Co-op Academy
Walkden

Knowledge Organisers

Year 8 Term 2

What are Knowledge Organisers?

Knowledge organisers are a summary of the key knowledge and skills that pupils need for a unit of work or a curriculum subject. They are overview sheets with information broken down into bite size chunks so pupils can revise and use them within their homework or studies.

How do I use my Knowledge Organiser?

There will be several strategies to use when using Knowledge Organisers (KOs) which will include:

- Read, say, cover, write and check (RSCWC). When revising knowledge for your subjects we have discussed the importance of doing it from memory and not copying from one piece of paper to another.
- A knowledge or skill highlighting a tricky area (gaps underlined).
- Demonstrate spaced practice through revising with the knowledge organiser a little between each lesson, rather than a lot each week or fortnight.

Read	Read your Knowledge organiser and select one area to focus on at a time.
Say	Select a section and read out aloud to yourself or to a family member or friend.
Cover	Cover your knowledge organiser so you can find out which areas you need to work on.
Write	Write down all the knowledge and skills you remember in you knowledge organiser fr that section.
Check	Look back and check to see if you were correct and got it right. Correct any mistakes or missing information in red pen.

Contents

Art

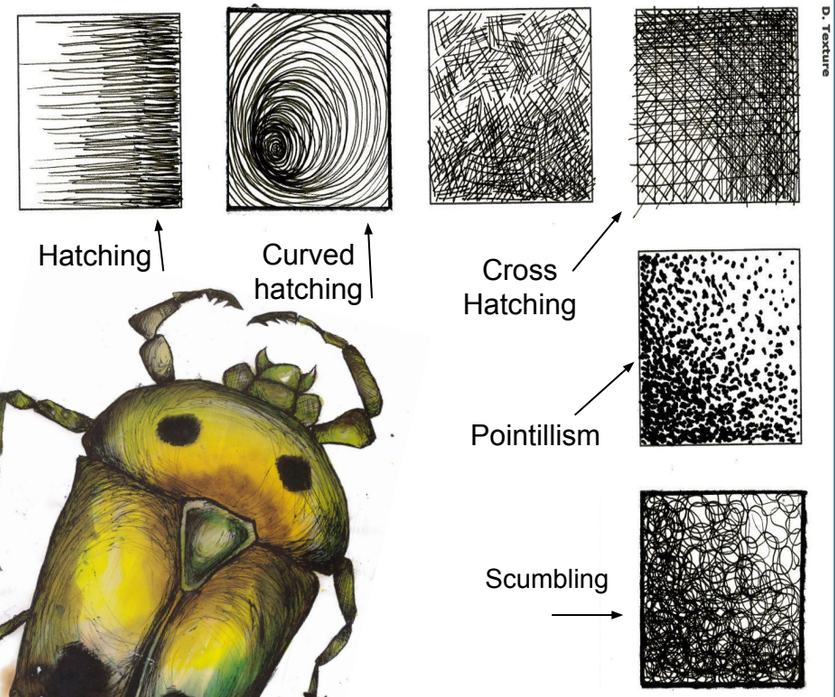
YEAR 8 : RAINFOREST

Stick brown paper and book pages onto your double page, then draw your images over the top and select which materials you would like to use.

You can use:

- **FInelin er**
- **Biro/pe n**
- **Pencil**
- **colour pencil**

Smooth colour pencil blend: produce a smooth section of colour pencil with a gradient at each end. These gradients can then overlap each other. Colours must be harmonious in order to blend. One colour fades into another without a definite start/end.



Using prior knowledge and skills produce a watercolour beetle study as a base (see Autumn knowledge organiser)

Add detail, tone and texture using a range of biro texture marks.

KEYWORDS

Biro texture – a visual surface quality created using biro marks
Hatching – small lines in the same direction
Cross hatching – small lines crossing on a diagonal
Pointillism – small dots to create colour, tone or texture
Scumbling – creating a softer / dull effect
Mixed media - using more than one type of material for example watercolour and colour pencil
Broken line – tone created within the line by varying the pencil pressure
Scaffolding shapes – simplified shapes to create the scale and proportion of a drawing

YEAR 8 : RAINFOREST

HOMEWORK
Art Homework at KS3 is set once a fortnight. Tasks should take no more than 30 minutes to complete. Pupils can expect to be set the following types of tasks:

- Keyword retrieval / definitions
- Artist analysis
- Retrieval tasks using a knowledge organiser
- Research - imagery collection / art history information
- Observational drawings
- Taking photographs
- Creating mood boards
- Skill practice worksheets
- Reading - texts about artists / art movements
- Completing classwork

READ: 100 facts: Rainforests by Camilla de la Bedoyere, DK Eyewitness – Amazon, Jungles in Paris- the paintings of Henri Rousseau by Christopher Green

WATCH: National Geographic Documentary - Secrets In the Amazon Rainforest - Wild Amazon

Drama

Year 8 Drama Spring Term – Scripted Skills Knowledge Organiser

<u>Core Skills</u>
Confidence, Creativity, Characterisation,Communication,

Top tips for performance

- Perform with confidence – don't get embarrassed.
- Stay in role all the time, even if something goes a bit wrong.
- Make eye contact with the audience to engage them.
- Project your voice loudly and clearly.
- Use a range of vocal and physical skills to show string and convincing characterisation.
- Make sure you are facing the audience, so they can see your facial expressions.
- Don't shuffle, move with purpose.

Transposition - to change things.

The two play scripts we are looking at are 'transpositions' Duffy's stories are adaptations of the original stories by the Brother Grimm and Noughts and Crosses is a Transposition of Romeo and Juliet.

Challenge - Can you identify the similarities in the story of Sephy and Callum to Romeo and Juliet.

Key Terminology

Fairy Tales	A type of fictional story that is aimed at children and involves a sense of magic, fantasy and mystery.
Narration	Often delivered by the actors on stage, the narration is the poem word that is given to the audience to describe what is happening on stage
Role Play	A dramatic strategy used where an actor takes on the role of someone else
Split Scene	A split scene is where two scenes happen side by side on stage.
Cross-cutting	A dramatic technique where the actors explore showing two or more scenes simultaneously on stage

Top Tips for rehearsing a script as a group

- Be cooperative (take part and listen to the ideas of others,
- Learn the lines. Not just your lines but **all lines.**
- Think together about what the **playwright** wants to show the audience
- Stay in your space and with your group.
- Plan your rehearsal time effectively so you can practice your whole performance
- Think about where your audience will be and rehearse with this in mind.
- Make sure everyone knows what they are doing.
- Practice, Practice, Practice!

Support and extension

What to read and watch

How the tales can be brought to life

https://www.youtube.com/watch?v=pLFPYfl07xI

Grimms Tales

https://www.theguardian.com/books/2010/jan/12/grimm-tales-review

Review of Performance

https://www.britishtheatreguide.info/reviews/LTMgrimm-rev

Noughts and Crosses - RSC article and Preview

https://www.rsc.org.uk/noughts-and-crosses

Interview with Malorie Blackman (Novelist on whose work the script is based)

https://www.malorieblackman.co.uk/qa-with-malorie/

Design Technology

Briefs, Specifications, Ideas and Development

Design Briefs

A Design Brief is the statement of how you will solve the Design Problem
It will often include:

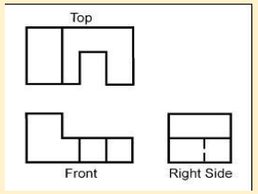
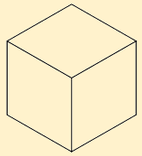
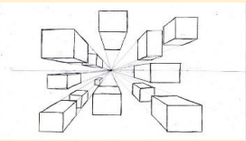
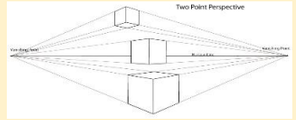
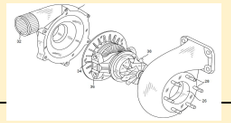
- Constraints/ limitations
- What the product is
- Materials/processes
- Any key information you know

Design Specifications

A Design Specification is a list of requirements your product has to meet in order to be successful

It is also useful for evaluation. If your product hasn't met the Spec then it gives you a starting point for improvements.

Aesthetics	What the product looks like? Style? Colour Scheme? Design Movement?
Customer	Who would buy it? (Age, gender, socio-economic, personality) How does the design appeal to them?
Cost	How much will it cost? (min-max) Why?
Environment	Where will it be used? Why? How will you make it suitable?
Safety	How is it safe? How will it be checked? Why must it be safe?
Size	What is the maximum or minimum size? Why?
Function	What does the product do? What features make it do that function well? How is it unique from similar products?
Materials	What is it made from? Why?
Manufacture	How might it be made? Why? What scale of production? Why?

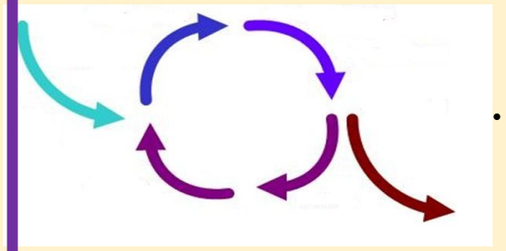
Technique	Description/ notes	Diagram
Orthographic Projection/ Working Drawings	• Includes "Front", "Plan" and "End" 2D Views, and often an Isometric 3D View • Standardised method for scale, dimensions and line types • Great for manufacturing	
Isometric	• Common 3D sketching method • Can be drawn free-hand or using isometric paper and ruler • Angles are at 30 degrees • Great for seeing most of the products	
1-Point Perspective	• A 3D drawing method • Often used by interior designers and architects • Gives drawings depth • Only uses 1 vanishing point	
2-Point Perspective	• Used for 3D designs • Exaggerates the 3D effect • Objects can be drawn above of below the horizon line but must go to the 2 vanishing points	
Annotated Drawings/ Free and Sketches	• Quick and easy way of getting ideas down • Range of ideas can be seen • Annotation helps explain designs further	
Exploded View	• Helps see a final design of a product and all it's parts • Can see where all the parts fit • Great for manufacturers	

Modelling and Development

Modelling and development are key to testing and improving products
This can be done physically using materials like; card, foam, clay, man-made boards or virtually in **CAD**
Modelling helps the designer get feedback from the customer, check aesthetics, function, sizes and even materials and production methods and change them if needed

Design Strategies

Design Strategies are used to solve **Design Fixation**, and help develop creative design ideas.



Iterative Design

- A Proposal is made
- It is then planned and developed to meet the brief
- It is analysed and refined
- It is then tested and modelled
- Then evaluated against the brief – many versions fail but that then informs development to make the idea better
- The cycle then repeats and if the product is successful it is then made and sold on the market

Iterative Design	
Advantages	**Disadvantages**
• Consistent testing helps solve problems earlier • Constant feedback • Easy evidence of progress	• Designers can loose sight of "the big picture" • Time consuming

User-Centred Design

- This is when designs are based on fulfilling the needs and wants of the Users/ Clients at every stage of the design process
- Questioning and testing is ongoing and is often found through interviews, questionnaires, surveys, etc

User-Centred	
Advantages	**Disadvantages**
• User feels listened to • Makes sure the product meets their needs	• Requires extra time to get customer feedback • If focused on just one person it can limit appeal to others

Systems Approach

- Usually used for electronic products
- Often uses diagrams to show systems in a visual way
- Planning the layout for the correct sequences e.g. inputs, outputs, timings, etc
- Electronics and mechanical systems need an ordered and logical approach

Systems Approach	
Advantages	**Disadvantages**
• Does not need specialist knowledge • Easy to communicate stages • Easy to find errors	• Sometimes over-simplifies stages • Can lead to unnecessary stages

Collaborative Approach

- Working with others to share data and solving problems and coming up with design proposals can help with creativity
- Numerous companies work in teams, and has been shown to improve the range and quality of ideas produced

Collaborative Approach	
Advantages	**Disadvantages**
• Gets multiple opinions and a range of views • Working in groups can produce more ideas	• Can be difficult to design ideas with opposing views • Can be difficult to find time to communicate with multiple people

Energy Generation and Storage

Non-Renewable Energy Sources	This is when certain sources of energy will run out eventually
Fossil Fuels	• Coal, Oil and Gas • Burned to create steam, turned in turbines to create electricity. • Burning creates C02 which adds to **Global Warming**
Nuclear Power	• Nuclear Fission controls the reactor (that creates the electricity). This requires **Uranium** which is non-renewable • Accidents and waste can severely damage the environment and cause radiation poisoning • **Radiation poisoning** can be fatal and cause physical deformations • Nuclear waste has to be disposed of properly and is hazardous for thousands of years.

Storing Energy

Pneumatics: This is the production of energy using compressed gas or air. E.g. Pistons in an engine

Hydraulics: Like a Pneumatic system, but uses water or oil under pressure. E.g. Wheelchair lifts

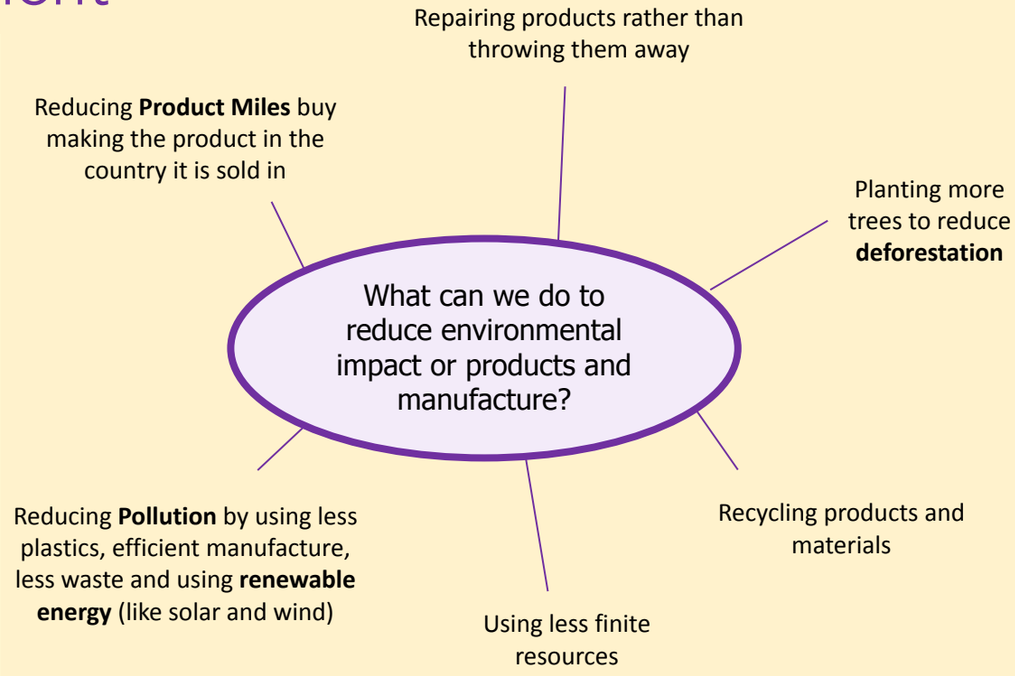
Kinetic: Energy that is generated by movement. This is stored by items like springs in a "clickable" pen or balloons,

Batteries: Electrical power can be stored in batteries. Rechargeable batteries are becoming increasingly popular.

Renewable Energy Sources	This is when certain sources of energy will not run out.
Solar	• **Solar panels** are used to collect light and convert it into electricity • There is no waste and a consistent supply • However, the panels are not effective at night or in countries where there isn't a lot of sunlight
Wind	• **Turbines** harness wind energy • Not effective on non-windy days • Some people don't like turbines as they are noisy, and not attractive to look at
Hydro-Electrical	• This harnesses energy from water held behind a **dam** • Has to be created by flooding land – damaging wildlife habitats • **Tidal** energy comes from using energy from waves
Biomass	• This is fuel from natural sources e.g. crops, scrap woods and animal waste • Growing biomass crops produces oxygen and uses up C02 • However, is a very expensive method

Environment

The 6Rs	Meaning
Reuse	To use a product again either for the same purpose or a different one
Reduce	To have less of material/packaging/pollution when making products by making them more efficient
Recycle	Breaking down and forming the material into another product
Refuse	Customers not buying or supporting products that make an environmental impact
Rethink	Designers and customer rethinking their decisions when making and buying products.
Repair	Fixing a product rather than throwing it away. Extending its life rather than using more resources to make another Often products are **Designed for Maintenance** so can easily be repaired. E.g. Using screws so even non-specialists can take a product apart, or using components that can easily be replaced like fuses or batteries



Life Cycle Assessment

This is when a designer looks at the environmental impact a product makes over its life time and how it could be reduced. Including:

- Impact of materials
- Impact of processes
- Product Miles (how far a product has to travel to get from factory to consumer)
- Impact while in use
- Impact when disposed of (6Rs)

Sustainability is maintaining our planet and its resources and making a minimal negative impact

Finite Resources *Will run out of eventually*	**Non-finite Resources** *Can be re-grown and re-bread. Will not run out of*
Plastics	Paper
Metals	Boards
Polymers (Textiles)	Natural Timbers
Coal, Gas and Oil	Cotton
	Leather

Planned Obsolescence	This is where products "die" after a certain amount of time. E.g. Disposable cups, Phones, Lightbulbs, Printer Ink, etc This can have a big environmental impact as customers are throwing away lots of products, and resources are being used to create new ones.

Finishes, Standard Components, Accuracy and Process Orders

Finishes

Finishes are used to improve the **aesthetics** and **durability** of products

Material Type	Finishes Used
Papers and Boards	• Paints • Varnishes • Laminating • Plastic coating • Wax coating
Timbers and Boards	• Paints • Varnishes • Wax and Polish • Staining • Oil
Metals and Alloys	• Painting • Lacquering • Electroplating • Galvanzing • Polishing • Plastic Coating • Powder Coating
Plastics	• Polishing • Painting • Decals (stickers)

Standard Components

Standard components are parts or components manufactured in the 1000s+
They are readily available, don't require specialist knowledge or tools to replace them and are universally recognised

Material Type	Components used
Papers and Boards	• Staples • Clips • Split pins
Timbers and Boards	• Nails • Screws • Panel Pins • Hinges
Metals and Alloys	• Nuts and bolts • Screw • Rivet • Washer
Plastics	• Plastic hinges

Tolerances

- The total amount a specific dimension or property is permitted to vary
This can apply to hole depth, length, angle, thickness, weight and elasticity
A gauge can be inserted into a gap or hole to check if the sizes fall within tolerance
If parts do not fit within the specified tolerances they are discarded or recycled

Quality Control and Quality Assurance

- QC is ***product*** oriented
Quality control is where products are regularly tested (during and after manufacture) to ensure they meet the defined set of quality criteria

- QA is ***process*** oriented
Quality assurance is ensuring that the processes used to test the product have been done correctly and consistently
You can test a product all you like, but if the tests are wrong/ inconsistent with each other than the results are invalid

- Below are examples of Quality Assurance symbols:

European Conformity

BSI Kitemark

Lion Mark

Registration Mark

Process Orders

An Input is information/ stimuli that enters a PC

An example would be keyboard, sensor, mouse, etc

→

A Process is process of transforming information into an Output

An example would be a PC

→

An Output is a response to the stimuli

An example would be speakers, text on a screen, alarm, lights, etc

Industry and Enterprise

Automation

This is when machines and robotics help make products or make them for you.

Often this is done by **CAD (Computer Aided Design)** and **CAM (Computer Aided Manufacture)** and **Computer Numerical Control (CNC)**

This helps products be made quicker, with more accuracy. Reducing errors humans make to products.

However, these machines are expensive to buy, need specialist training to use and need constant maintenance to keep them working properly

Virtual Marketing

This is when websites, social media and email are used to promote and sell products. This has become very popular in recent years, with big social media apps being funded by advertisers

Companies can also pay search engines to push their company further to the top of the results page, so customers are more likely to click it.

Cooperatives

A Cooperative is an Enterprise that is run by members that are part of the workforce or customers.

This means the organisation is democratic and often supports the local community. They are set-up to protect the rights of their members and ensure the same rules apply to everyone.

Your school is part of the Co-op, the world's largest Cooperative.

Enterprise

This is when an idea is developed into a business and produces a viable product.

Often, one of the biggest enterprises in in apps for smartphones

To make sure ideas are protected from being copied, a **Patent** can be applied for. This legally protects your idea on invention from being stolen.

Crowdfunding

This is where ideas are funded by large groups of ordinary people.

www.Kickstarter.com is a good example of this.

Fair Trade

This is an organisation that promotes fair pay, working conditions and better trade with farmers in developing countries

You can tell when something is Fairtrade as it will often have the symbol on the product or packaging. Common Fairtrade items include; bananas, cotton and chocolate.

Modern and Smart Materials

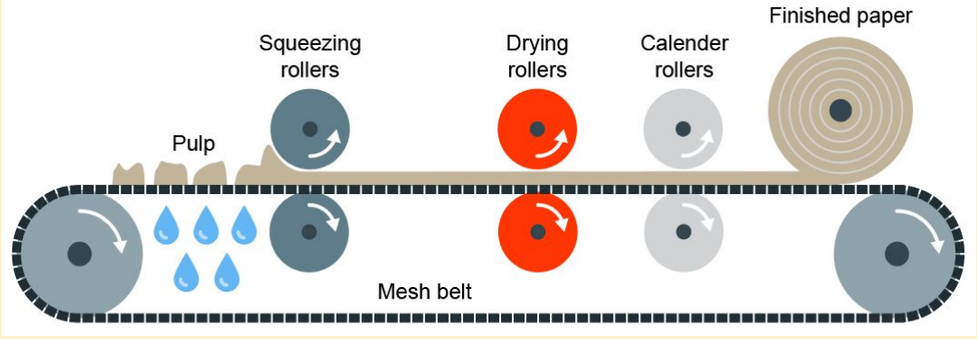
Modern Materials are materials that have been developed recently		
Material	**Key info**	**Examples**
Corn-starch Polymers	These are plant-based polymers that are a replacement for plastics that are **biodegradable** but cannot be recycled.	Plastic bottles, tubs, food containers, etc
Flexible MDF	Made in the same way as normal MDF but with grooves cut into the surface so it is flexible. **Flexiply** is the same but for Plywood. These can easily be shaped into curves	Modern furniture, interior walls and room dividers
Titanium	High strength to weight ratio. Doesn't corrode or rust. Suitable for medical use as its hypo-allergneic	Prosthetics, medical applications, sports cars, etc
Kevlar	A woven polymer with a high strength to weight ratio.	Bullet-proof vests, tyres, helmets, etc

Smart Materials are materials that change and react to the stimuli		
Material	**Key info**	**Examples**
Thermochromic Pigments	Change colour in reaction to heat	Kettles, baby bottles, etc
Photochromic Pigments	Change colour in reaction to light	Colour changing glasses, windows, etc
Shape Memory Alloy	Returns to its original shape, in reaction to heat	Braces and glasses
Polymorph	Granules that once exposed to hot water, become a modelling material (like a dough or clay)	Modelling and repairs

Papers and Boards

Papers and Boards come from trees. **The Stock forms** for papers are: rolls, sheets, A4, A3, etc		
Material	**Key info**	**Uses/ Examples**
Cartridge Paper	Thick white paper, completely opaque and more expensive than photocopy paper	Sketching, ink drawings
Layout Paper	Light, semi-translucent, good for blending inks and artist markers	Sketching, drawing and some tracing
Corrugated Cardboard	Strong but light. Rigid triangles of card sandwiched between a top and bottom layer.	Outer packaging, food packaging
Duplex Board	Light card with white outside layers. Waxy coating can be added	Cheap packaging. If waxy coating is applied, can be used for food
Foil-lined Board	White card coated with a thin aluminium layer. Foil is great for insulation and water resistance	Takeaway containers
Solid White Board	High-quality white card with a smooth finish. Stiff and holds colours well	Greetings cards, packaging and advertising

Primary Processing of Papers and Boards



Paper is made by first making pulp. Pulp is a mix of tree fibres and water. This is cooked and bleached white, and adding any other additives.
The pulp is then drained and goes through **Calendering** where the pulp is drained and goes through rollers to convert it to its stock forms

Timbers and Boards

Natural Timbers

Softwoods are generally cheaper than hardwoods as they are more available, since they grow quicker.
But because man-made boards are manufactured they are cheaper than timbers.
Man-made boards also come in a better variety of sizes since they don't depend on tree growth.

Stock forms for both include; sheets, dowel, planks, etc

Hardwoods come from **Deciduous Trees.** These trees loose leaves in winter and grow fruit and flowers in spring		
Material	**Key info**	**Examples**
Ash	Flexible, tough and shock resistant	Sports equipment Tool Handles
Beech	Fine finish, tough and durable	Toys, furniture and veneers
Mahogany	Easily worked, durable, high quality finish	High-end furniture
Balsa	Very soft and spongy. Light	Modelling
Oak	Tough, durable and hard	Flooring, furniture and veneers

Softwoods come from **Coniferous Trees.** These have thin, needle-like leaves and grow all year round. Often have pine cones and sometimes nuts and seeds		
Material	**Key info**	**Examples**
Larch	Durable, tough, good water resistance and finishes well	Furniture, flooring and used outdoors
Pine	Light, easy to work with but can split	Cheap furniture, construction and decking
Spruce	Easy to work with, high stiffness but can decay quickly	Furniture, musical instruments and construction

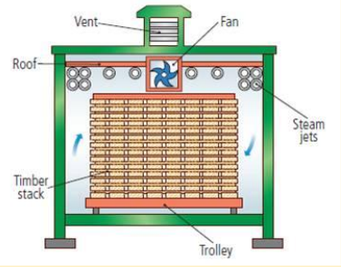
Man-Made Boards

Manufactured boards are made from wood chips/dust/ layers and glue.		
Material	**Key info**	**Examples**
Chipboard	Prone to chipping but good compressive strength. Not-water resistant	Flooring, low-end furniture, flat-pack
MDF	Rigid and stable. Easy to finish. Absorbs liquid easily	Flat-pack furniture and kitchen unites
Plywood	Very stable. Exterior veneer can be used from more expensive woods	Shelving, furniture, toys

Primary Processing of Papers and Boards

Trees are cut then converted into planks by cut using saws
It is then seasoned to reduce the moisture in the wood. This is done by either:

Air-drying – Planks are stacked and air allowed to circulate; causing evaporation
Kiln-drying – Where planks are put into a kiln and dried rapidly. This process is more costly than air-drying



Manufactured boards can be either be made by lamination or compression

Lamination – Layers of woods and adhesive are layered and compressed together. Usually with a more expensive wooden veneer on the top

Compression – Wood is shredded, heated and compressed with adhesive under extreme pressure

Metals, Alloys and Plastics

Metals

Metals come from ores in the ground. **Stock forms** are sheets, bars and rods

Ferrous Metals contain iron and are magnetic and rust		
Material	**Key info**	**Examples**
Low Carbon Steel	Tough and ductile and easily machined and welded	Construction, screws, cars
High Carbon Steel	Hard and wears well	Tools, blades and knives
Cast Iron	Hard but brittle. Easily cast but hard to machine	Pots, pans, vices

Non-Ferrous Metals do not contain iron, aren't magnetic and don't rust		
Material	**Key info**	**Examples**
Aluminium	Light, high strength to weight ratio and ductile	Pots, pans, cars, cans
Copper	Ductile, malleable and good conductor	Plumbing supplies and cables
Tin	Soft, malleable and good conductor	Used as a protective coating

Alloys are mixtures of 2 or more metals to get the best of their properties		
Material	**Key info**	**Examples**
Brass	Malleable and easy to cast	Musical instruments, plumbing
Stainless Steel	Doesn't rust, hard and smooth	Cutlery, medical tools, etc

Plastics

Plastics come from crude oil. **Stock forms** are sheets, powders, granules and rods

Thermoplastics can be reheated and reshaped and infinite amount of times		
Material	**Key info**	**Examples**
PET	Easily **blow moulded,** food safe and easily recycled	Bottles, packaging, etc
PVC	Flexible, tough, easily **extruded**	Pipes, tape, hard hats
HIPS	Flexible, lightweight, food safe and easily **vacuum formed**	Containers and yoghurt pots
Acrylic	Tough, brittle, easily scratched	Car lights, baths, displays/ signs

Thermosets once heated and set **cannot** be reshaped		
Material	**Key info**	**Examples**
Melamine Formaldehyde	Food safe, hygienic, hard and brittle	Kitchenware and work surfaces
Urea Formalehyde	Good insulator, hard and brittle	Electrical casings, buttons and handles
Polyester Resin	Strong, heat resistant, can be transparent	Coatings, casings

Primary Processing of Metals and Alloys

Metals are mined from the earth and then go through an extraction process
Extraction happens by putting the ore in a blast furnace
The metal is then separated from the waste material

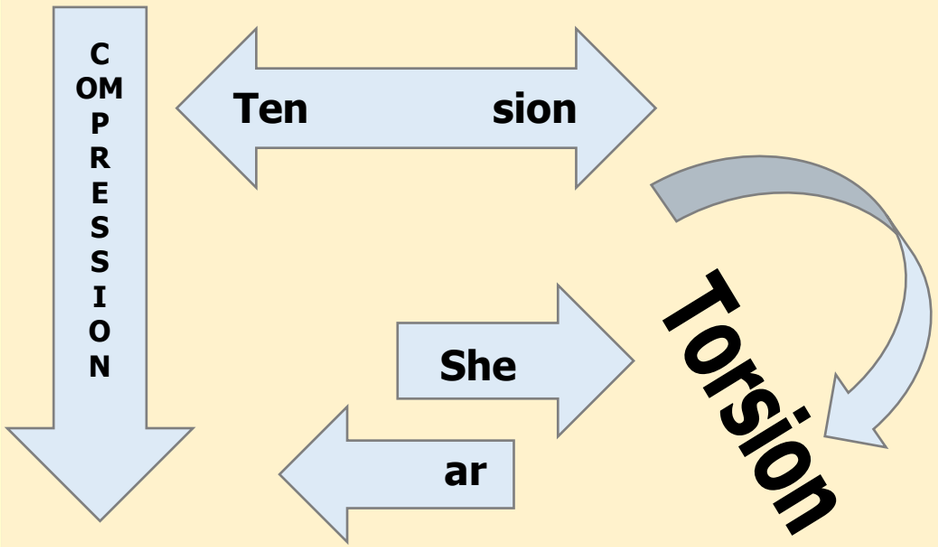
Primary Processing of Plastics

Crude oil is extracted from the earth and then processes into different types of fuels, etc. This is called **Fractional Distillation**

A process called **Cracking** then converts the large hydrocarbon molecules into plastics

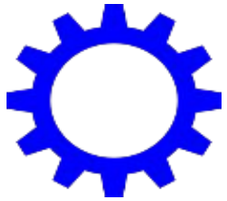
Mechanical Systems

Forces

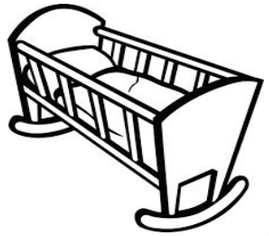


Motion

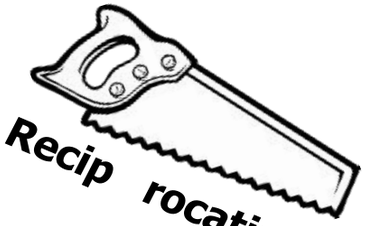
Linear



Rotation

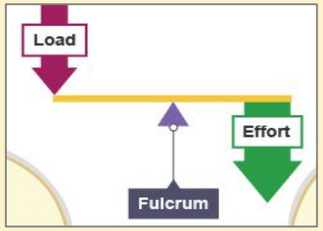


Oscill ating

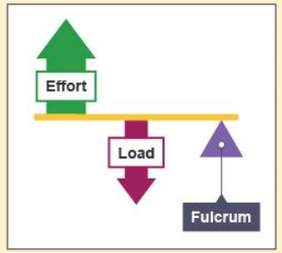


Recip rocating

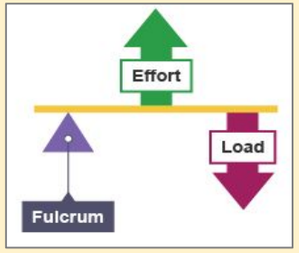
Levers



1st Class Lever: Fulcrum in the centre
E.g. Scissors



2nd Class Lever: Load in the centre
E.g. wheelbarrow



3rd Class Lever: Force in the centre
E.g. Lifting a dumbbell

Gears and Pulleys

A Pulley is a grooved wheel, that has a belt running through it

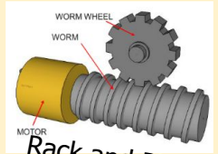
This uses rotary motion and is often used to help with heavy loads, and transfer force from a motor to a tool in machines like drills, etc

Gears have teeth that mesh together with each other (like teeth on a zip)

They mainly focus on rotary motion on tools and machinery e.g. car steering and pillar drills

Bevel Gear

Spur Gear



Rack and Pinion

Worm and Wheel

People. Society and Culture

Market Pull and Technology Push

Technology Push is the development of new technology, materials and manufacturing methods to create new products or improve old ones.

Examples include; Smart Phones, Electricity, Mass Production, etc

Market pull is the demand from consumers for new products and improvements in old ones; this is often found via reviews, polls, surveys, etc

Examples include; Product **Aesthetics,** making products easier to use, etc

Cultures, Faith and Belief

Different groups of people have different interests and have to be catered for.

Different countries and cultures also react to products differently.

E.g. In India McDonalds don't sell beef burgers as it has a large Hindu population, and cows are seen as sacred – in contrast the UK sells its most amount of fish and chips on a Friday as it is a Christian tradition to not eat meat on that day.

Case Study: £5 note

Hindu, Sikh and some other faith-based communities may choose to follow a vegetarian diet, and this is part of their culture. In addition to not eating meat, many followers of these faiths, as well as vegans and vegetarians, take every opportunity to avoid using animal products in their day-to-day lives.

The revelation in 2016 that the new polymer Bank of England £5 note contained tallow, an animal fat-based substance, upset a number of communities. There was a prompt call for the Bank of England to find an alternative way to produce the note and in the first two days of an official petition well over 100,000 signatures were received.

Shortly after the Bank of England admitted that the new polymer £5 note contained the animal by-product, some establishments refused to take the notes as a method of payment. One café owner was repulsed by the idea that the note contained tallow and believed that her customers supported her view. They received no complaints.

The Bank of England say they currently have no plans to change the manufacturing process.

Fashion and Trends

Fashion and Trends will change quickly, and you can see major differences in fashions over decades.

Designers have to make sure their products meet the fashion and trends of the area they are designing and selling the product to.

The change of products over time is called **Product Evolution**. This is caused by Market Pull, Technology Push and Fashion and Trends.

Some products are seen as **timeless.** These products are called **Iconic Designs.** These products are timeless because they were innovative, set a bench mark for following products, changed their industry and are often copied.
Examples include; iPod, iPhone, Angle-Poise Lamp, Swiss Army Knife, Converse Shoes, Levi's Jeans, Classic Mini Cooper

Inclusive vs. Exclusive Design

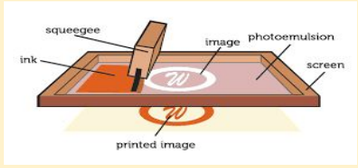
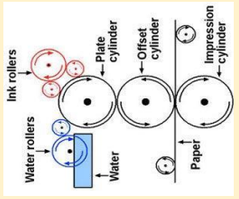
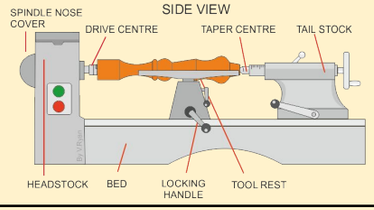
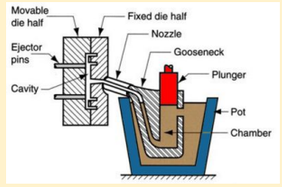
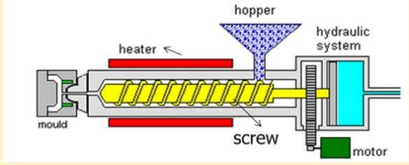
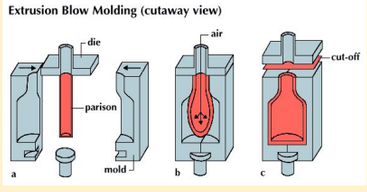
Inclusive Design: The aim to create a product that as many people as possible can use

Examples include; Cars, Doorframes, Adjustable Products, etc

Exclusive Design: The aim to create a product for a particular group and their needs

Examples include; Car seats for babies, Wheelchairs, Stair Lifts

Production Processes

Name of Process	Diagram	Material	Products Made	Key info
Screen -printing		Papers and Textiles	Posters, signs and t-shirts	Screen printing places paint on top of a screen. The screen has a stencil embedded in it, so when the paint is passed across it the desired shape is printed underneath. Good process in one-off and batch production as often done by hand
Offset Lithography		Papers and card (thin, flexible plastics)	Posters, newspapers, plastics bags	Rollers containing the colours and water go onto the plate cylinder. The water stops the colours sticking to certain places, creating the shape. The shape is transferred between rollers and onto the material. Can be used at batch and mass production
Lathe Turning		Wood and metal	Chair legs, baseball bats (cylindrical items)	Material is placed between the tail stock and the headstock and spun at high speed. The material is then cut using specialist tools (either by hand or my automated machinery) to the desired shape. Can be used in one-off and batch production
Die Casting		Metal	Car parts, engine components, etc	Molten metal is poured into a chamber and a plunger forces the metal through the nozzle into the mould. Unlike sand casting, the mould is reusable. Good process for both one-of and batch production
Injection Moulding		Plastics	Chairs, toys, etc	Plastic granules are poured into the hopper and onto the screw. The screw moves the material towards the heater where it turns into a liquid. The liquid is then forced into the mould, cooled and released. Great process for mass production as it makes 100s+ of products at once, to a identical standard.
Blow Moulding		Plastics	Plastic bottles	A Plastic parison is heated and put into the mould. The parison is then filled with air (like blowing up a balloon) and is forced to fit the mould shape. It is then cooled and then released. This is a great process for mass producing bottles.

Production Techniques and Systems

CAD Computer Aided Design

Examples; 2D Design, Autodesk Inventor, Fusion 360, Photoshop, etc

Advantages	Disadvantages
• Easy to change designs • Designs are easily saved and sent • Can be worked on by multiple people simultaneously • Can be used for virtual testing • Can produce high-quality designs	• Complex and time-consuming to learn • Expensive to buy • PCs can crash or be hacked – causing work to be lost • Takes up PC memory

CAM Computer Aided Manufacture

Examples; 3D Printing, Laser Cutting, CNC Router, Automated Machines and Robotics, etc

Advantages	Disadvantages
• Faster and more accurate than traditional tools • Repetitive accuracy/ consistent outcomes • Machines can run 24/7	• Expensive to buy the equipment, etc • Training takes cost and time • Need specialists to maintain and repair the machines • Dependence on CAM can cause unemployment

Flexible Manufacturing Systems

This is where **automated machines** are adaptable and can produce different products if needed.

If a manufacturer is making a product with machines that are just dedicated to specific tasks they have to be reprogrammed and re-tooled before changing to a new task. This is time consuming and expensive.

Examples include; CNC Machines, 3D Printers, Laser Cutters, Robotic arms, etc

Lean Manufacturing

This is where waste and energy is kept to a minimum.
This helps manufacturers save money and resources in production, as well as helping minimise the **environmental impact** of producing products.

Just-in-Time (JIT) Manufacture

This is where manufacturers only order materials, parts, etc when needed. The customer's order triggers the production process and the resources needed for that order are the only ones bought.

This can be used in any **scale of production** but is particularly useful for one-off production.

Advantages	Disadvantages
• Saves on warehouse and storage costs • Money is not tied-up in stock • Little/minimal waste • Customer often pays in advance so money is secure before production	• All production stops if a part/ material is missing • Needs to have a fast, reliable and good quality supply chain to work properly • Can be time-consuming

Scales of Production

Name/ Type	How many it makes	Key Info	Examples of Products
One-off Production	1	• Also known as Bespoke or Prototype manufacture • Custom-made products • Specialist workers/ skills • Specialist machines and materials • High Quality but expensive	• Towers / Bridges • One-off Houses • Custom made clothes
Batch	10s-1000s	• Uses a mix of workers and machinery • Uses jigs, moulds and templates to help make identical products • Stations of workers e.g. cutting station, painting station, etc • Can have some variation e.g. colour, finish, flavour	• Baked foods • Limited edition car • Socks • Chairs
Mass	10,000s - 100,000s	• Big assembly lines (and sub-assembly lines) • Heavily automated • Standard and identical products • Little worker input	• Cars • Bottles • Microchips • Plain shirts
Continuous	100,00s +	• 24/7 production • Heavily automated • Standard and identical products • Little worker input	• Energy • Water • Paper • Plastic

One-off Production	
Advantages	**Disadvantages**
• Custom made • High Quality Materials • High Quality Craftsmanship	• Time consuming • Specialist training for workers • Expensive to buy

Batch Production	
Advantages	**Disadvantages**
• Lower cost than one-off • Jigs, moulds and templates help products look identical • Can have some variety	• High storage costs • Jugs, moulds and templates have to be checked • Workers can become bored on their station

Mass Production	
Advantages	**Disadvantages**
• Large amounts made at once • All products are identical and to same standard • Using automation reduced human error	• Initial starting costs are high • If production line stops, the product can't be made • Workers become bored monitoring machines and repetitive tasks

Continuous Production	
Advantages	**Disadvantages**
• Large amounts made at once • All products are identical and to same standard • Using automation reduced human error	• Initial starting costs are high • If production line stops, the product can't be made • Workers become bored monitoring machines and repetitive tasks

Work of others and Customer Research

Work of Others

Image/ Example	Designer	Design Movement	Key info
	William Morris	Arts and Crafts	• British designer in 1880s • Simple natural crafts • Useful and beautiful products (wallpapers, cushions, etc)
	Charles Rennie Mackintosh	Art Nouveau	• Scottish designer in 1860s – 1920s • Known for light and shadow • Created stained glass and furniture • Inspired by nature and geometric lines
	Ettore Stottas	Memphis	• Italian designer in the 1950s/60s • Enjoyed making everyday objects wacky and bold • Used lots of bold colours and black lines

Image/ Example	Brand	Key info
	Alessi	• Italian Design Company • Homeware and kitchen utensils • "Post-modern" style • Phillipe Starke is a major designer
	Apple	• USA-based tech company • Famous for **iconic designs** of iPod and iPhone • Steve Jobs and Jonathan Ive are major designers • Known for innovative and modern design
	Dyson	• British engineering company • Famous for vacuum cleaners and innovative technology • James Dyson is a major designer

Research

Research can be divided into 2 categories; **Primary Research** and **Secondary Research**.
Primary is research you complete yourself.
Secondary is research from resources others can gathered e.g. books, magazines and internet

Primary research is generally more reliable as it is done by the person using it and can double-check the data

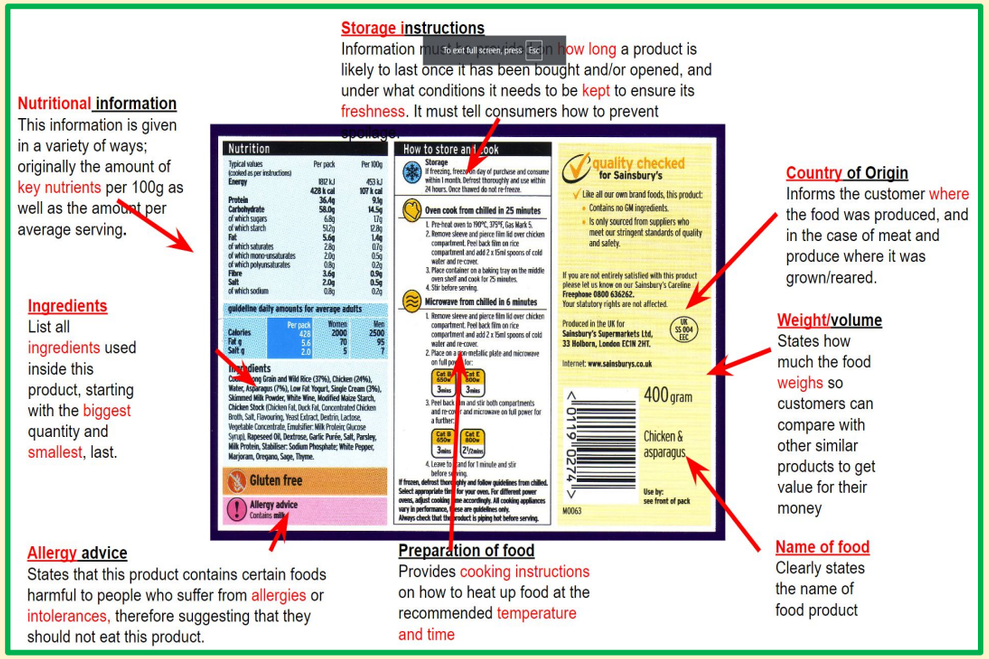
Another key piece of research, is **Anthropometrics and Ergonomics.** This helps develop the sizes of products, etc to make sure it fits the User	
Anthropometrics	The study of measurements of the human body. E.g. Knowing the grip width of a palm, if designing a new travel coffee cup
Ergonomics	The application of anthropometrics to ensure products are safe and comfortable to use. This can also include; size, material, appearance, brightness, sound and texture. E.g. making sure the travel cup is the correct size, and an insulating smooth material to make it comfortable to hold for long periods

Food Technology & Nutrition

Food Packaging

Food packaging includes information on food and drink to help consumers choose between different products, brands and flavours.
There is a legal requirement for certain information to be included

Key information on food packaging should be:	
Nutritional information	Brand logo
List of ingredients (ascending order)	Allergens in bold
Weight	Name & flavour
Use by/ best before	Barcode



Influences

Packaging of a product can be used as an effective **marketing** tool to influence consumers' perception of food products and therefore their choices to buy them.

Price and value for money can influence consumers choice on which food products they buy, supermarkets run offers such as 2 for a discounted price to encourage more sales.

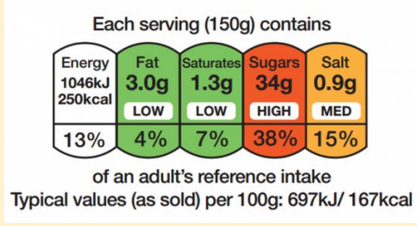
Packaging **protects** the food from damage or contamination.

Ingredients and **nutritional value** can affect consumer food choices.

Nutritional labels

The food standards agency recommends all products contain a traffic light label;

Red means the product is high in a nutrient and you should try to cut down, eat less often or eat smaller amounts. **Amber** means medium. If a food contains mostly amber, you can eat it most of the time. **Green** means low. The more green lights a label displays, the healthier the food is.



English

Co-op Academy Walkden English Knowledge Organiser

Year 8 Spring: Representations of Relationships

Much Ado About Nothing: Key Moments

Act 1	**Scene 1:** Leonato welcomes home Don Pedro, Benedick and Claudio, along with Don Pedro's sullen illegitimate brother. Beatrice and Benedick engage in a 'merry war' of words and Claudio falls in love with Hero. **Scene 2:** Leonato is told a false rumour about Don Pedro's intentions towards Hero. **Scene 3:** Don John talks to his servant, Conrad about his feelings of resentment towards his brother and plots to disrupt Don Pedro's plans by tricking Claudio at the masked ball.
Act 2	**Scene 1:** At the masked ball, the couples pair off: Beatrice with Benedick (whom she insults pretending not to know it is him) and Don Pedro with Hero (to woo her for Claudio). Don John tricks Claudio, telling him his brother wants Hero for himself and Claudio falls for it easily, but Don Pedro proves his loyalty when presenting Hero as his willing bride. Don Pedro proposes to Beatrice who refuses him tactfully. Don Pedro organises the gulling of Benedick and Beatrice. **Scene 2:** Borachio pleases Don John with his plot to deceive Claudio and Don Pedro and discredit Hero. **Scene 3:** Claudio, Leonato and Don Pedro gull Benedick into believing that Beatrice loves him and he falls quickly in love with as a result.
Act 3	**Scene 1:** Hero and her servants gull Beatrice, who like Benedick, swiftly decides that she will return his love. **Scene 2:** Don Jon tells Don Pedro and Claudio that Hero is disloyal and offers to prove it that night. **Scene 3:** We are introduced to the useless Dogberry and his Watch, who overhear Borachio and Conrad talk about the success of the plot to smear Hero. They arrest Borachio and Conrad. **Scene 4:** On the morning of the wedding, Hero is preparing for her wedding. Scene 5: Dogberry tries to tell Leonato about the plot, but Leonato cannot understand him and grow impatient and heads off to the wedding.
Act 4	**Scene 1:** At the wedding, Claudio breaks into a rehearsed and outraged speech about Hero's dishonesty. When Leonato asks for evidence Claudio reveals he has seen her at her window with Borachio. Don Pedro supports him and Leonato is convinced. Hero faints and Don Pedro and Claudio leave. Beatrice is convinced of Hero's innocence, as is the Friar and they concoct a plan to prove it. Benedick works out that the villain will be Don John. Alone, Beatrice and Benedick confess their love for each other and Beatrice asks Benedick to kill Claudio, he refuses but agrees to challenge him. **Scene 2:** Dogberry tries the case against Borachio and Conrad.
Act 5	**Scene 1:** Leonato challenged Don Pedro and Claudio to a duel for their shaming of Hero. Don Pedro and Claudio are surprised when Benedick tells them he cannot be their friend after their behaviour and that Don John has fled. The Watch bring in Borachio who confesses his crimes and Claudio and Don Pedro are devastated at their part in Hero's 'death'. Don Pedro and Claudio beg forgiveness and Leonato says Claudio should marry Antonio's daughter. **Scene 2:** Benedick tries to write a poem for Beatrice to show his love. They hear news of the discovered plot against Hero. **Scene 3:** Claudio, still believing Hero is dead, visits her tomb in repentance and hangs an epitaph on it. **Scene 4:** At the wedding, Hero enters wearing a mask and reveals herself to Claudio who is overcome. Beatrice and Benedick also reveal their love for each other and they plan a double wedding. Don John is said to have been arrested.

Co-op Academy Walkden English Knowledge Organiser

Year 8 Spring: Representations of Relationships

Much Ado About Nothing: Characters

Verges: assistant to Dogberry.
Sexton: assistant to Dogberry.
Ursula: Hero's serving lady and friend.
Balthasar: a servant to Don Pedro who sings.
Don Pedro: Prince of Aragon, returned victorious from war.
Antonio: Leonato's brother who provides a steadying influence.
Dogberry: Constable in charge of the Watch. Often confuses his words. Conrad: a follower of Don John who helps him in his plot to discredit Hero. Borachio: a follower of Don John who helps him in his plot to discredit Hero.
Benedick: a lord, soldier and friend of Don Pedro. Known for his quick wit. Loves Beatrice but does not know it.
Claudio: a lord, soldier and friend of Don Pedro. Young and naïve. Falls in love with Hero.
Don John: the half-brother of Don Pedro. Resentful and angry because of his status. Plots to destroy the happiness of others.
Leonato: Governor of Messina, where the play is set. Old and wise, but easily swayed by the opinion of others – he believes it when Hero is first accused.
Hero: Leonato's daughter. Young, naïve. Falls in love with Claudio and is falsely accused of being unfaithful to him.
Beatrice: Leonato's niece. Quick-witted and intelligent. She is in love with Benedick but does not know it.
Margaret: Hero's flirtatious serving lady who unwittingly helps trick Claudio into thinking Hero is unfaithful.
Friar Francis: the priest who is supposed to marry Claudio and Hero and who advises Hero to pretend to be dead.

Themes

- Deception
- Honour
- Love
- Men and Women
- Language

Conventions of Shakespearean Comedy

- Young lovers struggling to overcome obstacles
- Mistaken Identity
- Clever plot twists
- Use of puns
- Stock characters representing Elizabethan stereotypes
- Happy endings

Geography

Year 8 Geography Topic 3: Development and Case study:India Is development unequal?

Keywords

Development: the use of resources to improve the standard of living of a nation
Development indicators: measures used to assess a countries development level
Development gap: the difference in level of development between **HIC**s and **LIC**s
Poverty: living on less than $1.90 per day
Equality: the same equal and fair rights for all genders and ethnicities.
Fairtrade:Fair prices paid to producers of products
Aid: Voluntary donation of money, goods or knowledge from one country to another
TNC: Transnational corporation is a company that operates in more than one country
Urban core: cities and towns where most people live
Rural periphery: countryside with a low population
Sanitation: Access to clean water and sewage systems
Urbanisation: Populations migrating to urban areas
Sustainable settlement: a settlement which is designed with consideration for social, economic, environmental impact without compromising future generations.
Slums :Densely populated settlements that usually form around big cities with basic living conditions.

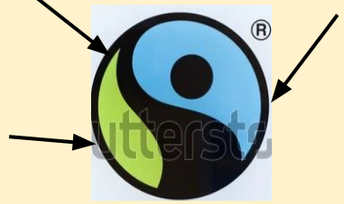
Barriers to development

Human: **Political**, colonisation in the 1800's means some countries are locked into unfair trade deals. **War**, can mean services are often disrupted. **Gender inequality** means less education for women and a smaller workforce

Physical: **Climate**, it can be difficult to grow crops. **Location**, is a country is landlocked trade is difficult. **Natural hazards** means money is spent on rebuilding and recovering.

Strategies to reduce the development gap

Fairtrade



Equality

TransNational Corporations (TNCs)
Coca Cola

Benefits: Invested $1 billion, employs 7,000 people, partnered with local charities to provide medical support for local people

Costs: Uses 510,000L of water per day from groundwater, economic leakage as profits are returned to financial headquarters in the USA. Rural water supplies became contaminated with waste leaving it toxic.

Urbanisation in Mumbai

Opportunities:There are over 1000 primary and secondary schools in Mumbai. The Mumbai Slum Sanitation project aims to improve sanitation facilities for up to a million dwellers across the city. The largest number of TNC headquarters in Asia including Walt Disney and Volkswagen. It is home to the Indian stock market, the busiest port and airports in India.
Challenges: Urbanisation has led to the creation o slum settlements. In Mumbai, the squatter settlement of Dharavi is now home to more than 1 million people. High crime rates in the city can create a sense of insecurity in its inhabitants.

Homework

1: Knowledge Organisers
These provide the basic knowledge for each topic which needs to be known off by heart. This may include, key words, key concepts, costs and benefits.

2: Meanwhile, elsewhere
What we learn in our lessons only offers a glimpse of the world. To widen our understanding, one page research sheets will be used to explore what else was going on around the world at the same time as the topic we are studying. These need to be researched using the links and resources provided and completed.

3: Revision
Preparing for Geography assessments is an essential part of each topic, as these assessments allow teachers and pupils the chance to check their progress in Geography. Revising gives you the chance to show off what you know.

Read
Kerala Flood Case Study - Kerala flood case study - Internet Geography

What are the causes of urbanisation in India? - What causes urbanisation? - Internet Geography

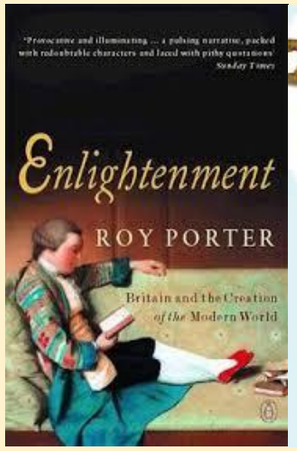
Factfullnes, Hans Rosling

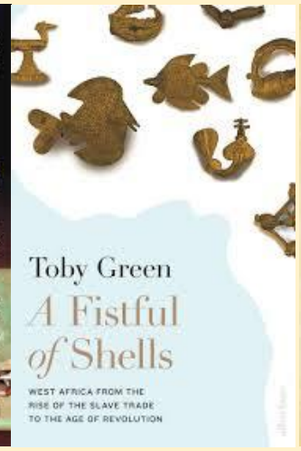
Watch
India is becoming its own Silicon Valley
https://www.youtube.com/watch?v=YHVNWtBuDVk

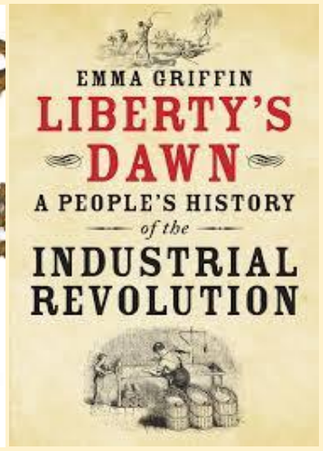
Listen
Impacts of drought in India
https://www.bbc.co.uk/programmes/w3csym2b

History

Age of Revolutions and the Industrial Revolution







Key Vocabulary	
Revolution	A forcible overthrow of a government or social order, in favour of a new system
Revolt	To take violent action against a ruler/government
Enlightenment	A period in the late 17th century in which thinking was based around reason and thought rather than tradition
Monarchy	A form of government with a king/queen at the head
Empire	A collection of countries ruled by one powerful mother country
Industrial	To work and manufacture raw materials for trading of goods.
Urbanisation	The growth of towns and cities
Rights	A moral/legal entitlement to do something
Population Explosion	The rapid increase in the amount of people present within a country.
Abolition	The action of removing a system/idea/practice. We use this in the 'abolition of slavery'

Key People	
John Locke	
Jean Jacques Rousseau	
Toussaint Louverture	
Mary Wolstencroft	
Oloudah Equiano	
Samuel Greg	
Maximillian Robespierre	

Timeline of Key Events	
Date	Event
1689	English Bill of Rights published
1714	John Locke's *Two Treatises* republished, outlining the ideas of tolerance and reason for foundations of society
1748	Montesque publishes *Spirit of the Laws* outlining improved systems for creating law in countries
1751	Diderot publishes *Encyclopedia*, one of the first compilations of varied knowledge
1769	James Watt invents his rudimentary steam engine
1775	Richard Arkwright develops the first textile mill, allowing textile products to be manufactured quickly
1775	The Continental Congress meets in America, establishing the Continental Army under George Washington. The 13 colonies are in open rebellion
1776	Thomas Paine publishes 'Common Sense', circulating the idea of independence from Britain in America.
1776	The US declaration is ratified, officially creating the United States of America
1783	The USA officially claim victory in the War of Independence.
1789	Revolutionaries storm the Bastille in France in open revolt against the French monarchy
1791	Haitian Revolution starts, breaking away from French control.
1792	Mary Wolstencroft writes 'A Vindication of the Rights of Woman' , in which she argues that women are not naturally inferior to men.
1807	Britain abolishes the Slave Trade. Slavery would not be abolished for another 26 years.

Year 8 History Homeworks

1: Knowledge Organisers

These provide the basic knowledge for each topic which needs to be known off by heart. This may include a timeline, key words, key concepts and summaries.

2: Meanwhile, elsewhere

What we learn in our lessons only offers a small glimpse of the past. To widen our understanding, one page research sheets will be used to explore what else was going on around the world at the same time as the topic we are studying.

3: Revision

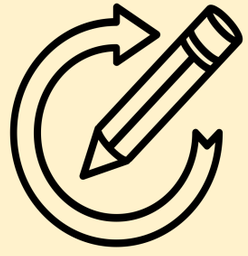
Preparing for history assessments is an essential part of each topic, as these assessments allow teachers and pupils the chance to check their progress in History. Revising gives you the chance to show off what you know.

Read, Watch, Listen

Read

- Toby Green, ‘A Fistful of Shells’.
- Roy Porter, ‘Enlightenment: Britain and the Creation of the Modern World’
- EC Spary, ‘Eating the Enlightenment
- Eric Hobsbawn - ‘Age of Revolution’

Watch



Listen

- BBC Radio 4, *In Our Time*, ‘The Enlightenment in Britain’, ‘Washington and the American Revolution’, ‘The French Revolution’s reign of terror’, ‘The French Revolution’s Legacy’, ‘The Haitian Revolution’

Computer Science

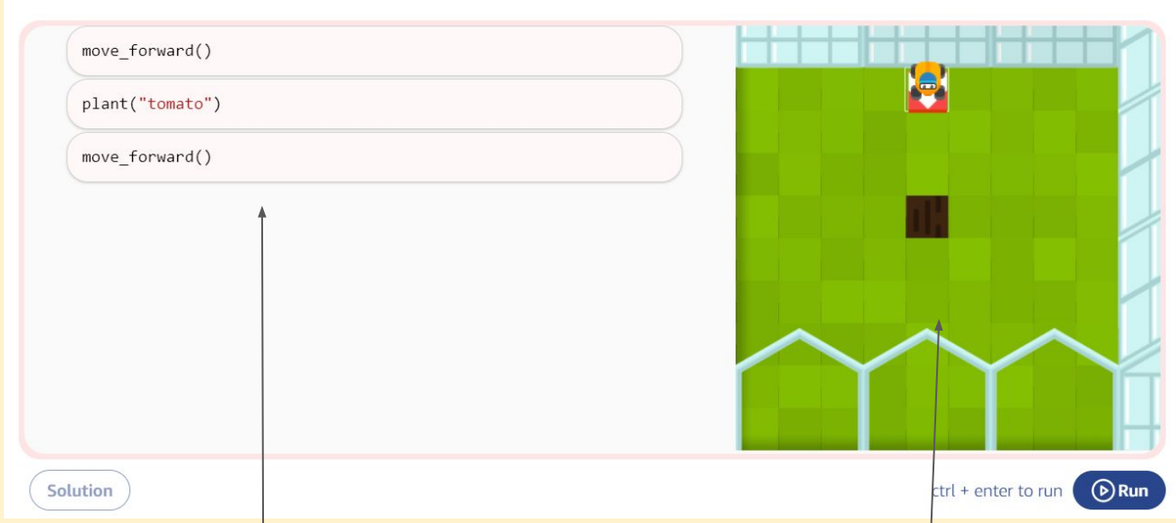
Knowledge Organiser - Programming

Key Term	Definition
Algorithm	A set of **rules** or **instructions** following by a computer system.
Sequence	Lines of code that are **executed one after another** without 'skipping' or ignoring any lines.
Selection	The process of **making a decision** within a computer program. In Python an **IF statement** is used.
Iteration	**Repetition** (or looping) of an instruction using a a formal construct such as **WHILE** or **FOR** loops.
Syntax	The way/format code is written in a specific programming language. Each language has its own syntax.
Debugging	The process of **locating and correcting logic or syntax errors** within the code.
Operator	When comparing data, an operator is used to check the equality such as < >, != or ==
Data Type - This is how data is stored within a computer system.	**String** - A collection of letters, numbers and/or characters usually signified by enclosing in speech marks i.e. "Hello"
	Integer - A whole number i.e. 99, 3, 56
	Boolean - A data type that accepts one of two values, i.e. True/False or Yes/No
Variable	**A value that can change** during the execution of a program, for example SCORE, LIVES etc.

Integrated Development Environment (IDE)

Coding/programming is created in an IDE. This is a piece of software that will assist in the development of the code. It will often help identify errors in the code or suggest correct formatting/syntax to use.

turinglab



Editing area where code can be written, structured and edited.

Testing area - this is where instructions created can be seen being executed.

```
move_forward()
plant("tomato")
move_fowrad()
plant("tomato")
```

Identifying **errors (debugging)** can be undertaken by examining the code and looking for syntax errors, where the code has been mistyped.

Hashtag # comments in your code can help you and other people understand and follow your code better.

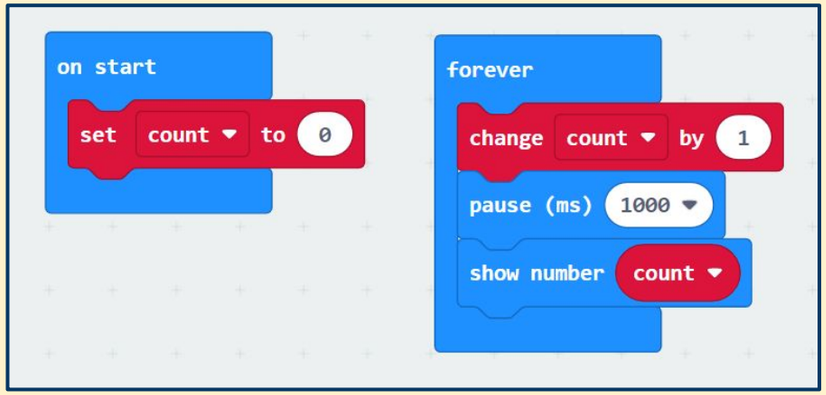
```
# Harvest the Turnips
harvest_crop()
move_forward()
harvest_crop()
return_home()
```

Writing your code

Blockly coding - This type of visual coding method that is good for beginners, you do not need to know the correct syntax for a specific programming language. This can develop your understanding of computing concepts by 'dragging and dropping' the blocks of code available into the correct sequence in your program.

Text-based programming languages use a specified syntax (coding language) to create a computer program. Programmers need to learn the syntax in order to write and understand their programs.There are many different programming languages, however they all use the same programming constructs of sequencing, selection and iteration.

Blockly example



Text based language example

```
count = 0

def on_forever():
    global count
    count += 1
    basic.pause(1000)
    basic.show_number(count)
basic.forever(on_forever)

```

Python Coding

Interact with the user (*input* and *output*)

Print a message

```
print('Hello, world!')
```

Print multiple values (of different types)

```
ndays = 365
print('There are', ndays, 'in a year')
```

Asking the user for a string

```
name = input('What is your name? ')
```

Asking the user for a whole number (an integer)

```
num = int(input('Enter a number: '))
```

Decide between options

Decide to run a block (or not)

```
x = 3
if x == 3:
  print('x is 3')
```

Decide between two blocks

```
mark = 80
if mark >= 50:
  print('pass')
else:
  print('fail')
```

Decide between many blocks

```
mark = 80
if mark >= 65:
  print('credit')
elif mark >= 50:
  print('pass')
else:
  print('fail')
```

- `elif` can be used without `else`
- `elif` can be used many times

Are two values equal?

```
x == 3
```

⚠ two equals signs, not one

Are two values not equal?

```
x != 3
```

Less than another?

```
x < 3
```

Greater than another?

```
x > 3
```

Less than or equal to?

```
x <= 3
```

Greater than or equal to?

```
x >= 3
```

The answer is a *Boolean*: `True` or `False`

Repeat a block 10 times

```
for i in range(10):
  print(i)
```

Sum the numbers 0 to 9

```
total = 0
for i in range(10):
  total = total + i
print(total)
```

Maths

Brackets, Equations and Inequalities - click here

Sequences - click here

Indices - click here

Fractions and Percentages - click here

Standard Form - click here

Number sense - click here

French

Ma routine quotidienne - my daily routine

Le matin (In the morning)

Avant le collège (Before school)

Pendant la semaine (During the week)

Le week-end (At weekends)

Tous les jours (Every day)

Après le collège (After school)

L'après-midi (In the afternoon)

Le soir (In the evening)

La nuit (At night)

je me brosse les dents (I clean my teeth)	je me lève (I get up)	je prends le petit déjeuner (I have breakfast)
je me douche (I shower)	je mets mon uniforme (I put on my uniform)	je sors de chez moi (I leave the house)
je m'habille (I get dressed)	je me peigne (I do my hair)	je vais au collège (I go to school)

je me couche (I go to bed)	je fais mes devoirs (I do my homework)	je prépare mon sac (I prepare my bag)	je rentre chez moi (I return home)
je déjeune (I have lunch)	je joue aux jeux vidéo (I play videogames)	je promène le chien (I walk the dog)	je me repose (I rest)
je dîne (I have dinner)	je lis un livre (I read a book)	je regarde la télé (I watch TV)	je vais sur internet (I go on the internet)

à une heure (at 1:00)

à deux heures (at 2:00)

à six heures (at 6:00)

à sept heures (at 7:00)

à huit heures cinq (at 8:05)

à huit heures dix (at 8:10)

à huit heures et quart (at 8:15)

à huit heures vingt (at 8:20)

à huit heures vingt-cinq (at 8:25)

à huit heures et demie (at 8:30)

à neuf heures moins vingt-cinq (at 8:35)

à neuf heures moins vingt (at 8:40)

à neuf heures moins le quart (at 8:45)

à neuf heures moins dix (at 8:50)

à neuf heures moins cinq (at 8:55)

à dix heures et quart (at 10:15)

à onze heures et demie (at 11:30)

à midi (at 12:00)

Je peux (I can)

Je ne peux pas (I can't)

Je veux (I want)

Je ne veux pas (I don't want)

Je dois (I have to)

Je ne dois pas (I don't have to)

Je vais (I'm going)

Je ne vais pas (I'm not going)

aider à la maison (to help around the house)	me doucher (to shower)	me lever (to get up)
aller au collège (to go to school)	faire mon lit (to make my bed)	rentrer chez moi (to return home)
aller sur internet (to go on the internet)	faire mes devoirs (to do my homework)	me réveiller (to wake up)
me coucher (to go to bed)	faire les tâches ménagères (to do the housework)	sortir avec mes amis (to go out with my friends)

Dans mon quartier- in my neighbourhood

Dans mon quartier (In my neighbourhood)

Dans ma ville (In my town)

Là où j'habite (Where I live)

on peut (one can)

faire (to do)

jouer (to play)

aller (to go)

voir (to see)

visiter (to visit)

Avant-hier (The day before yesterday)

Hier (Yesterday)

Il y a trois jours (Three days ago)

Le week-end dernier (Last weekend)

Vendredi dernier (Last Friday)

j'ai fait (I did)

j'ai joué (I played)

je suis allé (I went (m))

je suis allée (I went (f))

j'ai vu (I saw)

j'ai visité (I visited)

du sport (sport)

de la natation (swimming)

de l'équitation (horseriding)

de la randonnée (hiking)

du footing (jogging)

du tourisme (sightseeing)

dans les bois (in the woods)

dans le centre-ville (in the city centre)

au parc (at the park)

au foot (football)

au rugby (rugby)

au golf (golf)

au tennis (tennis)

au centre sportif (at the sports centre)

au parc (at the park)

en boîte (clubbing)

me promener (for a walk (I))

à un café (to a cafe)

se promener (for a walk (one))

au centre commercial (at the shopping mall)

dans les rues piétonnes (in the pedestrian streets)

dans la vieille ville (in the old town)

un concert au théâtre (a concert at the theatre)

un match de foot au stade (a football match at the stadium)

un spectacle de danse (a dance show)

un film au cinéma (a film at the cinema)

dans le centre-ville (in the city centre)

dans le quartier commercial (in the commercial district)

dans le quartier touristique (in the tourist district)

le château (the castle)

le palais historique (the historic palace)

la galerie d'art (the art gallery)

les ruines romaines (the Roman ruins)

le musée (the museum)

sur la place principale (in the town square)

dans le quartier historique (in the historic district)

dans la vieille ville (in the old town)

Un jour spécial- a special day

Chaque année, (Every year,) D'habitude, (Usually,) En général, (Generally,)	pour mon anniversaire, (for my birthday,)	je commande un plat à emporter (I order a take away) j'organise une fête (I organise a party) je vais au restaurant (I go to the restaurant)			on danse et on chante (we dance and we sing) on écoute de la musique (we listen to music) on mange bien (we eat well) on s'amuse bien (we have a good time)
Cependant, (However,) Mais (But)	cette année, (this year,)	j'ai commandé un plat à emporter (I ordered a take away) j'ai organisé une fête (I organised a party)	avec mes amis (with my friends) avec ma famille (with my family) avec mon meilleur ami (with my best friend (m)) avec ma meilleure amie (with my best friend (f))	et (and)	on a dansé et chanté (we danced and sang) on a écouté de la musique (we listened to music) on a bien mangé (we ate well) on s'est bien amusés (we had a good time)
		je suis allé (I went (m)) je suis allée (I went (f))	au restaurant (to the restaurant)		
		je vais (I am going)	commander un plat à emporter (to order a take away) organiser une fête (to organise a party) aller au restaurant (to go to the restaurant)		on dansera et on chantera (we will dance and we will sing) on écoutera de la musique (we will listen to music) on mangera bien (we will eat well) on s'amusera bien (we will have a good time)

Spanish

Sentence Builder- ¿Qué haces durante las fiestas? What do you do during parties?

Time Phrase	Key Verb	
antes la fiesta (before the party)	pinto las uñas (I paint my nails) me peino (I comb my hair) decoro la casa (I decorate the house) compro ropa nueva (I buy new clothes)	
durante la fiesta (during party)	bailo (I dance) saco fotos (I take photos) como (I eat) pasteles (cakes) juego (I play) salgo (I go out) voy al restaurante (I go to the restaurant) voy al cine (I go to the cinema) voy de compras (I go shopping) hablo con mis amigos/as (I talk with my friends) hablo con mi familia (I speak with my family) canto karaoke (I sing karaoke) abro regalos (I open presents) enciendo velas (I light candles) escucho música (I listen to music)	pero (but) también (also) y (and)

Sentence Builder- ¿Qué hay en la foto? What is in the picture?

To start off

En la imagen…	In the image
En la foto …	In the photo
Hay…	There is/ are
Veo…	I see
Se puede ver…	You can see
La foto muestra…	The photo shows…

En primer plano…	In the foreground
Al fondo..	In the background
En el centro	In the middle
A la izquierda	On the left
A la derecha	On the right

Who is in the photo and how do they seem

Un hombre/una mujer	a man/woman
Unas personas	some people
Mucha gente	lots of people

Parece(n)…	he/she/they seem(s)
Contento/a(s)	happy
Triste(s)	sad

The Weather

Hace sol	it's sunny
Hace buen tiempo	it's nice weather
Hace mal tiempo	It's bad weather

What are they doing

Está(n) hablando	They are talking
Está(n) discutiendo	They are arguing
Está(n) sonriendo	They are smiling
Está(n) llevando	They are wearing

Co-op Academy Walkden

Sentence Builder- ¿Qué llevas a las fiesta? What do you wear to the party?

Key Verb	one/ a	Clothing Item	Colour
llevo (I wear) lleva (he/she wears) llevan (they wear)	un (a (m))	abrigo (coat) cinturón (belt) sombrero (hat) traje (suit) uniforme (uniform) vestido (dress)	amarillo (·yellow (m)) blanco (·white (m)) negro (·black (m)) rojo (·red (m))
			azul (·blue) gris (·grey) marrón (·brown) naranja (·orange) rosa (·pink) verde (·green)
	una (a (f))	camisa (shirt) camiseta (t-shirt) chaqueta (jacket) corbata (tie) falda (skirt) gorra (cap)	amarilla (·yellow (f)) blanca (·white (f)) negra (·black (f)) roja (·red (f))

Sentence Builder- ¿Qué comes y bebes? - What do you eat and drink?

Celebration	Verb	Drink/ Food	
Durante (during)	bebo (I drink) / bebemos (we drink) bebes (you drink) / bebéis (you all drink) bebe (s/he drinks) / beben (they drink)	agua (water) café (coffee) chocolate caliente (hot chocolate) leche (milk) naranjada (orangeade) té (tea) zumo de fruta (fruit juice) zumo de manzana (apple juice)	Pavo = turkey Pollo = chicken puré de patatas = mashed potato
Navidad (Christmas) **Pascua (Easter)** **Januka (Hanukkah)** **Diwali (Diwali)** **Eid (Eid)** **El año nuevo (New Year)**	como (I eat) / comemos (we eat) comes (you eat) / coméis (you all eat) come (s/he eats) / comen (they eat)	arroz (rice) carne (meat) chocolate (chocolate) ensalada (salad) fruta (fruit) miel (honey) pan (bread) pescado (fish) pollo (chicken) queso (cheese) chocolates (chocolates) gambas (prawns) hamburguesas (burgers) huevos (eggs) manzanas (apples) naranjas (oranges) plátanos (bananas) tomates (tomatoes) verduras (vegetables)	
Los días festivos (bank holidays)	tomo (I have) / tomamos (we have) tomas (you have) / tomáis (you all have) toma (s/he has) / toman (they have)		a menudo (often) a veces (sometimes) de vez en cuando (from time to time) raramente (rarely) todos los días (every day)

Sentence Builder- ¿Conoces a las fiestas hispánicas? Do you know any Hispanic celebrations?

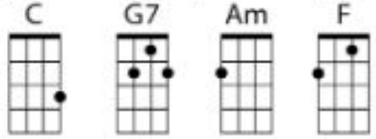
Celebration		Location	Month	More Details		Opinions	
La Tomatina (La Tomatina)	es un festival que tiene lugar (is a festival that takes place)	en Buñol (in Buñol)	en agosto. (in August.) en verano. (in summer.)	Es un festival donde (It is a festival where)	la gente hace una batalla de tomates. (people have a tomato fight.)	Me gusta porque es (I like it because it is)	divertido (fun) bonito (nice) impresionante (impressive) emocionante (exciting)
Las Fallas (Las Fallas)		en Valencia (in Valencia)	en marzo. (in March.) en primavera. (in spring.)		hay figuras muy grandes en las calles. (there are very big figures in the streets.) hay muchos fuegos artificiales. (there are lots of fireworks.)		
San Fermín (San Fermín)		en Pamplona (in Pamplona)	en julio. (in July.) en verano. (in summer.)		los toros corren en las calles. (the bulls run in the streets.) hay muchos fuegos artificiales. (there are lots of fireworks.)		
Los Castells (Los Castells)		en Cataluña (in Catalonia)	todos los domingos. (every Sunday.) durante todo el año. (all year round.)		la gente forma una torre humana. (people form a human tower.)	No me gusta porque es (I don't like it because it is)	sucio (dirty) ruidoso (noisy) peligroso (dangerous)
El Día de los Muertos (The Day of the Dead)		en México (in Mexico)	en noviembre. (in November.) en otoño. (in autumn.)		la gente celebra los muertos. (people celebrate the dead.)		

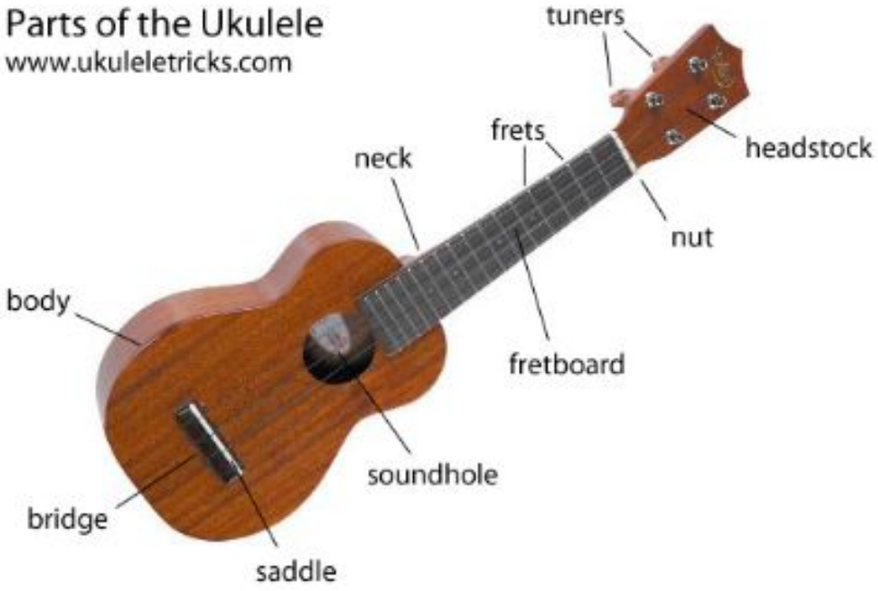
Music

Knowledge Organiser - Music Spring Term

4 Chord Trick

- This sequence of chords is made up of the Primary Chords (I, IV and V) plus chord vi.
- Progression: I - V - vi - IV
- In C Major: C - G - Am - F
- Hold the ukulele in your **left hand**
- Strum using your **right hand**



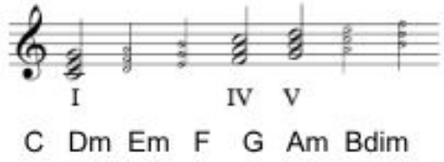


Chords in Funk & Soul

- Harmonic Progressions are the specific order of chords in a piece of music.
- A 12 Bar Blues uses the **three** primary chords
- We give each note in a scale a Roman Numeral
- This means that it doesn't matter what note we start our scale on, we can still work out what chords we need to play the 12 Bar Blues

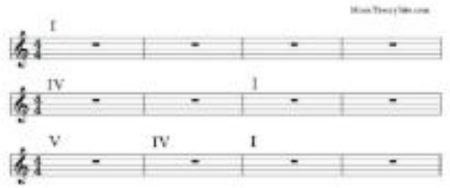
Primary Chords

- Chords I, IV and V from a Key.



12 Bar Blues

- The structure of Primary chords commonly used in Blues, Funk and Rock 'n' Roll



Knowledge Organiser - Music Spring Term

Homework

- Come to the Music Department for Year 7 Homework Clubs to practice for your performances
- Complete knowledge and key word checks on Google Classroom
- Complete performance reflection at the end of the topic

General Listening/Watching/Reading

Listen & Watch

Religious Studies

Coming soon

Science

Science knowledge organiser here