/a = <i>naughty</i> sincero/a = <i>sincere</i></p>	<p>pero también es bastante <i>(but also, he/she is quite)</i></p> <p>aunque no es <i>(although he/she is not)</i></p> <p>pero en el pasado era más <i>(but in the past, he/she was more)</i></p> <p>Además, tiene... <i>(In addition, he/she has)</i></p> <p>aunque en el pasado tenía <i>(although in the past he/she had)</i></p>	<p>alto/a = <i>tall</i> bajo/a = <i>short</i></p> <p>de estatura media = <i>average height</i></p> <p>fuerte = <i>strong</i> musculoso/a = <i>muscular</i></p> <p>atlético/a = <i>athletic</i></p> <p>guapo/a = <i>handsome</i></p> <p>delgado/a = <i>thin</i> gordo/a = <i>fat</i></p> <p>los ojos marrones / azules / verdes / grandes/ pequeños <i>he/she has brown / blue / green / big / small eyes</i></p> <p>el pelo largo / corto / castaño / rubio / pelirrojo <i>he/she has long / short / brown / blonde / ginger hair</i></p>
<p>Grade 5 touches</p> <p>Mi mejor amigo me da buenos consejos = <i>my best friend gives me good advice</i></p> <p>Nunca me peleo con mis hermanos = <i>I never argue with my siblings</i></p>			

2.2. ¿Cómo debería ser un buen amigo? (What should a good friend be like?) [Quizlet 2.2.](#)

<p>Un buen amigo debería... <i>A good friend should...</i></p> <p>Pienso que un buen amigo debería <i>I think I good friend should</i></p>	<p>ayudarte <i>help you</i></p> <p>dar buenos consejos <i>give good advice</i></p> <p>tener los mismos intereses <i>have the same interests</i></p> <p>ser honesto/a <i>be honest</i></p>	<p>Un buen amigo debería SER... <i>A good friend should BE...</i></p> <p>Un buen amigo debería ser ser más/ menos + adjective <i>A good friend should be more/less + adjective</i></p>	<p>generoso/a = <i>generous</i> simpático/a = <i>nice</i></p> <p>abierto/a = <i>open-minded</i> cerrado/a = <i>close-minded</i></p> <p>sociable = <i>sociable</i> arrogante = <i>arrogant</i></p> <p>hablador(a) = <i>talkative</i> / animado/a = <i>cheerful</i> perezoso/a = <i>lazy</i> / tonto/a = <i>silly</i></p> <p>trabajador(a) = <i>hard working</i> / tímido/a = <i>shy</i></p> <p>travieso/a = <i>naughty</i> sincero/a = <i>sincere</i></p>
<p>Grade 5 touches</p> <p>Mi amigo ideal sería + adjective = <i>my ideal friend would be + adjective</i></p>			

Y9 Cycle 2 **(F)** KO Family & Friends: Las relaciones con la familia y los amigos (THEME 1- Family & friends)2.3. ¿Te llevas bien con tu familia? / ¿Cómo te llevas con tus amigos? (Do you get on well with your family? / How do you get on with your friends?) [Quizlet 2.3.](#)

Me llevo bien con... <i>I get on well with...</i> Me llevo mal con... <i>I get on badly with...</i>	mi hermano/a (my brother/sister) mi abuelo/a (my grandfather/grandmother) mi(s) madre(s) / padre(s) (my mother(s)/ father(s)) mi tío/a (my uncle/aunt) mi primo/a (my cousin) Mi amigo/a (my friend)	porque dado que puesto que visto que ya que aunque	hoy en día <i>nowadays</i> ahora <i>now</i> cuando éramos jóvenes <i>when we were young</i>	me da buenos consejos = he/she gives me good advice se enfada por nada = he/she gets angry at nothing a veces discutimos = sometimes we argue es muy molesto/trabajador/simpático- he/she is very annoying/hardworking/nice nos llevábamos bien = we used to get on well me daba buenos consejos = he/she used to give me good advice se enfadaba por nada = he/she used to get angry at nothing a veces discutíamos= sometimes we used to argue
Grade 5 touches En los últimos años la relación con + family member ha mejorado mucho - in recent years my relationship with + family member has improved a lot				

2.4. ¿Qué opinas del matrimonio? (What do you think about marriage?) [Quizlet 2.4.](#)

Desde mi punto de vista = from my point of view En mi opinión = in my opinion Mi hermano opina/cree/piensa que = my brother thinks that	El matrimonio es malo / bueno / positivo / innecesario = Marriage is good / bad / positive / unnecessary Una pareja ideal debería = an ideal partner should Una pareja ideal debería ser = an ideal partner should be	y en el futuro (no) voy a casarme = and in the future I am (not) going to get married porque las bodas son muy caras = because weddings are very expensive hoy en día mucha gente usa las páginas de citas = nowadays many people use online dating sites ya que representa valores tradicionales= because it represents traditional values Cuidarte = look after you / Ayudarte = help you / tener los mismos intereses= have the same interests Leal = loyal / Simpática = nice / Guapa = pretty/handsome /Trabajadora = hardworking / ambiciosa= ambitious / honesta= honest
Grade 5 touches Mi pareja ideal, sería ... + adjective = My ideal partner he/she would be ... + adjective		

Y9 Cycle 2 (H) KO Family & Friends: Las relaciones con la familia y los amigos (THEME 1- Family & friends)

2.1. ¿Cómo son tus amigos? / Describe a tu familia (What are your friends like?/ Describe your family) [Quizlet link 1.1](#)

<p>Diría que mi amigo/a es <i>I would say that my friend is</i></p> <p>Honradamente, mi hermano/a puede ser <i>Honestly, my brother/ sister can be</i></p> <p>Lo mejor de mi amiga Eva es que es <i>The best thing about my friend Eva is that is</i></p> <p>Lo peor de mi padre/ madre que es <i>The worst thing about my father/mother is that is</i></p>	<p>generoso/a = generous amable / simpático/a = nice</p> <p>abierto/a = open-minded cerrado/a = close-minded</p> <p>sociable = sociable arrogante = arrogant</p> <p>hablador(a) / charlatán/ana = talkative</p> <p>animado/a = cheerful perezoso/a = lazy</p> <p>tonto/a = silly trabajador(a) = hardworking</p> <p>torpe; patoso/a = clumsy tímido/a = shy</p> <p>travieso/a = naughty sincero/a = sincere</p> <p>alegre/feliz = happy serio/a = serious</p> <p>comprensivo/a = understanding</p> <p>cariñoso/a = affectionate</p> <p>optimista= optimistic pesimista = pessimistic</p>	<p>pero también es bastante <i>(but also, he/she is quite)</i></p> <p>aunque no es <i>(although he/she is not)</i></p> <p>pero en el pasado era más <i>(but in the past, he/she was more)</i></p>	<p>alto/a = tall bajo/a= short</p> <p>de estatura media = average height</p> <p>fuerte= strong musculoso/a= muscular atlético= athletic</p> <p>guapo/a= handsome hermoso/a= pretty</p> <p>flaco/a= skinny delgado/a= thin gordo/a = fat</p>
		<p>Además, tiene... <i>(In addition, he/she has)</i></p> <p>y tiene... <i>(and, he/she has)</i></p> <p>aunque en el pasado tenía <i>(although in the past he/she had)</i></p>	<p>los ojos marrones / azules / verdes / grandes/ pequeños <i>he/she has brown / blue / green / big / small eyes</i></p> <p>el pelo largo / corto / castaño / rubio / pelirrojo <i>he/she has long / short / brown / blonde / ginger hair</i></p>
<p>A mi parecer, mi mejor amiga <i>In my opinion, my best friend</i></p> <p>Desde mi punto de vista, mi hermano/a <i>From my point of view, my brother/sister</i></p>	<p>se ríe casi siempre = he/she almost always laughs</p> <p>me cuida = he/she looks after me</p> <p>me da buenos consejos = gives me good advice</p> <p>me fastidia/me molesta = He/she/it annoys me</p>	<p>pero somos amigos desde hace diez años = but we have been friends for ten years</p> <p>y (no) pasamos mucho tiempo juntos = and we (don't) spend a lot of time together</p> <p>por eso peleamos como perro y gato = that's why we argue like cats and dogs</p>	
<p>Grade 9 touches</p> <p>El adjetivo más justo para describirme/le sería... = the fairest adjective to describe me / him/her would be</p> <p>Creo que mi mejor amigo ha madurado mucho porque ya no es tan... + adjective= I think that my best friend has matured a lot because he is no longer so...+ adjective</p>			

2.2. ¿Cómo debería ser un buen amigo? (What should a good friend be like?) [Quizlet link 1.2](#)

<p>Diría que un buen amigo debería... <i>I would say that a good friend should...</i></p> <p>Para ser un buen amigo, es imprescindible <i>In order to be a good friend, it's essential to</i></p>	<p>ayudarte/echarte una mano <i>help you / lend you a hand</i></p> <p>dar buenos consejos <i>give good advice</i></p> <p>tener los mismos intereses <i>have the same interests</i></p> <p>mostrar mucho respeto / lealtad <i>show lots of respect / loyalty</i></p> <p>ser honesto/a <i>to be honest</i></p>	<p>Un buen amigo debería SE... <i>A good friend should BE...</i></p> <p>Creo que soy/es... <i>I think that I am / he/she is...</i></p> <p>Un buen amigo tiene que ser tan ± adjective como yo <i>A good friend has to be as + adjective as me</i></p> <p>Un buen amigo debería ser ser más/ menos + adjective <i>A good friend should be more/less + adjective</i></p>	<p>generoso/a = generous amable / simpático/a = nice</p> <p>abierto/a = open-minded cerrado/a = close-minded</p> <p>sociable = sociable arrogante = arrogant</p> <p>hablador(a) / charlatán/ana = talkative</p> <p>animado/a = cheerful perezoso/a = lazy</p> <p>tonto/a = silly trabajador(a) = hardworking</p> <p>torpe; patoso/a = clumsy tímido/a = shy</p> <p>travieso/a = naughty sincero/a = sincere</p> <p>alegre/feliz = happy serio/a = serious</p> <p>comprensivo = understanding cariñoso/a = affectionate</p>
<p>Grade 9 touches</p> <p>Si pudiera tener el amigo perfecto, sería ... = If I could have the perfect friend, he/she would be ...</p> <p>Es importante/esencial que un buen amigo sea / tenga = It's important/essential that a good friend is / has</p>			

Y9 Cycle 2 **(H)** KO Family & Friends: Las relaciones con la familia y los amigos (THEME 1- Family & friends)2.3. ¿Te llevas bien con tu familia? / ¿Cómo te llevas con tus amigos? (Do you get on well with your family? / How do you get on with your friends?) [Quizlet link 1.3.](#)

(No) me llevo bien/mal con... <i>I (don't) get on well /badly with...</i> Mi relación con + family member/friend ha mejorado / empeorado mucho <i>My relationship with + family member/friend has got a lot better/worse...</i>	mi hermano/a (my brother/sister) mi abuelo/a (my grandfather/grandmother) mi(s) madre(s) / padre(s) (my mother(s)/ father(s)) mi tío/a (my uncle/aunt) mi primo/a (my cousin) mi sobrino/a (my nephew/ niece) mi hermanastro/a (my stepbrother/ stepsister) Mi amigo/a (my friend)	porque dado que puesto que visto que ya que aunque	hoy en día / estos días <i>nowadays</i> ahora <i>now</i> últimamente <i>lately</i>	me da buenos consejos = he/she gives me good advice nos gustan las mismas cosas = we like the same things se enfada por nada = he/she gets angry at nothing hay tensión en el hogar = there is tension at home me trata(n) injustamente = he/she (they) treat(s) me unjustly a veces discutimos = sometimes we argue (no) me dan libertad = they (don't) give me freedom estoy harto/a de ellos = I am fed up with them
			en el pasado <i>In the past</i> cuando éramos jóvenes <i>when we were young</i> hace ... años years ago	nos llevábamos bien = we used to get on well nos peleábamos como gato y perro = we used to fight like cat and dog me daba buenos consejos = he/she used to give me good advice se enfadaba por nada = he/she used to get angry at nothing hacíamos muchas cosas juntos = we used to do many things together nos gustaban las mismas cosas = we used to like the same things a veces discutíamos = sometimes we used to argue
Grade 9 touches Mi familia y yo hemos tenido periodos tempestuosos = My family and I have had stormy periods / Si hubiera sido posible, me habría gustado tener... = If it would have been possible, I would have liked to have... En los últimos años, he crecido mucho personalmente = I have grown a lot personally in recent years / Mi familia siempre me echan una mano = My family always lend me a hand				

2.4. ¿Qué opinas del matrimonio? (What do you think about marriage?) [Quizlet link 1.4.](#)

Desde mi punto de vista = from my point of view En mi opinión = in my opinion Mi hermano opina/crea/piensa que = my brother thinks that Me parece que = it seems to me No estoy seguro/a pero creo que = I'm not sure but I think that...	El matrimonio es malo / bueno / positivo / innecesario = Marriage is good / bad / positive / unnecessary Estoy a favor del matrimonio = I am for marriage Estoy en contra del matrimonio = I am against marriage	y en el futuro (no) voy a casarme = and in the future I am (not) going to get married porque las bodas son muy caras = because weddings are very expensive y espero tener suerte en mi vida amorosa = and I hope to be lucky in my love life hoy en día mucha gente usa las páginas de citas para encontrar una pareja = nowadays many people use online dating sites to find a partner hay mucha gente que miente sobre su vida =there are many people who lie about their lives ya que representa valores tradicionales = because it represents traditional values
	Una pareja ideal debería = an ideal partner should	Cuidarte = look after you / Ayudarte = help you / tener los mismos intereses = have the same interests Confiar en ti = trust you / Quererte = love you
	Una pareja ideal debería ser = an ideal partner should be	Leal = loyal / Simpática = nice / Guapa = pretty/handsome / Trabajadora = hardworking / ambiciosa = ambitious / honesta = honest
Grade 9 touches Si tuviera la oportunidad de elegir la pareja perfecta, sería ...+ adjective = If I had the chance to choose the perfect partner, he/she would be ...+ adjective		

Year 9

Textiles

Designing is an intrinsic part of Textiles Design so to help us to do this successfully, there are some key points we should incorporate into the process.

The 5 formal elements of Textiles Design are:

Colour



Colour is the visual element that has the strongest effect on our emotions. It is the element we use to create mood or atmosphere. Colour psychology is the study of how colors affect perception and behaviour. In design, colour psychology is focused on how colours impact consumers' impressions of a brand and whether or not they persuade consumers to make a purchase or feel a particular way.

Composition



Composition refers to the arrangement of design on the page. The term composition means 'putting together,' and can apply to any creative work, from music to drama to photography. To put it simply, it is the act of arranging or putting something together using conscious thought.

Pattern



A pattern is a design in which lines, shapes, forms or colours are repeated. The part that is repeated is called a motif. How complicated a pattern is depends on what is repeated and the way in which it is repeated. Patterns can be regular or irregular. In regular patterns the motif(s) is repeated in a way that is predictable. It could be exactly the same each time, or it could change in a way that is regularly repeated.

Texture



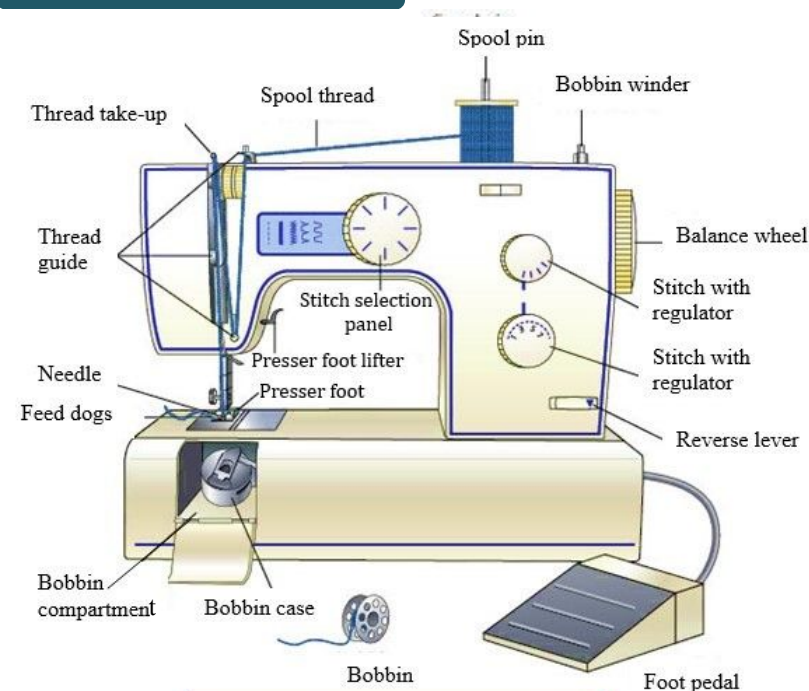
Texture refers to the surface quality of something we can sense through sight and touch. Textures can be rough or smooth, soft or hard. Textures are often *implied*. For instance, a drawing of a rock might *appear* to have a rough and hard surface, but in reality is as smooth as the paper on which it is drawn.

Scale

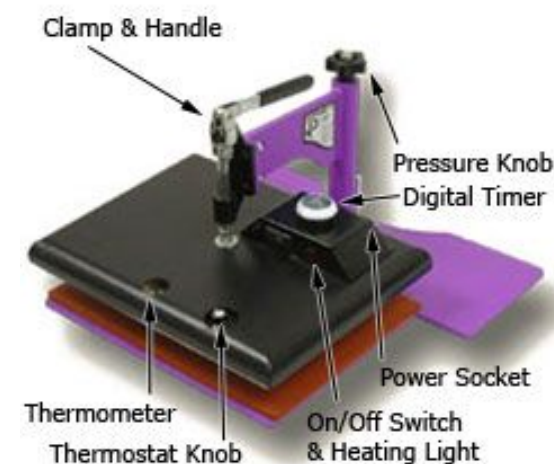


Scale refers to the relative size of one object compared to another. Scale can also refer to the size relationships of different visuals within a singular piece of design. When an artist or designer chooses to make particular objects oversized or miniature, it is often to emphasize their importance or encourage a new perspective.

The Anatomy of a Sewing Machine



The Anatomy of a Heat Press



Year 9

Textiles

In Textiles Design we use a range of specialist techniques in order to decorate textiles to make them more aesthetically pleasing and interesting. The information below explains some of the techniques you will explore this year.

Embroidery

Embroidery is the act of decorating fabric or other materials using a needle to apply thread or yarn. Typically embroidery is done by hand using embroidery needles, embroidery floss/thread and an embroidery hoop, however it is becoming more popular to use sewing machines to create designs using a technique called 'free machining'. The use of CAD further enhances the possibilities with specialist sewing machines able to sew designs which have been designed on computers.

**Tie-Dye**

Tie-dye is a term used to describe a number of resist dyeing techniques. The process of tie-dye typically consists of folding, twisting, pleating, or crumpling fabric or a garment, before binding with string or rubber bands, followed by the application of dye or dyes. The manipulations of the fabric before the application of dye are called resists, as they partially or completely prevent the applied dye from colouring the fabric.

**Couching**

Couching is the art of attaching other fibres to fabric with little stitches. Hemp yarn, ribbon, embroidery thread, cord, raffia or even beaded chains can be attached to fabric with couching stitches. Couching requires two 'threads': a 'Working Thread' which is the thread you use to stitch with and a 'Lay Thread' which is the fibre that quite literally lays down on top of the fabric. The advantage of using couching on your fabric is that you can embellish the fabric with different types of thread / fibres which otherwise would not penetrate the fabric, like thick metallic thread, beaded chains and even wire.

**Block Printing**

Block printing is a relief printing technique that uses a carved material (typically wood, linoleum, or rubber) to transfer ink onto fabric or paper. The block serves as a kind of stamp, with the final product a mirror image of the carving. It is a technique that can be used for printing text, images or patterns. Originating in China, it is used widely throughout East Asia.

**Heat Press (bonding, transfer, vinyl)**

A Heat Press is a commercial-grade iron that applies both heat and pressure to fabric. It is commonly used in custom t-shirt printing but it is also a very useful tool for other types of decoration. The different ways in which we use of a heat press in Textile Design range from the application of heat transfer vinyl (HTV) and fabric transfer paint, bonding plastics to fabric as well as a means to create 3D folds, pleating and Shibori.

**Appliqué**

Appliqué is a sewing technique whereby pieces of fabric are cut in different shapes and patterns and are then sewn or stuck onto a larger piece; forming a picture, pattern or design. Applique can be produced using either handsewing or using a sewing machine offering a different aesthetic.



NOTES

NOTES

SPaG

Grammar: Write in sentences

A sentence is a group of words that make sense. Sentences start with a capital letter and end with a full stop, question mark or exclamation mark. All sentences contain **clauses**. You should try to use a range of sentences when writing. There are three main types of sentences.

Simple sentence: A sentence containing one main clause with a **subject** and a **verb**.

He **reads**.

Literacy **is** important.

Compound sentence: Two simple sentences joined with a **conjunction**. Both of these simple sentences would make sense on their own. Varying conjunctions makes your writing more interesting.

He **read** his book **because** it **was written** by his favourite author.

Literacy **is** important **so** students **had** an assembly about reading.

Complex sentence: A longer sentence containing a main clause and one or more **subordinate clause (s)** used to add more detail.

The main clause makes sense on its own. However, a subordinate clause would not make sense on its own, it needs the main clause to make sense. The subordinate clause is separated by a comma (s) and/or conjunction. The clause can go at the beginning, middle or end of the sentence.

He read his book **even though** it was late.

Even though it was late, he read his book.

He read his book, **even though** it was late, because it was written by his favourite author.

How can you develop your sentences?

1. Start sentences in different ways. For example, you can start sentences with adjectives, adverbs or verbs.

Adjective: **Funny** books are my favourite!

Adverb: **Regularly** reading helps me develop a reading habit.

Verb: **Looking** at the front cover is a good way to choose a reading book.

2. Use a range of **punctuation**.

3. Nominalisation

Nominalisation is the noun form of verbs; verbs become concepts rather than actions. Nominalisation is often used in academic writing. For example:

It is important to **read** because it helps you in lots of ways.

Becomes: **Reading** is beneficial in many ways.

Germany **invaded** Poland in 1939. This was the immediate cause of the Second World War breaking out.

Becomes: Germany's **invasion** of Poland in 1939 was the immediate cause of the outbreak of the Second World War.

Connectives and Conjunctions

Cause And Effect	Because So Consequently Therefore Thus
Addition	And Also In addition Further (more)
Comparing	Whereas However Similarly Yet As with/ equally/ Likewise
Sequencing	Firstly Initially Then Subsequently Finally After
Emphasis	Importantly Significantly In particular Indeed
Subordinate	Who, despite, until, if, while, as, although, even though, that, which

Haggerston School



Year 9 Knowledge Organiser

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Aspiration Creativity Character