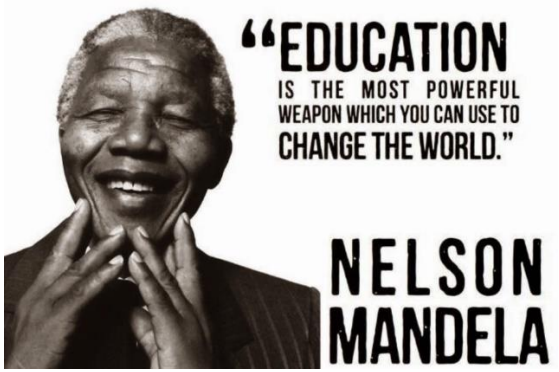
Westhoughton High School

Year 7 – Summer Term - Knowledge Organisers



Name: .....

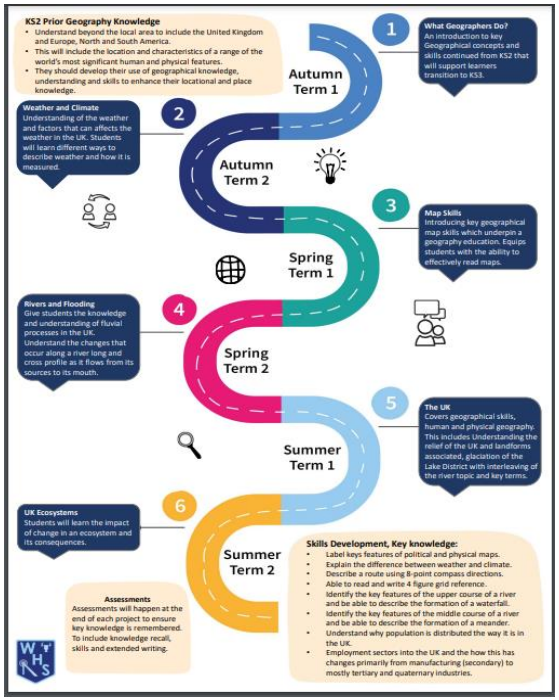
Form Group & Room: .....

Form Tutor: .....

the "Knowledge" pyramid

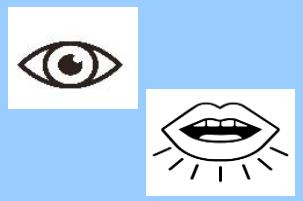
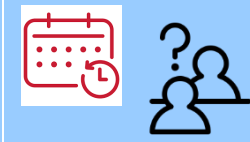
Introduction

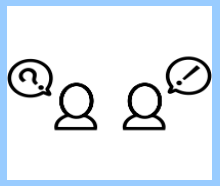
The curriculum in each of your subjects at WHS has been carefully planned to help you learn new things, building upon what you know and preparing you for learning in the future. This is mapped out as a learning journey which each teacher will share with you, so you understand how your learning fits together as a whole. Each subject's roadmap is here https://www.westhoughton-high.org/subjects/.



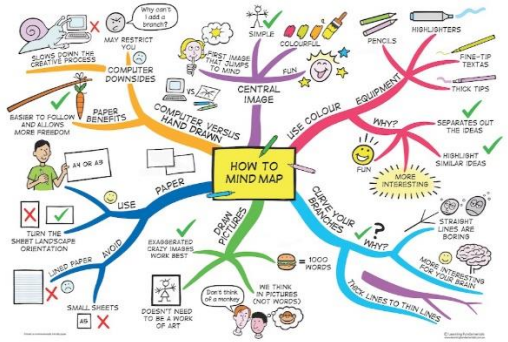
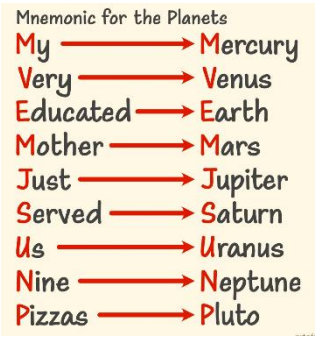
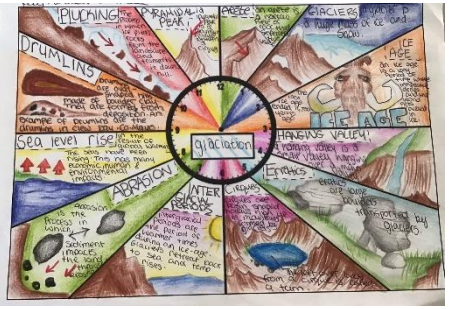
This booklet contains knowledge organisers for all the topics you will study in each subject this term. These give an overview of the essential knowledge that you MUST remember to be as successful as possible in Year 7 and as you move through each year of school. Your teachers will expect you to use them during lessons to find out about what you are going to be learning in a new topic, to retrieve information during a connect activity – connecting your brain to what you are going to learn that lesson and to test yourself or others to recall knowledge. You will also use them to complete home learning activities, to regularly revise from so that you begin to remember more knowledge over time, to discuss what you have been learning with family and friends and to catch up on any learning you might have missed due to absence. You must bring your booklet to school every day and keep it safe at the end of each term as you will continue to use it to support ongoing revision.

Learning Techniques to use with KOs – using them regularly is vital to make knowledge stick in your long-term memory (remember you need to revisit information at least 10 times before it is embedded in your memory).
Try using these ideas, choose different techniques to learn small sections of knowledge each day.

	Look, Say, Cover, Write, Check	Key Word Definitions	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
STEP 1	Look at and read aloud a specific area of your KO. 	Write down the key words and definitions in two columns. 	Use your KO to condense and write down key facts or information onto flash cards. 	Use your KO to create a mini quiz. Write down your questions relating to the information. 	Create a mind map with the information on your KO. 	Ask a partner, friend or family to use the KO or your flash cards. 
STEP 2	Cover or flip the KO over and write down everything you remember. 	Repeat the above but don't look at your KO 	Add pictures that might help you remember. Then self-quiz using the flash-cards. 	Answer the questions, remember to use full sentences. 	Check your KO to make sure there are no mistakes on your mind map. 	Make sure they test you on different sections of the KO and also on previous topics. 

STEP 3						
	Check what you have written down. Correct any mistakes and add anything you missed in purple pen. 	**Use a purple pen to check and correct your work** 	**Ask a friend or family member to quiz you on your knowledge.** 	**Ask a friend or family member to quiz you using the questions.** 	**Try to make more connections, link the information together where you can.** 	**Repeat this regularly so that you are frequently looking at KOs past and present.** 

How to make learning stick…

Mind Mapping	Flash Cards	Look, Say, Cover, Write, Check	Key Word Mnemonics	Revision Clocks
				
Mind mapping is a great way of representing key information from a topic in a visual way. Use colour and images to represent the knowledge you need to learn. Keep writing to a minimum; use only keywords/phrases.	Make flash cards using your KO. Write a question on one side and the answer on the other or record key- words and definitions. Test yourself frequently.	This technique is one that has been well used from primary school upwards. It is useful for rehearsing keywords, definitions and spellings. Look at the information, read it aloud, cover it up,	A mnemonic is a sentence you make up where each word begins with the same letter as the word you want to remember. It is a useful technique for remembering a	Draw a basic clock and break your KO down into 12 chunks. Make notes on each chunk in the 12 clock sections, use colour and images to make it memorable. Revise each section for 5 minutes, turn

Watch the clip for more tips and advice.	For more advice, scan the code.	write it down and then check it is correct.	group of facts/words in a certain order.	over and test how much you can recall. Watch the clip for more tips and advice.

Year 7 - ART

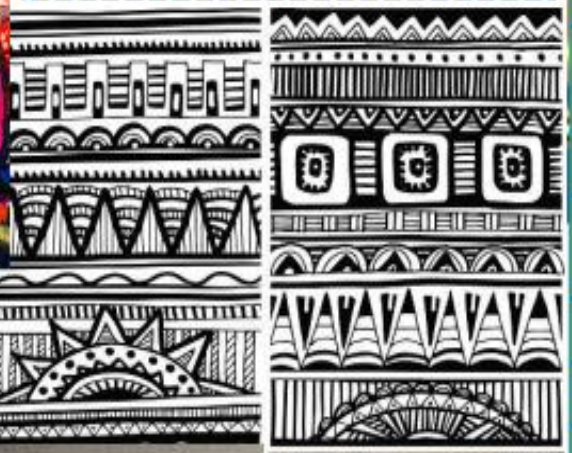
Bisa Butler

African Kente Cloth

What is Bisa Butler's work about?

Bisa Butler (born 1973) is an American fiber artist known for her vibrant, quilted portraits celebrating Black life

African inspired pattern



Traced portraits

Key words & Definitions		
1	Clashing	To 'not match' or 'not work together' in colour or tone
2	Continuous line	Without pausing or stopping
3	Cool colours	Calming colours that can recede into background
4	Complementary Colours	Colours that are opposite each other on the colour wheel ,they do not blend
5	Ghana	West African country
6	Harmonious colours	Colours that blend well together : near to each other on the colour wheel
7	Heritage	Family background/tradition
8	Identity	Who a person is, what makes them unique.
9	Kente Cloth	Ghanaian patterned textile
10	Pattern	Arrangement of repeated shapes
11	Proportions	The relationship (in size) of several things
12	Self Portrait	A portrayal of oneself
13	Symbol	An shape that represents something
14	Quilting	A sewing technique in which two or more layers of fabric, are sewn together.
15	Warm colours	Colours that have links to the sun & fire

Year 7 Portraiture Timeline (Me Myself & I)

Egyptian Head

1500 BCE

3000 BCE

Round headed figure Nige, Africa

Self-Portrait Sofonisba Anguissola Italy

1556-57

1452-1519

Leonardo da Vinci's Mona Lisa painted 1517

Frida Kahlo Self-Portrait with Thorn Necklace and Hummingbird, 1940

1907-54

1853-90

Vincent Van Gogh

"Marilyn" By Andy Warhol Silk screen 1967

1928-87

Born 1881-1973

Pablo Picasso

Julian Opie

B 1958

1960-88

Jean Michel Basquiat

Sadie Lee

B 1967

B 1964

The Singh Twins UK

Bisa Butler

B 1970

B 1967

Kehinde Wiley

Prehistoric - Egyptian - Renaissance - Post impressionism - Symbolism - Cubism - Pop Art- Neo Expressionism - Contemporary Art

Binary

Binary is a number system that only uses two digits: 1 and 0. All information that is processed by a computer is in the form of a sequence of 1s and 0s. Therefore, all data that we want a computer to process needs to be converted into binary.

The binary system is known as a **'Base 2' system**. This is because: There are only two digits to select from (1 and 0). When using the binary system, data is converted using the power of two.

128	64	32	16	8	4	2	1

Example Binary To Denary **8 BIT TABLE**

Q : Convert 0 0 0 1 1 0 0 0 to denary

128	64	32	16	8	4	2	1
0	0	0	1	1	0	0	0
			16	8			

Denary

Denary uses a **'Base 10' number system.**

Example Denary To Binary

Q : Convert 12 to binary **A:** 0 0 0 0 1 0 0

128	64	32	16	8	4	2	1
				8	4		
0	0	0	0	1	1	0	0

Adding Binary

When two numbers are added together in **denary**, we take the first number, add the second number to it and get an answer. For example, **1 + 2 = 3**.

When we add two **binary** numbers together the process is different.

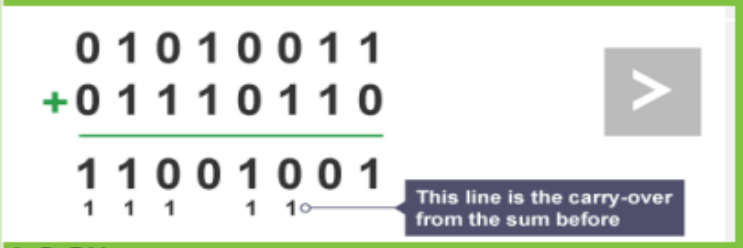
There are four rules that need to be followed when adding two binary numbers. These are:

- 0 + 0 = 0, 1 + 0 = 1, 1 + 1 = 10 (said one zero and is binary for 2)
- 1 + 1 + 1 = 11 (said one one and is binary for 3)

Example

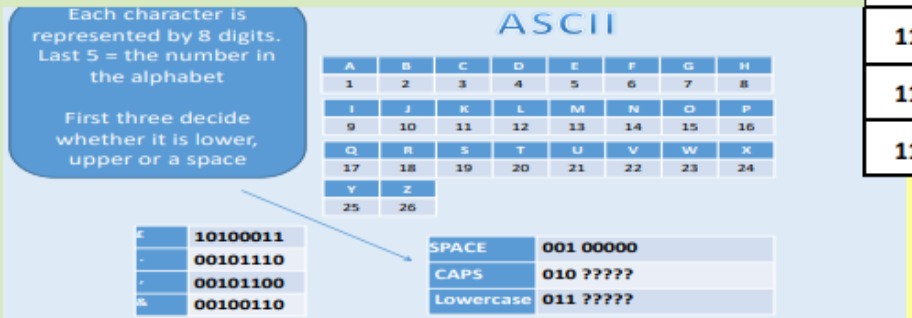
Let's try adding together two binary numbers: 0101 0011 and 0111 0110.

To get to the answer, use the following method:



ASCII

ASCII (American Standard Code for Information Interchange) codes represent text in computers, communications equipment and other devices that use text.



Hexadecimal

This is a quick way to write down binary values in a more manageable way.

This uses a 'Base 16' number system.

Conversion Table

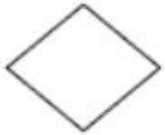
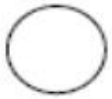
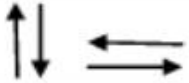
Binary	Denary	Hexadecimal
0000	0	0
0001	1	1
0010	2	2
0011	3	3
0100	4	4
0101	5	5
0110	6	6
0111	7	7
1000	8	8
1001	9	9
1010	10	A
1011	11	B
1100	12	C
1101	13	D
1110	14	E
1111	15	F

Computing— DTP KO Name_____

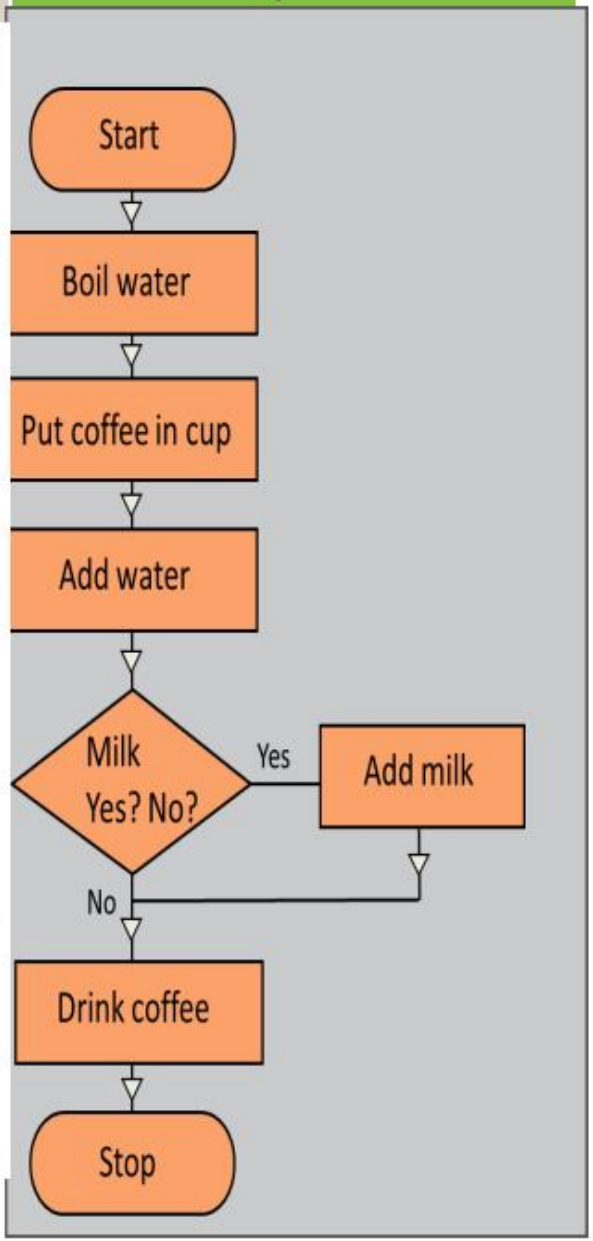
Tool	What it is used for ?
Desktop publishing Image Editing/Graphics Software	Software programs that allow you to manipulate digital images.
Business card	A card the size of a credit card (8.5cmx5.5cm) that displays contact information for an individual employed by a company
Letterhead	A letterhead is a printed heading that goes on to letters/documents sent from businesses.
Flyer	A flyer is a form of paper advertisement intended for wide distribution and typically posted or distributed in a public place or through the mail. Flyers may be used by individuals, businesses, or organizations to: Advertise an event or a business as a whole such as a food/drink establishment.
Text	This *tool* allows *text* to be typed onto the current layer using the Primary colour. The *Text* Controls in the *Tool* Bar can be used to change the font.
Logo	**Logos serve to represent a given organization or company through a visual image that can be easily understood and recognised**. A logo generally involves symbols, stylized text or both. Logos are often created by a graphic artist in consultation with a company and marketing experts.
Adjust white balance levels	White balance is **the adjustment of a digital photograph to make its colours appear more realistic**
File Formats for digital Graphics	PSD, TIFF, PNG, JPEG, GIF
Best file type for printing	TIFF
Best file type for online use	PNG/JPEG

Computing—Flowol

Flowchart Symbols

Symbol	Name	Function
	Process	Indicates any type of internal operation inside the Processor or Memory
	input/output	Used for any Input / Output (I/O) operation. Indicates that the computer is to obtain data or output results
	Decision	Used to ask a question that can be answered in a binary format (Yes/No, True/False)
	Connector	Allows the flowchart to be drawn without intersecting lines or without a reverse flow.
	Predefined Process	Used to invoke a subroutine or an Interrupt program.
	Terminal	Indicates the starting or ending of the program, process, or interrupt program
	Flow Lines	Shows direction of flow.

Coffee Example



Core Technical Principles : Timbers

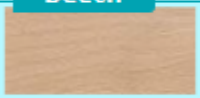
Hardwoods

Hardwood is from a deciduous tree, usually a broad-leafed variety that drops its leaves in the winter

Ash

Properties: Flexible, tough and shock resistant, laminates well. Pale brown
Uses: Sports equipment and tool handles

Beech



Properties: Fine finish, tough and durable. Beige with pink hue
Uses: Children's toys and models, furniture, veneers.

Balsa

Properties: Very soft and spongy, good strength to weight ratio. Pale cream/white
Uses: Prototyping and modelling

Oak

Properties: Tough, hard and durable, high quality finish possible. Light brown
Uses: Flooring, furniture, railway sleepers, veneer's

Mahogany

Properties Easily worked, durable and finishes well.
Uses: High end furniture and joinery, veneers.

Softwoods

Softwood is from a coniferous tree, one that usually bears needles and has cones

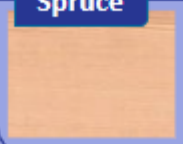
Pine

Properties: Lightweight, easy to work, can split and be resinous near knots. Pale yellowish brown
Uses: Interior construction, furniture

Larch

Properties: Durable, tough, good water resistance, good surface finish. Pale reddish brown.
Uses: Exterior cladding, decking, flooring, machined moldings, furniture and joinery. Railway sleepers and veneer's

Spruce



Properties: Easy to work, high stiffness to weight ratio. Creamy white
Uses: Construction, furniture and musical instruments

Manufactured boards

Manufactured boards are usually sheets of processed natural timber waste products or veneers combined with adhesives. They are made from waste wood, low-grade timber and recycled timber.

Chipboard

Properties: Good compressive strength, not water resistant unless treated, good value but prone to chipping on edges and corners
Uses: Flooring, low-end furniture, kitchen units and worktops

MDF (Medium density Fiberboard)

Properties: Rigid and stable, with a smooth, easy to finish surface. Very absorbent so not good in high humidity or damps areas.
Uses: Good value, flat pack furniture, toy's, kitchen units and internal construction

Plywood

Properties: Very stable in all directions due to alternate Layering at 90, with outside layers running in the same direction.
Uses: Furniture, shelving, toys and construction, interior, exterior and marine grades available for greater water resistance.

Sustainability looks to protect and maintain the needs of the present without compromising the ability of future generations to meet their needs.

Designers now have a better understanding of which materials are sustainable, which are not, and the effect that overharvesting and over consumptio

Finite resources

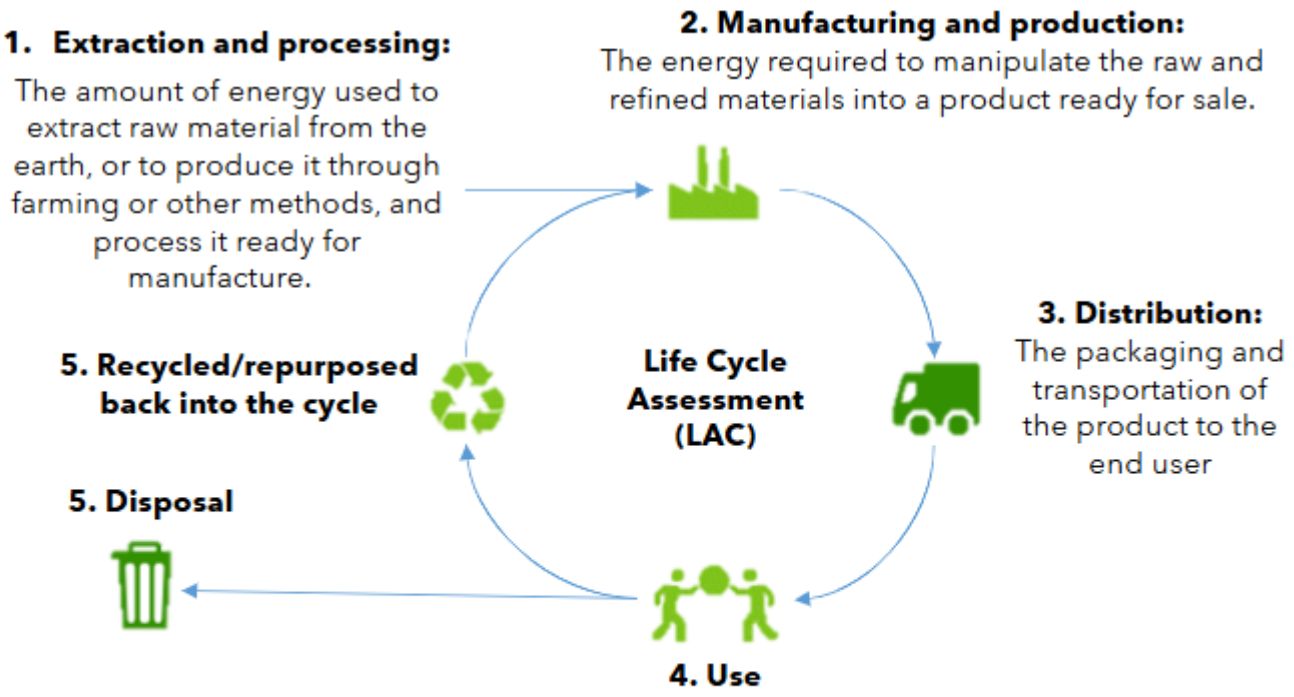
Finite resources are in limited supply and are being used more quickly than can be replaced. Use of finite resources should be avoided where possible or used only in small amounts for essential reasons where an alternative cannot be used. Fossil fuels, some materials and metal ores are examples of finite resources

Non-finite resources

Non-Finite resources are in abundant supply and are unlikely ever to be exhausted. They can be grown or replaced at the rate that they are being used. Examples include solar and wind energy, timbers and cotton.

Life Cycle Assessment

Conducting a **Life Cycle Assessment (LAC)** is a way for companies to assess the environmental impact of a product during the different stages of a products life.

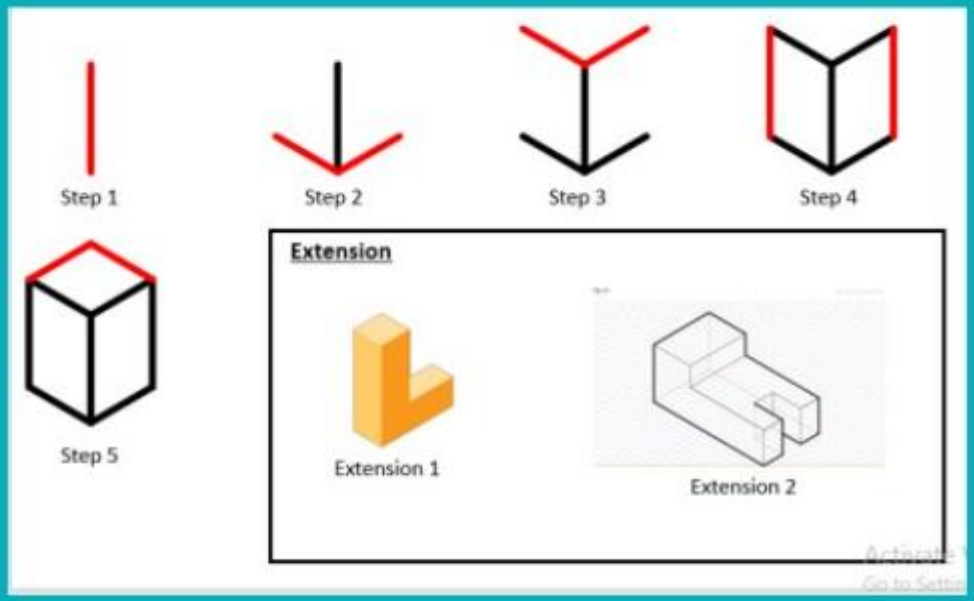


Waste disposal

Careful planning of **waste disposal** has many positive effects, particularly in large scale manufacturing plants. Waste materials can be reused internally for alternative parts and products. Some of the cost of materials is recouped through the same sale of recyclable waste. The energy used to heat and power a business may also be generated from waste material such as biomass.

Isometric Sketching

Draw five accurate cubes and then complete the two extension shapes.



Freehand

Freehand sketching is drawing without using any equipment and is the quickest way to communicate a design.

- Use 2D and 3D sketches next to each other to help communicate and explain an idea.
- Use annotations to explain your idea in more detail - e.g. materials, how it's made and how it will be used.
- Some colour can help show off key parts of the design, or give a background to the design to give it more visual depth.

3D Modelling

Making a physical model of your design allows you to see how your design interacts with users and spaces. The model can be to a smaller scale or be full scale. A model is often made of inexpensive materials such as paper, card, modelling foam or manufactured board.

A 3D model can allow you to test parts of your design to the specification, to see how well they work and develop the design further.

CUTTING/SHAPING

TENON SAW

Used for cutting timber in **straight lines.** Thick blade prevents the blade from deviating.

COPING SAW

Used for cutting **unusual and difficult shapes** with thin a blade.

DRILLING

PILLAR DRILL

Good for **accuracy** when drilling timbers. The Pillar Drill is **powerful** enough to drill large holes through thick material. Selecting the correct **drill bit and speed is very important.**

Scale

Scale is the size of the product being sketched or modelled. A full scale drawing or model is the exact same size as the final product. Large products are often drawn at smaller scales, such as furniture and cars, and small products will be drawn at larger scale, such as cameras and circuit diagrams.

Scales are written as ratios. For example, a 1:2 scale is half the size, 1:4 means an quarter of the size and 1:1 means it is full size.

Knowledge organiser: Year 7 Food & Nutrition

Personal hygiene

Personal Hygiene is the practice of good personal hygiene to help prevent cross-contamination and food-borne illness

Wear an apron

Blue plasters should be worn.

Do not eat during a practical.

Wash hand thoroughly with antibacterial soap.

Hair must be tied back

Remove watches and jewellery during a practical

Health & Safety in the kitchen

Health & Safety in the kitchen is the practice of being able to work in the kitchen area safely, preventing harm or injury to anyone and keeping the space clean & tidy

Ensure food isn't left unattended.

All cupboard and draws are closed.

Any spills are cleaned and/or mopped.

Wear oven gloves when adding and removing items from the oven

Knives must be stored safely and returned to the teacher

Food safety

Food safety is the practice of properly handling, preparing and storing food in ways that prevent food-borne illness

Cook food to the correct temperatures

Use the correct chopping boards

Don't mix or prepare raw and cooked foods together

Food hygiene

Food hygiene is the practice of properly chilling, cooking, cleaning **food** and avoiding cross-contamination to prevent the spread of bacteria in **food**.

Ensure food is stored at the correct temperature

Food should be covered and stored correctly.

Do not overfill the bins.

Wipe all surfaces down with anti-bacterial spray.

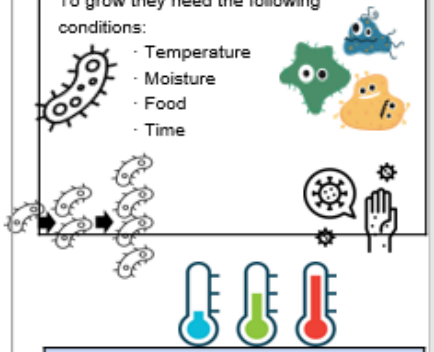
Meat, fish, vegetables etc must be prepared separately.

Washing-up must be completed during a practical.

Micro-organisms

A micro-organism (also known as a microbe) is a tiny, single-celled living plant or animal that you can only see under a microscope. Micro-organisms spoil food because they contaminate it with their waste products. There are three groups of micro-organisms that cause food poisoning; bacteria, mould and yeast. To grow they need the following conditions:

- Temperature
- Moisture
- Food
- Time



Key Temperatures

Food must be stored and cooked to the correct temperatures to avoid food poisoning and food spoilage.

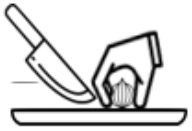
- 121°C – all bacteria is killed
- 100°C – The boiling point of water
- 75°C – The temperature that the centre of all cooked food should reach for at least 2 minutes
- 5°C–63°C – The danger zone where bacteria multiplies the most
- 0°C–5°C – The fridge temperature range
- -18°C– -24°C –freezer range

Personal Hygiene

Do not cough or sneeze next to food or put your fingers into food and lick them, then try the food again.
Wash and dry your hands thoroughly before handling food and regularly through food preparation.
The mouth, throat, teeth and gums contain billions of bacteria; some of which are pathogenic.
A clean apron gives a barrier between food and your clothes. Jewellery and watches can become clogged with dirt.
Objects outside of the kitchen, such as door handles have lots of bacteria that can contaminate your hands.

Claw Technique

Bridge Technique



Knife skills

We expect you to be able to use the equipment safely and correctly in your Hospitality & Catering lessons.

- When using a knife, we expect that you are sensible at all times and that there are no injuries or causes for concern.
- When collecting your knife from the teacher, you must walk slowly and hold the knife at your side with the blade facing the floor.
- When at your place, the knife should be clearly visible on the table at all times unless you are using it to chop.
- When cutting, you must use the 2 methods you will be taught; the **bridge** method and the **claw** method.
- Remember, any issues of unsafe behaviour will result in you being removed from practical lessons.

Subject: Food Preparation and Nutrition

Topic: Nutrition

The Eatwell Guide

- Comprises 5 main food groups.
- Is suitable for most people over 2 years of age.
- Shows the proportions in which different groups of foods are needed in order to have a well-balanced and healthy diet.
- Shows proportions representative of food eaten over a day or more.

Fruit and vegetables

- This group should make up just over a third of the food eaten each day.
- Aim to eat at least five portions of a variety each day.
- Choose from fresh, frozen, canned, dried or juiced.
- A portion is around 80g (3 heaped tbs).
- 30g of dried fruit or 150ml glass of fruit juice or smoothie count as a max of 1 portion each day.

Potatoes, bread, rice, pasta or other starchy carbohydrates

- Base meals around starchy carbohydrate food.
- This group should make up just over a third of the diet.
- Choose higher-fibre, wholegrain varieties.

Fibre

- Dietary fibre is a type of carbohydrate found in plant foods.
- Food examples include wholegrain cereals and cereal products; oats; beans; lentils; fruit; vegetables; nuts; and, seeds.
- Dietary fibre helps to: reduce the risk of heart disease, diabetes and some cancers; help weight control; bulk up stools; prevent constipation; improve gut health.
- The recommended average intake for dietary fibre is 30g per day for adults.

Key Terminology

The Eatwell Guide: A healthy eating model showing the types and proportions of foods needed in the diet.

Hydration: The process of replacing water in the body.

Dietary fibre: A type of carbohydrate found in plant foods.

Composite/combination food: Food made with ingredients from more than one food group.

Dairy and alternatives

- Good sources of protein and vitamins.
- An important source of calcium, which helps to keep bones strong.
- Should go for lower fat and lower sugar products where possible.

Beans, pulses, fish, eggs, meat and other protein

- Sources of protein, vitamins and minerals.
- Recommendations include to aim for at least two portions of fish a week, one oily, and;

people who eat more than 90g/day of red or processed meat, should cut down to no more than 70g/day.

Foods high fat, salt and sugar

- Includes products such as chocolate, cakes, biscuits, full-sugar soft drinks, butter and ice cream.
- Are high in fat, sugar and energy and are not needed in the diet.
- If included, should be had infrequently and in small amounts.

8 tips for healthier eating

These eight practical tips cover the basics of healthy eating and can help you make healthier choices.

1. Base your meals on starchy carbohydrates.
2. Eat lots of fruit and veg.
3. Eat more fish – including a portion of oily fish.
4. Cut down on saturated fat and sugar.
5. Eat less salt (max. 6g a day for adults).
6. Get active and be a healthy weight.
7. Don't get thirsty.
8. Don't skip breakfast.

Oil and spreads

- Unsaturated fats are healthier fats that are usually from plant sources and in liquid form as oil, e.g. olive oil.
- Generally, people are eating too much saturated fat and need to reduce consumption.

Hydration

- Aim to drink 6-8 glasses of fluid every day.
- Water, lower fat milk and sugar-free drinks including tea and coffee all count.
- Fruit juice and smoothies also count but should be limited to no more than a combined total of 150ml per day.

Composite/combination food

Much of the food people eat is in the form of dishes or meals with more than one kind of food component in them. For example, pizzas, casseroles, spaghetti Bolognese and sandwiches are all made with ingredients from more than one food group. These are often called 'combination' or 'composite' foods.

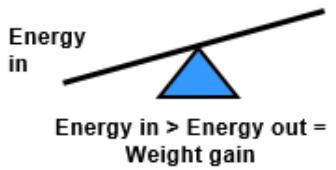
Subject: Food Preparation and Nutrition Topic: Carbohydrates and Fibre

Energy
Energy is essential for life, and is required to fuel many different body processes, growth and activities. These include:

- keeping the heart beating;
- keeping the organs functioning;
- maintenance of body temperature;
- muscle contraction.

Our bodies get energy from **Macronutrients.** There are 3 macro nutrients: carbohydrates, fats and protein.

Energy balance
To maintain body weight it is necessary to balance energy intake (from food and drink) with energy expenditure (from activity).



Free sugars include all sugars added to foods, plus sugars naturally present in honey, syrups and unsweetened fruit juice.

Fibre is a term used for plant-based carbohydrates that are not digested in the small intestine.

Food Sources of Carbohydrate

Sugars include a variety of different sugar molecules such as sucrose

Fibre

- Dietary fibre is a type of carbohydrate found in plant foods.
- Food examples include wholegrain cereals and cereal products; oats; beans; lentils; fruit; vegetables; nuts; and, seeds.

Dietary fibre helps to:

- reduce the risk of heart disease, diabetes and some can
- help weight control;
- bulk up stools;
- prevent constipation;
- improve gut health.

Key Terminology

Energy: The power the body requires to stay alive and function.

Macro nutrient: The nutrients we need in larger quantities that provide us with energy:

Digestion: The process by which food is broken down in the digestive tract to release nutrients for absorption.

Dietary fibre: a type of carbohydrate found in plant foods

Constipation: A symptom linked to a lack of fibre in the diet. It happens when food cannot pass through your digestive system easily.

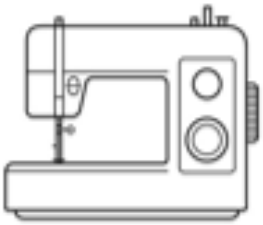
To increase your fibre intake you could:

•Choose a higher-fibre breakfast cereal such as plain wholewheat biscuits (like Weetabix) or plain shredded whole grain (like Shredded wheat), or porridge as oats are also a good source of fibre.
•Go for wholemeal or granary breads, or higher fibre white bread, and choose wholegrains like wholewheat pasta, bulgur wheat or brown rice.
•Go for potatoes with their skins on, such as a baked potato or boiled new potatoes.
•Add pulses like beans, lentils or chickpeas to stews, curries and salads.
•Include plenty of vegetables with meals, either as a side dish or added to sauces, stews or curries.
•Have some fresh or dried fruit, or fruit canned in natural juice for dessert. For snacks, try fresh fruit, vegetable sticks, rye crackers, oatcakes and unsalted nuts or seeds.

Dietary guidelines state that adults should eat 30g of fibre a day (Slightly less for children)

A lack of fibre in your diet can lead to **constipation**, irritable bowel syndrome (IBS), Heart disease and come cancers (bowel).
Type 3 and 4 on the Bristol stool chart means you have enough fibre in your diet.

A plan or drawing produced to show the look and function of a product.
a decorative pattern



PATTERN

(pa·tn)

- In Year 7 we will DESIGN a Pattern for the front of the pencil wrap
- You will DESIGN a stencil to use as a repeat template

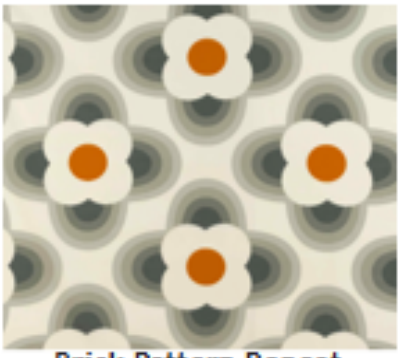
1. Pattern
2. Motif
3. Arrangement

Pattern

- **Repeat:** Is the amount of space from where a pattern starts and then begins again.
- Types of pattern repeat: Block Repeat, Half Drop Pattern Repeat, Brick Pattern Repeat, Random Pattern Repeat.

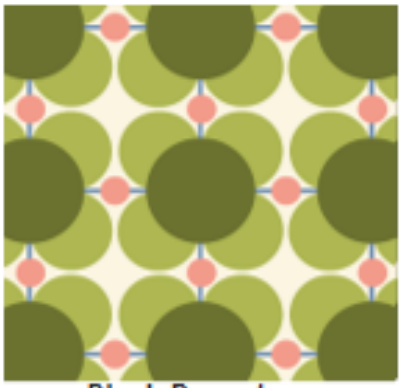
Block Repeat

Half Drop Pattern Repeat



Brick Pattern Repeat

Random Pattern Repeat



Block Repeat

Block Repeat

Quality
The grade of excellence

- How good something is
- How good it looks
- How well the pattern repeats

High Quality

- The very best
- Highest standard

Skilful

- Confident to undertake the task without support
- Task completed correctly

Skill

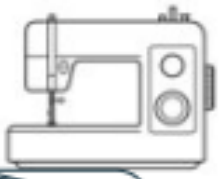
- An ability that comes from training
- Something you can get better at

The skills in this project are:
Drawing 2D shapes, pattern repeats, applying colour.

When Designing a pattern:

1. Extract 2D organic and geometric shapes
2. Create a template of the shape to be repeated
3. Consider how the pattern will repeat i.e. Block, ½ drop etc
4. Think about the type of product the pattern will be used on

- To look at
- To examine in detail to explain and interpret



- In Year 7 we will ANALYSE a the designer MILTON GLASER
- You will ANALYSE his designs to create a patten design of your own

1. Psychedelic
2. intense colours
3. wiggling lines
4. blending of objects that appear to be melting and oozing into each other

ANALYSE
(an+uh+lyz)

Psychedelic design is an art form that tends to have intense colours, free-flowing lines, and kaleidoscopic patterns

Founder's Philosophy:
Milton Glaser,felt that as a designer he was in the business of persuasion and could bring about change. He aspired to put his skills towards a worthy cause, even if success was not guaranteed.

History
Milton was born in The Bronx, New York City. His parents, were Hungarian Jewish immigrants. The family resided in the South Bronx. His father owned a dry-cleaning and tailoring shop; his mother was a homemaker.

Inspiration
Italian painter Giorgio Morandi, influenced Glaser. "Morandi was one of those artists who, the longer you look at him, the more you grow in your appreciation, the more you understand," Glaser said

Impact
Milton Glaser is credited for the creation of the famous Push Pin Design Studio. Their style is characterized by strong outlines, bright colours, and slightly exaggerated forms.

Legacy:
One of Glaser's most recognizable works is his 'I Love New York' logo. Its' aim was to increase tourism as New York was seen to be a dangerous place to visit.

Key Products:
In 1966, Glaser designed a poster for *Bob Dylan's Greatest Hits*. It was one of Glaser's first posters. The poster shows the profile of Dylan's face with psychedelic, swirly hair, with "Dylan" written at the bottom in Baby Teeth, one of Glaser's typefaces.

Global Reach:
Throughout his career, Glaser has been a creator of posters and prints. His artwork has been featured in exhibits worldwide, including one-man shows at both the Centre Georges Pompidou in Paris and the Museum of Modern Art in New York.

Relevance Today:
Again and again, he stressed the importance of continuing to learn. "We are all born with genius," he said. "It's like our fairy godmother. But what happens in life is that we stop listening to our inner voices, and we no longer have access to this extraordinary ability to create."

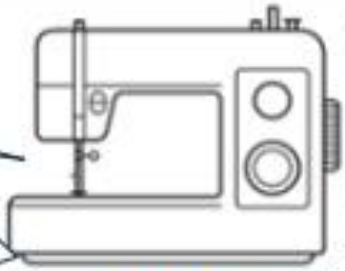
Milton Glaser Design

Bold Colours:
Milton often used vibrant and contrasting colours.

Organic Patterns:
Use of Organic shapes and patterns, including wavy and curved lines.

To put together
Practical activity

1. Assemble
2. Build
3. Construct



MAKING
(may-kuhng)

- In Year 7 we will be **making** a Pencil Wrap
- You will use tools to **make** the parts
- It will be **made** from Cotton

Cotton
- Natural
- Grows on a plant
- Absorbent; will soak up liquid
- Can be dyed lots of different colours

Pencil wrap
- Parallel: My pouches are parallel; this means the sewn lines are the same distance apart
- Seam allowance: The main parts have been sewn using a seam allowance of 1.5cm; this means they are strong and won't come apart

High Quality
- The very best
- Highest standard

Quality
The grade of excellence
- How good something is
- How good it looks
- How well it is made

When sewing use a;
Sewing Machine

1. Sharp needle
2. Take-up lever pulls the thread through the machine
3. Can use different types of stitch patterns
4. Used to sew lots of different types of fabrics.
5. The balance wheel can move the position of the needle

Skilful
- Confident to undertake the task without support
- Task completed correctly

Skill
- An ability that comes from training
- Something you can get better at

The skills in this project are:
Measuring / Sewing in a straight line , sewing 90-degree corners, Hand sewing

Year 7 Knowledge Organiser – Romeo and Juliet by William Shakespeare

Romeo and Juliet

You will be exploring 'Romeo and Juliet' by William Shakespeare, examining how the hatred between the Montagues and the Capulets can be shown effectively on stage.

Tasks for this topic:

- Explore the language of Shakespeare
- Use performance skills to represent hatred on stage
- Layer techniques you have used previously into your work to enhance the quality of your work.

Performance Techniques	
Technique	A tool used to enhance the quality of a performance piece
Movement to music	Movements that are created that work in time with a piece of music
Thought Tracking	A character's thoughts/feelings said out loud to an audience
Slow Motion	Moving slowly in order to highlight parts of a scene to an audience

Year 7 Knowledge Organiser – Titanic

Titanic

You will be using the skills and techniques you have learnt over the course of Year Seven to explore life aboard the Titanic and the impact the disaster had on society at the time.

Tasks for this topic:

- Use performance skills to explore the feelings and experiences of the passengers on board
- Explore the reasons people were on the Titanic and the dreams they had for the future through devising of work
- Use conscience ally to inform performance work.

Performance Techniques	
Conscience ally	A character walks down an alleyway formed by members of the group as they use words to help shape characterisation.
Stereotype	A fixed and oversimplified image or idea of a particular type of person or thing.
Flashback	Showing the audience an important moment in a story that happened in the past
Devising	A group collaboration in response to a stimulus resulting in the creation of an original performance

YEAR 7 SUMMER TERM KNOWLEDGE ORGANISER:
HIDDEN TRUTHS
THE TWELFTH NIGHT BY WILLIAM SHAKESPEARE

Plot Overview: Set in the island of Illyria, this Shakespearean comedy begins with the arrival of Viola in Illyria, who has been separated by her twin brother, Sebastian, in a shipwreck. The shipwrecked twins leads to mistaken identities, comedic misunderstandings and eventually a series of marriages.

Act	Plot Summary
Act 1	• Orsino, the Duke of Illyria, is upset because his love for Countess Olivia is not returned. • Viola is shipwrecked on the shores of Illyria. She believes her twin brother, Sebastian, has drowned. • Viola disguises herself as a man (Cesario) so that she can work for the Duke of Orsino. • Olivia's uncle, Sir Toby Belch, Sir Andrew Aguecheek and Maria are partying together. Sir Toby believes that Sir Andrew should marry his niece, Olivia. • Feste, Olivia's clown, tries to cheer Olivia up because she is still mourning her brother. • Viola, now called Cesario, is sent by Duke Orsino to try to convince Olivia of his love. • After meeting Olivia and leaving, Olivia admits she is attracted to Viola/Cesario and sends Malvolio, her servant, after him with a ring.
Act 2	• Sebastian (Viola's twin) arrives in the town of Illyria after surviving the shipwreck. He meets Antonio, who gives Sebastian a purse of money to help him. • Malvolio gives Viola/Cesario Olivia's ring. Viola/Cesario realises that Olivia has fallen in love with her. • Sir Toby, Sir Andrew and Maria dislike Malvolio and decide to play a prank on him because he disapproves of their partying. They write a letter to trick him: it says that Olivia is in love with him. • Viola/Cesario reveals that she is in love with Duke Orsino. Duke Orsino has no idea!
Act 3	• Viola/Cesario returns to Olivia's house. She begs Viola/Cesario not to give her any more love messages from Duke Orsino. • Olivia reveals that she loves Viola/Cesario (she thinks Viola/Cesario is a man). • Viola/Cesario tells Olivia that she cannot love her. Olivia is devastated. • Malvolio, who has fallen for the trick letter, is declared mad by Olivia. She locks him in the dungeon. • Sir Toby Belch plays a prank to get Sir Andrew to fight a duel to the death with Viola/Cesario and win Olivia's love. Sir Andrew and Viola/Cesario prepare to fight. • Antonio enters and, believing that Viola/Cesario is Sebastian, volunteers to fight in place. • Orsino's men then arrive, recognise Antonio (a wanted man) and arrest him. Antonio asks Viola/Cesario (still believing he is Sebastian) for his money back to release him from jail. Viola/Cesario is confused and refuses. Antonio feels betrayed.
Act 4	• Sir Toby and Sir Andrew meet Sebastian. Believing that he is Viola/Cesario, they challenge him to a duel. Sebastian agrees to fight. • Olivia enters and stops the duel. She thinks he is Viola/Cesario. Olivia returns with a priest and suggests they marry. He agrees. • Olivia and Sebastian marry.
Act 5	• Duke Orsino and Viola/Cesario approach Olivia's house. Antonio still feels betrayed by Viola/Cesario. • Olivia speaks to Viola/Cesario (whom she believes she has just married) in front of Duke Orsino. Viola/Cesario is confused and Duke Orsino is angry. • Sebastian enters and tells Olivia that he is sorry for having fought with Sir Toby and Sir Andrew. • Everyone stands amazed, seeing Viola/Cesario and Sebastian. Olivia realizes that she has married Sebastian, not Viola/Cesario. • Feste (the clown) reveals the trick played on Malvolio. Malvolio is released. • Orsino realises he loves Viola and tells her that as soon as she dresses as a woman, they shall marry.

'If music be the food of love, play on.'

Key Themes

Love

Disguise

Suffering

Big Ideas

Devout
Deep religious commitment.

Identity
Who a person is and what makes them who they are.

Social Expectations
The unspoken rules that define what behaviours, beliefs and attitudes are acceptable in society.

Conflict
A serious disagreement or argument.

YEAR 7 SUMMER TERM KNOWLEDGE ORGANISER:
HIDDEN TRUTHS
THE TWELFTH NIGHT BY WILLIAM SHAKESPEARE

Key Characters

Viola/Cesario
Protagonist / young woman / clever / disguised as Cesario

Duke Orsino
Powerful nobleman in Illyria / lovesick / egotistical

Countess Olivia
Noble Illyrian lady / wealthy / beautiful / in mourning / sworn off men for 7 years

Sebastian
Viola's twin / strong / confused / excellent at combat

Malvolio
Olivia's head servant / self-righteous / efficient / disapproves of fun

Sir Toby Belch
Olivia's uncle / rowdy / chaotic / friends with Maria and Sir Andrew

Sir Andrew Aguecheek
Desires Olivia to be his wife / believes he is witty / idiotic / friends with Sir Toby

Maria
Olivia's lady-in-waiting / clever / daring / friends with Sir Toby

Feste
Olivia's clown / fool / entertaining / wise

Antonio
Rescues Sebastian / caring / loving

Context – We must understand the influences of the world we live in when examining texts.

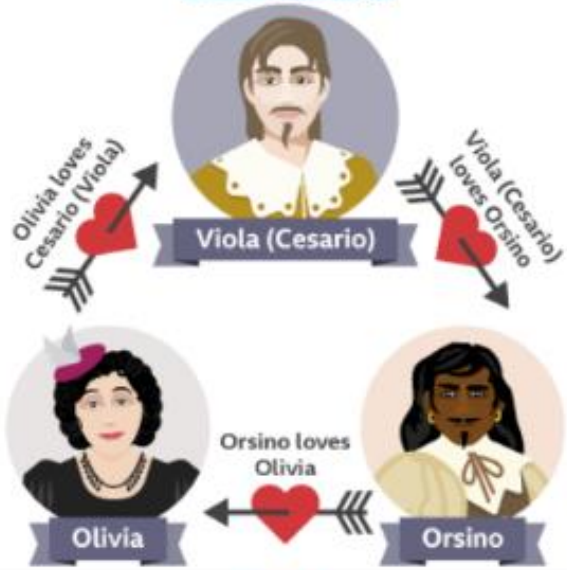
William Shakespeare

William Shakespeare was born in Stratford-upon-Avon in 1564. He is arguably the most famous playwright in the world. He wrote plays more than 400 years ago and served under two monarchs: Queen Elizabeth I and King James I. He also helped build the Globe Theatre in London.

Queen Elizabeth

Queen Elizabeth I was the Queen of England, Ireland and Wales from 1558-1603. Her reign was called the Golden Age.
It was unusual to be ruled by a woman at that time. It was also unusual because she refused to marry.
While she was queen, England won a famous sea battle against the Spanish Armada. Part of her success was because of her authorisation of a group of privateers who were sent to target the Spanish on land and at sea (similar to pirates).
Her reign saw the beginnings of Britain's colonising of the world (taking over lands they 'discovered').

The Love Triangle



The Twelfth Night

The Twelfth Night is named after the Twelfth Night festival (the twelfth night after Christmas)– a Christian festive period.
It was known as a time of carnivalesque behaviour: where people dressed up and roles were switched in a topsy-turvy fashion.

Actors

During the Shakespearean period, only males were allowed to perform as actors onstage. This meant all of the parts were performed by men or boys. Female characters were often played by young boys.

YEAR 7 AUTUMN TERM KNOWLEDGE ORGANISER: HIDDEN TRUTHS
TECHNICAL ACCURACY & KEY DEVICES

'FOUR FOR MORE'-THE 4-PART SUCCESS STORY

Part	Key Features
SETTING 	• Introduce your story by focusing on the setting • Describe the weather / environment / surroundings / objects / décor • DEVICES: Personification / pathetic fallacy / symbolism / prepositions / foreshadowing
CHARACTER 	• Describe your character(s) within your setting • One or two characters – keep it minimal • Craft their actions / behaviour to reflect their personality and emotions • DEVICES: Sensory language / similes / metaphors / minimal dialogue
FLASHBACK 	• Include a flashback to teach the reader something about your character and / or their world • Begin this section with a trigger • This memory should contrast your character's current situation • DEVICES: Sensory language / juxtaposition / light imagery / similes / metaphors / symbolism
RETURN TO THE SCENE 	• Begin this section with a trigger that forces your character back to their current world • Offer a glimpse of change / a subtle change to end your story • Return to something that you described in your opening paragraph to create a cyclical structure • DEVICES: Sensory language / personification / pathetic fallacy / symbolism / cyclical structure

Device / Feature

Simile
Comparing something to something else: 'as', 'like'


Metaphor
Describing something by stating it is something else


Symbolism
Objects, colours, sounds, places


Sensory language
Five senses


Punctuation

Capital Letters
- Start of a sentence
- Proper nouns: names of places, people or things
- The pronoun 'I'
- Months and days of the week

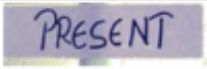
Commas
- Separating three or more items in a list
- After a fronted adverbial
- Before and after a subordinate clause (like brackets)
- After subordinate clauses and phrases that begin a sentence

Apostrophes
To show that letters are missing in a word
To show possession

Full Stops
To end a sentence

Tenses

Something that has already happened
Had / went / said / walked



Something that is currently happening
Have / go / say / walk

Something that will happen
Will have / will go / will say / will walk

Common Homophones

Word Classes

Adjective
Describes a noun or pronoun.
Blue / young / powerful

Adverb
How, when or where something happens.
Furiously / yesterday / here

Preposition
Where something is; the time, direction or cause of something.
On / under / above

Pronoun
Words that replace nouns or noun phrases.
She / he / they

Noun
Person, place, thing, idea or state of being.
Manchester / cat / love

Verb
An action or state of being.
Jump / write / be

Geography of the UK

Key Terms

Physical Map – Shows mountains, rivers and seas.

Political Map – shows the borders of the countries and also their capital/major cities.

Migration – this is when someone moves to a new place to live and work.

Multicultural – a society where many different cultures live together

Refugee – A person seeking a safe place to live

Choropleth Map - A map that uses colours to show different information

Population Distribution – this is usually displayed on a map and shows where people live

Primary employment – jobs in mining, fishing and farming

Secondary employment – manufacturing jobs where people make things

Tertiary employment – jobs that provide a service like teaching or shop assistant

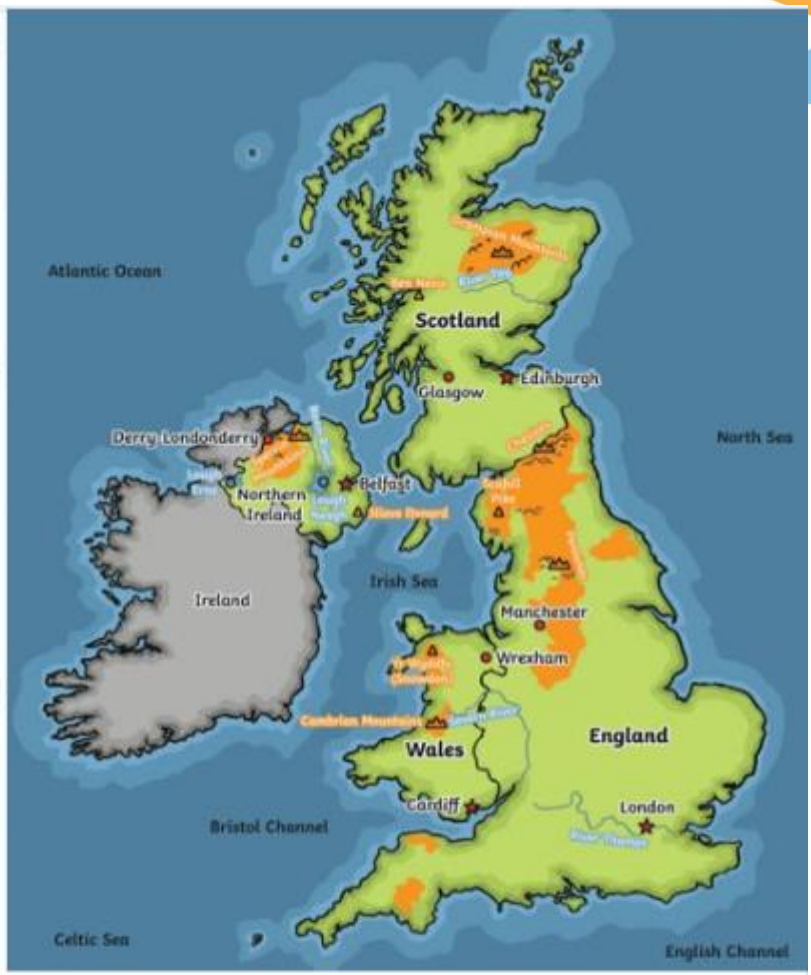
Quaternary employment – hi-tech jobs like computing

Demographics – this is data about the population of a place

Life expectancy – the average age people live to

A political map of the UK

There are 4 countries in the UK and each has a capital city as shown on the map above.



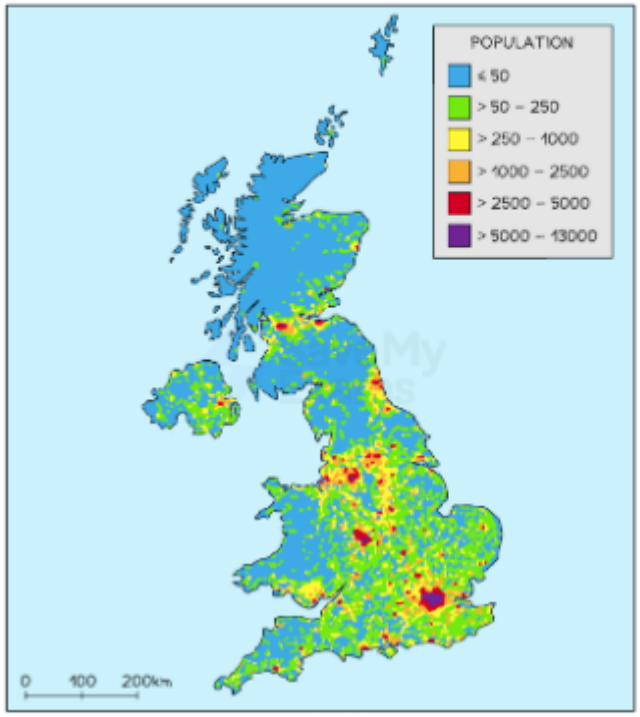
A physical map of the UK

The map shows the highest mountain in each country, the largest river and also where the main mountain ranges are located.

Who are the British?

The UK is a multicultural place with a long history of migration stretching back 1000s of years from the Romans, Vikings and Anglo-Saxons to more recently people from India, the Caribbean, Pakistan and also Europe from when we were a part of the EU.

Choropleth map showing population distribution



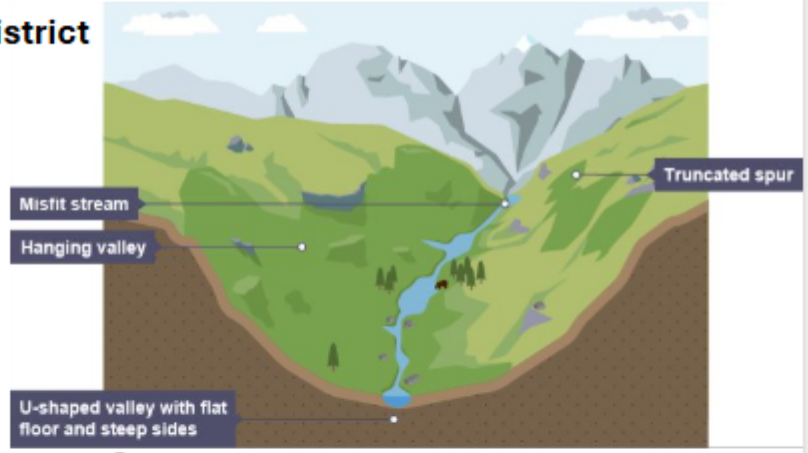
- The choropleth map uses colours to show where people live.
- The darker the colour the more people. As you can see the majority of people live in cities. The large dark colour to the south is London and in the North West you can clearly see there are many people in Manchester and Liverpool.
- In addition you can also see that very few people live in Northern Scotland. This is because there are lots of mountains and it is not an easy place to live.

The Lake District – An area of natural beauty created by glaciers

The Lake District is located in North West England and is a National Park (its natural beauty is protected by strict laws) that is famous for its Lakes and Mountains.
It is a very popular tourist destination for sightseeing, hiking, canoeing and sailing or mountaineering. It was created during the last ice age which began over 2 million years ago but only ended 11000 years ago.
A glacier is a slow moving mass of ice

How Glaciers shaped the Lake District

Because of the mountains and the Lake Districts location it has always received lots of rainfall which created rivers and V-shaped valleys (which learnt about in the rivers topic.
Glaciers eroded these valleys creating **U-shaped valleys**. The ice as it moved downhill scraped out the sides and bottom where there are now many lakes present.



UK Demographics

- The average age of the population of the UK is 41. In Greater Manchester it is 39.
- The average life expectancy in the UK is 82 years in Manchester it is 81 years. There could be a number of reasons for this such as standard of healthcare, how difficult their job is or their quality of life.
- The average wage a person will earn in the UK is £37,000 but in London it is £47,000 and Manchester is £38,000. This could differ because of the different types of jobs people have in different parts of the country.

Microclimate Knowledge Organiser

Key Terms

Weather – the day-to-day conditions in the atmosphere. It is warm and sunny

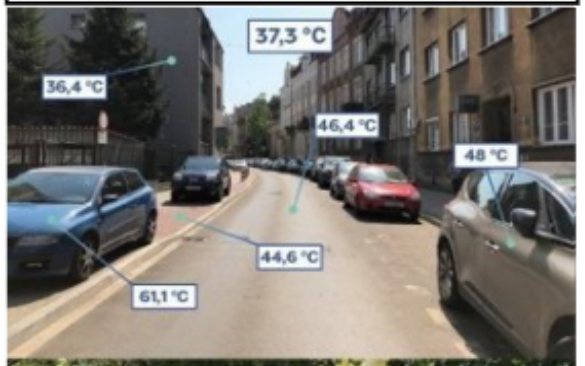
Climate – weather conditions over a long period of time. Spring in the UK is wet and mild.

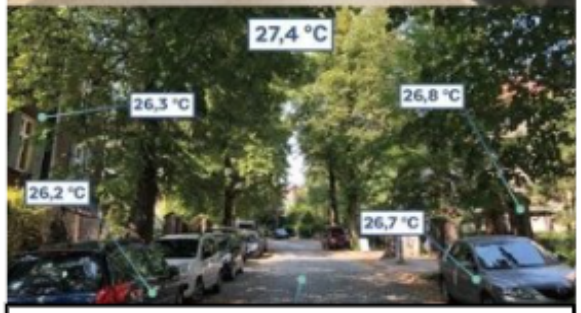
Fieldwork – this is practical research outside of the classroom.

Rationale

In this project you will investigate the microclimate of our school. You will learn about the role of the environment in affecting the microclimate along with developing your geographical investigation skills. This will involve identifying an area of study, collecting, presenting and analysing data along with formulating conclusions based on your investigation.

A microclimate is the distinctive climate of a small area, such as a garden, park, valley or part of a city. The weather in a microclimate can differ from the climate of a surrounding area. The variables may be temperature, rainfall or wind.

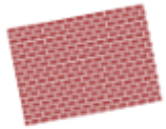




The two photos above were taken in the same city on the same day but the temperature in either place varies greatly. This is because in the second photo the trees are providing shade for the street so the ground is not being heated as much by the sun.

Factors that can affect microclimates

1. **Aspect** - The direction a place is facing. Places facing the south will be warmer as they receive more of the sun's energy. Those facing the north will cooler.



2. **Shelter** - Trees, hedges, walls and buildings all provide shelter from the wind. This can reduce wind speed or change direction of the wind.

3. **Physical Features** - Trees create shade. Bodies of water such as lakes and seas are cooler and sometimes create light winds. High places are cooler than low

4. **Surfaces** - The colour of the ground effects the warming. Dark surfaces are warmer than light as they absorb the suns heat better.

5. **Buildings** - Buildings give off heat that is stored during the day. Temperatures can be 2-3 degrees hotter around buildings. Buildings can decrease or increase wind speed.

The process of investigation

Hypothesis – this is the question we are aiming to answer by collecting, presenting and analysing data.

Risk Assessment – we always need to first assess what risks we face during fieldwork. If we are staying on school grounds we do not need to worry about traffic but the weather and also how we dress may have a factor. For example if it is raining we should wear a coat to stay dry.

Methodology – This is how we will carry out our method. We design this before leaving the classroom. We need to think carefully about how many sites we will visit around school. What equipment we will need to measure differences in temperature, shade, wind speed and how we will record our data.

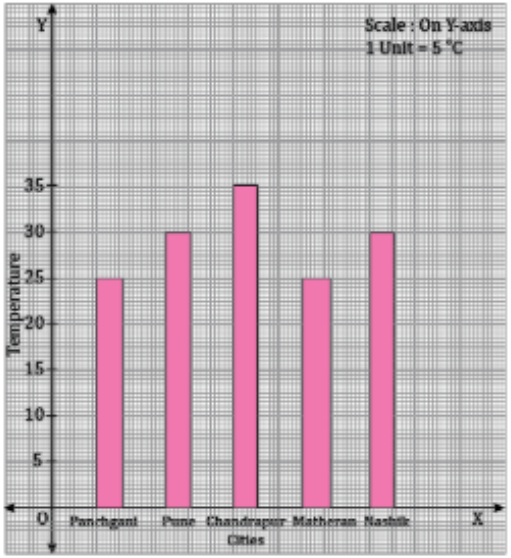
Data Presentation – This is how we present our data. This is a graph. Graphs make it easy to look for patterns in our data.

Data Analysis – We use our data to describe our results. We will look for specific patterns in places. If an area was in the shade did it have a lower temperature? Was the yard warmer than the field? Then we will explain why we think this was the case using the information on the previous page.

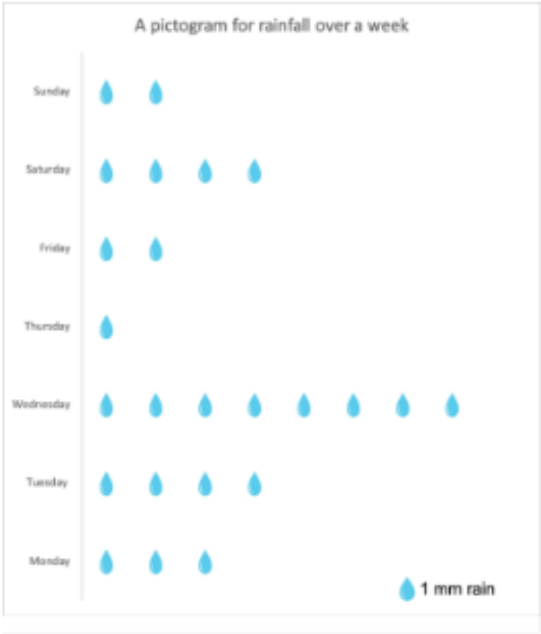
Conclusions – our conclusion is where we answer the hypothesis.

Evaluation – this is where we evaluate the study. Were there any factors that could mean our study was not accurate? How we collected the data for example?

Ways we can present our data



This is a bar chart. We can use bar charts to show the data from each site on one graph. We can only show Temperature or wind speed on a bar chart though.



This is a pictogram. It is similar to a bar chart but each symbol represents 1mm of rainfall. You count the symbols to show how much rainfall there was at each site. Like a bar chart this is a good way to compare data over each site. It must have a key to be accurate.

YEAR 7 KNOWLEDGE ORGANISER: Tudors and Stuarts (part 2)

Key things I need to know

- ✓ What was the impact of Henry's break with Rome?
- ✓ How did religion impact the reign of the Stuarts?
- ✓ What were the causes and impacts of the English Civil War?

Key Concepts	
1. The Break with Rome	When the English Church broke away from the authority of the Catholic Church and the Pope.
2. Protestant	A Christian Church created by Henry VIII meaning that the Pope no longer controlled religion in England.
3. Treason	The crime of betraying your King or Queen.
4. Divine Right of Kings	A King could do as they wish because they were picked by God.
5.Civil War	A war between two groups of people in the same country.
6.Republic	A country without a King or Queen.

How did Henry's break with Rome impact the reign of his children?

Edward VI	Mary I	Elizabeth I
Henry's son, Edward VI, went further than his father and made even more changes to the Church, making it more Protestant e.g. priests were allowed to marry, and the Book of Common Prayer was published.	After Edward died, his sister Mary I became queen. She was a strong Catholic and reversed many of Edward's changes. She also bought over 300 Protestants at the stake.	Following Mary's death, her sister, Elizabeth I, became queen. She attempted to find a middle way to please both Catholics and Protestants. This was known as the Elizabethan religious settlement.

Why did Elizabeth have so many problems?

Marriage:

Elizabeth was the last of Henry VIII's children and so needed to marry and have children to ensure that the Tudor bloodline continued.

Finding a partner for Elizabeth however was difficult as she had to decide on religion and alliances.

In addition, how Elizabeth looked played a part in finding a partner.

Mary Queen of Scots:

Mary Queen of Scots was born in 1542 and was Elizabeth I's cousin. Many Catholics saw Mary as the rightful Queen of England.

Mary became Queen of Scotland when she was a baby and was raised a catholic. The Catholics in England a wanted things to change whereas protestants wanted it to continue.

After Mary's husband was killed in suspicious circumstances Mary fled to England for safety, but Elizabeth did not trust her and so had her locked away.

In 1586, a plot to assassinate Queen Elizabeth and replace her with Mary was created; the Babington Plot. Mary would send a letter that seemed to agree with the plot that was found by Elizabeth's spy Sir Francis Walsingham. After it was deemed that Mary was too much of a threat and of committing treason, she was beheaded in 1587.

Spanish Armada:

The Spanish Armada set sail for several reasons:

- Executing Mary Queen of Scots
- Elizabeth rejected the King of Spain in marriage
- English explorer Sir Francis Drake destroyed Spanish ships

The Spanish Armada failed for several reasons:

- The Spanish had large and slower ships which were hard to manoeuvre
- The Spanish used a crescent formation which made them an easy target
- A storm hit the Spanish, causing them to sail around Scotland.
- The English had cannons that they could fire faster.

Stuart England

1603 – James becomes King James I of England → 5th November 1605 – Gunpowder Plot → 1625 – James dies, and his son Charles becomes King Charles I → 1629 – Charles rules without Parliament for 11 years → August 1642 – The English Civil War began → 1649 – Charles I was executed and England became a republic → 1660 – Parliament asks Charles' son to return as King Charles II

The Gunpowder Plot

Causes:	Events:	Impacts:
At first James I had been soft on the Catholics as he wanted to keep them happy. However, the Protestants didn't like it, so he had to become harsher on the Catholics - he announced a plan to outlaw (ban) Catholicism	• The plotters put 36 barrels of Gunpowder in a cellar they had rented, under the Houses of Parliament. • A suspicious letter was sent to Lord Monteagle who took this to the King's Spy Master, Robert Cecil. The King worked out what the message meant and the cellars were searched 10 days later. • Guy Fawkes was discovered, tortured and confessed.	• People thought that the King was clever for working out what was going to happen. • It made the Catholics look like a serious threat which gave King James an excuse to be harsher on the Catholics, including banning them from voting. • Such a public, and horrible punishment, scared the Catholics and meant they didn't actively try to overthrow the monarchy again. • The country became more firmly Protestant

Were the plotters framed?

Despite Guy Fawkes confessing to the crime, there is debate around if those accused actually planned this attack or if it was someone else.

- The cellar where the gunpowder was stored was rented to the plotters by a man called John Whynniard who was friend of the King's Spy Master. Whynniard was found dead on the morning of the 5th November.
- All supplies of gunpowder were kept secure in the Tower of London, however the records for 1604 were missing.
- After Robert Cecil was told about the mysterious letter, he waited 10 days before searching the cellar.
- Robert Cecil was allegedly also upset with how James I was treating the Catholics softly.
- The signature of Guy Fawkes was completely different from when he was arrested compared to a few days later.
- The house where the "plotters" were found was surrounded on the 7th November 1605, just two days after Guy Fawkes was captured. However, according to Government reports it took two days for Fawkes to give his real name and a further six days to reveal the others.

Key Concepts	
1. Cavalier	Nickname for a soldier who fought for the king during the civil war
2. Roundhead	Nickname for a soldier who fought for Parliament during the civil war
3. Puritan	A strict Protestant

Causes of the English Civil War (1642)

- Charles I married a Catholic and allowed Catholic advisors at court. He was accused of being a secret Catholic. In 1637 three Puritans (extreme Protestants) were arrested for printing pamphlets criticising changes to the Church of England, as they thought they made it more Catholic. They were punished in public.
- Charles refused to share power with Parliament, he ruled on his own for 11 years. He believed in the Divine Right of Kings.
- Since 1626 Charles has collected a tax to pay for the navy, because England was at war with Spain. This tax was called 'Ship Money'.
- In 1641 a rebellion breaks out in Ireland over religion and Charles asked Parliament for money. Some MPs refused to pay for an army that Charles was going to lead. They suggest that Parliament should be in change of the army instead, but Charles accused them of treason and demanded their arrest.

Soldiers of the English Civil War

The English Civil War divided friends and families between two sides; the Cavaliers who fought for parliament and the Roundheads who fought for the king.

Cavaliers – Musketeers

Musketeers did not wear armour, which meant they could move quickly. The gun that most of these soldiers used was called a matchlock. A good and well-trained musketeer could fire 3 rounds a minute – but if his gunpowder got wet, he wouldn't be able to shoot at all. Musketeers also had a sword for close hand-to-hand combat.

Roundheads – Pikemen

Wore a set of armour and a strong thick coat, made of horse hide, called a 'buff coat'. The pike that the men carried was approximately 18 feet long and made of a hard wood. The top 4 feet of the pike was wooden with metal around it, with a sharp spiked spearhead at the top. Pikes were very heavy; only the strongest men could use them properly.

Cavalry – both

Both the Cavaliers and the Roundheads had cavalry (soldiers on horses), but the cost of keeping hundreds of horses was very high. The cavalry soldiers were armed with a heavy sword and sometimes two pistols. They wore back and chest plate armour with a 'buff coat' (a thick coat usually made of horse hide) underneath that.

Key battles of the English Civil War (1642)

1642 – Battle of Edge Hill → 1642 – Battle of Westhoughton Common → 1643 – The First Battle of Newbury → 1644 – The Battle of Marston Moor → 1644 – The Second Battle of Newbury → 1645 – The Battle of Naseby → 1648 – The Battle of Preston

Charles' execution

Charles I was defeated by the leader of the Parliamentarian army, Oliver Cromwell. Charles was arrested and put on trial for high treason due to how he angered parliament before the war and also being blamed for starting it.

Cromwell had 59 signatures on Charles' death warrant but there were arguments for and against Charles' execution.

✓ Killing Charles will bring peace to England.
✓ Cromwell's victories proved that God was actually on his side, not Charles'.
✓ Charles has killed and been to war against the people he was supposed to protect.

- England would be lost without a King.
- A lot of people in Parliament wanted Charles back in power.
- Charles was chosen by God and mortals do not have the power to challenge that.

Oliver Cromwell; hero or villain?

30th January 1649 King Charles I was executed, and England became a Republic for the next 11 years. Oliver
Cromwell became Lord Protector and led England.

Oliver Cromwell made lots of changes to England;

- He still made decisions without Parliament at times but he gave Parliament much more power than before, and the way it was elected was fairer.
- Even though he was a Puritan, Cromwell was tolerant of other religions. He allowed Jews to come back into the country. He wasn't accepting of Catholics though, especially in Ireland.
- He created strict rules, such as banning football, however, he got rid of censorship (stopping some ideas being spread) and lots of people, including women, were now able to publish their ideas.

Oliver Cromwell died in 1958 and was replaced by Richard Cromwell. However, people were concerned about Richard's lack of experience so Charles I's son, Charles II was crowned King.

The Great Plague 1665

The Great Plague spread across England between June & November of 1665 and peaked in September with 7,000 deaths recorded in one week. In total, over 100,000 died in London – nearly 20% of the population but at the time nobody knew the true cause of the disease, so it was very difficult to treat.

There were two main types of plague;

1. Bubonic plague was spread when people were bitten by fleas, which lived on rats and 1 in 3 people would die if they caught it. This plague caused large swellings, known as buboes, in the armpit, groin and neck.

2. Pneumonic plague was spread from person to person through air droplets. In the period before antibiotics were developed, this had a near 100% death rate.

<u>Believed causes:</u>

- Punishment sent by God.
- The alignment of the planets.
- Bad smelling air from rubbish in the streets.
- Cats and dogs on the streets.

<u>Treatments (when someone had already caught the plague):</u>

- Carrying lucky charms and amulets.
- Praying.
- Transference – strapping a live chicken to buboes so the disease would transfer to the chicken.
- Herbal remedies.

<u>Preventions (how people avoided catching it):</u>

- 40,000 dogs and 200,000 cats killed.
- Victims locked in their houses for 40 days and a red 'X' painted on their door.
- Smoking tobacco and burning sweet smelling herbs in the streets to cure the bad smells.
- Plague Doctors wore bird-like beaks with herbs in them along with a waxed cloak.
- Public gatherings were banned and streets were cleaned

<u>Actions of the Government:</u>

- The Mayor of London published detailed orders which most people followed. He also appointed 'searchers' and 'watchmen'' to monitor the spread of the disease.
- Charles II demanded people follow the preventions such as the killing of animals, quarantine, cleaning of streets and burning sweet smelling herbs.

Sequences

Component Knowledge

- Understand and describe linear sequences.
- Understand and describe geometric sequences.
- Understand and describe pictorial sequences.
- Understand and describe special sequences

Key Vocabulary

Linear	The difference between terms increases or decreases by the same value each time.
Geometric	A sequence where each term is found by multiplying the previous one by a fixed non-zero number.
Difference	The gap between two terms.
Sequence	Items or numbers put in a pre-decided order
Term	A single number or variable.

Linear Sequences- can also be known as arithmetic sequences. Where each term is added or subtracted by the same amount each time (arithmetic operation).

The rule is add 4 because the difference between each number is 4.

1, 5, 9, 13, ... 17

+4 +4 +4

17 is the next number because 13 + 4 = 17.

Sequences

Finding the next term - diagrams

We can see an extra dot has been added along the top and down the side each time.

The 4th pattern would look like this.

3, 5, 7, 9 ...

Often patterns of shapes can be simplified to a number sequence.

Geometric Sequences- where each term is multiplied or divided by the same value each time.

Example:

The rule is multiply by 2 because the numbers are doubling.

5, 10, 20, 40, ... 80

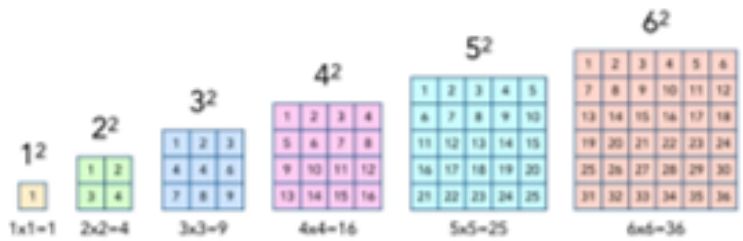
x2 x2 x2

80 is the next number because 40 x 2 = 80

Special Sequences

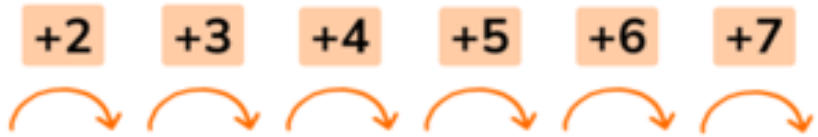
Square Number Sequences- each term is the result of each position multiplied by itself. They can be represented by a square.

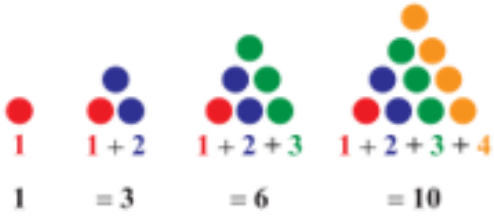
Example: 1, 4, 9, 16, 25, 36 …



Triangular Number Sequences- Triangular numbers are numbers that can be represented as a triangle. To find the next triangular number in a sequence, we need to find the difference between the previous two terms and add one more than this value.

Example:





Fibonacci Sequences- This sequence is commonly found in spirals in nature. The next term is found by adding up the two terms before it.

Example: The Fibonacci sequence is below. Other Fibonacci type sequences are based on the Fibonacci rule of adding the previous 2 terms.

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, …

0, (0+1), (1+1),(1+2), (2+3), (3+5), …

Online clips M381, M241, M166, M981

Finding and using the nth term

Component Knowledge

- Find the common difference between terms in a sequence
- Using the common difference to find the nth term
- Using the nth term to find terms in a sequence

Key Vocabulary

Sequence	A list of numbers or objects in a special order
Linear	A sequence where each term is added, or subtracted, by the same amount each time.
Pattern	Objects or numbers that are arranged following a rule or rules
Nth Term	A formula that enables us to find any term in a sequence
Term	In algebra, a term is either a single number or variable, or numbers and variables multiplied together.

How to find common differences & the nth term of a linear sequence

The nth term is the general rule for a sequence. We can use the nth term to then calculate any term in the sequence.

Here is a sequence: 5, 8, 11, 14, ...

1. Find the difference between the numbers

5, 8, 11, 14

+3 +3 +3 = 3n

A difference of +3 means we need to look at the +3 times table.

2. Calculate how you get from the times table to the original sequence.

3, 6, 9, 12, ...

5, 8, 11, 14, ... + 2

The nth term is 3n + 2.

We can also write this as

$t_n = 3n + 2$

Decreasing sequences – follow the same steps but your nth term will be negative

A difference of -3 means we need to look at the -3 times table.

-5, -8, -11, -14, -17

-2 -2

-3n: -3 -6 -9 -12 -15

Calculate how you get from the times table to the original sequence

-3n -2

Using the nth term to create a sequence

Write the first five terms of the sequence $3n + 4$.

n represents the position in the sequence. The first term in the sequence is when $n = 1$, the second term in the sequence is when $n = 2$, and so on.

To find the terms, **substitute** n for the position number:

- when $n = 1, 3n + 4 = 3 \times 1 + 4 = 3 + 4 = 7$
- when $n = 2, 3n + 4 = 3 \times 2 + 4 = 6 + 4 = 10$
- when $n = 3, 3n + 4 = 3 \times 3 + 4 = 9 + 4 = 13$
- when $n = 4, 3n + 4 = 3 \times 4 + 4 = 12 + 4 = 16$
- when $n = 5, 3n + 4 = 3 \times 5 + 4 = 15 + 4 = 19$

The first five terms of the sequence: $3n + 4$ are $7, 10, 13, 16, 19, \ldots$

Using the nth term to find if a number is in a sequence

Is the number 14 in the sequence 4n + 2?

$$\begin{array}{rcl} 4n + 2 & = & 14 \\ -2 & & -2 \\ 4n & = & 12 \\ \div 4 & & \div 4 \\ n & = & 3 \end{array}$$

If you get a decimal here, then the term isn't in the sequence

Yes, 14 is the 3rd term in the sequence.

Online clips

M381, M241, M166, M991

Ratio

Component Knowledge

- To be able to write and understand ratio notation
- To be able to simplify ratios
- To be able to simplify to unit ratios
- To be able to share an amount in a ratio

Key Vocabulary

Ratio	Relationship between two or more numbers.
Part	This is the numeric value '1' of, would be equivalent to
Simplify	Divide all parts of a ratio by the same number.
Equivalent	Equal in value

Ratio Notation

The ratio of apples to oranges is 3:2

Apples are mentioned first that is why the 3 comes before the 2

The ratio of oranges to apples is 2:3

Oranges are mentioned first that is why the 2 comes before the 3

To write this as a fraction

Apples to Oranges

3:2 ← There are 5 parts to this ratio in total

$\frac{3}{5} : \frac{2}{5}$

Simplifying a ratio

Simplify

12 and 20 both have a factor of 4

$\div 4$ (12:20 / 3:5) $\div 4$

Therefore both numbers need to be divided by 4

Using the highest common factor gets the final answer quicker but you could have divided by 2 and then 2 again for the example above

Simplify

$\div 10$ (60:40:100) $\div 10$

$\div 2$ (6:4:10) $\div 2$

3:2:5

Alternatively, you could have divided by 20 here to simplify in one step

Writing ratios as 1:n or n:1

This means that the ratio needs to be simplified in a specific way. You may end up with fractions or decimals as part of your answer

Write 2: 5 in the form 1 : n

This means the left number needs to be 1

$\div 2$ (2 : 5 / 1 : 2.5) $\div 2$

Write 2: 5 in the form n : 1

This means the right numbers needs to be 1

$\div 2$ (2 : 5 / 0.4 : 1) $\div 2$

Sharing in a ratio

To share in a ratio, we can use bar modelling to visualise the steps.

Example

Share £35 in the ratio 2:5

There are 7 parts to this ratio

35 ÷ 7 = 5 so each part is worth £5

£10:£25

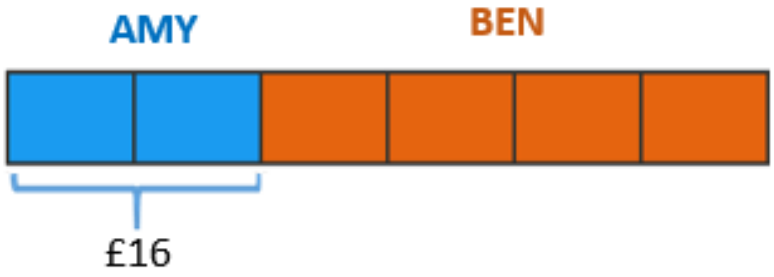
Sharing in a ratio when given one part

Example

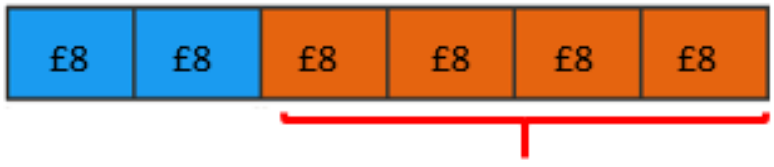
Amy and Ben share some money in the ratio 2:4

Amy receives £16. How much does Ben get?

This example is different as Amy gets £16 they do not have £16 in total



£16 ÷ 2 = 8



So Ben gets

£8 × 4 = £32

Online clips

M885, M801, M525, M543

Averages

Component Knowledge

- To understand and calculate the mode from a list.
- To understand and calculate the median from a list.
- To understand and calculate the mean from a list
- To calculate the range and understand it is **not** an average.

Key Vocabulary

Data set	Collection of values that share a common relationship. This could be answers to a set question or information for a set objective.
Average	Is a value (or values) that is used to represent a whole data set
Mode	The most frequent value in a data set. It is a type of average. Modal is another word used more mode.
Median	The middle value of a data set, when ordered. It is a type of average.
Mean	A measure of the size of the data when shared out equally. It is a type of average.
Range	A value to show spread out a data set is. It can be used to describe how representative of the whole data set the average used is. IT IS NOT AN AVERAGE.

Averages

We use averages to summarise a whole data set in a single value/few values. We do this so we can interpret large data sets and also compare data sets more easily.

Mode- the most frequent value/ few values in a data set. There can also be no mode in a set of data.

Ex 1, find the mode:

blue red blue green blue blue
pink green blue red blue yellow

Blue is the mode.

Ex 2, find the mode:

9, 4, 3, 6, 9, 5, 2, 1, 8, 7

To make it easier, we can re-write these values in ascending(increasing) order.

1, 2, 3, 4, 5, 6, 7, 8, 9, 9. We can now see clearly **9 is the mode.**

Ex 3, find the mode:

9, 4, 3, 6, 9, 5, 2, 1, 8, 7, 3

Re-written 1, 2, 3, 3, 4, 5, 6, 7, 8, 9, 9 We can see **3 and 9 are the modal values.**

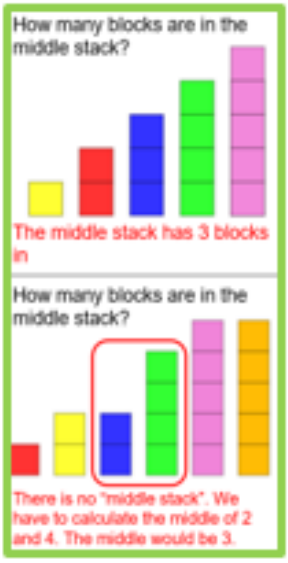
** We usually only have 1, 2 or 3 modal values**

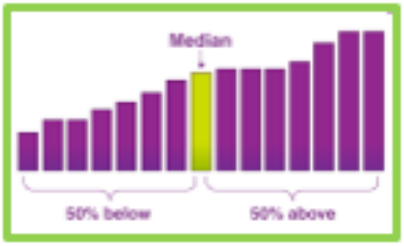
Ex 4, find the mode:

4, 3, 6, 9, 5, 2, 1, 8, 7

Re-written 1, 2, 3, 4, 5, 6, 7, 8, 9 We can see there **are NO modal values.**

Median- the middle value in a data set, when in order. If there are 2 middle values, we find the midpoint between them.





Find the median of: ~~1~~, ~~2~~, ~~3~~, **6**, ~~7~~, ~~8~~, ~~9~~

Median = 6

Find the median of: ~~1~~, ~~2~~, ~~3~~, **4**, **5**, ~~6~~, ~~8~~, ~~9~~

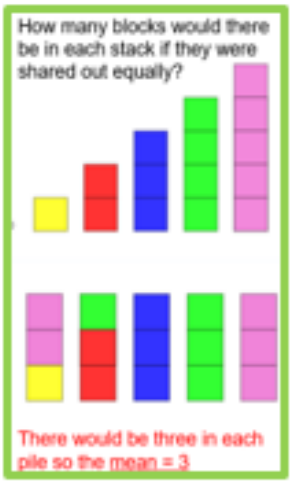
Median is the midpoint of 4 and 5 = 4.5

Find the median of the following set of numbers.

40 −2 10 40 −31 3 −34 −13 −10 1 30 16 −16

−34 −31 −16 −13 −10 −2 1 3 10 16 30 40 40

Mean- The mean is the size of each part when a quantity is shared equally. We can do this by adding all the values in the data set together and then dividing it equally between the number of values.



Example 1.
Find the mean of the following set of numbers.

19, 6, 17, 6

Solution.
To find the mean divide the sum of the numbers by the number of numbers.

$$\frac{\text{Sum of numbers}}{\text{Number of numbers}} = \frac{19+6+17+6}{4}$$

$$= \frac{48}{4}$$

$$= 12$$

There are 4 values in the data set so we are dividing by 4.

Range- the range shows how spread out the data is. It is useful to order the data when finding the range. The smaller the range, the more consistent the data.

E.g. Find the range of the following numbers

43 36 10 −8 −3 −6 −4 −22

−22 −8 −6 −4 −3 10 36 43

65

Range =43- -22 = 65

Online Clips

M841, M934, M940, M328

Pictograms

Component Knowledge

- To be able to draw a pictogram given a frequency table
- To be able to interpret a pictogram.

Key Vocabulary

Pictogram	A type of chart to represent non – numerical or discrete data
Key	Shows what value each picture represents.
Discrete	Data that can only take certain fixed values – it usually is values that can be counted. (e.g. whole numbers, shoe sizes, money)
Frequency	The number of times the item occurs in an experiment.

A **pictogram** uses pictures or icons to represent the total frequency of each category.

In a pictogram the icons used must be the same size and equally spaced. This makes it very easy to spot the mode (most common).

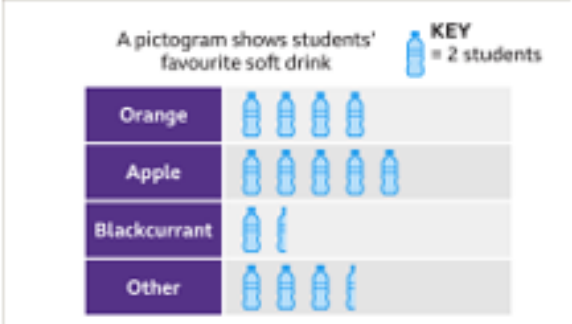
A key is included to indicate what value each icon represents. Fractions of the icon, usually a half or a quarter, might be used to indicate some values.

A pictogram can be used to make comparisons between the categories in a set of data.

Drawing

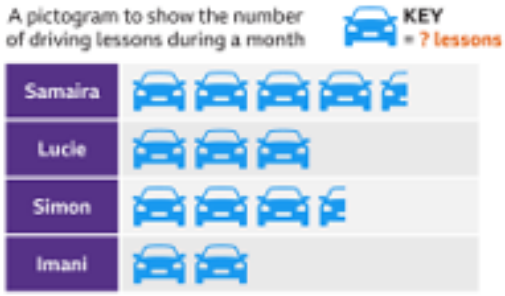
1. Look at the largest frequency in your table
2. Decide on an appropriate icon and what value it will represent, ones twos or fours work best.
3. Draw a table with two columns, one for category and one for the icons.
4. Label the categories in the table.
5. Draw the correct number of images for each frequency.
6. Draw the correct number of images for each frequency.
7. Check you have included a key and give your pictogram a title.

Soft drink	Apple	Orange	Blackcurrant	Other
Frequency	8	10	3	7



Interpreting

The pictogram shows the number of driving lessons some students had during a month. If Simon had 7 lessons, how many lessons did Samaira have?



Simon has three and a half Icons. This represents seven lessons (7 ÷ 3.5 = 2)

Each icon represents two lessons. Samira has four and a half icons. Samira = 4.5 x 2 = 9 lessons.

Online clip

M644

Bar Charts

Component Knowledge

- Understand how to complete a tally/frequency table
- Understand the important characteristics of a bar chart
- Understand how to draw a bar chart and read information from it

Key Vocabulary

Tally chart	Table used to track the frequency of a variable
Frequency	Measures how often things are repeated
Height	Measure from the base to the top of an object
Width	Measure of how wide an object is, usually horizontally
Axis	Horizontal or vertical scale on a graph or chart
Axes	Plural of axis, i.e. a set of axes (pronounced 'axees')
Discrete	Data that can only take certain values, e.g. shoe size
Continuous	Data that are not fixed and can have an infinite set of values

Completing a Tally Chart

Complete a tally chart for the most popular colour of car:

Red, blue, red, green, red, purple, red, green, red, purple, green, blue, red, green, blue, red, red, red

Colour	Tally	Frequency
Red	𝍸 IIII	9
Blue	III	3
Green	IIII	4
Purple	II	2

For each colour, draw a **vertical line** in the 'tally' column.

For the 5th number, you put a slash through the bundle of 4 vertical lines

𝍸

Add the tally to give a **numerical value**. This is called the **frequency**

Key facts & Tips

Bar charts represent *discrete data* (i.e. data you can count).
The bars are **equal width** with **equal gaps** between them. The height of each bar represents the frequency, which is shown on the y-axis

EXAM TIP

Don't forget to label the graph

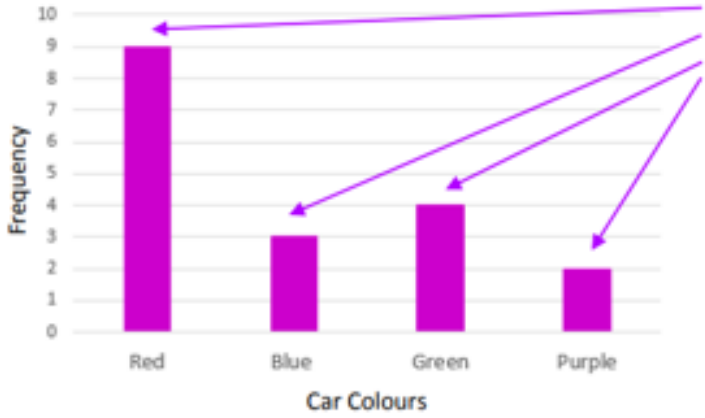
Example Question

Mrs Klingon asks 21 of her colleagues what model of car they drive. Below is the data.

Car Model	Frequency
Ford	6
VW	3
Kia	11
Nissan	1

Draw a bar chart to represent this.

Completing the bar chart



The number of red, blue, green and purple cars is the **frequency (height of the bars).**

IMPORTANT

The **bars** are the **SAME width**

The **gaps** between the bars are the **SAME width**

Both axes are **labelled**

The graph has a **title**

Frequency starts at 0

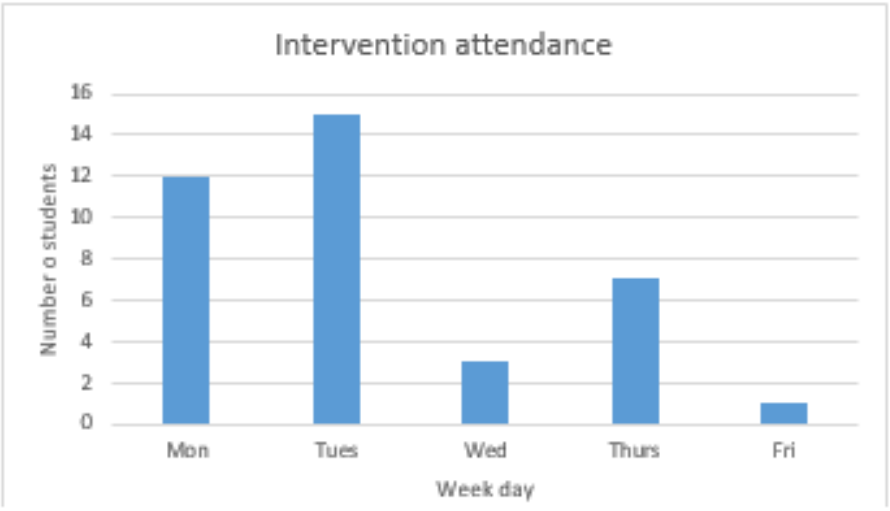
Further example question & solution

1) The table shows the number of year 11 students who attended intervention in one week. Use this information to draw a bar chart.

Mon	Tues	Wed	Thurs	Fri
12	15	3	7	1

2) The data below shows the favourite fast food of a group of year 7 students. Use this information to complete a tally chart. Then draw a bar chart to represent the information.

Pizza, burger, pizza, hotdog, burger, pizza, burger, pizza, hotdog, pizza, pizza, hotdog, pizza, burger pizza, burger, hotdog, chicken wings, burger



Online clips

M460, M738

Line Graphs

Component Knowledge

- Know how to plot a line graph
- Describe trends in data using a line graph

Key Vocabulary

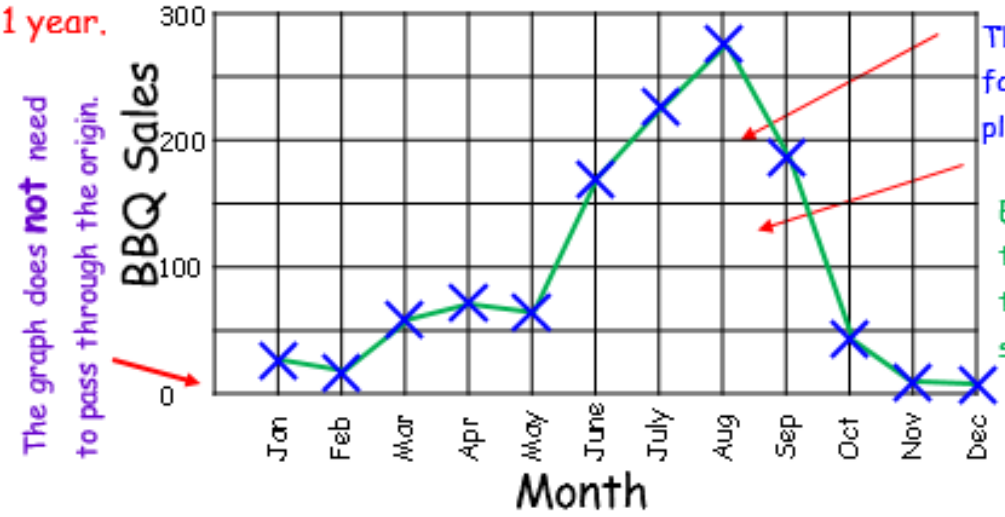
Series	A set of sequential pieces of data
Trend	A pattern in a data series

Line Graphs (Time Series Graphs):

Are commonly used to show how a variable changes over ***time***.

The graph is used to show ***trends*** in data.

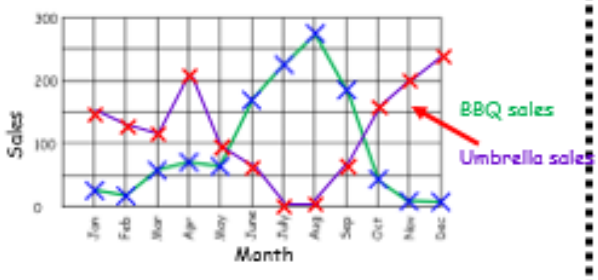
e.g. A graph to show sales of BBQ's in a shop each month, over the course of 1 year.



Here sales of BBQ's increase from May to August before decreasing again.

A second data series can be plotted on the same axes to allow ***comparison***.

Here the highest months for sales of BBQs are July and August, these are the lowest months for sales of umbrellas.



Online clips

M140, M183

What you do on your computer / what you do on your mobile

Qu'est-ce que tu fais avec ton ordinateur?
– What do you do on your computer?
Qu'est-ce que tu fais avec ton portable?
– What do you do on your mobile?
Je joue aux jeux vidéo – I play video games
Je partage des photos sur (des réseaux sociaux)
– I share photos on (social media)
Je regarde des vidéos sur (ma tablette)
– I watch videos on (my tablet)
Je télécharge des chansons sur (mon ordinateur portable)
– I download music on (my laptop)
Je parle avec mes ami(e)s – I speak with my friends
J'envoie des e-mails sur (mon portable)
– I send emails on (my phone)

Key ideas
Online habits
Sports and hobbies

Year 7 Topic 4: Mes Passetemps – My Hobbies

Saying if you are sporty

Tu es sportif (m) / sportive (f)? – Are you sporty?
Je suis sportif (m) / sportive (f) – I am sporty
Je ne suis pas sportif (m) / sportive (f)
– I am not sporty

Your favourite sportsperson

Mon sportif préféré est…
– My favourite sportsman is…
Ma sportive préférée est…
– My favourite sportswoman is…

What you like to do

Qu'est-ce que tu aimes faire? – What do you like to do?
J'aime regarder la télé – I like to watch TV
J'aime écouter de la musique – I like to listen to music
J'aime faire les magasins – I like to do shopping
J'aime faire du sport – I like to do sport
J'aime jouer sur (ma console de jeux) – I like to play on (my games console)
J'aime téléphoner à mes copains (m) / copines (f) – I like to phone my mates

Sports

Qu'est-ce que tu fais (*quand il fait beau*)?
– What do you do (*when it is nice weather*)?
En été – in summer
En hiver – in winter
Quand il fait beau / mauvais– When it's good / bad weather
Quand il fait chaud / froid– When it's hot / cold
Quand il pleut /neige – When it rains / pleut
Quand il y a du soleil / vent – When it is sunny / windy

je fais du parkour – I do parkour
je fais du vélo – I do cycling
je fais de la danse – I do dance
je fais de la natation – I do swimming
je fais de l'équitation – I do horse-riding
je fais une balade à cheval I do horse-riding

Using a range of language improves the quality of our speaking and writing and allows us to access more challenging texts!

Quels sports joues-tu? – What sports do you play?
Je joue au foot – I play football
Je joue au basket – I play basketball
Je joue au tennis – I play tennis
Je joue au handball – I play handball
Je joue aux boules / à la pétanque– I play boules / pétanque
Je joue aux cartes – I play cards

How often you do or play something

J'y joue + frequency expression – I play it + frequency expression
J'en fais + frequency expression – I do it + frequency expression

What you used to do or play

Avant / Dans le passé je jouais… – Before / In the past I used to play…
Avant / Dans le passé je faisais… – Before / In the past I used to

Definite Article – The
le – masculine
la – feminine
les – plural
l' – starts with a vowel sound

Jouer à + a sport
à + le = au (masc.)
à + la = à la (fem.)
à + les = aux (plural)
à + l' = à l'
(starts with a vowel sound)

Faire de + a sport
de + le = du (masc.)
de + la = de la (fem.)
de + les = des (plural)
de + l' = de l'
(starts with a vowel sound)

Faire – to do
Je fais – I do
Tu fais – You do (singular / informal)
Il fait / Elle fait / On fait
– He does / She does / We do
Nous faisons – We do
Vous faites – You do (plural/ polite)
Ils font / Elles font – They do

Year 7 Topic 4: Transferable Knowledge

Sequencers
D'abord – First of all
Puis – Then
Ensuite – Next
Finalement – Finally

Connectives
et – and
mais – but
aussi – also
parce que – because
car – because
puisque – since
cependant – however

Key verbs in the present tense

Jouer – to play
Je joue – I play
Tu joues – You play (singular / informal)
Il joue / Elle joue / On joue
– He plays / She plays / We play
Nous jouons – We play
Vous jouez – You play (plural / polite)
Ils jouent / Elles jouent – They play

Time Expressions
d'habitude – usually
quelquefois – sometimes
souvent – often
tous les jours – every day
tous les soirs – every evening
tous le temps – all the time
de temps en temps
– from time to time
une fois par semaine
– once a week
deux fois par semaine
– twice a week
Le soir… - In the evenings…

Opinions
Qu'est-ce que tu aimes faire?
– What do you like to do?
Qu'est-ce que tu n'aimes pas faire?
– What do you not like to do?
Tu aimes…?/ Est-ce que tu aimes…?
– Do you like…?
J'aime… – I like…
J'adore… – I love…
Je préfère… – I prefer…
Je n'aime pas… – I don't like…
Je déteste… – I hate…
pour moi – for me
c'est… – it is…

Intensifiers
très – very
assez – quite
vraiment – truly
réellement – really
un peu – a bit
peu – little
trop – too
extrêmement – extremely
tellement – so

Adjectives
bien – good
cool – cool
génial – great
ennuyeux – boring
nul – rubbish
important – important
essentiel – essential

Year 7 Topic 5: Les Animaux – Animals

What pet I have

As-tu un animal? – Do you have a pet?
J'ai un chat – I have a cat
J'ai un chien – I have a dog
J'ai un lapin – I have a rabbit
J'ai un cheval – I have a horse
J'ai un poisson – I have a fish
J'ai un oiseau – I have a bird
J'ai une souris – I have a mouse
J'ai une araignée – I have a spider
Je n'ai pas d'animal – I don't have a pet

Name of my pet(s)

qui s'appelle… – who is called…
qui s'appellent… – who are called…

My past pet

Quand j'étais petit / petite – When I was little
j'avais… – I used to have…
Il / Elle était… – It was
Ils / Elles étaient… – They were

My future pet

Dans le futur / À l'avenir – In the future
je voudrais avoir… – I would like to have…
Il / Elle serait… – It would be…
Ils / Elles seraient… – They would be…

Colours

violet / violette / violets / violettes – purple
rouge / rouges – red
bleu / bleue / bleus / bleues – blue
noir / noire / noirs / noires – black
gris / grise / gris / grises – grey
vert / verte / verts / vertes – green
jaune / jaunes – yellow
blanc / blanche / blancs / blanches – white
rose / roses – pink
orange – orange
marron – brown

Describing animals

fort / forte / forts / fortes – strong
dangereux / dangereuse / dangereux / dangereuses – dangerous
ennuyeux / ennuyeuse / ennuyeux / ennuyeuses – boring
grand / grande / grands / grandes – big
petit / petite / petits / petites – small
lourd / lourde / lourds / lourdes – heavy

Key ideas

Pets
My favourite animal

My favourite animal

Mon animal préféré, c'est…
– My favourite animal is…
le chat – the cat
le chien – the dog
le lapin – the rabbit
le cheval – the horse
le poisson – the fish
l'oiseau – the bird
la souris – the mouse
l'araignée – the spider

Adjectives

In French, adjectives usually go after the noun they are describing and agree with the noun (masculine, feminine, singular, plural).
For example:
Un chien noir – A black dog
Une araignée *noire* – A *black* spider
Deux chiens *noirs* – Two *black* dogs
Deux araignées *noires* – Two *black* spiders

Using a range of language improves the quality of our speaking and writing and allows us to access more challenging texts!

Year 7 Topic 5: Transferable Knowledge

Indefinite Article – A / An / Some
Un – a / an (masculine)
Une – a / an (feminine)
Des – some (plural)

Definite Article – The
le – masculine
la – feminine
les – plural
l' – starts with a vowel sound

Possessive Adjectives
My
Mon – masculine
Ma – feminine
Mes – plural
Your
Ton – masculine
Ta – feminine
Tes – plural

Opinions
J'aime beaucoup… – I really like…
J'adore… – I love…
Je préfère… – I prefer…
Je n'aime pas… – I don't like…
Je déteste… – I hate…
pour moi – for me
c'est… – it is…

Connectives
et – and
mais – but
aussi – also
parce que – because
car – because
puisque – since
cependant – however

Intensifiers
très – very
assez – quite
vraiment – truly
réellement – really
un peu – a bit
peu – little
trop – too
extrêmement – extremely
tellement – so

Être – to be
Je suis – I am
Tu es – You are
Il est/ Elle est/ On est – He is/ She is / We are
Nous sommes – We are
Vous êtes – You are (plural/ polite)
Ils sont / Elles sont – They are

Key verbs in the present tense

Avoir – to have
J'ai – I have
Tu as – You have
Il a/ Elle a/ On a – He has/ She has / We have
Nous avons – We have
Vous avez – You have (plural/ polite)
Ils ont / Elles ont – They have

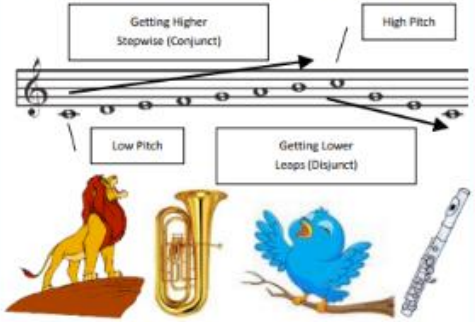
S'appeler – to be called
Je m'appelle – I am called
Tu t'appelles – You are called
Il s'appelle / Elle s'appelle / On s'appelle – He is called/ She is called / We are called
Nous nous appelons – We are called
Vous vous appelez – You are called (plural/ polite)
Ils s'appellent / Elles s'appellent – They are called

Programme Music

Using the Elements of Music to create a mood or an atmosphere

A. Pitch

The **highness** or **lowness** of a sound.



B. Tempo

The **speed** of a sound or piece of music.

FAST: *Allegro, Vivace, Presto*
SLOW: *Andante, Adagio, Lento*
GETTING FASTER – *Accelerando (accel.)*
GETTING SLOWER – *Ritardando (rit.) or Rallentando (rall.)*

C. Dynamics

The **volume** of a sound or piece of music.

VERY LOUD: *Fortissimo (ff)*
LOUD: *Forte (f)*
QUITE LOUD: *Mezzo Forte (mf)*
QUITE SOFT: *Mezzo Piano (mp)*
SOFT: *Piano (p)*
VERY SOFT: *Pianissimo (pp)*
GETTING LOUDER: *Crescendo (cresc.)*
GETTING SOFTER: *Diminuendo (dim.)*

D. Duration

The **length** of a sound.

SHORT ⟶ **LONG**

E. Texture

How much sound we hear.

THIN TEXTURE: *(sparse/solo)* – small amount of instruments or melodies.

THICK TEXTURE: *(dense/layered)* – lots of instruments or melodies.

F. Timbre or Sonority

Describes the **unique sound or tone quality** of different instruments voices or sounds.

Velvety, Screechy, Throaty, Rattling, Mellow, Chirpy, Brassy, Sharp, Heavy, Buzzing, Crisp, Metallic, Wooden etc.

G. Articulation

How individual notes or sounds are **played/techniques**.

LEGATO – playing notes in a long, smooth way shown by a **SLUR**.

STAGGATO – playing notes in a short, detached, spiky way shown by a **DOT**.

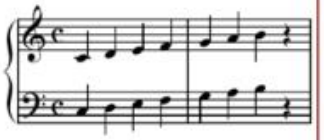
H. Silence

The opposite or absence of sound, **no sound**. In music these are **RESTS**.

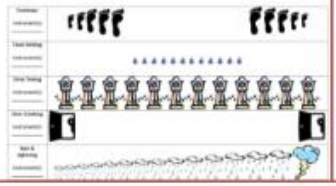
I. Notation

How music is **written** down.

STAFF NOTATION – music written on a **STAVE** (5 lines and spaces)



GRAPHIC NOTATION/SCORE – music written down using shapes and symbols to represent sounds.



J. How Music Works

Music can create an **atmosphere** or **ambience** *e.g., supermarkets and restaurants.*

Music can create an **image** *e.g., in response to art, a story, a poem, a character, a situation* – this is called **PROGRAMME MUSIC.**

Music can be **calming** *e.g., end of an evening in clubs and bars.*

Music can be used for **spiritual reasons** *e.g., worship, meditation, reflection, hymns and chants, yoga, and spiritual reflection.*

Music can be used for **commercial** purposes *e.g., advertising, TV themes.*

USER GROUPS in Sport/Fitness

- Young children
- Teenagers
- People with disabilities
- Parents (singles or couples)
- People who work
- Unemployed/economically disadvantaged people

- Gender
- People from different ethnic groups
- Retired people/people over 60
- Families with children
- Carers
- People with family commitments

NUTRITION:
A balanced diet consists of six essential nutrients:
1.Carbohydrates - The body's main energy source, found in foods like grains, fruits, and vegetables.
2.Proteins - Essential for growth, repair, and muscle maintenance, sourced from meat, beans, and dairy.
3.Fats - Provide long-term energy and support cell function, found in nuts, oils, and fatty fish.
4.Vitamins - Support immune function, metabolism, and overall health, present in fruits, vegetables, and dairy.
5.Minerals - Aid in bone strength, nerve function, and hydration, including calcium, iron, and potassium from leafy greens, dairy, and meat.
6.Water - Essential for hydration, digestion, and temperature regulation, making up a large portion of the body.

NUTRITION:
- Carbohydrates are essential in sporting activity because they provide a quick and efficient source of energy, fueling muscles and sustaining performance during exercise.
- Hydration is crucial as it regulates body temperature, maintains electrolyte balance, and prevents dehydration, which can impair endurance, strength, and overall athletic performance

TRAINING PRINCIPLES:
Training thresholds refer to intensity levels that determine the effectiveness of an exercise program. There are two key thresholds:

1.Aerobic Threshold (50-70% of maximum heart rate) - The point where the body starts using oxygen efficiently for sustained activity, improving endurance.
2.Anaerobic Threshold (80-90% of maximum heart rate) - The intensity at which lactic acid accumulates faster than it can be cleared, enhancing high-intensity performance and muscle strength.

KARVONEN PRINCIPLE
The **Karvonen Principle** calculates target heart rate for optimal training intensity using the **Heart Rate Reserve (HRR)** method:

•**HRR** = Maximum Heart Rate (220 - age) - Resting Heart Rate
•**Intensity %** = Desired effort level (e.g., 60-85% for aerobic training)
•**Resting Heart Rate (RHR)** = Measured at rest, indicating baseline fitness
This formula personalizes training zones, ensuring workouts are effective and aligned with fitness goals.

Year 7
Term 3: Health
Knowledge Organiser

Age-predicted maximum heart rate (APMHR)

HRmax = 220 - age

Karvonen formula

% HRR = ([HRmax – RHR] x % intensity) + RHR

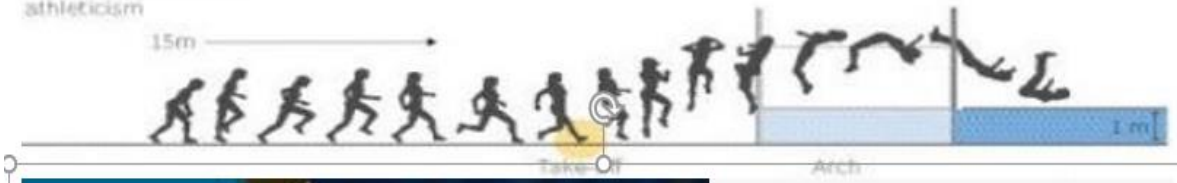
ANAEROBIC VS AEROBIC EXERCISE

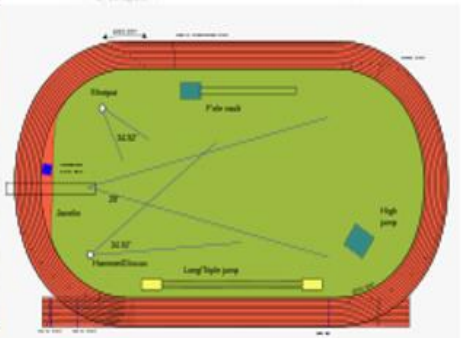
- Aerobic exercise, like jogging or cycling, uses oxygen to produce energy, primarily generating carbon dioxide and water as byproducts.
- Anaerobic exercise, like sprinting or weightlifting, occurs without oxygen, producing lactic acid as a byproduct.

Westhoughton High SCHOOL KS3 PE KNOWLEDGE ORGANISER – ACTIVITY: ATHLETICS

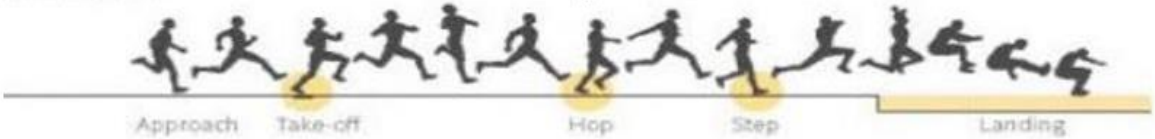
HIGH JUMP

A raw test of human athleticism

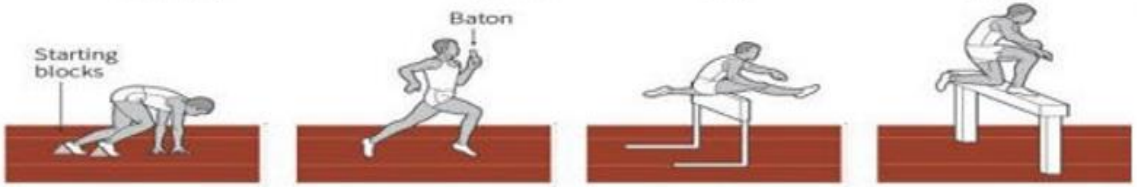




TRIPLE JUMP



LONG JUMP



SPRINTS
100m, 200m, 400m, 800m, 1,500m
3,000m (W) 5,000m (M) 10,000m (M)

RELAYS
4 x 100m, 4 x 400m

Teams of four athletes, who must carry the baton, one after another.

HURDLES
100m (W) 110m (M) 400m

Athletes sprint and jump over ten hurdles per lane.

STEEPLECHASE
3,000m

Athletes sprint and must overcome five jumps, including a water jump, per lap.

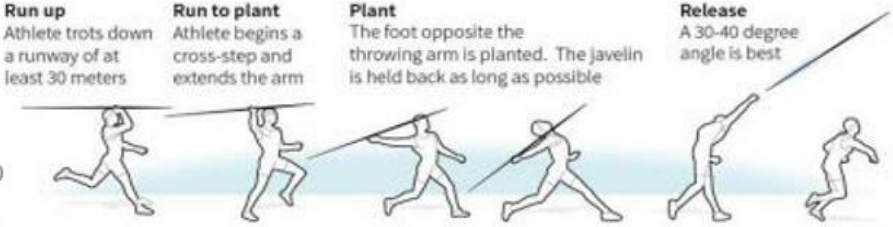
JAVELIN

Run up
Athlete trots down a runway of at least 30 meters

Run to plant
Athlete begins a cross-step and extends the arm

Plant
The foot opposite the throwing arm is planted. The javelin is held back as long as possible

Release
A 30-40 degree angle is best



DISCUS

Swing
Athlete swings discus back and forth

Spin
One-and-a-half-turn rotation. Thrower pushes off the opposite leg

Drive
Athlete's body and arms catch up with the legs in a twisting motion

Release
Thrower straightens body, releasing the discus as the arm whips around

HAMMER

Swing
Thrower lightly swings the hammer like a pendulum

Windmill
Thrower swings the hammer two or three times, gaining speed, staying relaxed

Spin
Thrower spins through three or four rotations, while swinging the hammer close to 45º

Release
Thrower's arms shoot upward, releasing the hammer at speeds of up to 110km/h

SHOT PUT

Grip
The shot is balanced on the fingers and pressed against the thrower's neck

Push off
Upper body relaxed with back to the field

Spin
The thrower spins a few as one or as many as three times.

Thrust
Sudden extension of arm propels shot.

Westhoughton High School– ACTIVITY: CRICKET

Batting: Basic Straight Drive

- Stand with feet shoulder width apart and parallel to the batting crease.
- Slightly flex knees and keep weight evenly distributed.
- Rest the hand and top of bat gently against the inside thigh of your front leg with the bat resting on the floor at a 45° angle.
- Keep your head over the front foot and face the bowler.
- As the bowler approaches, the bat should remain close to the body but brought upward, bending both elbows, until the bat is parallel to the shoulders.
- As the ball is released, move the front foot behind the front knee and chest and keep the back leg straight and foot planted.
- The head should be level with the front knee, with the back foot raised up to the toes.
- On contact, the bat accelerates vertically through a straight path, keeping elbows bent and locked, until the face of the bat is pointing to the sky.

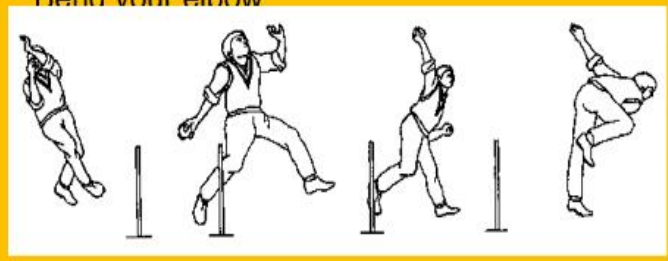
Bowling: Basic

Grip

- Place your thumb on the seam of the ball.
- Place your index finger on the seam, opposite your thumb.
- Hold the ball so that the seam is parallel to your index finger.
- Place your middle finger to the right of the seam, approximately a quarter of the way down the ball.
- Wrap your ring finger and pinky into a loose fit.

Release

- Carry the ball close to your chin. Coil your body and lean back.
- Drop your elbow and pant your leg bowling leg.
- Straighten your elbow and arm.
- Shift your weight to the lead leg.
- Thrust your bowling shoulder forward.
- Swing your arm like a windmill.
- Snap your wrist forward just before you release the ball.
- Release the ball.
- Follow through properly.
- Bend your elbow



Fielding:

Catching

- **English (orthodox catch)**-Aim to catch at the base of your fingers. Bring the ball into your body
- **Australian (reverse cup)**- Attempt to catch at eye-level and keep your hand high. Watch the ball the whole time until it hits your hands.

Throwing

- **Overarm**- bring arm behind head, and transfer power from back foot to front foot. Used over longer distances
- **Underarm**- swing arm from back to front, release ball when hand pointing at target.

Long Barrier

- Long barrier: Kneel side on with foot next bent leg, pick ball up side on.

Short Barrier

- Short barrier- face on approach ball, foot behind and pick up ball.

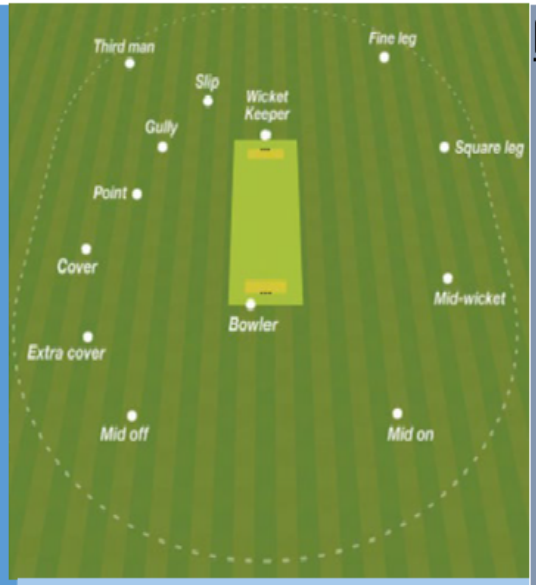
Westhoughton High School– ACTIVITY: Cricket

Rules:

➔ Two teams, play an innings of batting and bowling.
➔When one team is batting, try and score as many runs as they can by hitting the ball around a set boundary.
➔The bowling team can get the batsmen out by hitting the stumps or catching the ball.
➔Once the batting team is all out, the teams swap over and they then become the bowling side.

Scoring System:

➔One run is scored each time the batsmen cross and reach the set of stumps at the other end of the pitch.
➔Four runs can be scored if the ball reaches the perimeter of the field
➔Six runs if it crosses the perimeter without bouncing.



Key Words:

Wicket Keeper
Batsman
Bowler
Long Barrier
Hand eye co-ordination
Catch
Stumps
Seam
Leg before wicket
Over
Spin
Umpire

Positions:

➔ **Wicketkeeper:** The wicket keeper stands behind the batsman, and is responsible for catching the ball in their gloves if the batsman edges, misses or leaves the ball.
➔ **Point:** Fielding position square of the wicket on the off side of the batsman.
➔ **Mid-off:** Fielder should be positioned just a bit wider than straight on the off side of the field.
➔**Mid-on** is the same position as mid-off on the on side.
➔ **Cover:**Fielding position is just in front of square on the off side.
➔ **Square leg:** The fielder is located square of the wicket on the leg side of the field.
➔ **Mid-wicket** is a position in front of square on the leg side of the batsman

Tactics:

➔ **Fielding:** Place players in positions where the batsman may give a catch, to a fielder and to save runs or to block the path of the ball from the batsman's scoring strokes Backing up the ball from a fielders throw.
➔ **Bowling:** The location varies with the pace of the bowler, the state of the pitch, and the reach and technique of the batsman. The second is the direction. On this foundation a bowler may elaborate with variations of spin bowling
➔**Batting:** A forward stroke in which the batsman advances his front leg to the pitch of the ball and plays it in front of the wicket. This is the best way to score runs with control.

WESTHOUGHTON HIGH SCHOOL KS3 PE KNOWLEDGE ORGANISER – ACTIVITY: BOLTON ROUNDERS (FLATBAT)

Fielding: Catching

- Eyes focused on the ball.
- Feet move to place body in line with ball.
- Hands move to meet the object.
- Hands and fingers relaxed and slightly cupped to catch the ball.
- Catches and controls the ball with hands only (well-timed closure)
- Elbows bend to absorb the force of the ball.

Fielding: Throwing

Underarm throw used in a short distance.

- Stands face on to direction of throw.
- Eyes focused on target area..
- Steps forward with opposite foot to throwing arm.
- Well timed release.
- Follows through with straight arm.

Overarm throw used in a long distance.

Bowling

- Grip the ball between three fingers
- Step into the bowling action
- Release the ball at weight height
- Variation in speed and height will enable you to outwit the opponent
- To add spin, twist your wrist as you release the ball

Batting

Batting: One hand on the bat, have the fat side facing the bowler and with a slight tilt. Bend your knee and transfer your weight from the front to the bacl

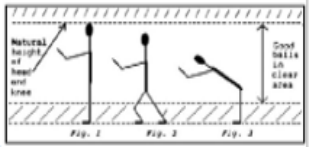
Barriers

Long barrier: On a bumpy outfield, or if the ball is travelling at speed

Short barrier: Used to pick the ball up at pace

Key Words:

Batting
Bowling
Deep Fielding
Obstruction Power
Accuracy Throwing
Catching Umpire
Stumping
No ball
Hit out
Running Out
Rounder
Barrier
Variation
Reaction time
Spatial awareness
Momentum



WESTHOUGHTON HIGH SCHOOL KS3 PE KNOWLEDGE ORGANISER – ACTIVITY: BOLTON ROUNDERS (FLATBAT)

Tactics:

➔ Batters run round the **inside of the posts**

➔ fielders have a field in 'the slips' to the right of the batter

➔ Adapt fielding positions according to strengths and weakness of the batters

➔ Move your fielding position once you have established how each batter hits the ball is a sign of good fielding

➔ Always focus on the batter that has just hit the ball as they are scoring.

➔ Batters should think about how they hit ball according to the positioning of the fielders and also
an understanding of how many points they need to win a point.

Rules:

➔ Each team can have a minimum of 6 players on the pitch at any one time.11 players are on a team.

➔ Bowler must bowl the ball in the bowlers pitch

➔ Lawn tennis balls must be used

➔ The ball must be bowled above the knee of the batter, below the top of their head. Batter can only hold the bat with one hand

➔ The batters foot must be on the edge of the batters square and stay planted when hitting the ball.

➔ The ball can be hit forwards or backwards

➔ A batter will be out if, after making a scoring shot from a good ball, the ball is caught by a fielder without it touching the ground.

➔ The batter, while running to a base, is out if she is touched by the fielder
ball from one of the fielding side.

➔ A batter is out if first base is stumped before she reaches it.

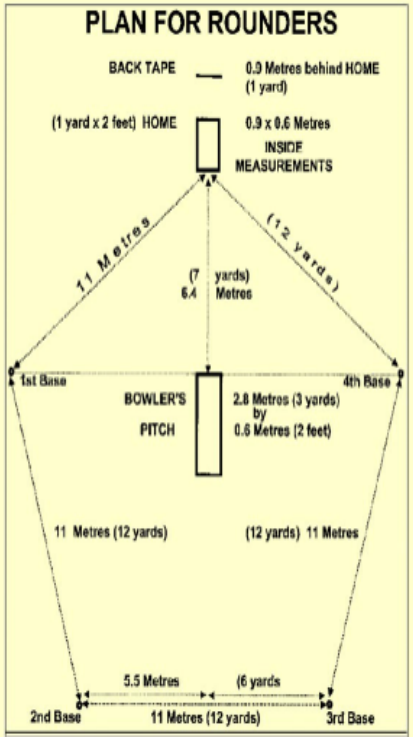
Positions:

➔ **First base** this is the only base you can stump and player out.

➔ **Baller** must bowl the ball in the bowlers pitch

➔ **Fielders** spread out around the pitch

➔ **Backstop** must stand on the line behind the batting square



Scoring System:

➔ The batter will receive **1** point for every base they reach.

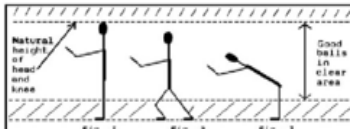
➔ If the touch all four base without being caught out they receive **6** points.

➔ If the batter is out they keep the points reward until that point. E.g. if the batter is touched by the all between 3rd and 4th base they would achieve **3** points and out.

➔ If the bowler bowls a 'bad ball' the batting team receive 1 point.

Key Words:

Batting
Bowling
Deep Fielding
Obstruction Power
Accuracy Throwing
Catching Umpire
Stumping
No ball
Hit out
Running Out
Rounder
Barrier
Variation
Reaction time
Spatial awareness
Momentum



WESTHOGHTON HIGH SCHOOL -ORIENTEERING

Skills and Techniques:

➔ **Directions:** 4 key compass directions: North, South, East, West
More complex compass directions: North East, North West, South East and South West

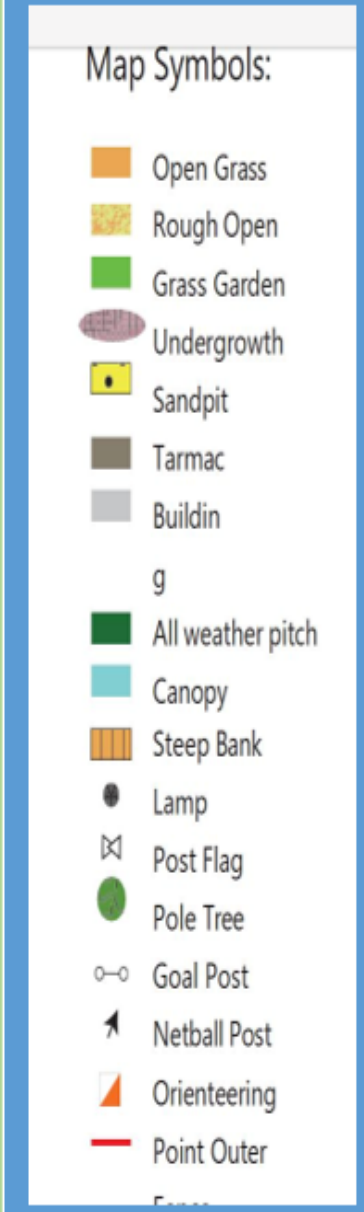
➔ **Map Reading:** Recognise symbols on a map. Understand that maps and aerial view pictures are not the same. Recognise these features on aerial photographs

➔ **Human features:** Know that a human feature, is influenced by man (Road, cities, churches). Recognise these on a map

➔ **Physical Features:** Know that a physical feature, is natural (Forest, rivers, beaches, hills) Recognise these on a map

➔ **Directional language:** To describe the physical and human features in a location or a route.

Diagrams and Symbols:



Positions:

➔ The main aim of orienteering is to complete the set course by finding control markers in the correct order in the shortest time.

➔ Although it Is based on accurate map reading it is also a test of physical fitness.

➔ You must find all the controls you are told to visit and record them on your score sheet.

➔ You have to consider the terrain you are moving over ensuring your safety and the safety of any team members at all times, taking into account the varying fitness level of all your team members.

➔ In order to be given a finish time for finding controls the whole team has to finish together

Key Features:

➔ Orienteering control

➔ Orienteering Map

Key Words:

Location, Speed
Cardiovascular Fitness
Setting a Map
Navigation
Adventurous
Diverse Direction
Key
Catchment features
Terrain
Map
Compass
Control point
Thumbing
Attack points
Pacing

Key components:

➔ **Map**
A diagrammatic representation of an area showing physical features

➔ **Key**
Explains the meanings of symbols

➔ **Route**
A way from getting from a starting point to a destination

➔ **Location**
The place where something is

➔ **Orienteer**
To find your way across areas using a map.

➔ **Grid reference**
map reference indicating a location in terms of a series of vertical and horizontal grid lines

➔ **Latitude**
Imaginary lines north and south of the equator

➔ **Longitude**
Imaginary lines from East to West around the globe

Life Lessons – Summer Term KS3 - Living in the Wider World	
Topics	**For Further Information and Advice**
Money Matters £	• **Stepchange:** Free debt advice charity 0800 138 1111 • **The Kings Trust:** use the QR code to access budgeting and saving resources.
Responsible internet use	**Are you worried about online sexual abuse or the way someone has been communicating with you online?** • Contact **CEOP** (Child Exploitation and Online Protection). Use the QR code of search for CEOP online.
The protected characteristics	**The 9 protected characteristics in the Equality Act 2020 are:** Age Disability Gender Reassignment Race Religion or Belief Sex Sexual Orientation Pregnancy & Maternity Marriage & Civil Partnership For more information about the **Equality Act**, scan the QR code. **Citizens Advice**: Provides information and advice on issues such as discrimination because of race and/or religion 0800 144 8848.
Your Rights	**The Universal Declaration of Human Rights** is a document that protects the rights of every individual, everywhere. It was created by the United Nations in 1948, in response to the "barbarous acts" of the Second World War. Its adoption recognized human rights to be the foundation for freedom, justice and peace. **Scan the QR code to see all 30 of your Human Rights.**
Young Carers young carers	**You're a young carer if you're under 18 and help to look after a relative with a disability, illness, mental health condition, or drug or alcohol problem.** • For advice and support with care issues, call the **Carers Direct** helpline on 0300 123 1053. • Search for **Carers Trust** and find the Young Carers Page.
Criminal Behaviour (County Lines and Kinfe Crime)	You can report an incident of knife crime by calling **101** or talking to us via **LiveChat** at www.gmp.police.uk. Always dial **999** in an emergency. Help is also available via **CrimeStoppers** on 0800 555 111, or using the QR code for the **Fearless** anonymous reporting. What is county lines? County lines is a criminal activity where drug dealers in big cities use other people (typically young and/or vulnerable) to carry, store, and sell their drugs in smaller towns and rural areas. Use the QR code to find out more.

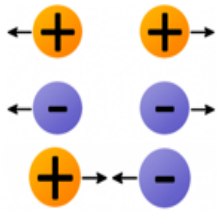
KS3 Electromagnetism: Electricity

Charges

A charged object is either positive or negative.

Opposite charges will **attract**.

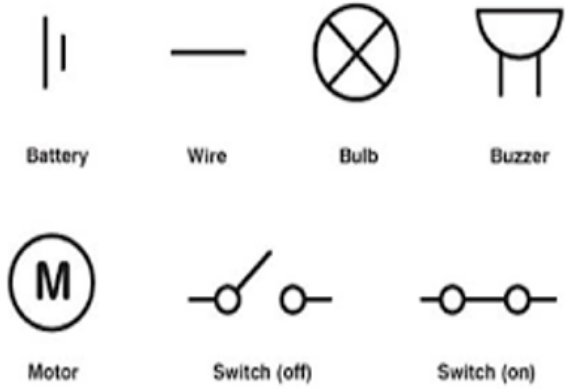
The same charges will **repel**.



Static electricity is an imbalance between negative **electrons** and positive **protons** where the charge cannot move

Earthing an object will mean the **electrons** can transfer to the ground by the path of least resistance.

Circuit Symbols



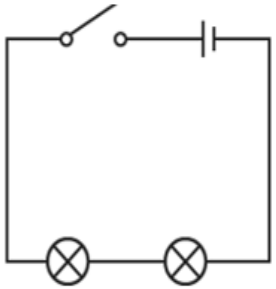
Electric Fields

An **electric field** is a region surrounding a charged object where other charged objects can experience a force.

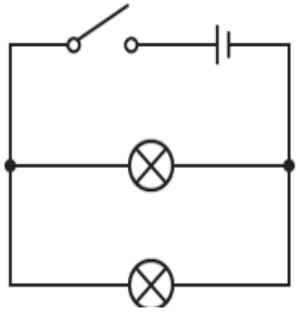
When charged objects enter the electric field, they experience a force and can repel or attract

Series and Parallel

Series circuit - A circuit where the current has only one route to flow.



Parallel circuit - A circuit with different 'branches' the current can flow through.



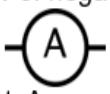
Keywords

- Static
- Electron
- Repulsion
- Attraction
- Non-contact force
- Electric field
- Current
- Ammeter
- Potential difference
- Voltmeter
- Series circuit
- Parallel circuit
- Resistance
- Conductor
- Insulator

KS3 Electromagnetism: Electricity

Current

Current is a flow of negative charge in a complete circuit.

An ammeter  is a device that is used to measure current. An ammeter measures current in Amperes (or Amps).

The ammeter is placed in series.

Current is constant throughout a series circuit.

Current across branches adds up to the current before and after the branches.

Potential Difference

Potential difference can also be called voltage.

Potential difference is the difference in the amount of energy that negative charges have between two points in a circuit.

A voltmeter  is a device that measures potential difference.

A voltmeter measures potential difference in Volts.

The voltmeter is placed in parallel to the two points it is measuring.

Resistance

Resistance is the opposition to the flow of current in a closed circuit.

Current will always flow the path of least resistance.

Resistance is measured in Ohms (Ω) and is produced by any device in the path of a current. For example, a lamp produces resistance.

The higher the resistance, the lower the current.

Resistance is a ratio between potential difference and current that can be represented by the formula:

$$Resistance = \frac{Potential\ Difference}{Current}$$

Resistance in objects

Electrical conductors are materials that allow electrical current to flow through easily.

Metals are good electrical conductors.

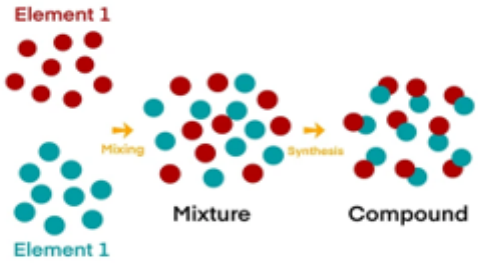
Electrical insulators are materials that do not allow electrical current to flow through easily.

Keywords

- Static
- Electron
- Repulsion
- Attraction
- Non-contact force
- Electric field
- Current
- Ammeter
- Potential difference
- Voltmeter
- Series circuit
- Parallel circuit
- Resistance
- Conductor
- Insulator

KS3 Pure and Impure Substances

Pure Substances: A pure substance consists of only one type of particle with fixed composition and distinct properties.
Determining Purity: A pure substance has a sharp melting and boiling point, while mixtures melt and boil over a range of temperatures.



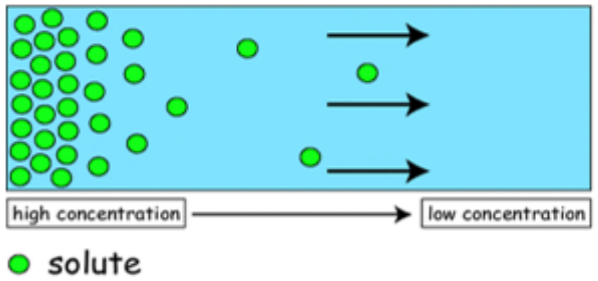
Mixtures: Mixtures contain two or more substances physically combined, where each retains its properties.
Compounds vs Mixtures: A compound is chemically combined in a fixed ratio, while a mixture is physically combined and separable.
Dissolving & Solutions: When a solute dissolves in a solvent, it forms a solution.

Keywords

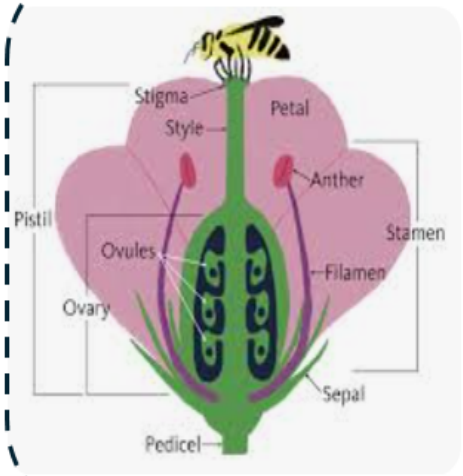
- Pure Substance
- Mixture
- Compound
- Element
- Filtration
- Crystallisation
- Distillation
- Chromatography
- Diffusion

<u>Common separation techniques include:</u>
- Filtration: Separates insoluble solids from liquids.
- Crystallisation: Separates dissolved solids by evaporation.
- Distillation: Separates liquids based on boiling points.
- Chromatography: Separates substances based on solubility.

Diffusion: The movement of particles from high concentration to low concentration



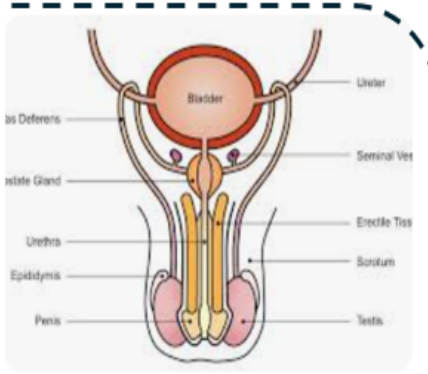
KS3 Reproduction



Reproduction in plants.

Pistil: female.

Stamen: male.



The ovum travels from the ovary, through the oviduct, uterus, cervix & out of the vagina.
Sperm travels from the testes, through the sperm ducts, urethra & out of the penis.

Fertilisation occurs when 1 sperm fuses (not meets) an ovum.
The sperm travels from the vagina, through the cervix, the uterus, the oviduct where it fuses with the ovum.

When pregnant, to keep the foetus healthy, Mum needs to:
Eat a healthy, balanced diet.
She will need to eat more protein and some substances like iron & calcium.
If she smokes, the baby can be born early and smaller.
If she drinks alcohol, it can affect the foetus' brain.
She needs to be vaccinated to prevent the foetus being affected by diseases like measles.

Keywords

- Reproduction
- Ovary
- Oviduct
- Uterus
- Vagina
- Cervix
- Testes
- Sperm duct
- Urethra
- Penis
- Fertilisation
- Fuse
- Foetus