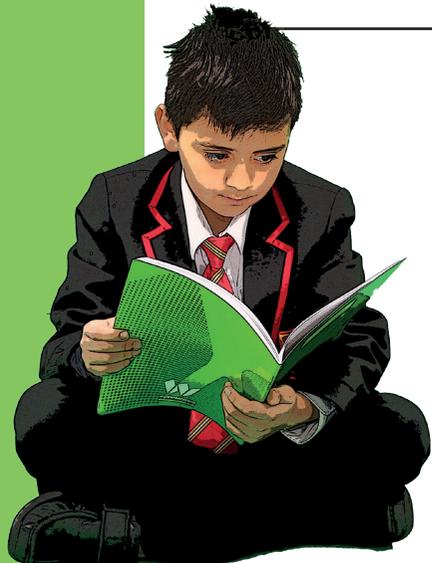




“If you’re not willing to learn no one can help you. If you’re determined to learn no one can stop you.”
Anon

Name

Tutor



Educating
for life in
all its
fullness

St Cuthbert Mayne School Year 8 Autumn Term



Knowledge Organiser

CORE VALUES

To have integrity and be courageous, compassionate and creative. These core values underpin how we work as a School Community and the values we look to develop in all members of the Community.

Courageous: Being confident, to embrace challenge.

Compassionate: Reflect the love of God. A care for others, to be peace makers who understand the importance of forgiveness and reconciliation.

Creative: To be inventive, resourceful and visionary.

Integrity: To do the right thing even when no one is watching.

Introduction

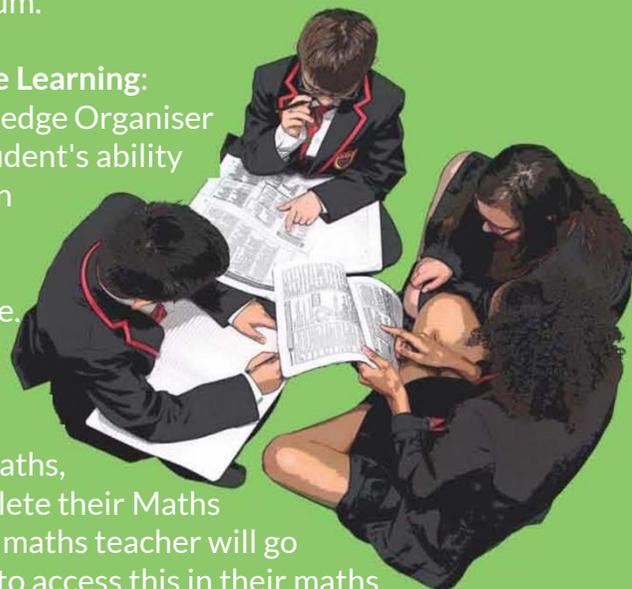
This booklet provides you with all of the KNOWLEDGE that you will need to succeed in your learning this term. The minimum requirement from you is one full A4 page or 20 minutes per subject. Your home learning will be checked by your subject teachers each week. Subjects will set additional Home Learning to help you apply the knowledge from this booklet.

At St Cuthbert Mayne there are two strands to our Home Learning Strategy:

Subject Specific Home Learning: students will be set specific subject tasks linked to the curriculum.

Guided Independent Home Learning:

An approach using a Knowledge Organiser which aims to develop a student's ability to retain knowledge over an extended period of time. Students will routinely self test core subject knowledge.



Students will use SPARX Maths, an online platform to complete their Maths home learning. Your child's maths teacher will go through the details of how to access this in their maths lessons and communicate this home. Other subjects may also use online platforms to facilitate their subject specific tasks and those subjects will communicate this to students and to parents at the start of term.

Instructions for completing your Home Learning

Read

The definition a couple of times



Cover

The Page



Remember

The definition, think about it



Write

Write what you remember



Repeat

Each step until you can write the definition correctly



Home Learning Timetable



	Monday	Tuesday	Wednesday	Thursday	Friday
	Maths	Computing	Technology	Music	English
Developmental Studies		French	Geography	PE	
	Science	Drama	History	Art	RE

UNIFORM AND APPEARANCE - OUR EXPECTATIONS

Students are expected to present themselves correctly and tidily at all times both in school and on the way to and from school or when involved in off-site visits. This not only helps to maintain the high standards of the school, but also is good training for later life.

There are separate guidelines on dress code for students in the 6th Form available on application to the school. If parents / carers are unsure about whether an item of uniform is suitable for school they should visit our website or contact us directly prior to purchasing.

- Blazers – This must be the school blazer (black with red braiding and school badge) purchased from Torre Sports / Pro-direct Sport. These must be worn at all times except if involved in physical activity on the field or on the yards during lunch and morning break when they can be removed if desired. If a student wishes to take his or her blazer off during a lesson then he/she should ask the teacher. A black V-neck jumper (not sweatshirt) may be worn under the blazer.
- Skirts – Black* knee length pleated skirt, as supplied by Torre Sports / Pro-direct Sport or an identical skirt. The skirts should be approximately knee length and not worn in a very short manner (e.g. Not more than 5cms above the knee). Tights if worn should be plain black. Socks if worn should be plain black ankle socks.
- Boys Trousers - Trousers must be plain black* formal style school trousers, as supplied by Torre Sports / Pro-direct Sport or an identical item. Not acceptable: black jeans, chino or denim style or any form of tight stretchy style of trouser. Plain black socks to be worn. If a belt is worn, it needs to be plain black (wide belts and large buckles are not appropriate).
- Girls Trousers – Trousers must be plain black* formal style school trousers, as supplied by Torre Sports / Pro-direct Sport or an identical item. Non acceptable items are as listed for boys.

Black* means that the colour and shade of the trousers /skirt must match that of the blazer (as supplied by Torre Sports / Pro-direct Sport

- Shoes – Formal black shoes that are fully polishable. Moreover, Footwear, which displays a sports branding, is not appropriate for school i.e. the Nike tick. Moreover, trainers should not be worn. All students in the main school must wear shoes that are completely black including on their way between home and school. Shoes should be of a “sensible style” suitable for a wide variety of activities that students tackle each day. Shoes should be waterproof, flat soled, leather or leather like, able to be polished and cover the whole foot. Therefore, platform soles higher than 3cms, high heels higher than 5cms, mules, flip flops, sling backs and sandals, Converse, Vans or boots of any kind are inappropriate for school wear and must not be worn.

- School Bags – A suitable school bag which can carry at least A4 folders e.g. ruck sack not a large fashion handbag.



UNIFORM AND APPEARANCE - OUR EXPECTATIONS

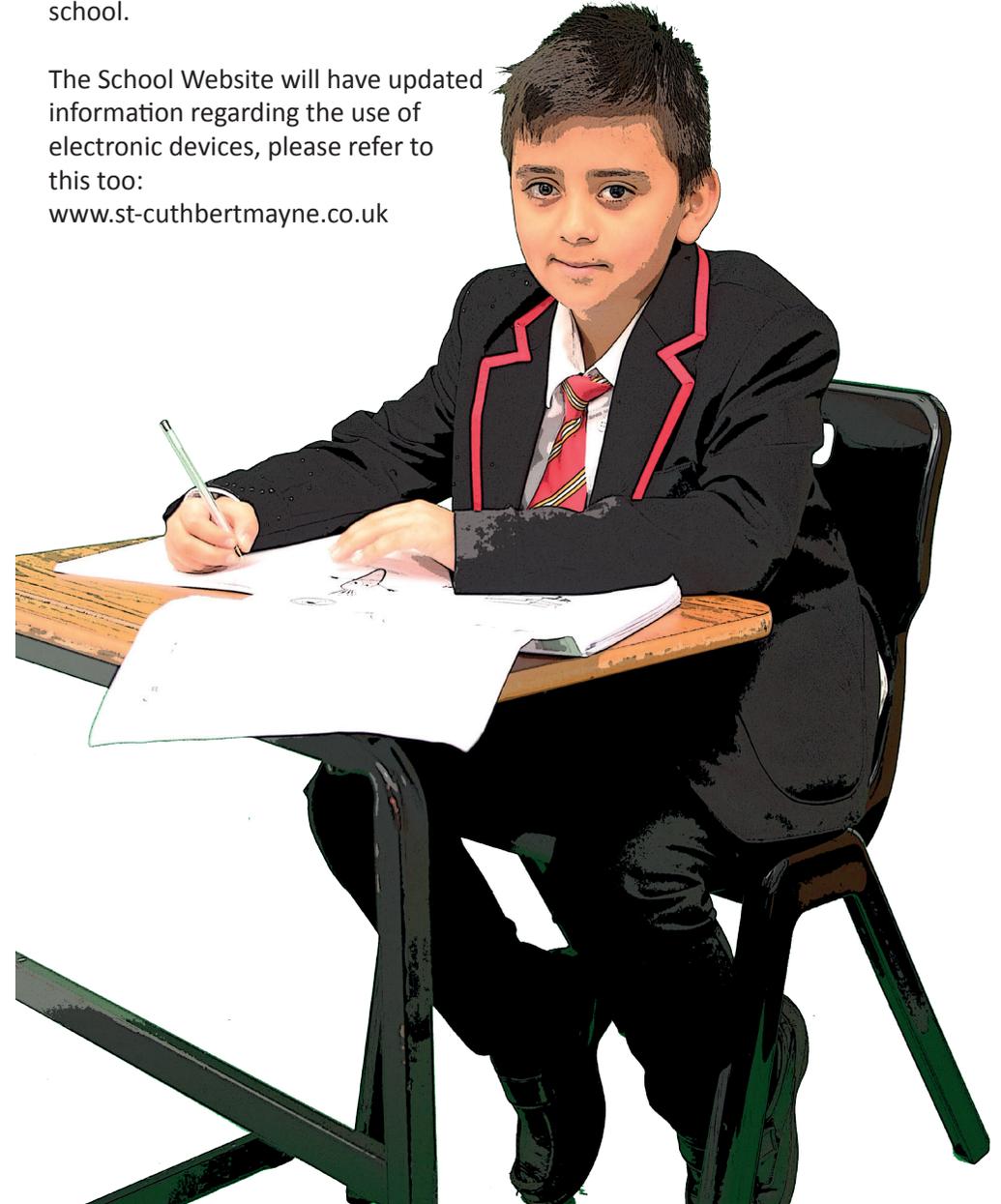
- School Coat – Dark (blue/black) plain outdoor style coat (with no logo, design or graffiti), preferably waterproof. Denim or leather jackets, hoodies or other sweatshirts are not acceptable as school uniform even as outdoor clothing. Coats, hats, gloves or scarves should not be worn in classrooms at any time.
- Make-up – Make-up must be kept to a minimum and should be subtle and not noticeable. Nail varnish is not to be worn into school, if worn students will be instructed to remove it. False nails are not appropriate for school.
- Collared Shirt and Tie – Students must wear a white formal shirt which must button at the neck and be tucked in at all times. All ties must be the school's clip-on tie.
- Jewellery – Jewellery should be kept to a minimum and removed during PE or sporting activities. If students wear a necklace it should not be visible but worn under their shirt. Bracelets must not be worn to school. If excessive or inappropriate jewellery is worn (e.g. rings) the items will be confiscated and put in a safe place until collected by Parents / Carers (normally from Student Services).
- Earrings – For safety reasons any earring which is not of a small stud type should not be worn to school. There must be no more than one in each ear.
- Body piercings - Studs, rings, etc including on the face, nose and in the mouth must not be worn to school under any circumstances. Piercings that require a ring, retainer or object to remain in place whilst the site heals is not acceptable during school sessions. Nose studs cannot be worn in school.
- Hair – Non-natural occurring hair colours are unacceptable for school. Extreme hair styles are also not acceptable e.g. Mohicans, tram lines, highly gelled etc. Headwear of any kind should not be worn in school unless; It is of a religious nature or for medical reasons and has been previously agreed with the Head teacher

- Additional notes:

Aerosols of any description, fizzy drinks, rugby balls, are not permitted in school.

The School Website will have updated information regarding the use of electronic devices, please refer to this too:

www.st-cuthbertmayne.co.uk



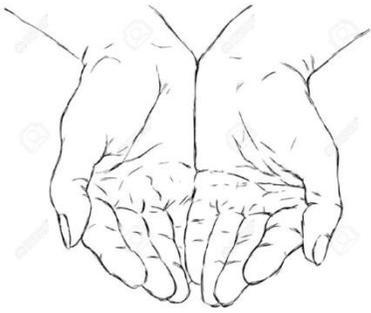
ART: Year 8 Unit 1

Please work on plain paper.
Tasks to be completed:
Sept-Oct half term

Task 1: Draw a selection of sweets in a hand/s. You may work from an image that you take or one that you find on the internet. Create the hand using only a shading pencil and the sweets in colour.



Tip: You may trace an outline of the hands before adding the sweets. To do this hold your paper over your screen or image and trace the key sections.



Task 2: Draw a lolly of your choosing and add a red and white stripes background to give the impression the sweet is on some material. Try to fill an area that is approx 15cm x 15cm as a minimum.

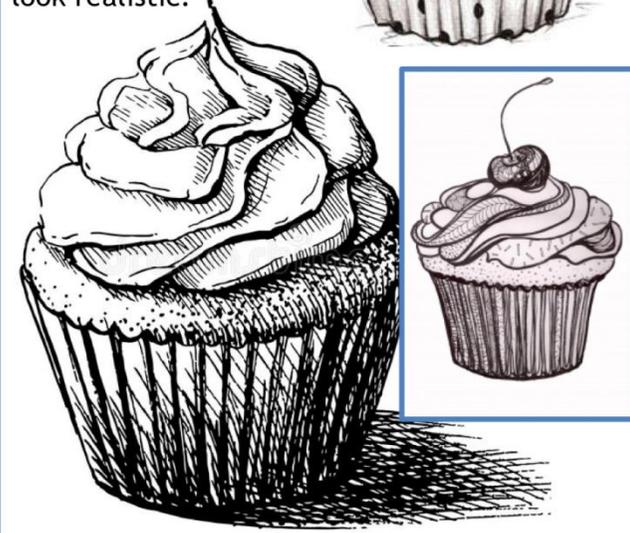


Graham



Sarah

Task 3: Using a biro pen draw a cupcake. Try to capture the swirls of the icing on the top. A black biro pen works best but any pen will be fine. You may add a little colour over the top once you have drawn it. On the icing remember to leave some areas with no colour as this effect will make the cake look realistic.



Extension: Create a view finder around a section of your drawing and scale it up. Complete a second drawing in another medium but on a larger scale.

Tip: When creating the background it is advised that you use pencil crayon and try to gradually blend out the colours in places from dark to light.

YouTube

Tip: Use YouTube Clips to help get you started. Try searches: How to draw a cupcake/ How to draw a realistic cupcake.

Key Words: Contrast, Sweets, Scale, Realistic, Tone, Blend, Texture, Sarah Graham, Text, Logo, Detail, Gradation.

Extension: Add personal comments about all your work discussing what you like and areas that you could improve.



Information: Please use this blank piece of paper to complete your ART work on or work on your own paper for better quality. If you need additional paper please request more from your subject teacher (some students often complete several pages of Art KO each half term). You may alternatively use paper that you have at home. You will then hand your work in to your subject teacher at the end of each half term by cutting this page out and/ or handing in additional paper. You will then place your

 - - - - - work in the back of your school Art sketchbook - - - - -



ART: Year 8 Unit 2

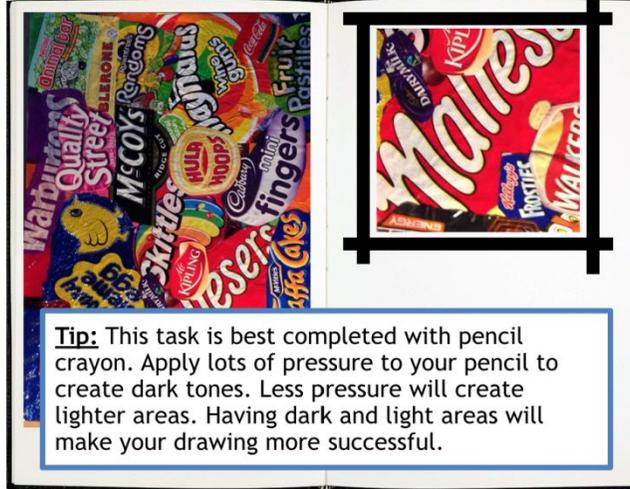
Please work on plain paper.
Tasks to be completed:
October - Christmas Holidays

Task 1: You are Willy Wonka! Design your own unusual sweet. Explain how you have come up with your idea. Consider the ingredients that might be in your sweet treat. But most importantly design a creative and colourful wrapper.



Story: Charlie and the Chocolate Factory is about a young boy called Charlie who finds a golden ticket hidden in a chocolate bar, giving Charlie the chance to visit a unique chocolate factory. Inside the chocolate factory sweets of all possibilities are created. *Use this as inspiration for your design!*

Task 2: Create a collage of sweet/ treat wrappers. Fill a section of your Home Learning paper. Use a view finder to then draw a section of the wrappers by scaling up the area.



Tip: This task is best completed with pencil crayon. Apply lots of pressure to your pencil to create dark tones. Less pressure will create lighter areas. Having dark and light areas will make your drawing more successful.

Extension: Award winning and self taught artist Nigel Humphries is from the UK and has built a steady reputation for producing oil paintings of modern and retro sweets, chocolates and toys. Humphries' work is intensely detailed with a light hearted, nostalgic appeal. His work is influenced by his childhood and he has been quoted as saying that his intentions are "to bring a smile to people's faces".

- Gather Images and examples of his work
- Add personal reflective comments about the work
- Add a title Nigel Humphries
- Make copies of some of his work

Key Words: Nostalgic, Nigel Humphries, Viewfinder, Reflective, Artist Research.

Task 3: Make a mixed media ice cream. Below are some examples which have a range of materials such as newspaper to painted CD's. Try to use at least two different mediums or materials on the piece.



MIXED MEDIA

Example Mediums: Sections from magazines, newspaper, felt pens, paint, wallpaper, patterned paper or card, string, material.

Tip: Try to use mediums/ materials that are relatively flat/ have little relief as your Home Learning will be stuck in your book once it is completed.

Information: Please use this blank piece of paper to complete your ART work on or work on your own paper for better quality. If you need additional paper please request more from your subject teacher (some students often complete several pages of Art KO each half term). You may alternatively use paper that you have at home. You will then hand your work in to your subject teacher at the end of each half term by cutting this page out and/ or handing in additional paper. You will then place your

 - - - - - work in the back of your school Art sketchbook - - - - -



Computing – Flowcharts and Algorithms

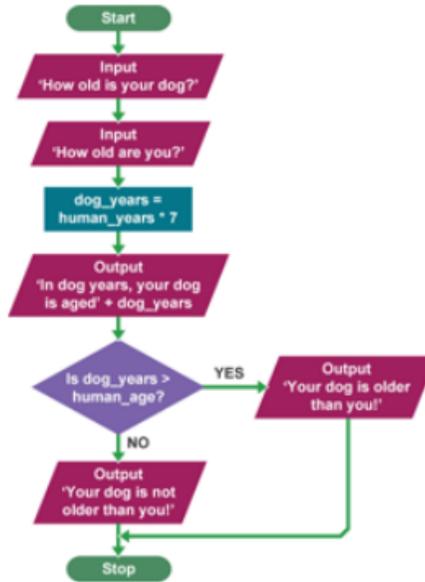
Computational thinking

- Decomposition
- Abstraction
- Pattern recognition
- Algorithms

Flowcharts

- Flowchart symbols:

Symbol	Name
	Start/end
	Arrows
	Input/Output
	Process
	Decision



Programming

Techniques / constructs:

- Variables
- Input / output
- Sequence
- Selection [IF and ELSE]

Data types

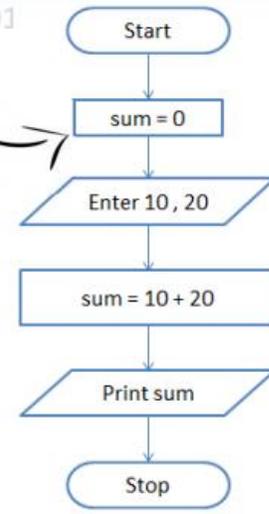
String	Float or Real	Integer	Boolean
Title	Rating	Times Viewed	Favourite
Zombie Attack	9.5	83	True
True Love	8.0	5	True
Mission: Pluto	2.5	1	False

Key vocabulary	Definitions you need to learn...
Computational thinking	The steps you take to find the best solution to a complex problem.
Decomposition	Breaking a complex problem down into smaller problems and solving each one individually.
Abstraction	Picking out the important bits of information from the problem and ignoring the details that don't matter.
Pattern recognition	Finding similarities and patterns in order to solve complex problems more efficiently.
Algorithm	A sequence of logical instructions for carrying out a task. In computing, algorithms are needed to design computer programs.
Program	Sequences of instructions for a computer.
Programming	The process of writing computer software.
Sequence	The specific order in which instructions are performed in an algorithm.
Selection	Allows for more than one path through an algorithm (IF and ELSE).
Iteration	The process of repeating steps (WHILE and FOR).
Flowcharts	Show the general flow of an algorithm without going into lots of detail.
Data types	The format in which a variable or constant holds data, such as 'integer' or 'string'.
String	Used for a combination of any characters that appear on a keyboard, such as letters, numbers and symbols.
Integer	Used for whole numbers.
Real (or Float)	Used for numbers that contain decimal points, or for fractions.
Boolean	Used where data is restricted to True/False or yes/no options.

Computing – Flowcharts and Algorithms

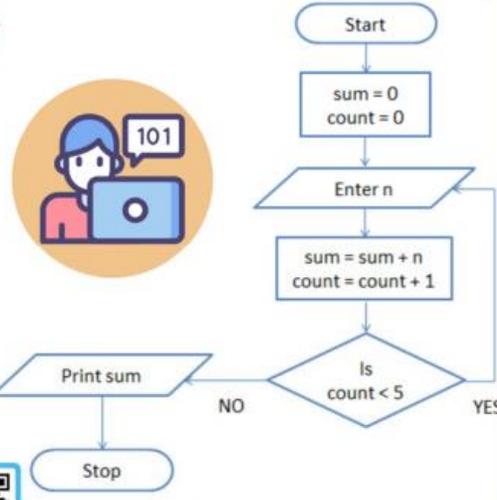
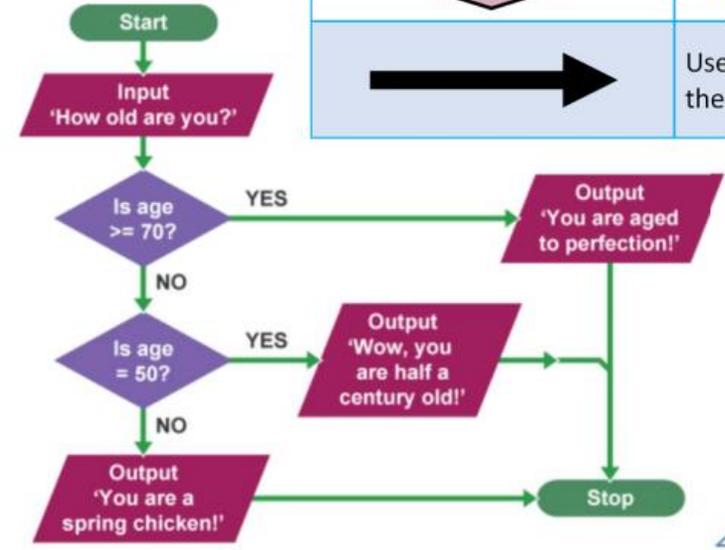
Key Vocabulary

Algorithm	A set of rules or instructions to be followed.
Flowchart	A graphical way of showing an algorithm.
Mimic	In Flowol, a simulation of a real world environment.
Selection	Deciding what code to run based on a decision or answer to a question. E.g. an IF statement.
Sequence	A set of instructions that are completed in the exact order that they are written.
Iteration	Where a set of instructions is repeated . E.g. a WHILE loop, FOR loop and REPEAT UNTIL loop.
Instruction / Statement	A command that the programmer gives to the computer.
Input	Data that is given to the computer or program to then use.
Output	Information that is provided by the computer or program.
Procedure	A group of instructions grouped together that can be used by the main program.
Variable	A name given to a value in a program that can change when the program is running.



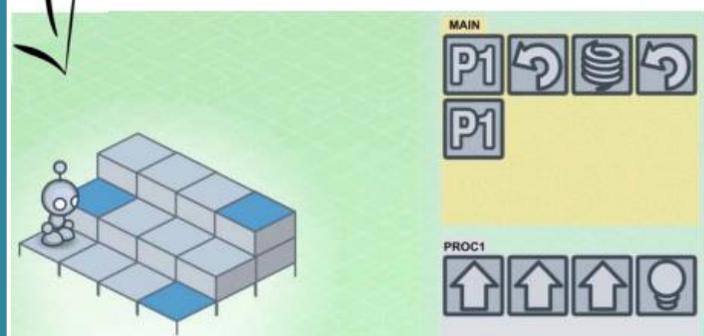
Flowchart Symbols

	Used at the start and end of a flowchart.
	Controls all the inputs and outputs.
	General instructions and calculations carried out by the computer.
	Where a question/decision is asked. Must have a 'Yes' and 'No' output.
	Used to connect flowchart symbols to show the direction of flow in the program.



Key Objectives

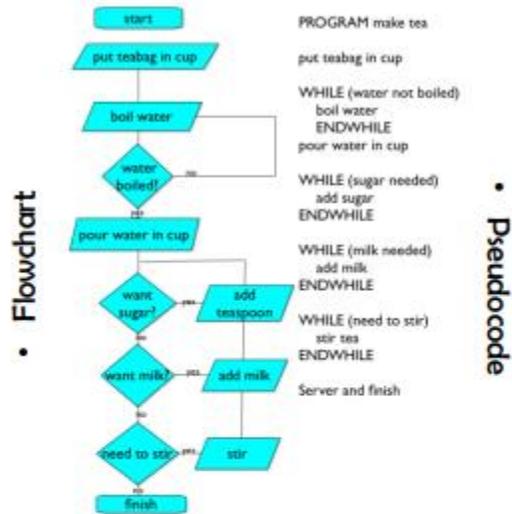
Identify and describe the use of the 5 flowchart symbols.	
Follow and draw a simple flowchart involving a decision.	
Follow and draw a flowchart involving a loop.	
Follow a written algorithm, arriving at the correct result.	



Computing – Sorting and Searching

Algorithms

There are two ways to write algorithms:



Searching Algorithms

- Binary Search

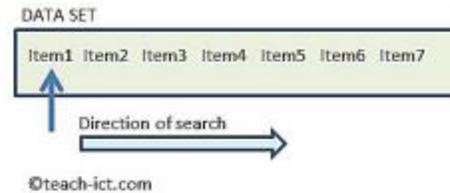
- Find the center of the list
- $N + 1 / 2$
- Compare the middle item



- Discard half of the list
- Repeat until found

Searching Algorithms

2 - Linear Search



Sorting Algorithms

1 - Bubble Sort

Original set	9 23 2 5 34 56
Step 1	9 23 2 5 34 56
No swap needed	9 23 2 5 34 56
Step 2	9 23 2 5 34 56
Swap	9 2 23 5 34 56

2 Merge Sort



Key Vocabulary

1	Abstraction	picking out the important bits of the problem and removing unnecessary detail from a problem.
2	Decomposition	breaking a problem into a number of sub problems these sub problems can then be solved individually
3	Algorithm	is a step by step set of rules or instructions.
4	Pseudocode	is a set of step by step instructions in the style of a programming language but using plain English.



Computing: Introduction to Python

Key Words	Python Programming	Key Knowledge												
<p><u>Annotation</u>: Commenting your code to explain what parts do.</p> <p><u>Assignment</u>: Storing a value (numerical or otherwise) to a variable.</p> <p><u>Data Structure</u>: A way of storing multiple bits of information at once.</p> <p><u>Index</u>: A position reference in a data structure.</p> <p><u>Iteration</u>: Repeating sections of codes using loops, usually with changing values each time.</p> <p><u>List</u>: Also known as an array. A data structure.</p> <p><u>Module</u>: A collection of linked functions. External modules can be imported in to your code.</p> <p><u>Selection</u>: Using code to choose what happens in a program. Also called a conditional.</p> <p><u>User Input</u>: Allowing the person using the code to provide data.</p> <p><u>Variable</u>: A value that can change. Used to store information for use in a code.</p>	<h2 style="text-align: center;">Key Skills</h2> <p><u>Understanding Python Code</u>:</p> <pre style="border: 1px solid black; padding: 5px;"> name = input("Enter Name") #A age = 14 #B users = ["John", "Jane"] #C length = len(users) #D valid = False #E #F for i in range(length): #G if name == users[i] #H valid = True #I if valid == True: #J print("Valid user") else: #K print("Invalid user") </pre> <p>A: Stores user inputted text to a variable called name. B: Stores an integer value 14 to a variable called age. C: Creates a list which contains 2 string values. Stores to users. D: Calculates the length (how many items are in) of users. E: Stores the Boolean value False to variable valid. F: Use of white space to make code clearer. G: Creates a loop that will iterate for every element in users. H: Use of selection to determine if the entered value match with any values from the list. users[i] looks up the current value from the list based on the given index. I: If the name is in the list users, valid is changed to True. J: Selection based on whether valid was changed to True. K: Runs alternative code if the criteria from J is not met.</p>	<p><u>Key Syntax</u>:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">= used for assignment</td> <td style="padding: 2px;">== used for comparison</td> </tr> </table> <p>Python functions (such as print or len) must have brackets after them, which may contain information. E.g. print("Hello") or exit()</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Keywords in lower-case only e.g. if, while</td> <td style="padding: 2px;"># used to start a comment</td> </tr> </table> <p>: must be used at the end of selection and iteration</p> <p><u>Handling Data Types</u>:</p> <table style="width: 100%;"> <tr> <td>Convert to integer</td> <td><code>int(x)</code></td> </tr> <tr> <td>Convert to float</td> <td><code>float(x)</code></td> </tr> <tr> <td>Convert to string</td> <td><code>str(x)</code></td> </tr> <tr> <td>Convert to Boolean</td> <td><code>bool(x)</code></td> </tr> </table> <p>User input in python is always a string by default.</p> <p><u>Variable Name Conventions</u>:</p> <p>Should not be overly long but should be easy to identify purpose. Must start with a letter. Must not contain any symbols or spaces. Instead of a space, use an underscore or camelCase, e.g.:</p> <p>user name ❌ user_name ✅ userName ✅</p>	= used for assignment	== used for comparison	Keywords in lower-case only e.g. if, while	# used to start a comment	Convert to integer	<code>int(x)</code>	Convert to float	<code>float(x)</code>	Convert to string	<code>str(x)</code>	Convert to Boolean	<code>bool(x)</code>
= used for assignment	== used for comparison													
Keywords in lower-case only e.g. if, while	# used to start a comment													
Convert to integer	<code>int(x)</code>													
Convert to float	<code>float(x)</code>													
Convert to string	<code>str(x)</code>													
Convert to Boolean	<code>bool(x)</code>													

YEAR 8 FOOD KNOWLEDGE ORGANISER

WEEK 1: Protein

Function: growth, repair and maintenance. Proteins are made up of amino acids. They are the building blocks of the body.
Food sources: Meat, fish, poultry, eggs, cheese, milk, soya, quinoa, peas, lentils, nuts, seeds, beans

WEEK 1: Fats

Function in the body: provide a concentrated source of energy It forms an insulation layer under our skin which keeps us warm and forms a layer which protects our internal organs like heart and kidneys. Fats are a source of Vitamins A & D. Fat is needed by the body, but too much fat in the diet can lead to weight gain.
Food sources: Meats including sausages and burgers, full fat milk, cheese, butter, oils, nuts, avocados, oily fish

WEEK 2: Carbohydrates - Starch

Function in the body: provide energy. When we eat carbohydrate foods, our body breaks down the sugar & starch into glucose, which is absorbed into our blood & used for energy.
Food sources: Potatoes, bread, pasta, rice, cereals, vegetables & fruit. Starchy foods contain B vitamins, iron and calcium. Starch carbohydrates are known as complex carbohydrates. They take a lot longer to digest than simple carbohydrates, so they gradually increase the blood sugar levels and provide a slow steady release of energy.

WEEK 2: Carbohydrates - Sugar

Function in the body: energy.
Food sources: Sugar, eg glucose and fructose, can be found naturally (eg fruits and veg), or can be added to food during manufacturing (eg sugars in cakes, biscuits, desserts, sweets, fizzy drinks)
 Added sugars are often referred to as empty calories because they have no nutritional benefit other than energy. Sugar is a simple carbohydrate because the body rapidly digests simple carbohydrates, making blood sugar levels rise quickly and providing a short burst of energy

WEEK 2: Dietary fibre (NSP)

Function in the body: Dietary fibre (NSP) is a type of carbohydrate that helps to keep your digestive system working properly and keeps food moving through it.
Fibre food sources: vegetables, fruit, brown & wholemeal bread, wholegrain rice/pasta/flour, lentils, beans, seeds, nuts.
 You need to eat fibre to stay healthy. If you don't it can lead to health problems like constipation, bowel and colon cancer, heart disease, high blood pressure. The NHS states the average adult should have 30g fibre per day.

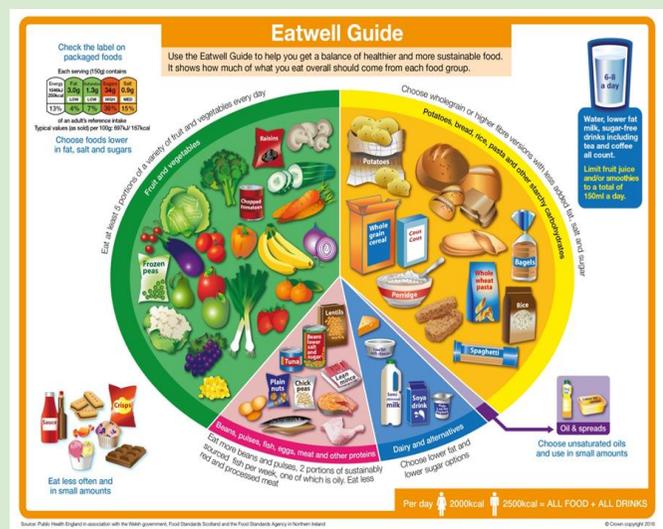
WEEK 3: High Risk Foods

To grow and multiply, bacteria needs: Time
 Moisture Food Warmth
 High risk foods: tend to be moist & high in protein.
 High risk foods: Meat, fish, dairy, prepared salads, cooked rice, sauces & gravies.
 Avoid cross contamination: Don't pass bacteria from raw food to work surfaces, hands, equipment.

Key words

Macronutrients
 Protein
 Amino acids
 High biological value
 Low biological value
 Saturated fats
 Polyunsaturated fats
 Carbohydrates
 Hazard analysis
 Cross contamination
 Bacteria
 Temperature control
 Fortification
 Non starch polysaccharide

Eatwell Guide



WEEK 4: Food Provenance

Organic farming – a more natural method of farming eg growing crops without artificial pesticides and fertilisers
 GM foods – genetically modified food has had its genes altered to give it useful characteristics
 Factory farmed – produced by an intensive farming technique - reared animals have little room to move
 Free range – animals have more space to move and live naturally

Task: Make a list of all the information found on a food label

Task: Research ' The Danger Zone' in food storage, prep and cooking. Explain the different temperatures.

YEAR 8 Food Knowledge organiser

WEEK 5 Function of ingredients

Each ingredient has an important role in the making of each dish.

Cake mix

Self-raising flour	Makes the cake rise (increase in size)
Caster sugar	Makes the cake sweet.
Margarine	Makes the cake moist.
Egg	Binds the mixture together and raising agent
Vanilla essence	Adds flavour



Bread

Strong flour	To provide structure.
Yeast	Makes the bread rise.
Water	Provides moisture.



Extension Task:

Explain the function of the ingredients used in your practical lessons for each recipe you have made.



WEEK 6 Seasonal Foods



What is seasonal food?

Food grows at different times of year in England. The time that food is ripe for eating is known as its season. Food grows in different countries at different times, so if food is not in season in England, it can be transported from another country.

Why is eating seasonal food whenever you can a good idea?

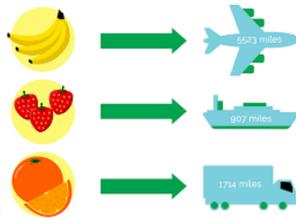
- Seasonal foods are fresher.
- Seasonal foods taste better, as they are full of flavour.
- Seasonal foods have less environmental impact because carbon footprints are reduced.
- Local foods supports the local community.

What are Food Miles?

The distance food has travelled. Less food miles are better for the environment.

How to reduce them:

Eat seasonal, local food where possible



WEEK 7: What is a Carbon Footprint?

The amount of energy you use during your lifetime.

How to reduce it:

- Don't fill the kettle (only boil what you need)**
- Reduce food waste**
- Eat seasonal, local food where possible**
- Reuse/Recycle food packaging**

WEEK 8 Food Waste

What is food waste?

Food waste is food that is discarded, lost or uneaten.

What is the difference between best before, use by and sell by date?

- Best Before date:** It means the product will taste best up until that date. It is still edible and okay to eat a little past the listed date, though you may notice a slight change in texture, flavour, or colour.
- Use by date:** The date that food should be used by. After this it may be unsafe.
- Sell by date:** a date marked on a perishable product indicating the recommended time by which it should be sold.

Tips for reducing food waste

- Reduce
- Reuse
- Redistribute/recycle
- First in first out
- Store food correctly – use your freezer
- Don't cook too much
- Know the difference between best before and use by dates



D & T Resistant Materials and CAD/CAM Year 8 Knowledge organiser

WEEK 1: Metals are found in the Earth's crust and have been mined extensively for many years. Of the 70 different types of metal a select few are used for the majority of applications. Metals very rarely occur in their pure metallic state in the ground (the only exceptions are gold, silver and copper) Metals account for about two thirds of all the elements and about 24% of the mass of the planet. Metals have useful properties including strength, ductility, high melting points, thermal and electrical conductivity, and toughness. From the periodic table, it can be seen that a large number of the elements are classified as being a metal. A selection of various metals can be seen below



Extension task: Explain how you would polish metal.

WEEK 2: Metals are generally classed as either ferrous or non-ferrous depending on whether they contain iron or not.

Ferrous (contain iron) metals include iron and steel.

Ferrous metals are the ones most widely used and have a lower value per weight than non-ferrous metals, although the latter are used in smaller quantities. The metals industry is typically split into ferrous and non-ferrous sub-industries



WEEK 4:
From ore to metal
What are "ores"?

An **ore** is a type of rock that contains minerals with important elements including metals. The ores are extracted through mining; these are then refined to extract the valuable element Aluminium, for example, is the most common metal in the Earth's crust, occurring in all sorts of minerals. However, it isn't economically worthwhile to extract it from most of these minerals. Instead, the usual ore of aluminium is bauxite - which contains from 50 - 70% of aluminium oxide. An open cast gold mine. Huge areas of land are removed to get access to the valuable metals. There are obvious environmental impacts with the extraction of metals. The impact on habitats, and the landscape can be huge with large areas completely destroyed. Due to the size of mines the whole geography of a region can change, the way water behaves in these landscapes can have serious impacts for rivers in the area with them being diverted or polluted

WEEK 3:

Non-ferrous (contain no iron) metals include aluminium, copper, lead, mercury, gold, nickel, tin, zinc. These metals do not contain iron, are not magnetic and are normally more resistant to corrosion than ferrous metals.

Some metals are very rare or difficult to extract from the ground and as a result are very expensive.



Extension task: Research the processes of welding and milling metal. Produce an info sheet explaining them. .

D & T Resistant Materials and CAD/CAM Year 8 Knowledge organiser

WEEK 1: Pewter is a malleable metal alloy that is made from tin and copper. Pewter has a low melting point, around 170–230 ° and therefore is much easier to cast in a school than other metals. The pewter is heated in a low temperature system or by torch (not recommended) and poured into a mould. The pewter sets rapidly to form the desired shape.

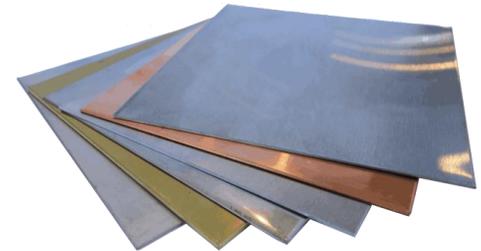


WEEK 2: The easiest form of pewter casting is often done between pieces of MDF/plywood laminated together. The middle piece has a shape cut out to form the void into which the pewter is poured. More complicated moulds would have details engraved onto the other surfaces. This process was demonstrated in the workshops.



WEEK 3: Metals like all materials come in a large variety of standard shapes and sizes. We will look at the standard **stock forms**.

Sheet metal is commonly sold in flat sheets, however large industrial users will buy rolls of steel sheet if it is thin enough to be placed on a roll.



WEEK 4: Bar is shaped lengths of metal in a variety of shapes in the cross section. It is solid in its cross section and is often comes as round bar, flat section and hex bar (hexagonal)

It would be available in many different sizes and is often sold in both metric and imperial sizes

Tube is the other common form of stock steel. Normally when we talk of tube we think of round sections although steel is often sold in many hollow shapes all referred to as tube; round, square etc.

Tube is sold as

Round -the diameter and the length are needed

Square section – the internal diameter and the length

Rectangular section – the two internal sizes and the length



D&T: Resistant Materials – Working with Wood

WEEK 1: Health & Safety

Working safely is the most important aspect of being in a workshop. Health & safety is everybody's responsibility.

- Walk around the workshop sensibly, never run
- Wear an apron and secure any loose clothing.
- Tie long hair back
- Wear safety glasses when using power tools
- Always switch power tools off after use.
- Never use a tool until you have been shown how to do so correctly

WEEK 2: Common Hand Tools

- Steel rule
- Try square
- Centre punch
- Tenon saw (for straight cuts)
- Coping saw (for curved cuts)
- File (flat, round, half round etc)
- Abrasive paper (sandpaper)

WEEK 2: Machine Tools

- Disc sander
- Scroll saw
- Pillar drill/Bench drill
- Cordless drill

WEEK 2: Pillar drill/bench drill

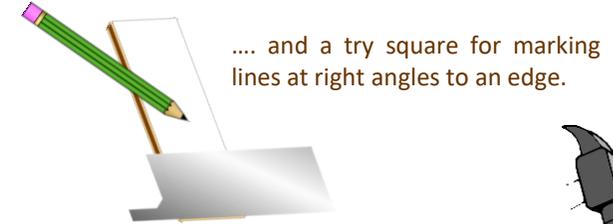
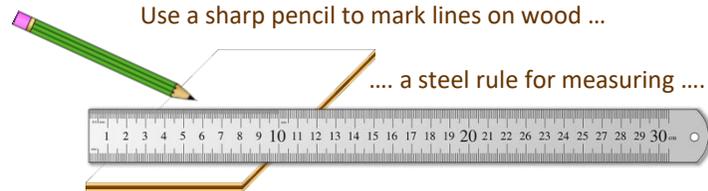
Daw a neat diagram of a pillar/bench drill labelling the following parts;

- Chuck and chuck guard
- Base
- Pillar
- Table

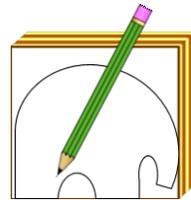
Marking Out

WEEK 3:

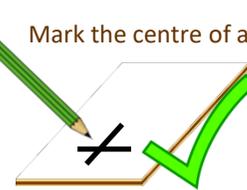
Marking out is the process of drawing your design onto the material you are going to make it from. Only pencils should be used to mark lines on wood because pencil marks can be rubbed out or sanded off afterwards. Ink from ball point or felt tip pens will soak into the wood and spoil your work.



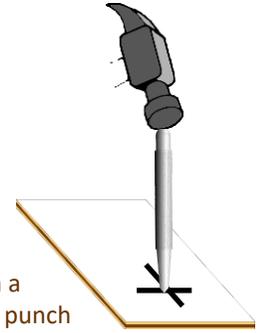
Templates are especially useful for curved or intricate shapes.



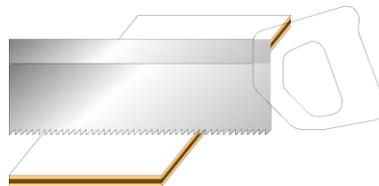
Mark the centre of a hole with a cross ...



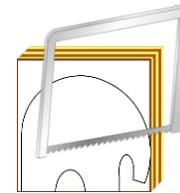
... then a centre punch



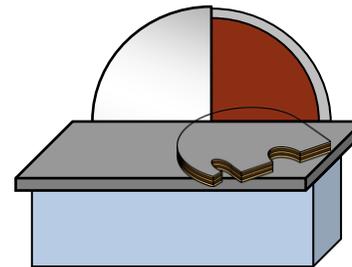
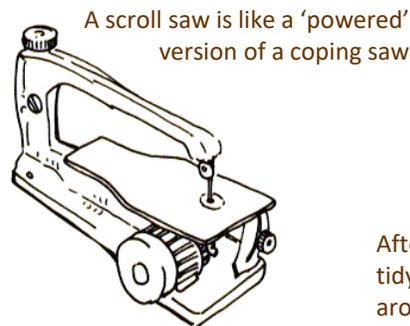
WEEK 4: Cutting & Shaping



Tenon saws have broad stiff blades for making accurate straight cuts in wood



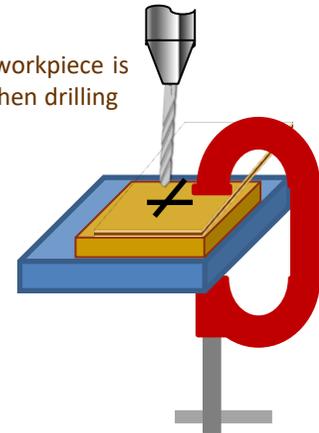
Coping saws have thin flexible blades so that they can cut around corners and curves



After sawing a disc sander can be used to tidy up and smooth out any jagged bits around the edges ...



Make sure the workpiece is held securely when drilling



... but a file may be needed to get to any edges a disc sander cannot reach.

D&T: Resistant Materials – Wood & Timber Products

Week 5: Resistant Materials

... are materials which require special tools & equipment to cut, shape join etc. Eg) wood, metal, plastic etc.

Wood & Timber Products

... may be divided into two main categories;

1. Natural Wood
2. Engineered Wood

Pros & Cons

Generally wood is;

- Widely available
- Highly versatile

- Strong & tough
- Easy to work with
- Attractive
- Relatively cheap

However, it can be prone to warping (bending) and will eventually rot/decay unless protected.

WEEK 6: Common Softwoods;

Pine, Fir, Spruce, Cedar

Common Hardwoods;

Oak, Beech, Mahogany, Teak

Common Manufactured Boards;

Plywood, MDF, Chipboard, Blockboard

Environmental Issues

Generally wood is considered a 'renewable' material but what does this mean and how can we help ensure wood is a 'sustainable' resource for the future?

Natural Wood (wood cut and used straight from the tree)

WEEK 7

There are two main categories of natural woods; **1) Softwoods** (like Pine & Fir) **2) Hardwoods** (like Oak & Mahogany)



Engineered Wood/Manufactured Board

WEEK 8

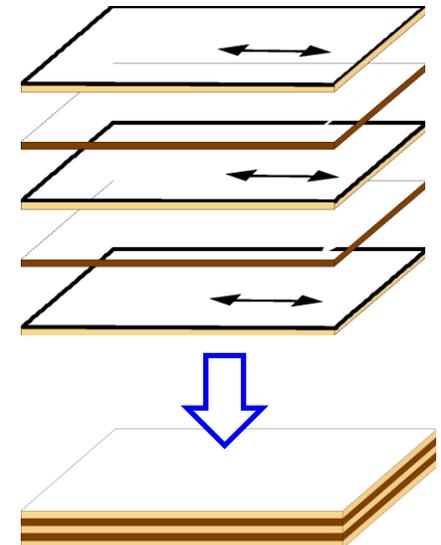
Manufactured board or 'engineered wood' is made from fibres, chippings, blocks or layers of natural wood bonded together with resin (a type of glue). **Manufactured board** is useful because;

- it uses up much of the waste wood, sawdust etc from sawmills
- it can be made into bigger sheets than natural wood (which is limited by the size of the tree)
- It is less prone to warping & bending

One common type of manufactured board is **Plywood**, which is made up of thin plies (layers) of natural wood which are compressed and glued together. The plies are arranged so that the grain in each layer is at 90° to the grain in the layers on either side. This makes plywood especially strong for its weight. Plywood always has an odd number of layers so that the grain on the outer plies matches. Plywood is easy to cut and shape and gives a good finish when varnished or painted.

Other types of manufactured board include MDF (Medium Density Fibreboard) and chipboard which are produced by bonding small particles of wood together with resin.

Manufactured board is supplied in large sheets up to about 3m x 2m in size.



Textiles

WEEK 1: Safety Rules in Textiles

To work safely in Textiles and to prevent accidents from occurring, safety rules must be followed at all times:

- Walk around the classroom, do not run
- Keep bags and chairs out of the walk ways
- Hold scissors with the blades closed if not in use
- Be careful when using needles and pins
- Always put equipment away in the correct place
- Wear goggles when using the sewing machine
- Only 1 person at a machine at one time
- Concentrate at all times, especially when using the machine
- Be careful with the hot iron
- Turn off electrical equipment when finished
- Sensible behaviour at all times

WEEK 2: Risk/hazards assessment

- Identify the risks of each practical lesson and safety rules that you will need to follow.
- Produce a table with the following headings:
Process Risks/Hazards Safety rule

WEEK 3: Design specification

- Aesthetics: What would you like it to look like?
- Consumer: Who could the product be designed for?
- Cost: How much will it cost to make and sell?
- Environment: What environmental impact would the product have?
- Safety: How can you make sure the product is safe to use?
- Size: What size could you make it?
- Function: How and where could it be used?
- Materials/Manufacture: What could it be made from and how will it be made?

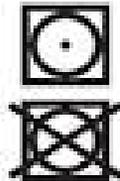
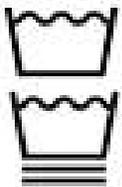
WEEK 4: The 6 R's

- Rethink: Design in a way that considers people and the environment
 - Refuse: Choose not to buy a material or product if you don't really need it
 - Reduce: Cut down the amount of material and energy that you use
 - Recycle: Reprocess a material or product and make something else
 - Repair: When a product breaks down or doesn't work properly repair it
- Extension Task:** Research different recycling symbols. Draw and label 3 different ones and name the products they can be found on



Extension Task: Labels on clothing

The labels on clothes use a variety of symbols to explain how to care for them. Copy out the symbols and explain what they mean:



Textiles

WEEK 5: Decorative Techniques

Applique - A piece of fabric that is sewn or ironed on to another piece of fabric.

Reverse Applique - Two pieces of fabric with the top fabric having a shape cut into it showing the second piece of fabric.

Couching – zig zag stitch encasing a piece of thread

Ribbon Applique – Sewing on a piece of ribbon for decorative purposes

Extension Task: Research and find images of textiles products that have been decorated. Produce an information page with images of decorative techniques and explain how they have been created.

WEEK 8:

Machine Stitching

Straight Stitch

This is where you the sewing machine produces a straight line stitch. Through the fabric in one line. It is the simplest machine stitch.

Decorative Stitch

These are stitches combination of **stitch** and thread produces quite a **variety of textural effects**.



WEEK 7: Key Terms

Natural Fabrics Cloth made from natural substances, such as; Cotton and linen from plants, wool from goats and sheep and leather from cows' skin.

Man-made Fabrics Cloth made from man made chemicals, usually different forms of plastic, such as Polyester, Nylon, Viscose and Lycra. All these are made from oil.

Recycled Fabrics – fabrics that have been made from recycled materials

Thread Thin strands of fabric wound tightly together. Used with a needle to hold two pieces of fabric together permanently.

Sample A collection of small pieces of fabric machining styles used to try out different ideas on.

Extension Task:

Identify the different fabrics used for the clothing that you wear. Produce a chart that shows the item of clothing, the fabric and whether it is made using natural fibres or man-made fibres.

WEEK 6: Equipment and Materials

Sewing machine - A machine using electricity to sew together fabrics. It can use a straight stitch or decorative stitch to sew fabric together.

Fabric Scissors - Special sharp scissors used for cutting fabric only.

Pins – to secure 2 pieces of fabric together temporarily

Poly Cotton – Man Made material

Unpicker - To unpick stitching

Elastic – stretchy material

Ribbon – Material used to add decoration and/or tie the room tidy together



Physical Checklist

Facial Expression	Using your face to communicate emotions and thoughts
Body Language	Using your body to communicate thoughts and feelings
Gesture	Using your body, head or hands to express emotion/meaning
Eye Contact	Looking at another person or the audience to communicate a message or meaning
Levels	Using height and positioning on stage to communicate status/meaning

You must learn these key definitions that will be used throughout your drama lessons. Try the following:

- Look, Cover, Copy, Write
- Creating a poster
- Creating flashcards
- Create pictures to represent the key words

Challenge Tasks...

Write a review of a lesson that uses WWW/EBI for how you used your drama skills

Create a poster including the Drama Lesson Expectations

Explorative Techniques

Still Image	A moment of action frozen in time, like a photograph
Narration	A performer describing what is happening/telling the story to the audience
Thought Tracking	When an actor speaks their inner thoughts and feelings on stage, all other actors are frozen on stage
Hot seating	Staying in character and answering questions truthfully – and seriously!

Vocal Checklist

Volume	Loud/quiet
Pitch	High/low
Pace	Speed, fast/slow
Pause	A temporary stop
Tone	Pitch, strength, quality of voice

Please remember:

- Be kind**
- Be brave**
- Try out new ideas**
- Respect the work of others**
- Focus and concentrate**
- Do your best**

DRAMA YEAR 8 TERM 1

Textual or script writing devices (advanced)

You will find these in some of the texts we study this year but you can also use these in your own devised or improvised work.



Narrator

An actor describing what is happening/telling the story.

Monologue

A piece of text performed by one actor.

Choral Speech

A number of actors speaking together at the same time.

Flashback

Showing a time period in the past.

Direct Address

Speaking out to the audience, addressing them/breaking the Fourth wall.

Multi-role

Actors playing more than one character in a performance.

You must learn these key definitions that will be used within your drama lessons. Try the following:

- Look, Cover, Copy, Write
- Creating a poster
- Creating flashcards
- Create pictures to represent the key words or scenes
- Write a script

Challenge Tasks...

Write a script that uses these advanced techniques.

Create a story board or set of images that use some of these advanced devices.

Physical skills (advanced)

Synchronised Movement

How you move your body with unison with another performer

Posture

Position you hold your body upright when standing/sitting or slumped to show defeat or fear etc

Explorative Techniques (advanced)

(use these in your practical work and in script writing to deepen your approach)

Cross Cutting

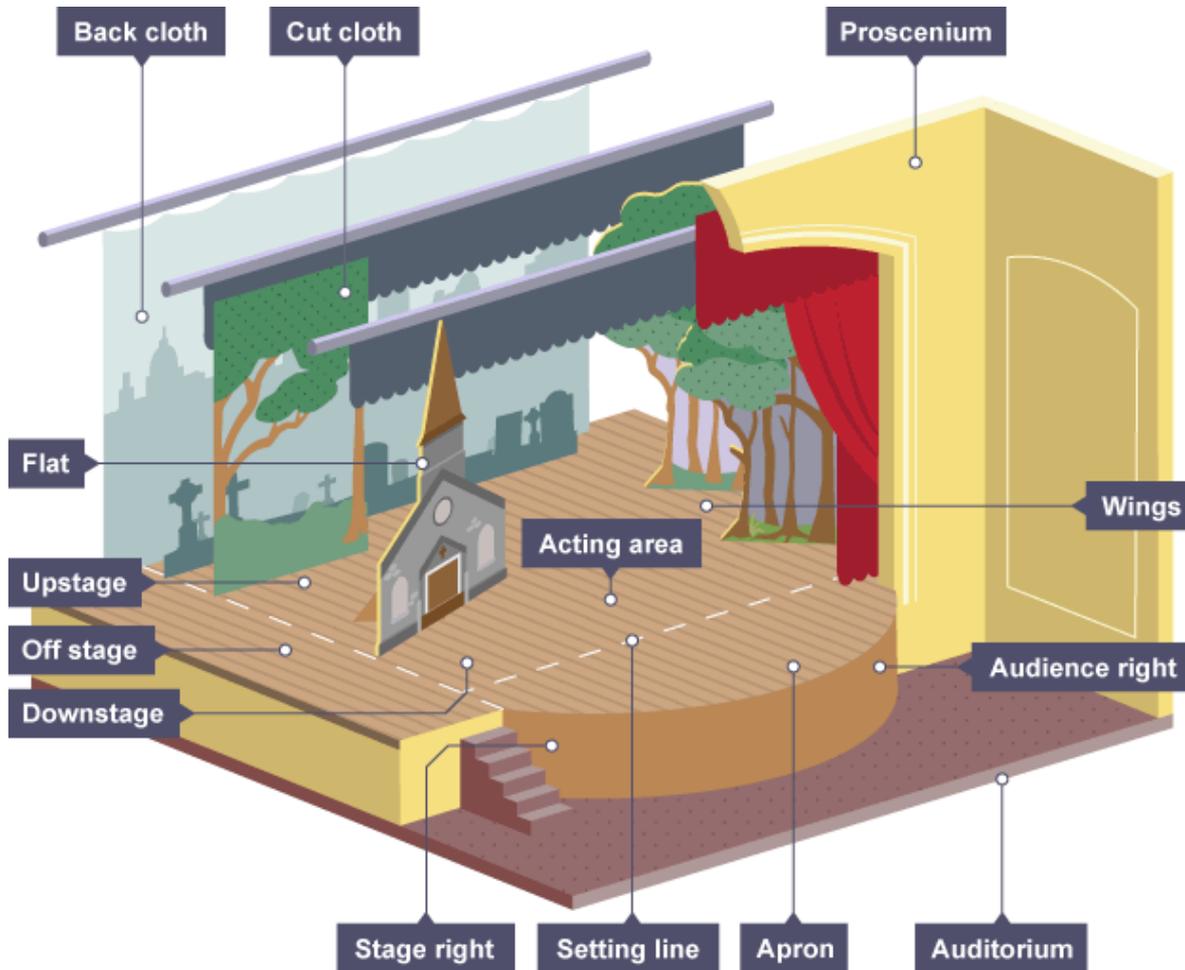
Split stage, action on one side and frozen on the other. You can then create drama that goes forwards and backwards in time.

Role Play

Scenes which include speaking and movement to communicate believable characters.

The Performance Space

<https://www.bbc.co.uk/bitesize/guides/z26bjxs/revision/3>



Staging Techniques

Split Stage

The stage is divided in some way to show two different locations. E.g. a character is upstairs in their bedroom while another character is downstairs.

Flashback

This is also a good device to link to split stage.

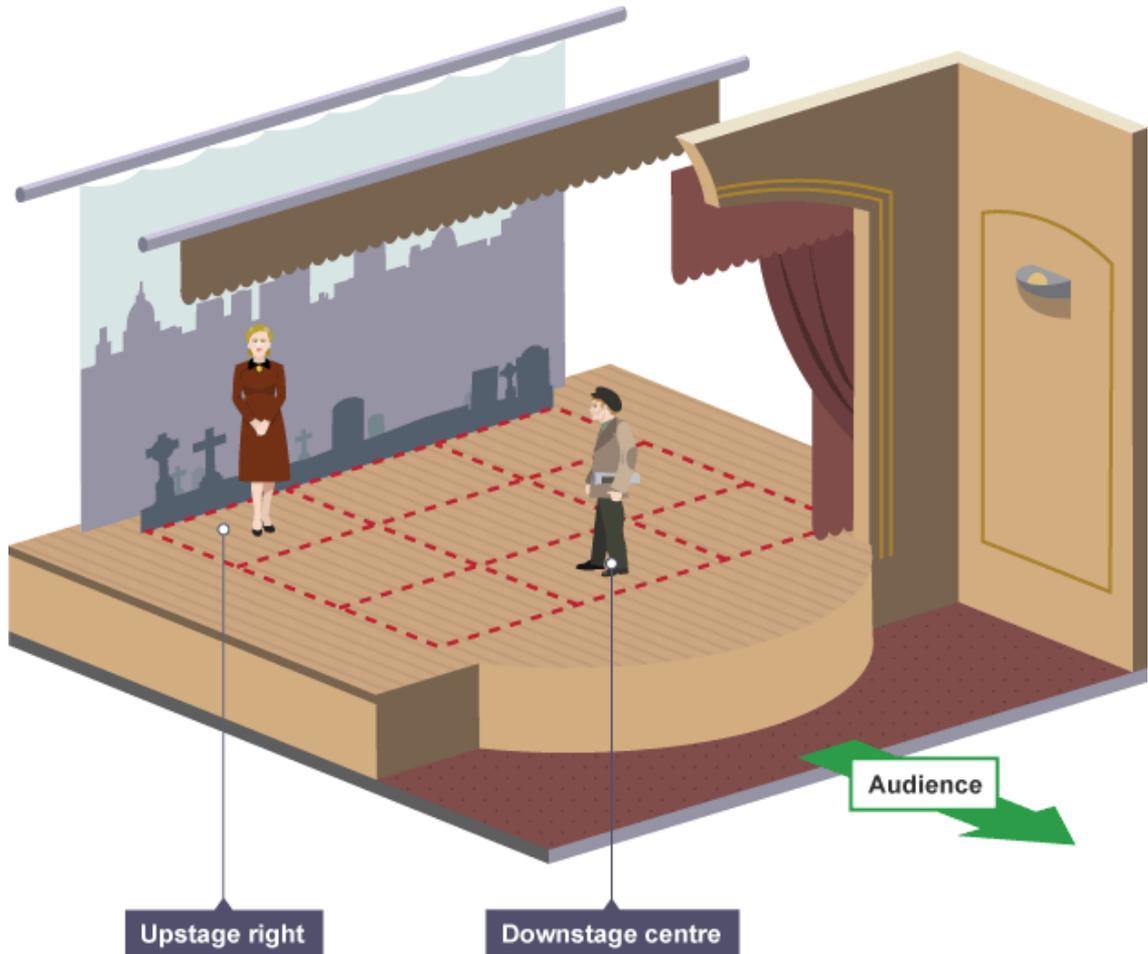
Challenge Tasks...

Learn and use these staging areas in your drama lessons.

Write a script that uses these staging areas and link it to split stage.

The Performance Space

<https://www.bbc.co.uk/bitesize/guides/z26bjxs/revision/3>



Stage Areas

Back Stage		
Upstage Right (USR)	Upstage Centre (USC)	Upstage Left (USL)
Centrestage Right (CSR)	Centrestage (CS)	Centrestage Left (CSL)
Downstage Right (DSR)	Downstage Centre (DSC)	Downstage Left (DSL)
House Left	Audience (House)	House Right

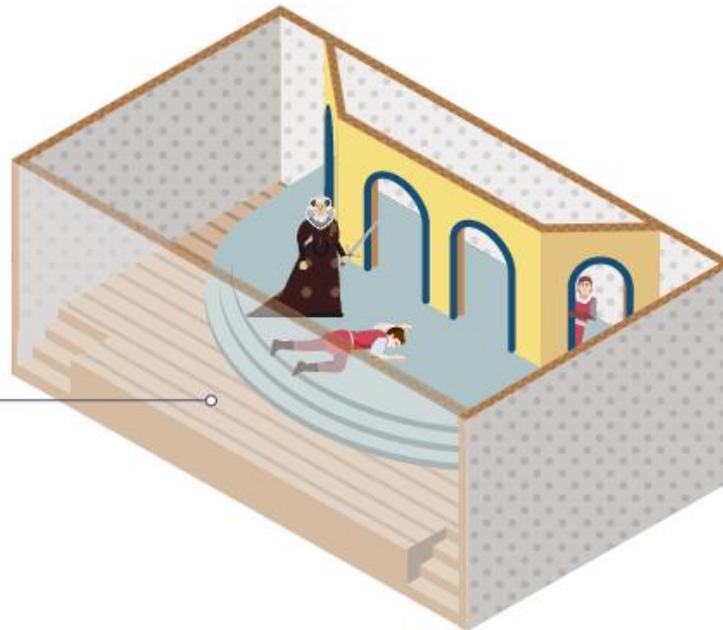
Challenge Tasks...

Learn and use these staging areas in your drama lessons.

Write a script that uses these staging areas.

The Performance Space

<https://www.bbc.co.uk/bitesize/guides/zygqsbk/revision/1>



The fourth wall

Challenge Tasks...

Create in lessons drama pieces where the audience has to be quiet and just observe.
Create in lessons drama pieces where the audience participation is vital to the piece.

What is the fourth wall in drama?

The **fourth wall** is like an invisible screen or wall between the actors and audience. Imagine the stage as a box with one side open where the audience sit.

Drama performances where the audience are **passive** observers is said to keep the fourth wall intact. There's no direct contact between actors and audience.

On the other hand something like pantomime breaks the fourth wall as we are regularly spoken to as an audience.

Drama Lesson Expectations

Please learn and follow these expectations as they will help us all enjoy and learn!

- Please enter the drama or dance studio **quietly**
- Please **do not throw** anything during the lesson (blocks/bottles)
- Please place your bags and/or shoes **sensibly** in the correct area
- Please complete the **DO IT NOW** task as instructed
- Please use focus and concentration to **maximise** or make the most of discussion and rehearsal time
- **Do not shout out when others perform**
- Please use **WWW/EBI** to give constructive/useful feedback
- Please speak to each other with **respect and consideration**
- **Apologise** if a mistake is made
- Please **try out new ideas** in rehearsal to be ready for 'show time'
- **Try not to laugh** if something goes wrong in a performance
- **Be brave**
- **Be kind**

Week 1

Spellings:

prologue dramatic
destiny tense
Chorus violent
audience
contemporary
Shakespeare
theatre
emphasis
stereotype
director effective

'Writing:

Write the blurb for your favourite film as a sonnet.

Explode this quotation:

'The fearful passage of their death mark'd love.'

Key words:

sonnet = a 14 line poem

rhyme = when words sound the same

rhythm = when syllables and sounds are used to make a rhythm

quatrain = four lines of poetry with patterns of rhyme and rhythm

sestet = six lines of poetry with rhymes and rhythm

synopsis = a short version of a story

stichomythia = short lines in Shakespeare that show us characters are arguing

Week 2

Spellings:

teenager patriarchy
adolescent gender
relationship
passionate
benefit earnest
disadvantage
tradition
matriarch culture

Writing:

Write an invitation to
Juliet's engagement
party.

Key words:

Romeo Juliet Benvolio
Montague Capulet
Friar Lawrence
manipulation
tradition
persuasion = using
AREDFOREST
convince = to persuade
parlance = speech
stereotype

Explode this quotation:

'The earth has swallowed all my hopes
but she' Capulet about his daughter.

Week 3

Spellings:

Innocent / angelic /
loyal / faithful /
attractive / maternal
/ honourable /
obedient / beautiful /
patriarchy / dowry

Writing:

Write a character
profile for you favourite
character in the play.

Key words:

dowry = a gift or sum of money
that was given to the groom's
family by the bride's family.

Benvolio

Paris

Abram

Tybalt

Verona

Italy

Explode this quotation:

'But soft, what light through yonder window
breaks,
It is the East and Juliet is the sun.'

Week 4

Spellings:

tragedy / romantic /
ideal / audience /
Jacobean /
contemporary /
misogyny

Writing:

Research women's
lives in the 1500s and
write a report.

Explode this quotation:

'My only love drawn from my only hate'

Key words:

pun = using the fact that a word
may have more than one meaning
to be funny.

iambic pentameter = patterns of
ten syllables in lines of poetry

religious symbolism = ideas that
we associate with Bible stories -
like the apple or the serpent

dramatic irony = when the
audience know things that the
characters don't know - like we
know about Juliet's secret
marriage to Romeo.

personification = when living
characteristics are given to
something inanimate.

Week 5 (Revision)

Being female in the 1500

In the 1500s few women were able to be as free as we are today.

Life Expectancy:

Women and girls did not live as long as we do today. Many women died from childbirth and complications from pregnancy. With little or no medical knowledge or treatment, minor infections and common diseases, like measles, led to death. In addition to this there was no reliable form of contraception so women became pregnant far more often as they could not plan their family. As a further problem girls as young as 14 became married.

Marriage

Fathers, uncles and brothers arranged marriages for their daughters. When males control everything we call this patriarchal. If the woman was lucky their father would make sure that their future husband had enough money to support her and the future family. Fathers would also look for a husband that was socially as high up as possible. You would be very lucky if your opinion was requested about your future husband. Fathers considered female children as a burden, someone that they had to pay for until they found a husband to take their place. It was almost as if females were property to be bargained with and exchanged. When a girl married her husband might receive a dowry from her family for taking the girl on. Refusing an arranged marriage could lead to your family disowning you.

Finances

Women and girls did have some 'value'. However this value was measured by the girls' attractiveness, virginity and behaviour. These rules did not apply to males. Rich families might provide a large and tempting dowry. All money and property belonged to the husbands. If your husband died, you might inherit his property, but it was more likely that you and any property would be returned to the male members of the family.

Family Life

The female role was to literally look pretty and provide children, particularly male heirs. Rich women would have had maids and helpers but poor women would have had to cope with all domestic duties. It was common for wealthy women to employ 'wet-nurses'. These were poorer women who had recently had children of their own. This wet nurse would breast feed and tend to the baby. Many wet nurses had experienced the loss of their own child and often these relationships became closer than the biological mother.

Week 6

Spellings:

suicide / banishment
/ execution /
exploitation /
vulnerable /
humour fickle
religion tension
comparison mother
figure
contrast banishment
justify amoral
suspense

Writing:

Write an essay
discussing if Romeo
and Juliet is a
Tragedy.

Explode this quotation:

'A plague on both your families, they have made
worm's meat out of me.'

Key words:

imperatives = commands

euphemism = avoiding swearing
by using more appropriate words
like 'blast'

parallelism = when sentences are
constructed in the same way

couplet = pairs of lines of poetry
that rhyme

nominative determinism = when
names suggest identity or
character

YEAR 8 FRENCH – AUTUMN TERM 1

1	J'adore aller à Paris, en France. <i>I love going to Paris, in France.</i>
2	Je vais en Espagne avec mes copains. <i>I go to Spain with my friends.</i>
3	Il y a beaucoup de choses à faire. <i>There are lots of things to do.</i>
4	On peut visiter les monuments. <i>You can visit the monuments</i>
5	Normalement, je fais du ski avec mon frère. <i>Normally, I go skiing with my brother</i>
6	D'habitude, je vais à la plage et je me bronze. <i>Usually, I go to the beach and I sunbathe.</i>
7	L'année dernière, je suis allé en France et j'ai fait beaucoup de sport. <i>Last year I went to France and I did lots of sport.</i>
8	L'été dernier, je suis allée en Italie et j'ai mangé des plats typiques. <i>Last summer, I went to Italy and I ate typical dishes.</i>
9	À mon avis, c'était amusant car j'adore la culture italienne. <i>In my opinion, it was fun because I love the Italian culture.</i>
10	Il fait du soleil et il fait chaud. <i>It is sunny and hot.</i>
11	Il faisait froid. <i>It was cold.</i>

A	Français	Anglais
1	Je vais	I go
2	En France	To France
3	En Angleterre	To England
4	En Espagne	To Spain
5	En Italie	To Italy
6	En Allemagne	To Germany
7	Au Maroc	To Morocco
8	Au Canada	To Canada
9	Au Portugal	To Portugal
10	Aux États-Unis	To the USA

B	Français	English
1	On peut	You can
2	Visiter les monuments	Visit the monuments
3	Faire du sport	Do sport
4	Faire les magasins	Go shopping
5	Faire des promenades	Go for walks
6	Nager à la piscine	Swim in the swimming pool
7	Rester à l'hôtel	Stay at the hotel
8	Aller aux restaurants	Go to restaurants
9	Manger des plats typiques	Eat typical dishes
10	Aller à la plage	Go to the beach
11	Se bronzer	Sunbathe
12	Acheter des souvenirs	Buy souvenirs

Present tense verbs

C	Français	English
1	Je visite	I visit
2	Je fais	I do
3	Je reste	I stay
4	Je nage	I swim
5	Je vais	I go
6	Je mange	I eat
7	Je bois	I drink
8	Je me bronze	I sunbathe
9	Il fait	It is + weather

Time phrases

C	Français	English
1	Normalement	Normally
2	D'habitude	Usually
3	En été	In summer
4	La semaine dernière	Last week
5	L'année dernière	Last year
6	L'été dernier	Last summer

Perfect tense verbs

C	Français	English
1	J'ai visité	I visited
2	J'ai fait	I did
3	Je suis resté(e)	I stayed
4	J'ai nagé	I swam
5	Je suis allé(e)	I went
6	J'ai mangé	I ate
7	J'ai bu	I drank
8	Je me suis bronzé(e)	I sunbathed

Imperfect tense verbs

C	Français	English
1	C'était	It was
2	Il faisait	It was + weather

Opinions

C	Français	English
1	À mon avis	In my opinion
2	D'après moi	For me
3	Pour moi	For me
4	Selon moi	According to me
5	Je pense que	I think that
6	Je crois que	I believe that
7.	Je trouve que	I find that

Adjectives

	Français	English
1	Génial	Great
2	Chouette	Great
3	Amusant	Fun
4	Extraordinaire	Amazing
5	Incroyable	Incredible
6	Nul	Rubbish
7	Ennuyeux	Boring
8	Affreux	Awful

Connectives

	Français	English
1	Et	And
2	Mais	But
3	Aussi	Also
4	En plus	In addition

Weather – il fait/ il faisait

	Français	English
1	Du soleil	Sunny
2	Chaud	Hot
3	Froid	Cold
4	Beau/mauvais temps	Good/bad weather

YEAR 8 FRENCH – AUTUMN TERM 2

1	On peut écouter de la musique pop. <i>We can listen to pop music.</i>
2	On peut aller au cinéma le weekend. <i>We can go to the cinema at the weekend.</i>
3	Je regarde la télé-réalité tous les jours. <i>I watch reality TV everyday.</i>
4	Hier, je suis allé au cinéma et j'ai regardé un film. <i>Yesterday I went to the cinema and I watched a film.</i>
5	À mon avis, c'était amusant. <i>In my opinion, it was fun.</i>
6	Tu veux aller en centre ville? <i>Do you want to go into the town centre?</i>
7	Oui, on peut faire du shopping, cela sera chouette! <i>Yes, we can go shopping, it will be great!</i>

A	Français	English
1	On peut	You/we can
2	Tu veux....?	Do you want?
3	Écouter de la musique	(to) Listen to music
4	Regarder la télé	(to) Watch TV
5	Regarder un film	(to) Watch a film
6	Aller au cinéma	(to) Go to the cinema
7	Manger du popcorn	(to) Eat popcorn
8	Boire du coca	(to) Drink Coca Cola
9	Lire un livre	(to) Read a book
10	Sortir avec des amis	(to) Go out with friends
11	Aller en centre-ville	(to) Go into the town centre

B	Français	English
1	Les émissions de sport	Sports programmes
2	Les dessins animés	Cartoons
3	Les documentaires	Documentaries
4	les feuilletons	Soap operas
5	La télé-réalité	Reality TV
6	Les films d'horreur	Horror films
7	Les films romantiques	Romantic films
8	Les comédies	Comedies
9	Les livres d'aventure	Adventure books
10	Les livres de fantaisie	Fantasy books

Present tense verbs

D	Français	English
1	J'écoute	I listen
2	Je fais	I do
3	Je regarde	I watch
4	Je nage	I swim
5	Je vais	I go
6	Je mange	I eat
7	Je bois	I drink
8	Je lis	I read
9	Je sors	I go out

Imperfect tense

D	Français	English
1	C'était	It was

Time phrases

	Français	English
1	Normalement	Normally
2	D'habitude	Usually
3	Quelquefois	Sometimes
4	Tous les jours	Everyday
5	En été	In summer
6	La semaine dernière	Last week
7	L'année dernière	Last year
8	L'été dernier	Last summer
9	Hier	Yesterday

Perfect tense verbs

E	Français	English
1	J'ai écouté	I listened
2	J'ai fait	I did
3	J'ai regardé	I watched
4	J'ai nagé	I swam
5	Je suis allé(e)	I went
6	J'ai mangé	I ate
7	J'ai bu	I drank
8	J'ai lu	I read
9	Je suis sorti(e)	I went out

Future tense verbs

Français	English
Je vais + infinitive	I'm going to
Use the infinitives/activitie in box B	

Opinions

	Français	English
1	À mon avis	In my opinion
2	D'après moi	For me
3	Pour moi	For me
4	Selon moi	According to me
5	Je pense que	I think that
6	Je crois que	I believe that
7	Je trouve que	I find that

Adjectives

	Français	English
1	Génial	Great
2	Chouette	Great
3	Amusant	Fun
4	Extraordinaire	Amazing
5	Incroyable	Incredible
6	Nul	Rubbish
7	Ennuyeux	Boring
8	Affreux	Awful

Connectives

	Français	English
1	Et	And
2	Mais	But
3	Aussi	Also
4	En plus	In addition

Intensifiers

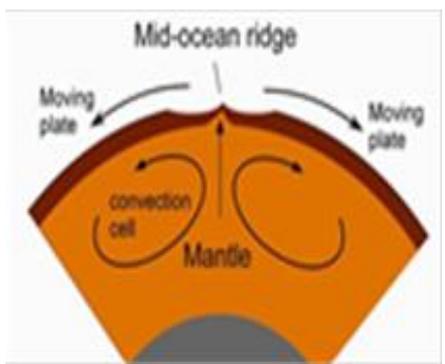
	Français	English
1	Très	Very
2	Assez	Quite
3	Vraiment	Really
4	Trop	Too



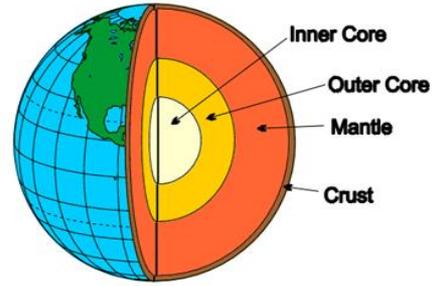
BLIZZARD	Strong winds that blow snow making it very difficult to see where you are going
EARTHQUAKE	A violent shaking of the earth's crust
FLOOD	When a river gets too full and overflows its banks
TSUNAMI	A tidal wave that occurs because of an earthquake in the sea bed
TORNADO	A column of very strong wind
FOREST FIRE	When lightning sets fire to trees and plants
HURRICANE	A storm that occurs tropical areas and has very heavy rain and strong winds
EPIDEMIC	When diseases spread across a large area
VOLCANO	An opening in the earth's crust through which molten lava, ash, and gases are erupted
DROUGHT	When rain does not fall for a long time so there is not enough for plants and animals to survive

EXTRA: Could you add some more examples of hazards to this list, make sure you include a definition too.

C Convection Currents
Heat from the core causes convection currents in the mantle. These cause the mantle to move as it heats and cools. These currents slowly move the crust.



B Structure of the Earth
The earth has 4 layers
The inner core
The outer core
The mantle
The crust
The crust is split into major fragments called **tectonic plates**. There are 2 types: **Oceanic** (thin and younger but dense) and **Continental** (old and thicker but less dense)
These plates move and where they meet you get tectonic activity (volcanoes and earthquakes).

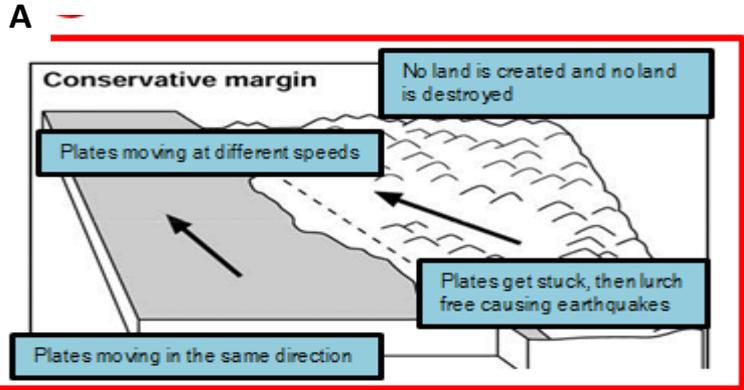


EXTRA: Research and record a list of **ten natural hazards** that have occurred since 2018. Write the natural hazard, location and date.

EXTRA - Watch the news - have there been any natural hazards affecting the world this week? Where have they been? What has happened?

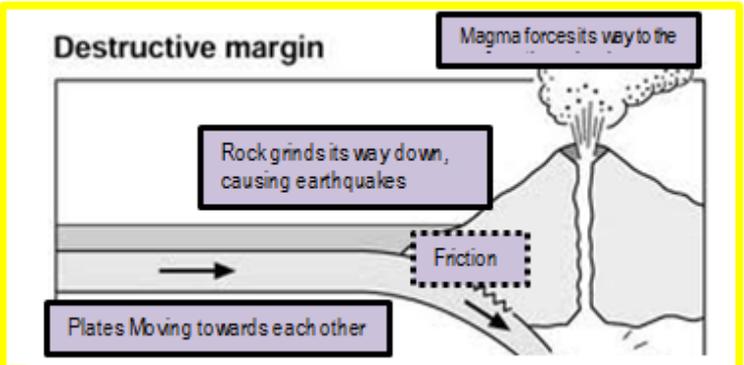
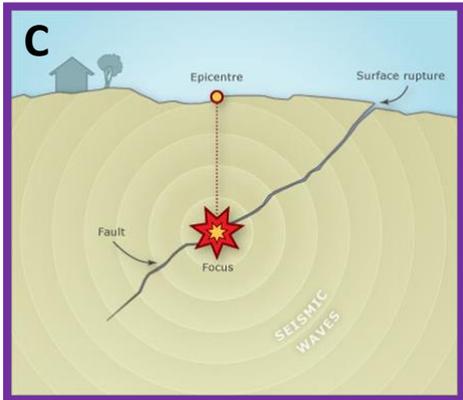
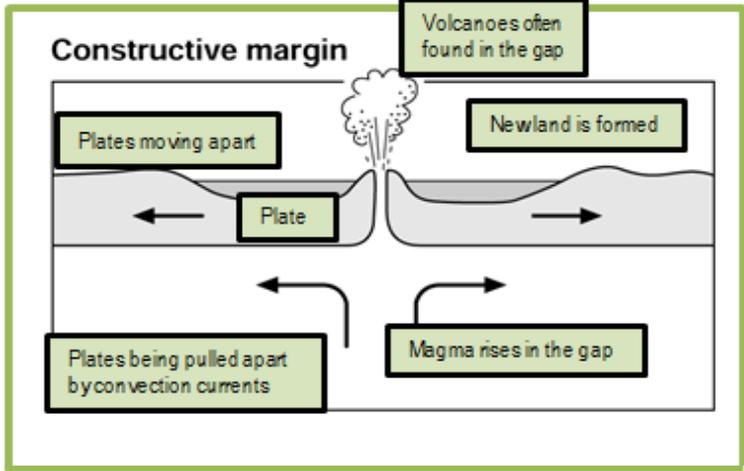
Scientists have developed the theory of **plate tectonics** to explain how the Earth's crust behaves and the landforms that are created as a result. The Earth's outer skin – the crust is divided into many separate slabs called plates – these move very slowly in relation to each other. Earthquakes and volcanoes are found along the plate margins

D KEY TERMS
NATURAL HAZARD - are natural (as opposed to man-made) events that kill people or damage property or the environment.
TECTONIC PLATE – a slab of the Earth's crust that floats on the mantle
PLATE MARGIN – the place where plates meet
CONSTRUCTIVE PLATE – where two plates move towards each other
DESTRUCTIVE PLATE – where two plates move away from each other
CONSERVATIVE PLATE – where two plates slide past each other



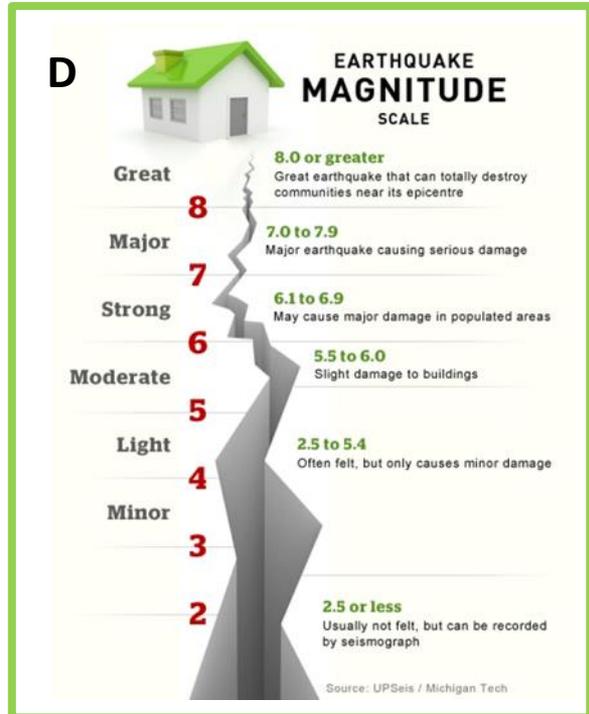
B EARTHQUAKES

- An earthquake is the shaking or vibration of the Earth's crust due to pressure at a plate boundary.
- Earthquakes can happen at any plate boundary.
- Plates do not always move smoothly alongside, under or beneath each other. They sometimes get stuck. When this happens pressure builds up and, when this pressure is released, an earthquake occurs.
- Every earthquake has an epicentre and focus
- The focus is the point in the Earth's crust where the pressure between the two plates is released. It is underground.
- The epicentre is the point on the surface of the crust above the focus



EXTRA: Calculate how more powerful a magnitude 8 earthquake is than a magnitude 4 earthquake

EXTRA: Who are the USGS and why are they relevant to the study of 'our risky planet?'





A Earthquakes and Volcanoes

Volcanoes	Earthquakes
<ul style="list-style-type: none"> • Constructive margins – Hot magma rises between the plates e.g.. Iceland. Forms Shield volcanoes • Destructive margins – an oceanic plate subducts under a continental plate. Friction causes oceanic plate to melt and pressure forces magma up to form composite volcanoes e.g. the Pacific Rim 	<ul style="list-style-type: none"> • Constructive margins – usually small earthquakes as plates pull apart. • Destructive margins – violent earthquakes as pressure builds and is then released • Conservative margins – plates slide past each other. They catch and then as pressure builds it is released e.g. San Andreas fault. .

Extra: Using your earthquake case studies, assess the extent to which primary effects are more significant than secondary effects.

B Effects of Tectonic Hazards

Primary effects happen immediately. Secondary effects happen as a result of the primary effects and are therefore often slightly later.

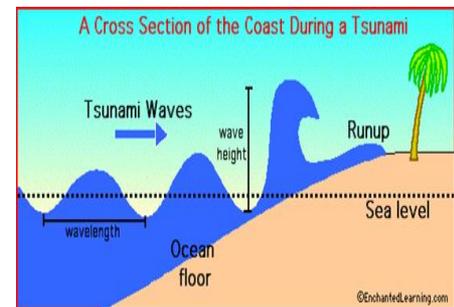
Primary - Earthquakes	Secondary - Earthquakes
<ul style="list-style-type: none"> • Property and buildings destroyed • People injured or killed • Ports, roads, railways damaged • Pipes (water and gas) and electricity cables broken 	<ul style="list-style-type: none"> • Business reduced as money spent repairing property • Blocked transport hinders emergency services • Broken gas pipes cause fire • Broken water pipes lead to a lack of fresh water
Primary - Volcanoes	Secondary - Volcanoes
<ul style="list-style-type: none"> • Property and farm land destroyed • People and animals killed or injured • Air travel halted due to volcanic ash • Water supplies contaminated 	<ul style="list-style-type: none"> • Economy slows down. Emergency services struggle to arrive • Possible flooding if ice melts • Tourism can increase as people come to watch • Ash breaks down leading to fertile farm land

Extra: With the help of a diagram explain what happened to cause the Indian Ocean earthquake 2004

C Responses to Tectonic Hazards

Immediate (short term)	Long-term
<ul style="list-style-type: none"> • Issue warnings if possible • Rescue teams search for survivors • Treat injured • Provide food and shelter, food and drink • Recover bodies • Extinguish fires 	<ul style="list-style-type: none"> • Repair and re-build properties and infrastructure • Improve building regulations • Restore utilities • Resettle locals elsewhere • Develop opportunities for recovery of economy • Install monitoring technology

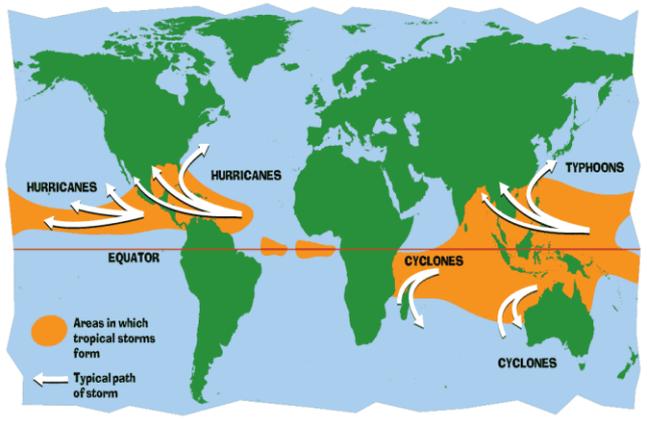
D Tsunami - A long, high sea wave caused by an earthquake or other disturbance





A Tropical Storms

Occur in low latitudes between 5 and 30 degrees north and south of equator. Ocean temperature needs to be above 27 degrees C. Happen between summer and autumn



Extra - have a look at the National Hurricane Centre website <https://www.nhc.noaa.gov/> and see what tropical storm activity they are monitoring

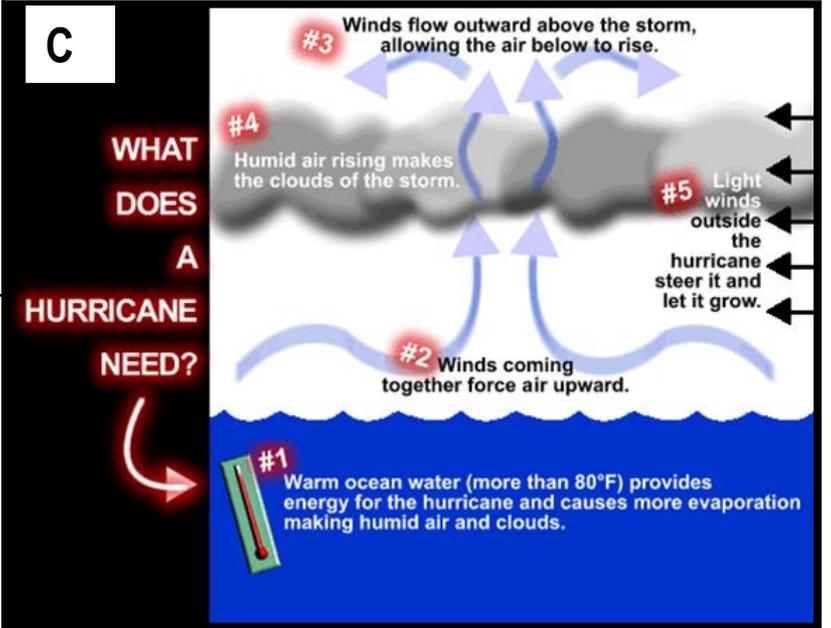
B HURRICANES

A tropical storm is an intense low pressure weather system that can last for days to weeks within the tropical regions of our planet. They are known by many names, including **HURRICANES** (North America), **CYCLONES** (India) and **TYPHOONS** (Japan and East Asia)
The eye of the storm is very calm with clear skies, no rain or wind.

Extra - write a weather forecast that describes what happens before, during and after the storm

D Reducing the risk of tropical storms

Prediction	Planning	Protection
Monitoring wind patterns allows path to be predicted. Use of satellites to monitor path to allow evacuation	Avoid building in high risk areas Emergency drills Evacuation routes	Reinforced buildings and stilts to make safe from floodwater Flood defences e.g. levees and sea walls



Extra - GCSE Questions: Give one condition that is needed for a tropical storm to form. (1)
STRETCH: Give two reasons why tropical storms eventually lose their energy. (2)



Extra - Sketch this diagram adding labels to suggest what is happening. Can you find another satellite image of a tropical storm?

St Cuthbert Mayne History Department: Year 8 Knowledge Organiser One - Wars of the Roses and the rise of the Tudors

Key Term	Definition
Renaissance	The 'rebirth' of classical learning and ideas.
Dynasty	A family that rules a country
Civil War	A war where a country fights among itself.
York	The family represented by the white rose
Lancaster	The family represented by the red rose.
Henry VI	The insane king, his weak rule sparked the Wars of the Roses.
Edward IV	The first king of the House of York
Tudor	The family who challenged the House of York for the throne

Key Term	Definition
Usurper	Someone who takes the throne by force.
Richard III	Brother of Edward IV, he stole the throne from his nephew.
The Princes in the Tower.	Edward V and Richard, Duke of York, These were the sons of Edward IV
Infanticide	The murder of children
Battle of Bosworth	The battle where Henry VII won the throne of England.
Avaricious	A person who is greedy
Heir	A child of the king, next in line to the throne.

Why have a KO?

In History there are some words you have to know. For each topic you cover there will be 15 key words to learn.

You will be tested on these on a regular basis.

How do I use my KO?

Your teacher will tell you when you need to study for a test. It's really simple:

Read
Cover
Write

Repeat the process until you know the key terms and their definitions.

Enjoy!

St Cuthbert Mayne History Department: Year 8 Knowledge Organiser Two - The reign of Henry VIII

Key Term	Definition
Catholic	Followers of the Roman Catholic religion
Protestant	A group of Christian who challenged the teaching of the Catholics.
Pope	Head of the Catholic church
Martin Luther	A German monk who started the Protestant movement.
Monasteries	A community of monks.
Reformation	A major / significant change (eg Catholic to Protestant faith)
Annulment	A judgement that states a marriage never happened.
Dissolution	To get rid of something.

Key Term	Definition
Divorce	To legally end a marriage
Tyrant	To rule without listening to anyone else.
Henry VIII	King of England, 1509 - 1547.
Katherine of Aragon	Henry's first wife.
Anne Boleyn	Henry's second wife.
Treason	To act against the monarch.
Divine Right	Belief that the king's power came from God.

Why have a KO?

In History there are some words you have to know. For each topic you cover there will be 15 key words to learn. You will be tested on these on a regular basis.

How do I use my KO?

Your teacher will tell you when you need to study for a test. It's really simple:

- Read
- Cover
- Write

Repeat the process until you know the key terms and their definitions.
Enjoy!

St Cuthbert Mayne History Department: Year 8 Knowledge Organiser Three - The Mid Tudor Crisis

Key Term	Definition
Edward VI	Son of Henry VIII, king from 1547 - 1553
Mary I	The first women to rule England alone, 1553 - 1558.
Heresy	To disagree with the teaching of the church
Martyr	A person who dies for their beliefs.
Philip II of Spain	Mary I's husband
Counter Reformation	Mary's attempts to make England Catholic again.
Lady Jane Grey	Ruled for only 9 days.
The Burnings	Mary's strategy to convert Protestants

Key Term	Definition
Calais	The last piece of the English empire in France.
Archbishop Cranmer	Archbishop of Canterbury, the most important post in the CoE.
Torture	The use of force to gain answers.
France	England's traditional enemy.
Succession	Passing the throne onto a member of your family.
Treason	To act against the monarch.
Richard Foxe	Published the 'Book of Martyrs' , helped to create the image of 'Bloody Mary' . .

Why have a KO?

In History there are some words you have to know. For each topic you cover there will be 15 key words to learn. You will be tested on these on a regular basis.

How do I use my KO?

Your teacher will tell you when you need to study for a test. It's really simple:

- Read
- Cover
- Write

Repeat the process until you know the key terms and their definitions.
Enjoy!

St Cuthbert Mayne History Department: Year 8 Knowledge Organiser Four - The 'Gloriana?' The reign of Elizabeth I

Key Term	Definition
Elizabeth I	Second daughter of Henry VIII, queen of England, 1558 - 1603
Mary, Queen of Scots	Elizabeth's cousin, a potential heir to the throne.
Middle Way	An attempt to keep all religions happy in England.
Puritan	An extreme Protestant
Jesuit	An extreme Catholic.
Sir Francis Walsingham	Elizabeth's spymaster
Rescuant	A person who refused to attend the COE
Bible	The main book of the Christian faith

Key Term	Definition
Elizabeth I	Second daughter of Henry VIII, queen of England, 1558 - 1603
Mary, Queen of Scots	Elizabeth's cousin, a potential heir to the throne.
Middle Way	An attempt to keep all religions happy in England.
Puritan	An extreme Protestant
Jesuit	An extreme Catholic.
Sir Francis Walsingham	Elizabeth's spymaster
Rescuant	A person who refused to attend the COE
Bible	The main book of the Christian faith

Why have a KO?

In History there are some words you have to know. For each topic you cover there will be 15 key words to learn. You will be tested on these on a regular basis.

How do I use my KO?

Your teacher will tell you when you need to study for a test. It's really simple:

- Read
- Cover
- Write

Repeat the process until you know the key terms and their definitions.

Enjoy!

The power of Sparx for parents and carers

sparx

Be empowered to become a pivotal part of your child's education.

The challenge

Engaging young people with any homework can be tough, let alone tackling maths. At Sparx, we know that parents and carers can be very influential when it comes to homework, and that is why we are so keen for you to be involved in their maths learning journey.

What is Sparx?

In schools, Sparx Maths Homework automatically sets one hour of personalised learning for every student, every week.

Unique content, covering the KS3 and GCSE maths curriculum, is devised and written by our in-house teams. Over 33,000 hand-written questions are supported by more than 7,800 tutorial videos, which help explain concepts and encourage independent learning.



Receive reassurance

You will receive a weekly email keeping you up-to-date with your child's homework hand-in dates and what they are studying in the coming week.



Helpful videos

Your weekly emails contain a link to a topic-based video that can help you to understand the topic your child will be covering.



Personalised learning for every student

Our technology learns where students' strengths and weaknesses lie, and how long they take to complete different types of questions. It then determines which homework questions would help improve and consolidate their learning. Question difficulty is gradually increased to suit the learner and topics are repeated during the year to help them fully understand the skill for the long term.



Improves attainment

Additional teacher time and a bespoke learning experience drive both progress and attainment in maths.



Supports mental health

Progress in core subjects such as maths has a recognised effect on overall attainment. Tackling issues such as 'maths anxiety' and rewarding progress for all students creates confidence that is evidenced at a school-wide level.



Keeps your child motivated

Students collect XP (experience points) and are rewarded with mini-games.

Home Learning set weekly every Friday 16:00 and due every Thursday 08:00. If you have completed 30% by Monday, we recommend that you attend Bright SPARX.

“ I used to hate maths, now I want to do maths every day ”

Student from All Saints Academy

Bright SPARX clubs run every Monday and Tuesday from 15:10 – 16:10. Supervised by the Maths Department to help anyone who may have issues logging in or would like help on any aspect of the homework.

YEAR 8 MUSIC
AUTUMN TERM 1 TASKS

SAMBA

Please complete the following tasks for your Music Lessons using your 'Samba' Knowledge Organiser pages. There are THREE pages.

Try to write the tasks in your very best handwriting with the title (e.g. 'Week 1 - Music') and date at the top of your page. **Make sure you complete your KO every week even if you don't have a lesson** and remember, you should use your KO as a guide to learn and revise keywords and information - don't just copy it down!

	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
T A S K S	<p>Task: Learn about MAD TSHIRT (bottom of page 1). Write out the acronym, the keyword AND the definition clearly in your book.</p> <p>Also learn about SAMBA DRUMMING MUSIC. Can you summarise this style of music?</p>	<p>Task: Learn about RHYTHM.</p> <p>Copy out the table making sure you can identify the note name, draw the note symbol and explain the note value (length of the note).</p> <p>Also, learn about INSTRUMENTS/ TIMBRE and TEXTURE.</p>	<p>Task: Learn the key words and definitions of the following boxes:</p> <ul style="list-style-type: none"> - MELODY - DYNAMICS - TEMPO/TIME - STRUCTURE <p>Can you use these keywords to describe the music we are learning in class?</p>	<p>Task: Answer the QUESTIONS ABOUT MUSICAL FEATURES in clear sentences.</p> <p>Try to link these keywords back to your classroom learning.</p>	<p>Task: Look at page 3 of your Samba Knowledge Organiser at the KNOWLEDGE column.</p> <p>Create a mindmap of all the key features of Samba music and define them - turn your book landscape to complete this.</p> <p>Complete the table filling in the missing gaps of the notes.</p>	<p>Task: Staying on page 3 of your Samba Knowledge Organiser, complete at least 2 out of the 5 exercises on the APPLICATION column:</p> <ul style="list-style-type: none"> - outline of samba piece - 4-part polyrhythm - 4-beat ostinato - 3-beat ostinato - call and response rhythm

Music Knowledge Organise: Samba

Exploring Rhythm and Pulse



MELODY

Pitch – high and low sounds
 Improvisation – making music up on the spot (can be a melody (tune) or just a rhythm)

DYNAMICS

Piano - soft ***p*** *cresc.* ***f***
 Forte - loud
 Crescendo – gradually getting louder
 Diminuendo – gradually getting quieter
dim.

TEMPO/TIME

Metre – the number of beats in a bar
 Time Signature – found at the beginning of a piece of music and shows how many beats are in a bar. In the time signature below there are 2 beats in a bar. Samba music often is in 2/4 time. One bar

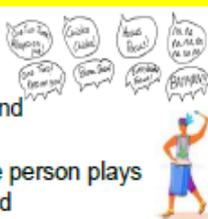


STRUCTURE

Intro/Outro – the start/end of the piece
 Groove – the main section of Samba
 Break – a link passage of music between sections

TEXTURE

Solo – one person on their own
 Monophonic – one layer of sound
 Unison – playing as one
 Call and response – where one person plays and the rest of the group respond



INSTRUMENTS/TIMBRE

Timbre - the type of instrument sound
 Percussion – an instrument that makes a noise by being hit, shaken or scrapped



Samba Drumming Music originates from Rio De Janeiro, Brazil in South America and is a fusion of Portuguese and African music. It is often heard at Carnivals and has a fast beat. Months are spent preparing floats and costumes for carnival. It plays a huge part in Brazilian culture. The band learns to play from memory and the leader plays an Apito whistle to signal when to change beats.

RHYTHM

Rhythm - a combination of notes of different durations
 Syncopation - an off-beat rhythm (not on the main beats)
 Polyrhythm – different rhythms played at the same time
 Ostinato (rhythmic ostinato) – a repeated rhythmic pattern



Whole Class Samba Polyrhythm

- Team 1: Tea _____ a cup of tea _____
- Team 2: Sugar shaker coffee maker
- Team 3: All I want is a bar of choc'late
- Team 4: Rice cakes coffee, cold chips and vindaloo

Note Name	Note Symbol	Note Value
Crotchet <i>Remember it... Tea</i>		1 beat
Pair of Quavers <i>Remember it... Coffee</i>		2 x 1/2 beats = 1
Four Semiquavers <i>Remember it... Cappuccino</i>		4 x 1/4 beats = 1
Two Semiquavers + one Quaver <i>Remember it... Lemonade</i>		2 x 1/4 and 1/2 = 1
One Quaver + two Semiquavers <i>Remember it... Blackcurrant</i>		1/2 and 2 x 1/4 = 1
Crotchet Rest <i>Remember it... Shh!</i>		1 beat rest

M	A	D	T	S	H	I	R	T
Melody	Articulation	Dynamics	Texture	Structure	Harmony	Instruments	Rhythm	Tempo/Time
the tune	how notes are played	loud/soft and any changes in volume	the layers of sound and how they fit together	sections of music and how they are organised	the chords used	types of instruments used (timbre)	the pattern of notes	the speed of the music/number of beats in a bar

Music Questions: Samba

Exploring Rhythm and Pulse



QUESTIONS ABOUT MUSICAL FEATURES	What is syncopation?
How many beats does a crotchet last?	What is a crotchet rest?
How many beats does a quaver last?	How might you structure a Samba composition?
What is a polyrhythm?	What does the time signature tell you?
What are dynamics in music?	What is a common time signature of Samba music?
What do the following symbols mean? How can we use them in performance? <i>p</i> <i>cresc.</i> <i>f</i>  <i>dim.</i> 	CONTEXT, SKILLS, REHEARSAL TECHNIQUES AND WIDER QUESTIONS
What is an ostinato pattern?	What is a musical ensemble?
Name the different timbres (instruments) used in Samba music.	Where does Samba music originate from?
Which instruments in Samba play different pitches?	Where do you often hear Samba music?
What is call and response?	What is a musical ensemble? Give an example
How is call and response used in Samba music?	How do the Samba band keep in time?
Name the different sections found in Samba music.	Which instrument does the leader play?
Which texture describes when everyone plays the same rhythm at the same time?	
Define the term 'solo'.	
What is improvisation?	

Music Extension Activities: Samba

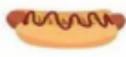
Exploring Rhythm and Pulse



KNOWLEDGE

Create a mind map of all the key features of Samba music.
In a different coloured pen define each feature.
For each feature give an example of how it is used in Samba music

Perform these rhythms using your knowledge of notation

 HOT DOG 	 GRAPE SODA 	 APPLE PIE 	 HOT FUDGE SUNDAE 	 COCONUT SHRIMP 
 RICE KRISPIE TREAT 	 CHOCOLATE STRAWBERRY 	 CINNAMON OATMEAL 	 MILK AND CEREAL 	 AVOCADO TOAST 
 COCONUT SHRIMP 	 CHEESE RAVIOLI 	 STRAWBERRY ICE CREAM 	 CHIPS AND GUACAMOLE 	 PEPPERONI PIZZA 

Complete the table filling in the missing note symbols, values and note names

Note Name	Note Symbol	Note Value
Remember it... Tea		
Remember it... Coffee		beats = 1
Remember it... Cappuccino		4 x ¼ beats = 1
Remember it... Shh!		

APPLICATION

Create an outline for a samba piece. Decide on the structure and map out how you will use the features of Samba music in each section.
Consider when you will use each feature and how it contributes to the piece.

Create your own 4-part polyrhythm in 2/4 time. Write a part suitable for the Surdo, Ganza, Tambourim and Agogo Bells. Can you show the different pitches of the Agogo Bell?



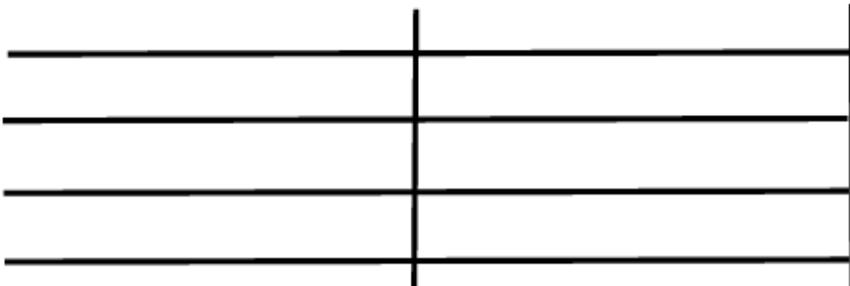
2/4

2/4

2/4

2/4

2/4



Compose a four-beat ostinato using the note values and rests in the table on the left.
Compose a three-beat ostinato using the note values and rests in the table on the left.
Compose a call and response using the note values and rests in the table on the left.

AUTUMN TERM 2 TASKS

NIGHTMARE BEFORE CHRISTMAS

Please complete the following tasks for your Music Lessons using your 'Nightmare Before Christmas' Knowledge Organiser page.

Try to write the tasks in your very best handwriting with the title (e.g. 'Week 1 - Music') and date at the top of your page. **Make sure you complete your KO every week even if you don't have a lesson** and remember, you should use your KO as a guide to learn and revise keywords and information - don't just copy it down!

	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
T A S K S	<p>Task: Learn the keywords and their definitions:</p> <ul style="list-style-type: none">- Purpose- Tension- Revulsion- Suspense	<p>Task: Learn the keywords and their definitions:</p> <ul style="list-style-type: none">- Leitmotif- Ostinato- Mickey Mousing- Underscore- Drone	<p>Task: Learn about DYNAMICS. You should be able to describe the following:</p> <ul style="list-style-type: none">- Crescendo- Forte- Piano- Sforzando	<p>Task: Learn about MELODY. You should be able to describe the following:</p> <ul style="list-style-type: none">- Stepwise- Leap- Ascending- Descending- Chromatic	<p>Task: Learn about TEMPO. You should be able to describe the following:</p> <ul style="list-style-type: none">- Slow- Fast- Accelerando	<p>Task: Learn about HARMONY. You should be able to describe the following:</p> <ul style="list-style-type: none">- Major- Minor- Dissonance
	<p>Make sure you can spell all of these keywords correctly</p>					

Nightmare Before Christmas

1	Purpose	Music in a film is there to set the scene, enhance the mood, tells the audience things that the visuals cannot, or manipulate their feelings. Sound effects are not music!
2	Tension	Tension is the slow build in the music that helps to add unease/anxiety felt by the audience. E.g. seeing a shadow moving towards a character in the darkness
3	Revulsion	The moment the bad thing in the scene happens, bringing on a sudden feeling of horror. E.g. a scary mask appearing from the darkness
4	Suspense	A state or feeling of excited or anxious uncertainty about what may happen.
5	Leitmotif	A <i>short melody</i> that is <i>associated with a character</i> or idea in a film
6	Ostinato	A short repeated musical pattern
7	Mickey Mousing	When the music <i>fits perfectly</i> with a specific part of the action in a film
8	Under-score	Where music is played at the same time as the action or dialogue
9	Drone	A note or chord that is continuously played

10	Dynamics	<i>Crescendo</i>	Volume gradually gets louder
		<i>Forte</i>	Loud volume
		<i>Piano</i>	Quiet volume
		<i>Sforzando</i>	Suddenly loud/accnt
11	Melody	<i>Stepwise</i>	Moving to a note next door e.g. A to B
		<i>Leap</i>	Moving to a note further away - can sound scarier
		<i>Ascending</i>	A melody that goes up
		<i>Descending</i>	A melody that goes down
		<i>Chromatic</i>	A melody that uses the black and white keys (moving in semitones)
12	Tempo	<i>Slow</i>	Create suspense and tension
		<i>Fast</i>	Builds action and excitement
		<i>Accelerando</i>	Gradually get faster
13	Harmony	<i>Major</i>	A happy and optimistic sound
		<i>Minor</i>	Sad and serious sound
		<i>Dissonance</i>	Scary and clashing sound



PHYSICAL EDUCATION YEAR 8 KS3 KNOWLEDGE ORGANISER - FITNESS TESTING

Muscular Endurance

Test: 1 minute sit up test



Test: 1 minute press up test



Protocol: Complete as many full sit ups/press ups as possible in 1 minute.

Advantages

- Simple test to complete
- Minimal equipment needed.

Disadvantages

- Difficult to assess whether each repetition is performed correctly.
- Difficult to accurately measure large groups.

Cardiovascular Fitness (Aerobic Endurance)

Test: 12 min Cooper Run

Protocol: Continuously run/swim for 12 minutes.
Distance recorded.



Test: Harvard Step Test

Protocol: Step continuously for 5 minutes.
Measure heart rate at 1, 2 and 3 minutes after exercise.



Advantages

- Minimal equipment needed
- Test can be self administered.

Disadvantages

- Inaccuracy of heart rate measurements
- Motivation dependant

Flexibility

Test: Sit and Reach Test

Protocol: Sit with legs straight out in front and soles of feet against the box/table. Reach forward without bending knees. No jerking movements.



Advantages

- Quick and easy to perform.
- Data table readily available for comparison

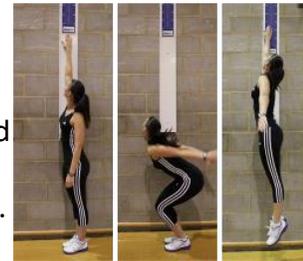
Disadvantages

- Can cause injury if not fully warmed up appropriately.
- Only measures flexibility of lower back and hamstrings.

Power

Test: Vertical jump Test

Protocol: Stand next to wall and mark an initial reach while feet are flat on the ground. Standing jump to reach as high as possible. Measure distance from first mark to second.



Advantages

- Quick and easy to perform.
- Easy to complete with large groups.

Disadvantages

- Technique plays a large role in successful completion.

PHYSICAL EDUCATION YEAR 8 KS3 KNOWLEDGE ORGANISER - FITNESS TESTING

Agility

Test: Illinois Agility Test

Protocol: Start lying down at the start line. Complete course as quick as possible (10m x 5m – 4 central cones)
See diagram.



Speed

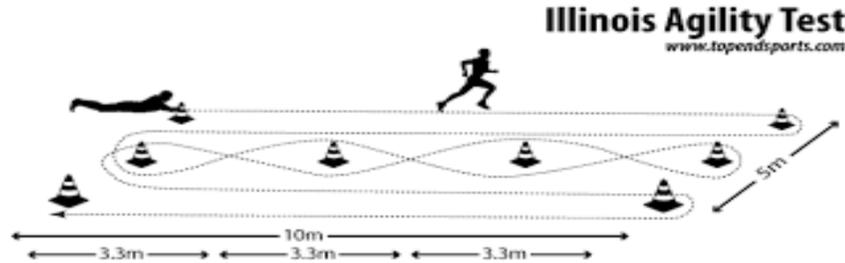
Test: 30m Sprint Test

Protocol: Start from stationary position. Complete distance in the quickest possible time. Time is stopped when chest crosses the line.



Advantages	Disadvantages
-Simple and easy to complete	-Motivation dependent / Timing errors.

Advantages	Disadvantages
-Quick test to complete. -Minimal equipment needed and can be performed anywhere with a flat 50m run.	-Running surfaces/weather conditions can affect the results. -Inaccuracies with stopwatch usage.



TASK 1:

Make a list of the factors that might affect the results of these tests if you were to carry them out.

Consider things like:

Where you would do the test (indoors or outdoors, surface?)

What equipment you would use

The participant

Anything else that could affect the results

TASK 2:

Design your own fitness test either for one of the components of fitness mentioned above or another one. Consider:

-what will it test

-what equipment is needed

-what the results will mean

-how it will be performed

-factors that could affect results

TASK 3:

Explain why sportsmen and women take part in fitness tests and what the benefits are of knowing the results. How might such tests be used in the health and fitness industry?

TASK 4:

There is a common component of fitness not mentioned in the above tests and that is Muscular Strength. Research how Muscular Strength can be tested. Explain the tests available, how they are set up and performed, advantages and disadvantages and how the results are interpreted.

What is the Bible?

The Bible is the holy book of Christianity. It is made up of two parts, firstly the Old Testament and secondly the New Testament. The Old and New Testaments are collections of books that have been put together. There are 39 books in the Old Testament and 27 in the New Testament.

The 10 Commandments (The Decalogue)

The Ten Commandments are a set of rules found in the Old Testament. According to the Old Testament these rules were given to Moses from God on Mount Sinai on two stone tablets. Christians believe that these rules are a guide for life.

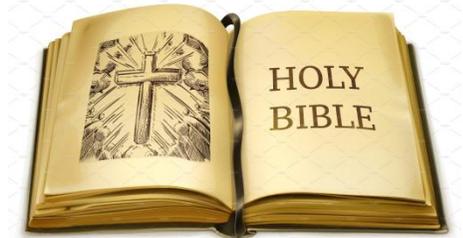
1. Believe in one God.
2. Love God more than anything else.
3. Do not misuse God's name or swear.
4. Respect God by resting on the 7th day of the week.
5. Love and respect your parents.
6. Do not kill/murder.
7. Always be faithful to your husband or wife.
8. Do not steal.
9. Always tell the truth.
10. Do not be jealous of others.

Why the Bible is important to Christians

Many Christians believe the Bible is the direct word of God. Christians go to the Bible for guidance and help with everyday life. The Bible teaches Christians the importance of Jesus' life and death. The Bible gives rules and advice on how to live in a Christian way. The Bible includes Christian history which helps Christians understand their religion.

The Old Testament

1. Jewish law - Genesis, Exodus, Leviticus, Numbers and Deuteronomy. These books record the creation of the world and the rules of Judaism.
2. History books - These describe Jewish history.
3. Poetry books - These are mainly poems in praise of God. The most well known book in this group is the Book of Psalms.
4. Prophets – This is the largest section of The Old Testament.



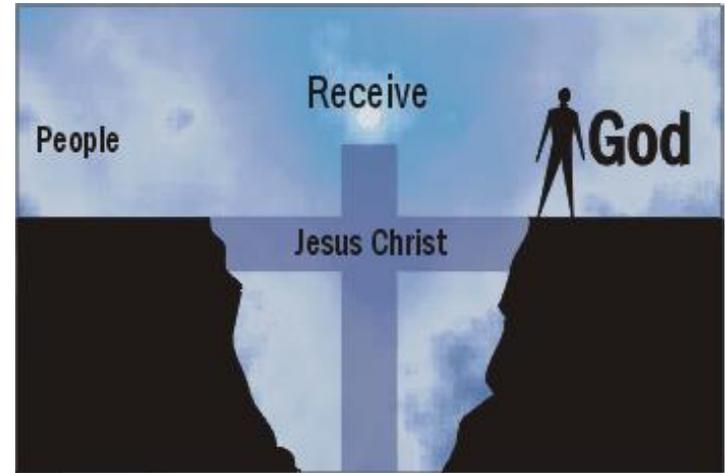
The New Testament

1. The Four Gospels – Gospel means “good news”. The Gospels are called Matthew, Mark, Luke and John. The Gospels record the life and teachings of Jesus.
2. The Acts of the Apostles – These tell the history of early Christianity after Jesus died. Apostles is the word used for the first Christian preachers.
3. Letters – There are 21 letters in the New Testament. Most of them were written by St Paul to his friends. He wrote the letters to teach them and give them advice about how they should live as Christians.
4. Revelations – This is mainly about the visions of the future which the author had.

Sin and the Fall

What is original sin?

- Original sin is a Christian teaching that says that everyone is born sinful. This means that they are born with a built-in urge to do bad things and to disobey God. It is an important doctrine within Christianity.
- Original sin is not just this inherited spiritual disease or defect in human nature; it's also the 'condemnation' that goes with that fault.
- An explanation for the evils of the world. Some Christians believe that original sin explains why there is so much wrong in a world created by a perfect God, and why people need to have their souls 'saved' by God.
- A condition you're in, not something you do.
- Original sin is a condition, not something that people do: It's the normal spiritual and psychological condition of human beings, not their bad thoughts and actions. Even a new-born baby who hasn't done anything at all is damaged by original sin.
- ***Stretch and Challenge: Read Genesis 3 and identify the characters and what role each has in the Fall.***



The Sin of Adam

- In Christian teaching, original sin is the result of Adam and Eve's disobedience to God when they ate a forbidden fruit in the Garden of Eden.
- Original sin affects individuals by separating them from God, and bringing dissatisfaction and guilt into their lives. On a world scale, original sin explains such things as genocide, war, cruelty, exploitation and abuse, and the "presence and universality of sin in human history".
- How to cure original sin? Some Christians believe that human beings can't cure themselves of original sin. The only way they can be saved from its consequences is by the grace of God.
- The only way people can receive God's grace is by accepting his love and forgiveness, believing that Jesus Christ died on the cross to redeem their sins, and getting baptised.

RE - People of God

Abraham

Covenant - A covenant is a solemn agreement/promise with God

Sacrifice - Give up (something valued) for the sake of something else.

Faith - complete trust or confidence in someone or something.

God promised (if Abraham was a faithful servant):



To have these promises fulfilled, **Abraham** and his descendants (offspring) must obey God. God asked Abraham to leave his homeland and travel to what we now call Israel.

Abraham and his wife Sarah left their homeland and followed God's command to go to a new land. In return, Abraham was given two children. The first was a son called **Ishmael** born to Hagar, the slave of Sarah. The second was a son called **Isaac**, born to Sarah.

After a few years, God asked Abraham to take Isaac up a mountain and sacrifice him to God.

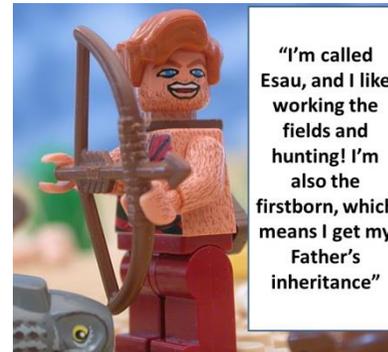
Abraham did take him to the mountain and was about to sacrifice him when God stopped him.

God was testing Abraham's faith, and Abraham showed he had total faith in God.

Stretch and Challenge: Research why Jews made sacrifices to God.

Jacob & Esau

Isaac grew to be a man and married a woman called Rebecca. They had twins called Esau and Jacob.



One day Esau was working in the fields and was hungry. Jacob had cooked some food and offered it to Esau in return for the firstborn's birth right. This would mean he received his Father's inheritance.

Esau agreed, and gave the birth right up.

Later, Isaac was old and weak, and told Esau to prepare a special meal so he could give him a special blessing before he died.

While Esau was out hunting, Jacob cooked a meal, wrapped animal skins around him and pretended to be his brother.

Isaac was tricked and blessed him. He would now get the inheritance.

This angered Esau, and Jacob ran away.

After he had left his family, Jacob stopped to sleep. He had a dream that he could see a stairway to heaven, with angels of God ascending and descending. God said **"I am the Lord, the God of Abraham and Isaac. I am with you and will watch over you wherever you go... I will not leave you until I have done what I have promised you."**

After this, Jacob followed God's commands.

Stretch and Challenge: Research other Biblical religious experiences.



Joseph

Jacob married and had 12 sons. The 11th son was called **Joseph**.

Joseph was the first son of his favourite wife and Jacob loved him most.

- Jacob gave Joseph – his favourite – a coat of many colours. This made his brothers very jealous.
- Joseph was also able to interpret dreams. This made his brothers even more jealous.
- Because of their **jealousy**, the brothers threw him into a deep pit. They sold him as a slave and told Jacob he'd been killed.
- Joseph was bought by a man called Potiphar, and worked hard. He was promoted from a slave, and was put in charge of the house and slaves.
- Unfortunately Potiphar's wife was upset when Joseph refused to follow her immoral commands and she had him thrown into prison.
- Two prisoners with Joseph had dreams that Joseph interpreted – he got both right!
- Joseph was taken to Pharaoh who wanted his dream interpreted. Joseph told him that Egypt would experience 7 years of excellent crop growth followed by 7 years of famine.
- Joseph was made governor of Egypt – 2nd in command!
- During the famine, Joseph's brothers came to Egypt for food and did not recognise their brother. Filled with anger, Joseph had his oldest brother put in prison. To be freed, they had to go home and bring their youngest brother Benjamin back.
- Joseph then hid a cup in Benjamin's bag and had him arrested. The brother's took the blame and asked for **forgiveness**.
- Joseph revealed who he was and forgave his brothers. Jacob came to Egypt and the family lived there.



Stretch and Challenge: Research other dreams people had in the Bible.

Moses

Jacob's family grew and soon they were known as **The Israelites**.

Birth

- The Pharaoh – who had already made them slaves - decided to take drastic action to stop them from growing too many in number, and made a new law stating that every baby boy born to the people of Israel had to be thrown into the river Nile and drowned.
- Moses' mother put him in a basket and sent him down the river Nile.
- He was found by the Pharaoh's family and Moses became a Prince of Egypt

The Burning Bush

- After growing up in the Palace, Moses realises his true Jewish roots and flees.
- He becomes a shepherd and marries.
- One day Moses has a religious experience, in which God tells Moses to go back to Egypt and rescue his people.

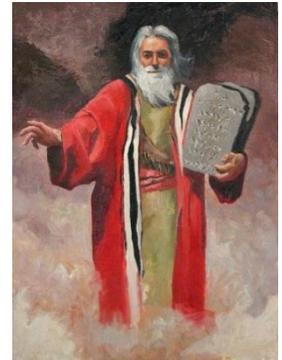
The Plagues of Egypt

- Moses returns and the Pharaoh refuses to free the Israelites.
- 10 plagues are sent by God to make Pharaoh free them.
- The last plague (death of first born) persuades him to do so.

Parting of the Red Sea

- Once the Israelites have left, Pharaoh sends his army after them to kill them
- God parts the Red Sea so his people can pass through it. Then the Egyptians are drowned when they try to follow.

Stretch and Challenge: Research what The Decalogue is
Stretch and Challenge: What has this got to do with the Passover Meal/Seder plate?



PLAGUES OF EGYPT



Science Knowledge Organiser - Autumn Term



1. There is one page in here to be completed each week.
2. Each week complete the page with the correct date at the top.
3. Use the information sheets to help you answer the questions
4. Once you have answered the questions or completed the task, spend the rest of your time learning the information. Try writing the answers in your green book, and then checking your page.
5. Ensure you have your knowledge organiser in Science lessons so that your teacher can check you have completed the work for the week.
6. You will also be tested on these questions during the week

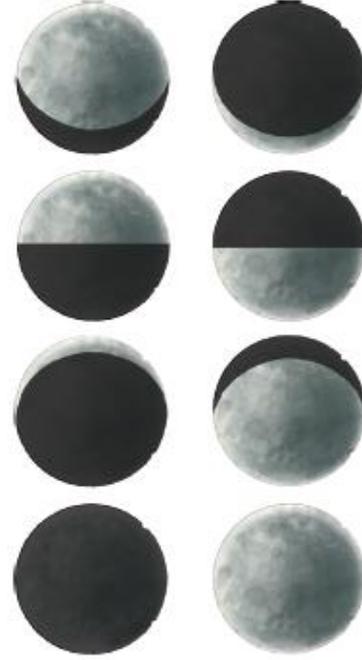
Information sheet - Space Science



Space

Key Revision Facts

- The International Space Station (ISS) is an example of an artificial satellite.
- The Moon is an example of a natural satellite.
- A comet is frozen dust particles that are orbiting the Sun.
- A meteor is the name given to pieces of dust and rock travelling through the sky.
- The planets in the solar system are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
- A day is 24 hours and is the time it takes for the Earth to rotate completely.
- A year is 365 days and is the time it takes the Earth to orbit the Sun.
- Seasons occur because of the tilt of the Earth on its axis and its position in orbiting the Sun.
- Solar eclipse: when the moon becomes between the Sun and Earth.
- Lunar eclipse: when the Earth comes between the Sun and Moon.
- The moon takes 27 days and 7 hours to orbit the Earth.
- As the Moon moves around the Earth, its shape appears to change. This is known as phases of the Moon.



The Space Science Project

W/C 13th Sept



Key Recall Questions

Answers

What is the name for how scientists believe the Universe was formed?

What is the largest planet within our Solar System

What keeps planets in orbit around the Sun?

What is the Sun made of?

What is the definition of a solar system?

What is the definition of a galaxy?

What is the name of our galaxy?

What is the name of the nearest star to Earth?

What is a natural satellite?

What can you see during a full moon?

Why do we only ever see one side of the moon?

How is the Moon involved in the tides on Earth?

What is the name of the shape the Earth travels in orbit around the Sun?

Why do we have seasons?

What is the name for the two halves of the Earth?

The Space Science Project

W/C 20th Sept



Key Recall Questions

Answers

What position is the planet in during summer in the Northern Hemisphere?

What is the name of the imaginary line through the centre of the Earth?

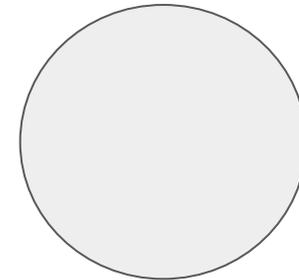
What angle is the Earth tilted at?

What is the 5th planet from the Sun?

Why is Pluto not considered a planet any more?

Draw a sketch of the position of the Sun, Earth and Moon during a solar eclipse

What is the composition of our atmosphere, represent in a labelled pie chart



What is a waxing moon?

What is a waning moon?

What is a geo stationary satellite?

The Space Science Project

W/C 27th Sept



Key Recall Questions

Answers

What are geostationary satellites used for?

What is a polar satellite?

What are examples of uses for polar satellites?

What is the gravitational field strength on Earth?

What is the gravitational field strength on the Moon?

What weight would a person of mass 70kg have on Earth?

What weight would a person of mass 45kg have on the Moon?

What is the speed of light?

What is a light year?

Why do we use light years to measure the Universe?

How wide is our galaxy?

What is an equation to show the relationship between distance, speed and time?

How do scientists believe the Moon was formed?

Where is the next NASA space mission going to be to?

Information sheet - Living Things



KS3 Cells and Organisation Knowledge Organiser

Specialised Cells

Each function carried out by the organism is performed by different cells. Each type of cell has slightly different features.

Name	Diagram	Functions	Adaptions
root hair cell		To absorb water and minerals from the soil.	Long protrusion fits between grains of soil and provides a large surface area for the absorption of water and minerals into the cell.
palisade cell		To carry out photosynthesis and make food for the plant.	Lots of chloroplasts to absorb light energy for photosynthesis. Its tall, long shape gives the cell a large surface area to maximise the absorption of light.
sperm cell		To travel to and fuse with an egg cell for fertilisation.	Long tail for movement to the egg and lots of mitochondria to release energy to allow the sperm to move.
muscle cell		To help the body to move.	Contains bands of protein that change shape to contract and relax the muscle. Lots of mitochondria to provide energy for muscle contraction.
nerve cell		To carry nerve impulses around the body.	Long fibres carry electrical impulses up and down the body and branching dendrites at each end connect to other nerves or muscles.
ciliated epithelial cell		To move mucus away from the lungs.	Tiny hairs called cilia to help waft mucus along the airways. Lots of mitochondria release energy for the cilia to move.
red blood cell		To transport oxygen around the body.	Biconcave shape increases the surface area for the diffusion of oxygen. No nucleus so that there is more room for haemoglobin, which binds oxygen molecules.
white blood cell		To fight pathogens which cause disease.	Some can change shape to squeeze out of blood vessels and engulf pathogens. Some can produce antibodies or antitoxins.
egg cell		To be fertilised by the sperm cell.	The cytoplasm contains nutrients for the developing embryo. The membrane changes after fertilisation to stop any more sperm getting in.

The Skeleton

The skeleton has several functions:

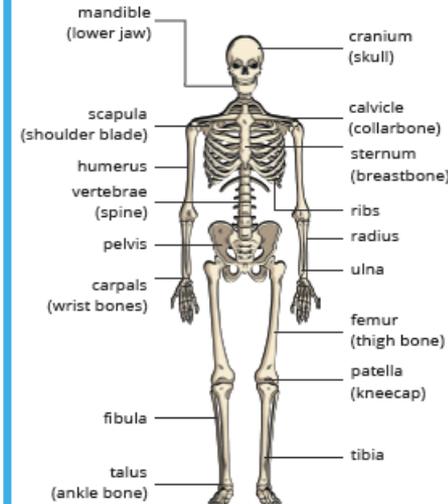
Support – The skeleton provides a frame to hold your body upright and keep your organs in place.

Protection - Bones are hard and strong to protect important organs such as the heart and the brain.

Movement - Your bones and muscles work together to allow your body to move.

Making blood cells - Some bones contain a soft tissue called bone marrow. Red blood cells and white blood cells are made in the bone marrow.

The adult body contains around 206 bones. Some are shown below:



Joints

Joints are found where bones meet. Sometimes these joints are fixed but most joints are flexible to allow the body to move.

A **hinge joint** allows backwards and forwards movements. Knees and elbows are hinge joints.



A **ball and socket joint** allows movement in all directions. Shoulders and hips are ball and socket joints.



Cartilage is a strong, smooth tissue that covers the ends of the bones to protect them from damage.

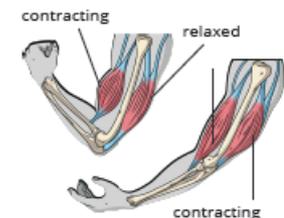
Ligaments hold the bones together.

Fluid in the joints keeps the cartilage slippery to reduce friction.

Muscles

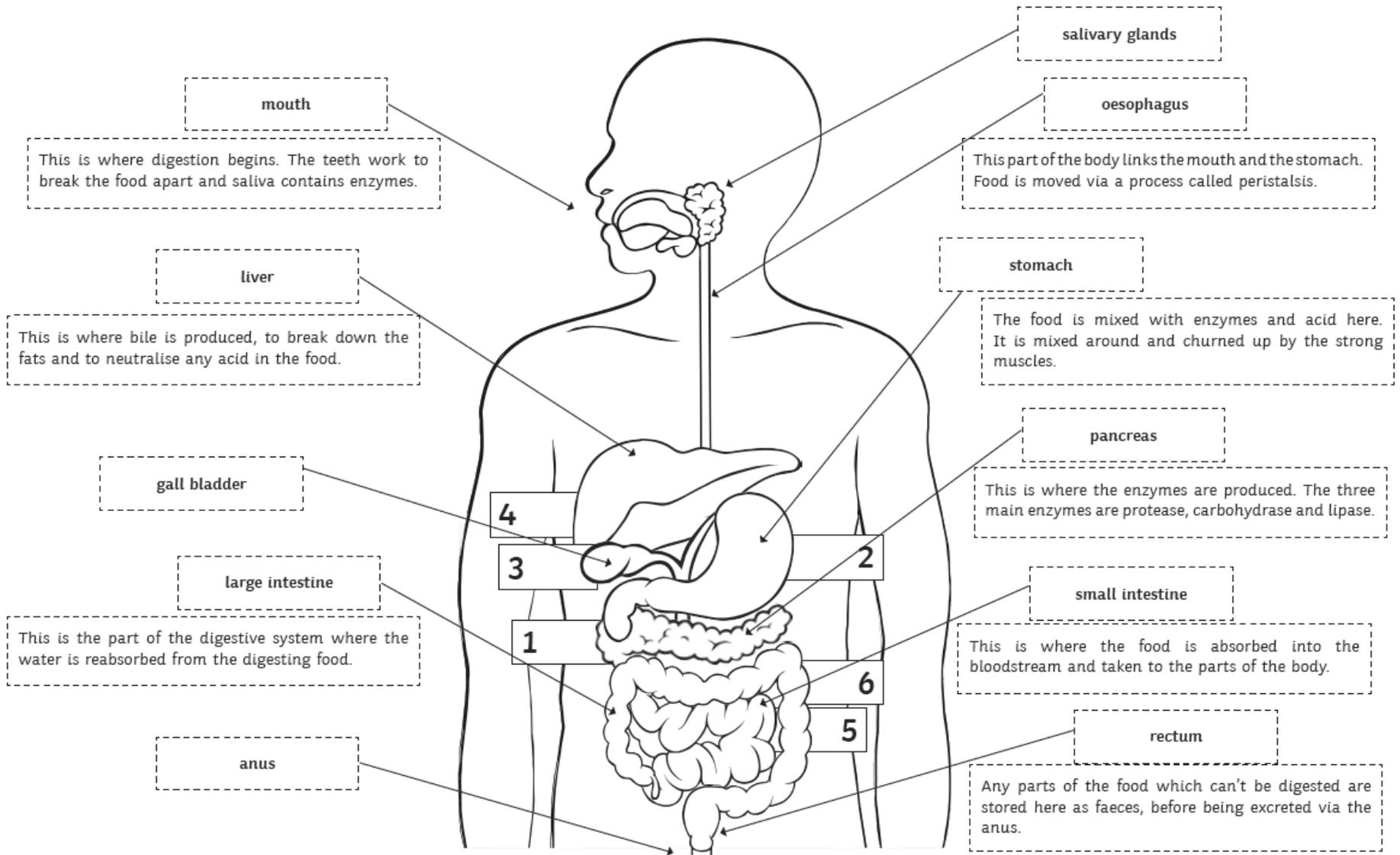
Muscles can't push, they can only pull.

A pair of muscles that work together are called **antagonistic muscles**.

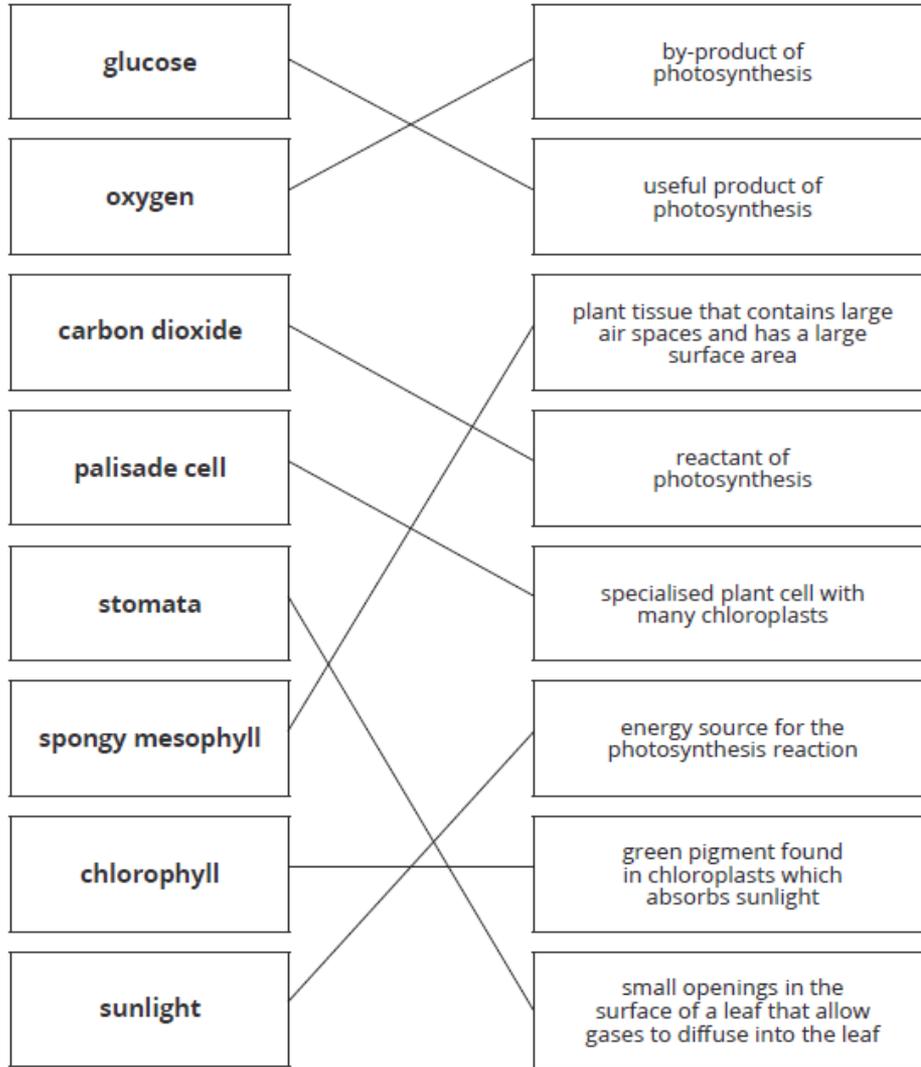


This combination of muscles, bones and joints making our bodies move is called **biomechanics**.

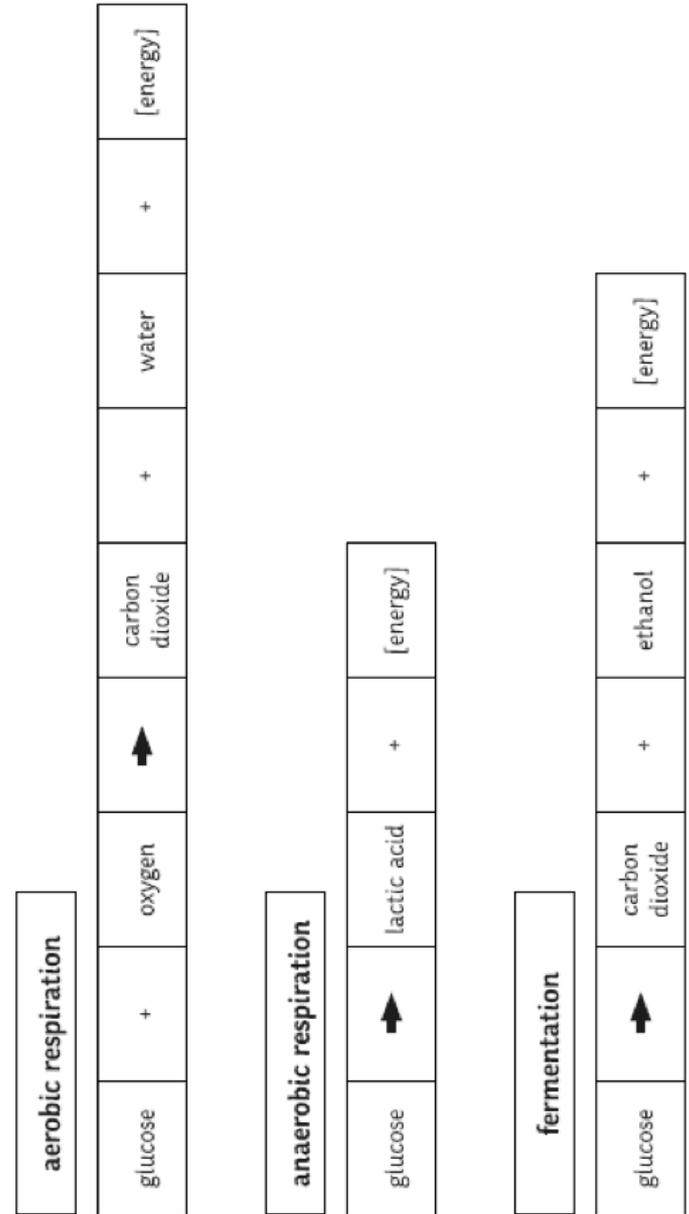
Information sheet - Living Things



Information sheet - Living Things



Respiration



How Do Living Things Work?

W/C 4th Oct



Key Recall Questions

Answers

What is the process plants use to make glucose?

Write out the word equation for the above process

What gas do plants remove from the atmosphere?

How are leaves adapted for optimal photosynthesis?

What would be the effect of keeping a plant in the dark?

Where do plants get water from?

What is the name of the tube that water travels up in a plant?

How do plants use glucose?

How do animals use glucose?

What does aerobic mean?

How Do Living Things Work?

W/C 11th Oct



Key Recall Questions

Answers

What is the name of the process living things use to produce energy?

Write out the word equation for the above process

What does anaerobic mean?

What is another name for anaerobic respiration in yeast?

Write out the word equation for the above process

What are some uses of aerobic respiration in yeast?

What conditions result in anaerobic respiration in animals?

Write out the word equation for anaerobic respiration in animals?

Which type of respiration releases the most energy?

What does the term oxygen debt mean?

How Do Living Things Work?

W/C 18th Oct



Key Recall Questions

Answers

How would you test a leaf for starch? Step by step instructions:

What is the name of the reagent used to test for starch?

What colour change would you expect to see in the presence of starch?

How could you measure the rate of photosynthesis?

What would be the effect on rate of photosynthesis if you reduced the light?

What would be the effect on rate of photosynthesis if you increased the concentration of CO_2 ?

What would happen to the rate of photosynthesis if you reduced the temperature?

What is the name of the hole on the underside of a leaf where gas exchange takes place?

What is transpiration?

How Do Living Things Work?

W/C 1st Nov



Key Recall Questions

Answers

What happens if you cannot get oxygen?

What is the name of the system that gets oxygen into the blood?

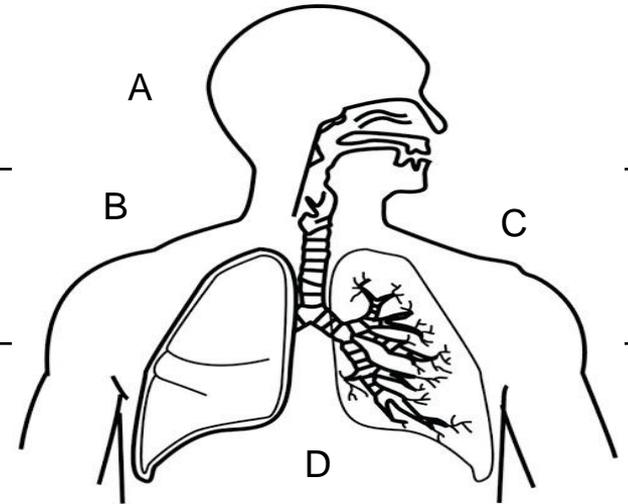
What system is closely linked and enables transport of oxygen around the body?

Draw a line from the letter A to the trachea

Draw a line from letter B to right lung

Draw a line from letter C to the bronchioles

What is missing from the diagram at letter D



How Do Living Things Work?

W/C 8th Nov



Key Recall Questions

Answers

What is the name of the organ found at the end of bronchioles?

What occurs in these organs?

How are they adapted to their function?

What are the effects of strenuous exercise on the body? Think about demands.

What type of cell carries oxygen around the body?

How are red blood cells adapted to carry oxygen?

How many bones are there in the human body?

What are the main roles of the skeletal system?

What are three types of muscle?

What does contract mean?

How Do Living Things Work?

W/C 15th Nov



Key Recall Questions

Answers

What is an antagonistic pair?

Name an example of an antagonistic pair

What does DNA stand for?

Where is DNA found?

What does inherited mean?

How many chromosomes are found in non-sex cells?

How many chromosomes are found in sex cells (gametes)?

What is environmental variation? Give an example

What is natural selection?

What is evolution?

What is biodiversity?

Recap 1

W/C 22nd Nov



Key Recall Questions

Answers

How do animals use glucose?

What does aerobic mean?

What does DNA stand for?

Where is DNA found?

How could you measure the rate of photosynthesis?

What would be the effect on rate of photosynthesis if you reduced the light?

Why do we have seasons?

What is the Sun made of?

What is the name of the process living things use to produce energy?

Why do we use light years to measure the Universe?

How do scientists believe the Moon was formed?

Recap 2

W/C 29th Nov



Key Recall Questions

Answers

What is the definition of a galaxy?

How wide is our galaxy?

What is an equation to show the relationship between distance, speed and time?

How are leaves adapted for optimal photosynthesis?

What would be the effect of keeping a plant in the dark?

What is the name of the system that gets oxygen into the blood?

What system is closely linked and enables transport of oxygen around the body?

How are red blood cells adapted to carry oxygen?

How many bones are there in the human body?

What is natural selection?

What is evolution?



Respiration Match and Draw

Draw **one** line from each key word to the correct description.

aerobic respiration	respiration that involves the use of oxygen to transfer energy
anaerobic respiration	a product of anaerobic respiration in plants and yeast, used to make alcoholic drinks
cytoplasm	respiration that takes place in the absence of oxygen
carbon dioxide	the part of the cell in which anaerobic respiration takes place
ethanol	the part of the cell in which aerobic respiration takes place
glucose	a type of sugar that is used as an energy source in respiration
lactic acid	a by-product of aerobic respiration and anaerobic respiration in plants and yeast
mitochondria	the amount of extra oxygen required to break down built-up lactic acid after exercise
oxygen	a toxic substance that is the product of anaerobic respiration in muscles
oxygen debt	a reactant required for aerobic respiration

1. Cells require oxygen so that they can respire and produce energy. Which of the following shows the route taken by oxygen to reach the cells? the correct box.

- nose > lungs > windpipe > bloodstream > cells
- nose > bloodstream > lungs > windpipe > cells
- nose > windpipe > lungs > bloodstream > cells
- nose > lungs > bloodstream > windpipe > cells

2. Respiration takes place in the cells of all organisms. Complete the word equation for respiration.

_____ + oxygen > carbon dioxide + _____ + energy

3. As a result of respiration, the proportions of oxygen and carbon dioxide in inhaled and exhaled air vary. Which of the following statements are true? the correct boxes.

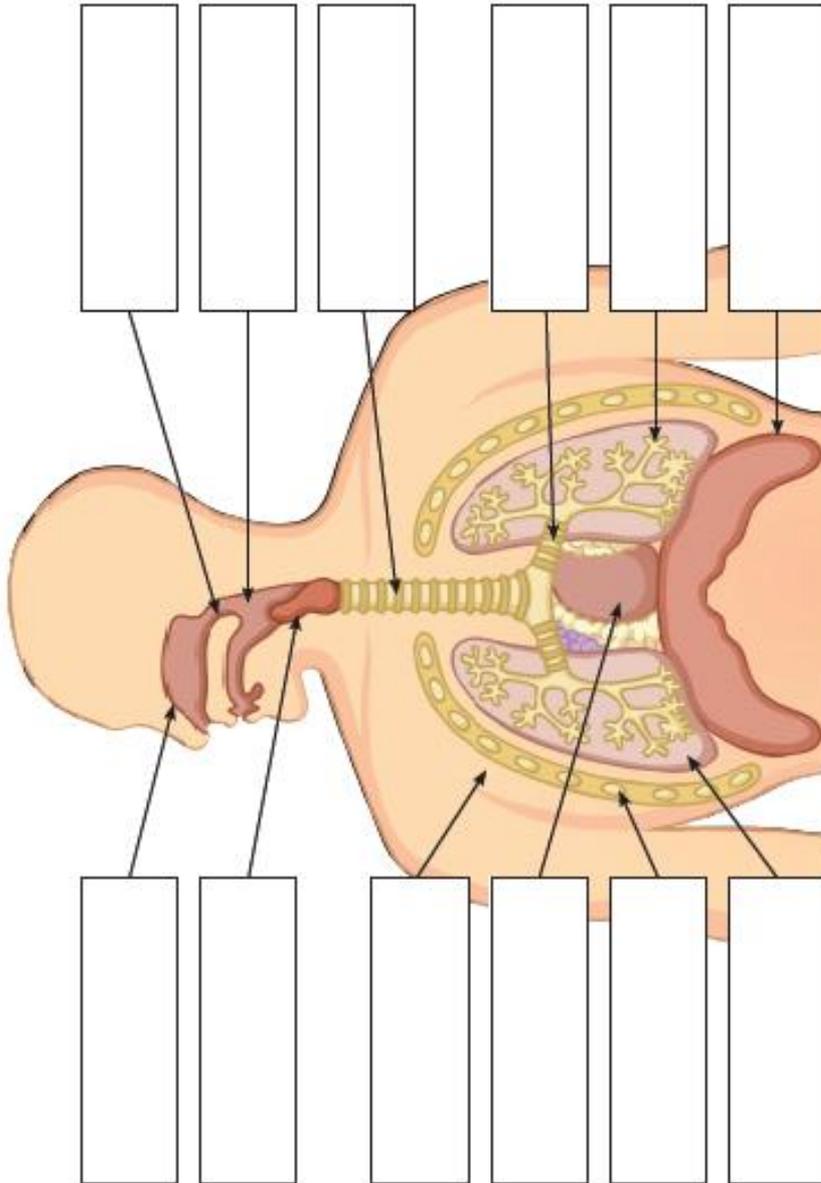
- Air breathed out has more carbon dioxide and more oxygen than air breathed in.
- Air breathed out has less carbon dioxide and less oxygen than air breathed in.
- Air breathed out has more carbon dioxide and less oxygen than air breathed in.
- Air breathed out has less carbon dioxide and more oxygen than air breathed in.
- Air breathed out contains more water vapour and more carbon dioxide than air breathed in.

Recap 4

W/C 13th Dec



Use the terms on the next page to fill in the boxes



Name	Role

Recap 4

W/C 13th Dec



intercostal muscle

rib

rib

larynx

heart

diaphragm

bronchus

oesophagus

nasal cavity

air sacs (alveoli)

air sacs (alveoli)

trachea

lung

trachea

diaphragm

soft palate

Protects the lungs.

A muscle that moves to help get air in and out of the lungs.

Part of the lungs where gas exchange occurs.

Air that is inhaled passes through here to the bronchi and into the lungs.