



LIONHEART
EDUCATIONAL
TRUST















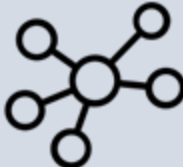


SIR JONATHAN NORTH
GIRLS' COLLEGE

Lionheart Educational Trust

Knowledge Organiser Booklet

Year 8
Autumn Term

Ways to use your knowledge organiser

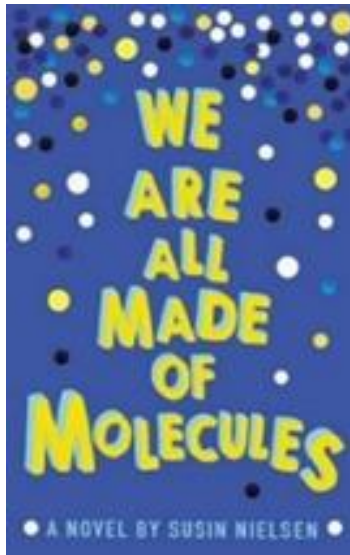
	Look, Cover, Write, Check	Self Quizzing	Mind Maps	Paired Retrieval	Definitions to Key Words
Step 1	<p>Look at and study a specific area of your knowledge organizer.</p> 	<p>Use your knowledge organizer to create a mini quiz. Write down questions using your knowledge organizer.</p> 	<p>Create a mind map with information from your knowledge organiser.</p> 	<p>Like self quizzing, use your knowledge organizer to create a quiz.</p> 	<p>Write down the key words and definitions.</p> 
Step 2	<p>Cover or flip the knowledge organizer over and write down everything you remember.</p> 	<p>Cover or flip the knowledge organizer over and answer the questions and remember to use full sentences and key words/vocabulary.</p> 	<p>Add pictures to represent different facts, knowledge. Try to categorise different areas in different colours.</p> 	<p>Ask a family member to ask you the questions and tell you which ones you get right and which ones you get wrong.</p> 	<p>Try not to use your knowledge organiser to help you.</p> 
Step 3	<p>Check what you have written down. Correct any mistakes in a different coloured pen and add anything you missed. Repeat.</p> 	<p>Check your answers. Correct any mistakes in a different coloured pen and add anything you missed. Repeat.</p> 	<p>Try to make connections that link information together.</p> 	<p>Following the quiz, summarise which areas you got wrong and need to revise further.</p> 	<p>Use a different coloured pen to check you work and correct any mistakes you may have made.</p> 

Lionheart Literary Canon: Curating a Lifelong Love of Literature

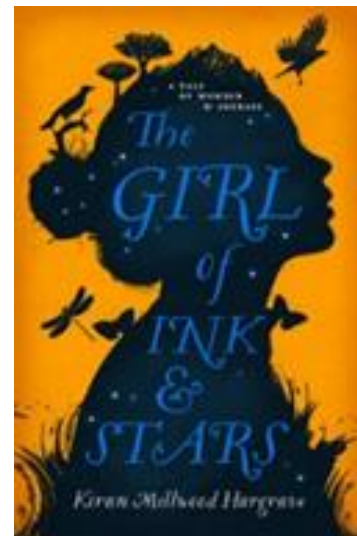
Recommended books to have read by the end of Year 8



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**We Are All Made
Of Molecules**
Susan Nielsen



**The Girl of the Ink
and the Stars**
Kiran Millwood
Hargrave



**The Acrobats
of Agra**
Robin Scott-Elliott



**The Curious Case of
Karl Nova**
Karl Nova

All books can be purchased online, or loaned from our library

Definition of a short story: ‘A story which can be read in a single sitting.’ The 19th Century was the golden age of the short story.

Ghost/ Mystery Stories

Rooted in Gothic tales of horror but evolved to reflect the reality of the Victorian age. From mid C19th featured new inventions such as the railway or familiar places such as the pub. ‘Penny dreadful’ magazines with their stories of criminals reflected the rise in crime in society. Detective figures with great intellects and deductive minds became increasingly popular. Stories first appeared in monthly magazines, with Christmas issues and stories very popular.

Science Fiction Stories

Scientists were making great discoveries and transforming the understanding of life on earth. Charles Darwin’s theory of evolution and the discovery of radioactive power happened. These discoveries inspired writers to explore the implications of scientific progress in short stories. H. G. Wells popularised the genre with his instant bestseller ‘The Time Machine’ Narratives often explore the dangerous of humanity overreaching.

Fantasy Stories

As a genre this looks back to the Anglo Saxon oral tradition (Beowulf) and to Shakespeare’s comedies. Cautionary tales that include magical characters such as witches and fairies. Despite the fantastical content, these were dark narratives, not necessarily for children. Fantasy Stories are similar to fairy tales in that they show moral learning and growth. The Victorian search for adventure and exploration is reflected in these strange characters and settings.

Realist Stories

Social upheaval caused by the industrial revolution transformed people’s lives. New realities and hardships faced by people as a result of industry was reflected in fiction. Often centred around the poverty stricken streets of London and chronicled the rich/poor divide. The harsh realities of rural life and the plight of farm workers was also depicted. Depicted the fine line that existed between a seemingly respectable life and abject poverty.

Social and Historical Context

- At the start of the 19th century there were only a handful of magazines specializing in prose fiction where authors of short stories could find an outlet for their work.
- Abolition of harsh taxes on publishing in the 1850s led to an explosion of literary magazines featuring all kinds of fiction.
- The Education Act of 1870 meant that all children had to attend school for a minimum of 5 years and led to rapidly increased literacy and a desire for reading as entertainment.
- The Industrial Revolution created such a change in the way people lived that writers felt compelled to depict the consequences of it on the ordinary working person, often as a vehicle for social change.
- The Age of Enlightenment and Victorian desire for exploration made writer’s question the boundaries of our universe.
- Rising wages meant that families who had previously been unable to afford novels, could now purchase a weekly or monthly magazine to read together.
- By the end of the century more than 100,000 different newspapers and magazines were being published, giving the short story writer countless outlets for their work.
- Female writers (known as fin-de-siècle writers), responding to the beginnings of the women’s liberation movement, embraced the short story as a form for presenting highly stylised depictions of sexual and gender oppression. Fin-de-siècle (turn of the century) reflected the mood of change they depicted.

Narrative Methods

Perspective/Voice Who is telling the story? Is the narrator first person or third person? Are they intradiegetic (a character in the story) or extradiegetic (an uninvolved observer). Are they omniscient (all knowing) or inadequate (don’t have all the facts.) Are they reliable (the audience can trust them to fairly relay events) or unreliable (they have a motive and an angle)?

Structure Is the story told chronologically (ie with a linear beginning, middle and end) or is it fragmented (may start in the middle or miss out sections). Is there a climax or a series of anti-climaxes? How does the story open/close? Is there a turning point where the mood changes? Is there lots of dialogue or is it mostly description?

Language Are there any patterns in the language use (repeated imagery or groups of words with the same meaning)?

Notable 19th Century Short Stories (in chronological order)

The Mortal Immortal – Mary Shelley, 1833
The Tell-Tale Heart – Edgar Allen Poe, 1843
A Terribly Strange Bed – Wilkie Collins, 1852
The Signal Man – Charles Dickens, 1866
A Tradition of Eighteen Hundred and Four – Thomas Hardy, 1882
The Body Snatcher – Robert Louis Stevenson, 1884
The Star Child – Oscar Wilde, 1891
The Yellow Wallpaper – Charlotte Perking Gilman, 1892
The Adventure of the Speckled Band – Arthur Conan Doyle, 1892
Desiree’s Baby – Kate Chopin, 1893
The Star – H. G. Wells, 1897
A White Night – Charlotte Mew, 1903

Year 8 - 19th Century Short Stories Vocabulary Lists

gothic	untarnished	Napoleonic	agony
lonesome	obsequious	rustic	fulfilled
gloomy	decrepit	mirthful	sanctity
shudder	speculative	antiquity	incongruous
gesticulation	grave	venerable	formidable
treacherous	latent	relic	sublime
fiendish	affliction	immoral	repelled
malignant	pride	servility	spectral
celestial	prophecy	loathsome	catastrophe

Equal division	When a number line is divided into parts that are an equal distance apart.
Interval	The distance between two values or points. <i>This might or might not include the end values.</i>
Scale	A (linear) scale with equal divisions for equal values.
Equal division	When a number line is divided into parts that are an equal distance apart.

Fraction	(from Latin fractus, "broken") represents a part of a whole or, more generally, any number of equal parts.
Equivalent	Equivalent is to have the same value even though it may be presented differently.
Decimal	A decimal is a fraction written in a special form. The decimal system, therefore, has 10 as its base and is sometimes called a base-10 system.
Percentage	(from Latin per centum "by a hundred") is a number or ratio expressed as a fraction of 100. It is often denoted using the percent sign, "%".
Convert	To change the form of a measurement, different units, without a change in the size or amount.

Factor	An integer that divides exactly into that number
Product	The result of multiply factors together
Scaling	The act of multiplying by a scale factor

$$2 \times 3 = 6$$

Diagram illustrating multiplication: 2 (Factor) × 3 (Factor) = 6 (Product / Multiple)

Key conversions to remember:

$$1 = 1.00 = 100\%$$

$$\frac{1}{2} = 0.5 = 50\%$$

$$\frac{1}{3} = 0.\dot{3} = 33.\dot{3}\%$$

$$\frac{1}{4} = 0.25 = 25\%$$

$$\frac{1}{100} = 0.01 = 1\%$$



Key terms	Definitions
HTML	Hyper Text Mark-up Language: the language used to write and display web page documents.
Website	A collection of web pages and related content.
Web page	A hypertext document connected to the world wide web.
Web browser	The software which displays a webpage or website on a computer
URL	Uniform Resource Locator – web address
Hyperlink	A word/phrase/image that you can click on to jump to a new web page or document.
Navigation bar	A user interface element within a web page that contains links to other sections of the website.
Search bar	The place where items being searched for are entered
Search term	Keywords that need to be searched for on web pages
Child pages	Related subpages from the main results page that a searcher might find useful
Crawler/spider	A program a search engine uses to find content on the world wide web.
Spam	Irrelevant messages sent to a large number of internet users for illegitimate advertising.



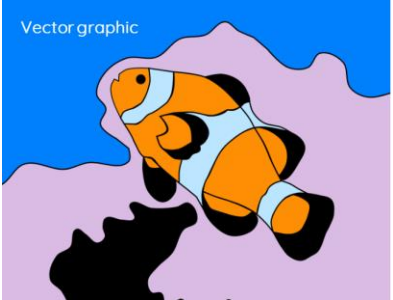
```
<html>
  <body>
    <h1>Hello world</h1>
    <p>This is my first webpage</p>
  </body>
</html>?
```

Key terms	Definitions
<HTML>	States that the document is a HTML document.
<body>	States that the information appears in the body of the page.
<h1>	States that the text will appear as a prominent heading.
<p>	States that this is the beginning of a new paragraph.



Keywords for Vector Graphics

Vector Graphic	A computer made image that is made up of points, lines and curves based upon mathematical equations.
Raster Graphic	A detailed image created with pixels.
Pixel	A tiny square of colour.
Logo	A symbol that is used to represent an organisation or product.
Union	An operation used to combine two or more paths to create a single path.
Intersection	An operation use to create a single path from the overlapping portion of two paths.
Scalable	When an object or image is able to be made bigger or smaller.
Path	A line or a shape used to create vector graphics.
SVG	Scalable Vector Graphic



Six-cornered star
Rounded corners
Green fill
Red dotted stroke



Arc
Pink fill
Black stroke



Three-cornered polygon
Rounded corners
Yellow fill
Blue dashed stroke

Vector
e
Raster
e

Vector	Raster
Made up with paths	Made up with pixels
Simple images	Detailed/complex images
Maintains image quality when scaled	Loses image quality when scaled
Used for logos, icons and illustrations	Used for real photos

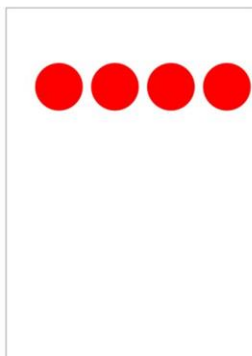
Alignment



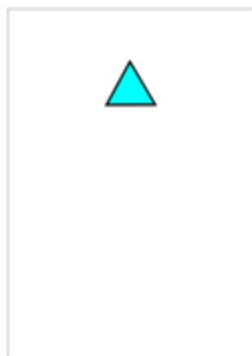
Align left edges to page



Distribute centres equidistantly vertically



Distribute centres equidistantly horizontally



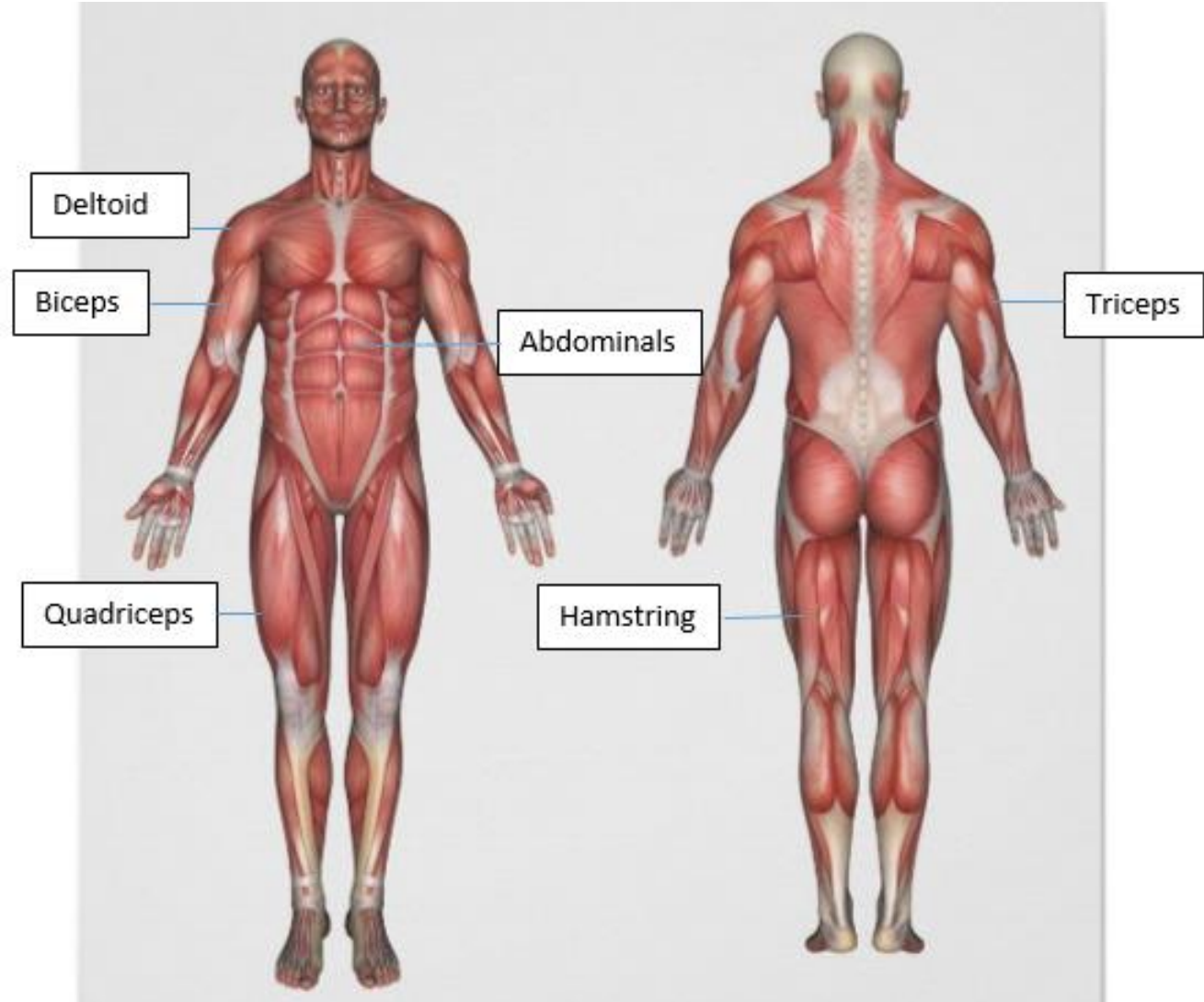
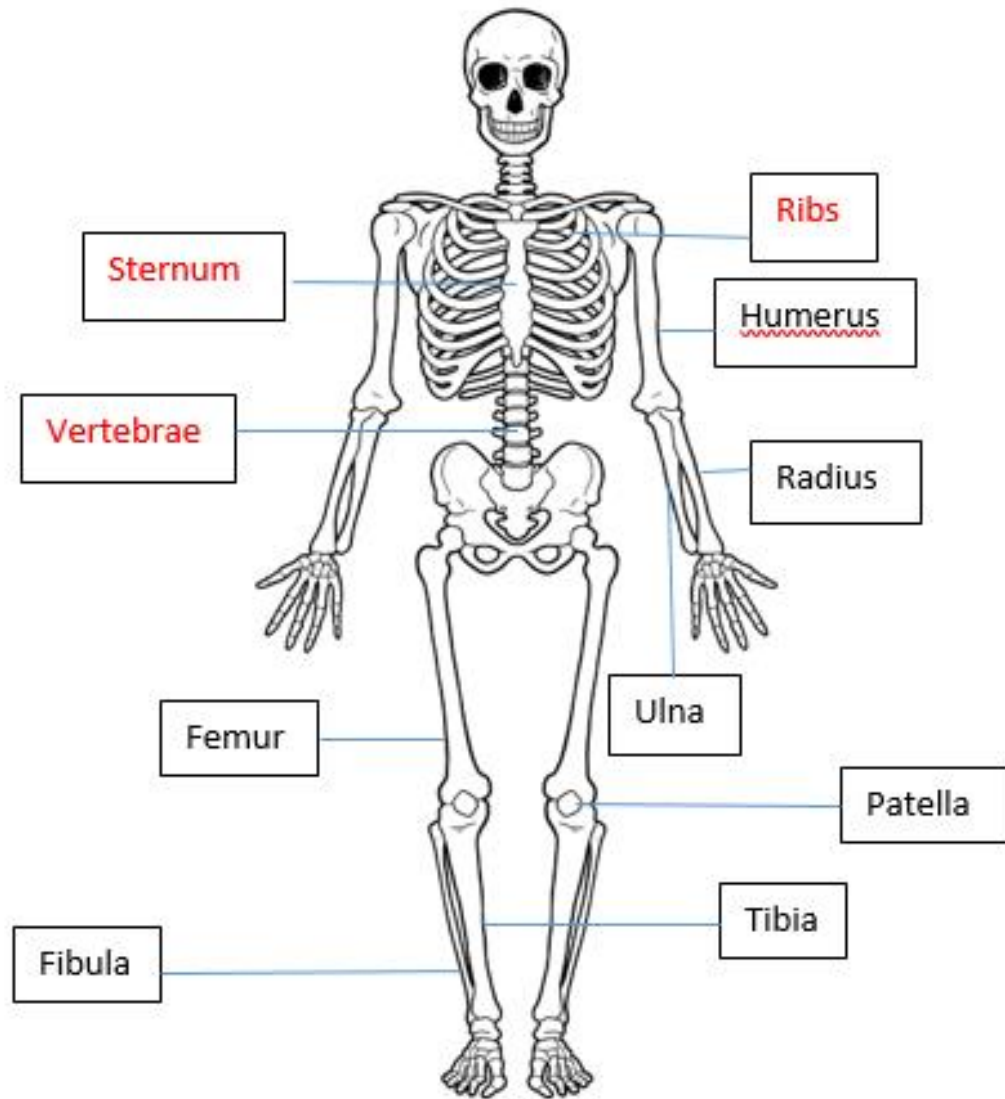
Centre on vertical axis to page

Unit 1 Physical Education- Knowledge Organiser: Staying safe in Physical Activity

Key learning content	Description / Explanation/ Example
Stages of a warm up <ul style="list-style-type: none"> Stage 1 –pulse raiser (5 mins) Stage 2 –mobility exercises Stage 3 –stretching (10s+) Stage 4 –dynamic movement Stage 5 –skills practice Names of muscles 	Examples of warm up <ul style="list-style-type: none"> Stage 1 – (Low intensity exercise) A 5 minute jog around a netball court. Stage 2 – (To move a joint through its full range of motion) Arm circles, ankle circles, hip circles. Stage 3 – (Static or dynamic stretches) quadriceps stretch. Stage 4 – (high intensity exercise) Shuttle runs Stage 5 – (Practice the skills you will be using) Chest/ shoulder passes (netball) Names of muscles: quadriceps, hamstrings, biceps, triceps
Benefits of a warm up <ul style="list-style-type: none"> Increase temperature and HR Decreased chance of injury Increased oxygen transport Increased flexibility Increased speed / strength of muscle contractions Mental preparation 	Benefits explained <ul style="list-style-type: none"> Allow more oxygen to reach muscles Better for overall health. Can maintain involvement in physical activity . More oxygen gets to muscles, so can create more energy. Increased flexibility can enhance performance (Reach higher to catch a ball) Faster/ stronger movements - perform skills more effectively. Mental preparation – feel more alert/ focussed/ confident/ concentrating/ motivated/ relaxed etc.
Stages of a cool down <ul style="list-style-type: none"> Stage 1 – Low intensity exercise Stage 2 – Stretching Names of movements – flexion and extension 	Examples of cool down <ul style="list-style-type: none"> Stage 1 – Steady jog on netball court, can move onto a walk Stage 2 – (Static stretches) Quadriceps stretch, hamstring stretch. Flexion = bending at an elbow or knee. Extension = straightening at an elbow or knee
Benefits of cool down <ul style="list-style-type: none"> Gradually lower heart rate Gradually lower breathing rate and temperature. Speeds up removal of waste products. Speeds up recovery Names of joints 	Benefits explained <ul style="list-style-type: none"> Gradually lower heart rate from 150bpm when working to 70bpm when resting. To maintain blood flow/ oxygen transport/ carbon dioxide removal Carbon dioxide and lactic acid removed faster. Reduces aching, recovery is faster. Joints: Elbow and knee = hinge. Shoulder and hip = ball and socket
Preparing for physical activity <ul style="list-style-type: none"> Wear appropriate PE kit Long hair tied back Jewellery removed No chewing gum or food Water for hot weather 	Preparation explained <ul style="list-style-type: none"> Sports trainers, shorts, t-shirt to avoid injury yourself or others. So you can see when playing Earrings taken out, bracelets off to avoid injuring yourself or others. To avoid chocking when active. To stay hydrated /avoid headaches/ feeling weak
Risks and hazards to check for <ul style="list-style-type: none"> Area free from rubbish Equipment tidied away Equipment undamaged Surface dry/ undamaged 	Hazards explained <ul style="list-style-type: none"> Check there is no debris such as broken glass on football pitch, to avoid someone injuring themselves. Check there are no equipment such as bibs left out on a basketball court from a previous activity, to avoid someone slipping/ tripping over when warming up. Check the trampoline is up properly, to avoid injury to a player. Check there is no water spilled on the badminton court, to avoid a player slipping and hurting an arm.

Year 8: Physical Activity- Key terminology

Key word	Description
Aerobic	Use of oxygen for the duration of the exercise. Usually at moderate intensity at a continuous rate e.g. long distance running. Can be performed for a long period of time.
Anaerobic	Exercise which creates energy without the use of oxygen. Usually high or very high intensity for a short period of time. E.g. sprinting up a hill.
Flexibility	Range of movement available around a joint.
Mobility	The ability to move freely.
Dynamic movement	Movements performed at high speed/ intensity.
Oxygen	The gas we breathe in, transport and use to create energy.
Oxygen transport	Oxygen is transported through blood vessels within the red blood cells.
Gaseous exchange	The movement of oxygen and carbon dioxide within the lungs, muscles and vital organs.
Contraction	A muscle contracts and (usually) gets shorter to apply a force and create movement.
Heart rate	Number of heart beats per minute.
DOMS	Delayed Onset Muscle Soreness. Usually occurs 1 or 2 days after high intensity exercise.
Lactic acid	A waste product produced in the muscle tissues during anaerobic exercise.
Waste products	Bi-products of aerobic exercise are carbon dioxide and water. Lactic acid is also a bi-product of anaerobic exercise.
Carbon dioxide	We produce carbon dioxide as a waste product. We transport it back to the lungs and breathe it out.
Recovery process	Returning the body to resting levels.
Intensity	How hard you work.
Team work	Working together to achieve a common goal. Requires good communication skills.
Reciprocity	Working positively with others as a group.
Demonstration	Showing someone how something should be done.
Communication	Transferring information by speaking, writing, demonstrating and using body language.
Risk	The chance or probability that someone will be harmed.
Hazard	A source of potential danger.
Injury	Damage or harm to the body.
Sprain	Damage to a ligament.
Mental Preparation	Getting your mind ready for competition through visualising the skills and imagining yourself being successful.



	Description/ Location/ Role
Muscle pair	Muscles that work together to produce a movement. Also called antagonistic pairs.
Hamstrings	A group of muscles located at the back of your thigh. Muscle pair with quadriceps
Quadriceps	A group of muscles located at the front of the thigh. Muscle pair with hamstrings
Biceps	A muscle located at the front of your upper arm.
Triceps	A muscle located at the back of your upper arm.
Abdominals	A group of muscles at the front of your body between the ribs and pelvis.
Deltoids	A group of muscles located at the shoulder.
Femur	A bone in your thigh
Tibia	A bone in your lower leg on the inside
Fibula	A bone in your lower leg on the outside
Patella	A small bone at the front of your knee
Humerus	A bone in your upper arm
Ulna	One of 2 bones in your forearm. The ulna runs down to your little finger
Radius	One of 2 bones in your forearm. The radius runs down to your thumb.
Ribs	Lots of bones in the chest protecting your lungs.
Vertebrae	Lots of bones in your back, sometimes referred to as your spine.
Sternum	Bone down the front of your chest protecting your heart.
Flexion	Bending a joint. This occurs when the angle of a joint decreases. For example, the elbow flexes when performing a biceps curl.
Extension	Straightening a joint. This occurs when the angle of a joint increases, for example, at the elbow when putting a shot.
Contraction	When a muscle produces a force which pulls on a bone.
Agonist	The name given to a muscle which is contracting and causing a movement/ producing a force.
Antagonist	The name given to a muscle which is relaxing while it's paired muscle contracts to perform an action.
Hinge Joint	These include the elbow and knee. They allow flexion and extension to occur.
Ball and Socket Joint	These include the shoulder and hip and allow flexion, extension, abduction, adduction, rotation and circumduction.
Abduction	Movement away from the midline of the body. This occurs at the hip and shoulder joints during a star jump.
Adduction	Movement towards the midline of the body. This occurs at the hip and shoulder, returning the arms and legs back to the centre from a star jump position.
Circumduction	This occurs at the shoulder and hip and involved the arm or leg moving in a circle.
Rotation	This is where the arm or leg moves in a twisting movement around the shoulder or hip. E.g. twisting foot to side to pass a football.
Concentric	A type of muscle contraction where the muscle shortens while it is contracting. E.g. biceps when lifting a weight.



To find any 'C' note on the keyboard, find the pair of black keys - the white key to the left of them is always 'C'



Treble Clef



C D E F G A B C D E F G A

Bass Clef

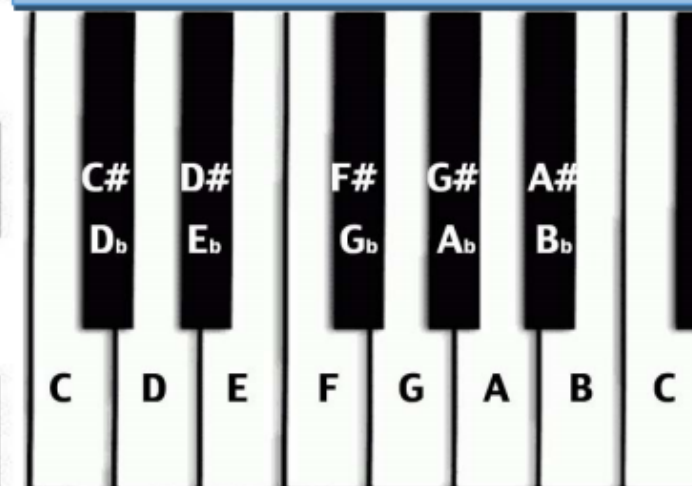


F G A B C D E F G A B C

middle C

Sharps (#) and Flats (b)

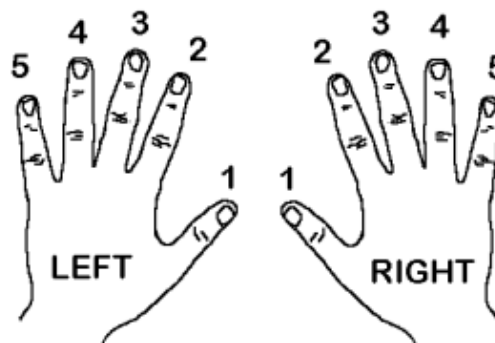
The black keys have two names; a SHARP name (#) and a FLAT (b) name e.g. The black key to the right of C can be called C# (C sharp) OR Db (D flat)

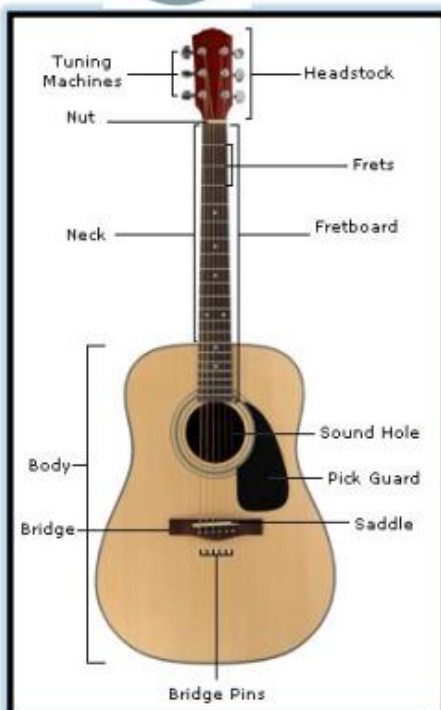


Basic Chord Shape (root)



When you play the keyboard or piano, it's important to use all your fingers and thumbs as efficiently as you can. This helps you to not have to move your hands away from the keys quite so much! Each finger and thumb is given a number - try to stick to the right finger numbers where written on the music!





TAB(Tablature)

The word **TAB** at the beginning of the tablature score is the abbreviation for tablature.

Tablature has six lines that indicate the six strings of the guitar.

T
A
B



READING TAB

Notes played at the same time

Notes played one at a time

Thinnest string

Thickest string

0= open string

Numbers tell you where to put your fingers



Danger

**DON'T
TOUCH
THE
TUNING
PEGS!**

READING CHORD BOXES

Don't play these strings

Play these strings (open)

Nut

Frets

Left Hand Fingers

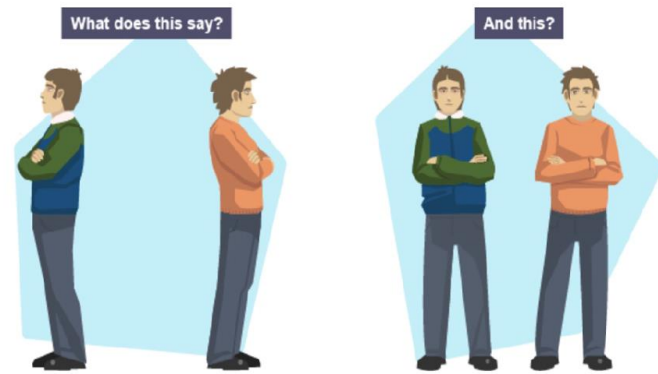
6th String (thickest)

1st String (thinnest)

Drama Year 8 Topic 1 Blood Brothers

Proxemics and levels

What do the shapes that you create on the stage say about the character relationships and action? Levels are also important and can be useful in denoting a character's status or power.



Playwright: Willy Russell

Written: 1980's

Set: 1950-80's

Theatrical setting: Liverpool

Themes: Social class divide, nature vs nurture

Style: Musical Theatre (singing sections),
naturalistic (acting sections)

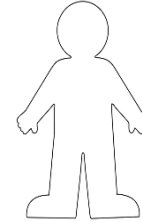
Genre: Comedy, Tragedy, Musical Theatre

Homework 1:

Learn the information on this knowledge organiser.

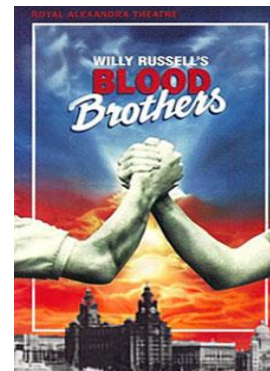
Drama conventions

Role on the wall is a diagram (usually an outline) of a person with information around the edges exploring a character.



Improvisation Improvising is inventing and creating content spontaneously. It's a great way to generate new ideas and for creating and developing characters.

Duologue Duo = 2 Duologue is a play or part of a play with speaking roles for **only two actors**.



Drama

Physical skills

These skills are linked to the ways an actor uses their body to communicate their **character**. They are all non verbal communication skills, meaning you do not talk or make any sound!

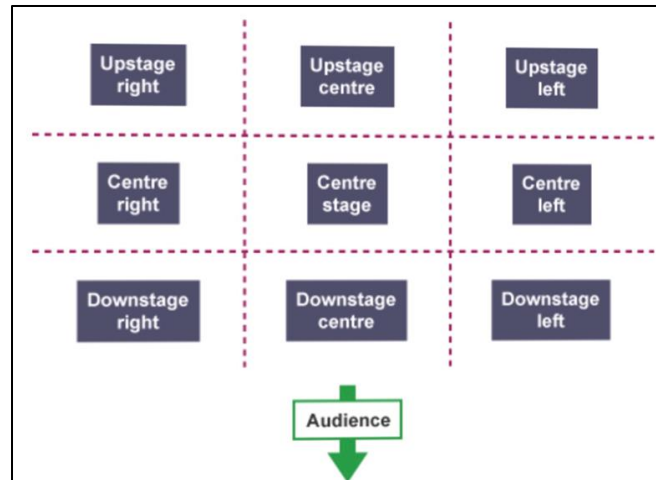
Body Language- Posture

Body Language – Gestures

Facial expressions



Areas of a stage



Vocal skills

These skills are linked to the ways an actor uses their voice to communicate their **character**. There are 6 key elements you are going to explore.

Pause, Pitch, Pace, Volume, Accent, Tone



Homework 2:

Learn the 10 spellings below:

- 1.) Script
- 2.) Proxemics
- 3.) Improvisation
- 4.) Role
- 5.) Blocking
- 6.) Confidence
- 7.) Audience
- 8.) Duologue
- 9.) Performance
- 10.) Character

YEAR 8 KNOWLEDGE ORGANISER DANCE TERM 1: DANCE



Physical and Expressive Skills

Physical Skills

Alignment: Ensuring limbs are following the correct line with the rest of the body

Balance: The ability to retain the centre of mass above the base of support

Co-ordination: being able to perform with more than one body part at the same time

Flexibility: The range of movement available at the joint

Control: The ability to start and stop movement, change direction and hold a shape efficiently

Strength: Muscular Power, the ability of the muscles to hold the body/another dancer in a position.

Movement Memory: the ability to remember a set of movements in sequence

Expressive Skills

Projection: the energy the dancer uses to connect with and draw the audience.

Spatial Awareness: Consciousness of the surrounding space and its effective use

Facial Expression: Use of the face to show mood, feeling or character.

Musicality and Timing: the use of the music, time or counts when matching movement to sounds and other dancers

Stimulus

The starting point or initial idea or theme that a dance performance is based on

Types of Stimuli

Visual Stimulus – Something we look at. This could be a piece of art, an image, photo or a sculpture

Literary Stimulus – something we can read, this could be a poem, a story, a news article.

Tactile Stimulus – Something we can touch – we can feel textures, shapes and consistency

Auditory Stimulus – Something we can hear, this could be music, natural sounds, sound effects.

Ideational Stimulus – Using a theme to convey an idea or tell a story e.g. We might have an idea to create a piece about the idea of

War

RADS

RELATIONSHIPS: Who we are dancing with. Solo, duo, group. Also, how we might be connecting with other dancers – contacting/touching, balancing, lifting, formations, canon, unison

ACTION: What we are performing. Examples of basic actions (travel, turn, jump, gesture, stillness, transference of weight) also actions with specific names.

DYNAMICS: How we are performing our actions. The energy you give to the dance it could be speed i.e. quickly/slowly It could be quality i.e. forcefully/gently.

SPACE: Where we are performing. This can mean directions e.g. left, right, diagonal. It could mean Levels e.g. high, low. It could mean areas of the stage e.g. downstage, upstage, centre

SJNGC - Art & Design Knowledge Organiser - Yr 8

Inspirational Women Project – Mixed media & collaborative

Neomi Saffir (Artist)

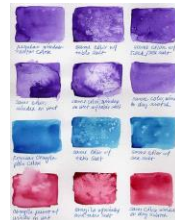


Israeli portrait and landscape artist Neomi Saffir works in block colours on large canvases to create powerful and vibrant works of art. Inspired by the urban cityscape of her hometown Tel Aviv and the emotive power of her female subjects, Neomi's paintings explore themes of desire, power and independence.



Mediums & Materials

Watercolour Paint



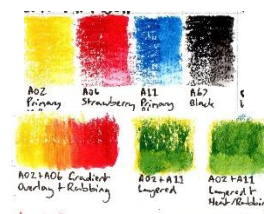
Acrylic Paint



Collage



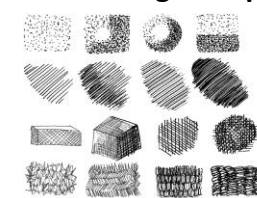
Oil Pastel



Chalk Pastel



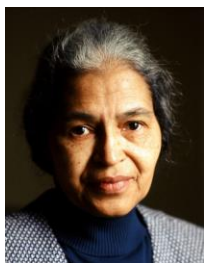
Mark making with pen



Watch the following video for help with application & technique: <https://youtu.be/PKUwSVYuBck>

Inspirational Women

During this project we will be using a range of inspirational women, past & present as a focus for our collaborative & sketchbook work. Here are some of the women we will be focussing on:



Rosa Parks was an American activist in the civil rights movement, known for her pivotal role in the Montgomery bus boycott.



Zaha Hadid was a British, Iraq, architect, artist and designer, recognised as a major figure in architecture of the late 20th and early 21st centuries.

Emma Watson (right) UN Women Goodwill Ambassador, actor & humanitarian. Dedicates her work towards the empowerment of young women. Advocate for UN Women's HeForShe campaign promoting gender equality. (pictured with JK Rowling, book author)

Writing about an Artist & Analysing Art

Use some of these tips to help structure your thoughts within your writing:

- Tell me about the artist, What is the piece called, what are your initial thoughts about the piece.
- What do you see in the image? What colours & textures do you see?
- Is there a main focus in the piece? Are there any unusual features?
- What colours and shapes stand out the most and how do you think the piece was made or created?
- How does the piece make you feel? Does the piece remind you of anything? What feelings could the piece represent.

You could even discuss how the formal elements are used in the piece, these are – Line, tone, texture, shape, form, colour & space. In addition to this you could talk about how mark making & pattern is used.

Design & Technology

Techno-spellings-

- Jewellery**-Personal ornaments such as necklaces.
- Earrings**- Jewellery worn on the ear lobe.
- Acrylic**- Plastic made from coloured polymers.
- Pliers**- Scissor action pincers for gripping.
- Drilling**- A machine with a rotating cutting tip.
- Filing**-Using a file to smooth edges of plastic.
- Polishing**-Using metal polish to give a shine.
- Designing**- Drawings showing of an idea.
- Making**-The process of producing something.
- Analyse**-Examine something in detail.
- Evaluate**-To judge the quality of a product.
- Hearth**-A stone lined place to heat up materials.
- Sustainability**-Using renewable energy/materials.
- Medium density fiberboard**- Engineered wood.
- Headpin**-Large pin for beads.

The design process

In DT we use a range of acronyms to help us to remember how to analyse, develop and design products. We use three at KS3 which are: CAFEQUE and SWOT used for analysing and SATSUMA used for writing a design specification.

C-Cost

A-Aesthetics

F- Function

E-Ergonomics

Q-Quality

U-Uniqueness

E-Ergonomics

S-Strength

W-Weakness

O-Opportunity

T-Threat

S-Size

A-Aesthetics

T-Target market

S-Sustainability

U-Uniqueness

M-Materials

A-Aids such as tools.

You will create a range of products that are functional, well made and aesthetically pleasing.

Design challenge-you will be issued with a brief which will explain what you need to do.

You will conduct research and analyse it using CAFEQUE/SWOT.

You will generate a range of designs and make prototypes.

You will write a specification using SATSUMA.

You will use a range of materials and skills to make your products

You will test and evaluate your products

Working with acrylic

- The key fob and the phone stand are made of thermoplastic.
- Acrylic** plastic polymers are formed by reacting a monomer, such as methyl methacrylate, with a catalyst. These chemicals come from coal and oil.
- Thermoplastic** has 'memory form' which means once it has been shaped, it can be heated up and it will go back to it's original shape. It can be recycled and comes in a range of colours including light gathering forms and transparent. We shape acrylic sheet on the disk sander, polish it using a range of abrasive paper of grits 240, 320 and 1000 then use metal polish to bring it to a high shine. We can drill through it using the electric hand drills and clamps. We heat it up using a hot air gun which allows us to twist it.
- We can **mark it out** using a biro and ruler on the protective plastic cover which protects it from scratching.
- We can bend the plastic by using the hot wire strip heater. Once products are made they can be enhanced by adding LEDs, gems and laminated photographs.

- Using hand tools to shape and cut wire.
- Analysing products to identify successful design features.
- Sketching in 2D using colour and labelling.
- Working with acrylic thermoplastic;
- Marking out, cutting using hand saws, smoothing using a disc sander, polishing using abrasive paper, drilling holes and shaping using a heat gun.
- Using a tri-square to mark out finger joints, cut, file and glue MDF.
- Use creativity to decorate a jewellery box.

Design		Make		Evaluate	
A clear understanding of the user's needs. An extensive range of creative and original ideas show a high level of skill. Detailed annotation shows materials, tool and processes.	- Secure +	Students have used the working properties of the materials to make high quality, well finished, fully functioning products.	- Secure +	A detailed evaluation with improvements. Thoroughly evaluated against the specification and user's needs.	- Secure +
User's needs identified. Detailed analysis of research identifying materials leading to a detailed design specification. The ideas link clearly to the specification. Ideas communicated using a range of techniques and mediums.	- Working +	Appropriate tools were used with a good level of skill and accuracy. Used tools and equipment correctly and safely. Some accuracy and quality of finish demonstrated.	- Working +	A detailed analysis showing the impact of their work on society and the environment. Students have identified where their work can be improved.	- Working +
At least one 2D sketch showing colour. The design partly addresses the brief and, with help, can suggest the strengths and weaknesses of their idea.	- Beginning +	A mostly finished product that uses one skill with some accuracy, using tools and equipment with help.	- Beginning +	Identify one good point and say what needs to be better next time. Be able to describe successful features.	- Beginning +

Using Machines and tools safely:

Disk sander, Hegner saw: Tie hair back, tuck scarf and lanyard in the apron, goggles, one at a time and wait behind the stripy line. Keep work flat on the bed, only for plastic and wood.

Laser cutter: CAD/CAM equipment which uses carbon dioxide laser technology to cut through all material but not metal. Do not stare at the beam, turn extractor on.

Electric hand drill: Fast moving parts to drill holes. Goggles, hair tied back and wear an apron with scarfs and lanyard tucked in.

Hot wire strip heater: Hot wire heated so that it bends acrylic. Accurate and effective requiring focus when using.

Hot air gun: Used to gently heat up acrylic before twisting for the key fobs. Sensible behaviour, keeping fingers off the hot end-one at a time waiting behind the stripy line.

Coping saw: Used to cut wood and plastic. Versatile and accurate. Use both hands to cut. Apron.

Pliers-round nose, long nose and snips: Used to make earrings. Cutting, bending, making eavelets.

Design and Technology Special Diets Knowledge Organiser

Key techno spellings and technical language with definitions.

Vegan-Plant based diet and lifestyle.

Vegetarian-No meat, dairy, eggs or fish.

Lacto-vegetarian-No meat, eggs, fish but are allowed dairy.

Ovo-vegetarian-No meat, fish, dairy but allowed eggs.

Lacto-ovo vegetarian-No Meat and fish but allowed dairy and eggs.

Macrobiotic-No meat but grains and seasonal fruit and vegetables with occasional fish.

Flexitarian-Typically vegetarian who occasionally eat meat, dairy, eggs and fish.

Local and seasonal-Fruit and vegetables grown locally and at the current time of year.

Micronutrients-Vitamins and minerals.

Macronutrients-Food groups in the eat well plate.

Coeliac disease-An intolerance of gluten.

Diabetic-Low sugar diet.

Lacto-intolerant-An intolerance to dairy foods.

Food intolerance-Any food that an individual is allergic to.

Anaphylaxis- A serious condition to allergens which requires the use of an epi-pen.

Epi-pen-Epinephrine acts quickly to improve breathing, stimulate the heart, raise a dropping blood pressure, reverse hives, and reduce swelling of the face, lips, and throat.

Food Standards Agency list of 14 food allergens.

celery

cereals containing gluten – including wheat (such as spelt and Khorasan), rye, barley and **oats (No gluten)**

crustaceans – such as prawns, crabs and lobsters

eggs

fish

Lupin (Type of bean)

milk

molluscs – such as mussels and oysters

mustard

tree nuts – including almonds, hazelnuts, walnuts, brazil nuts, cashews, pecans, pistachios and macadamia nuts

peanuts

sesame seeds

soybeans

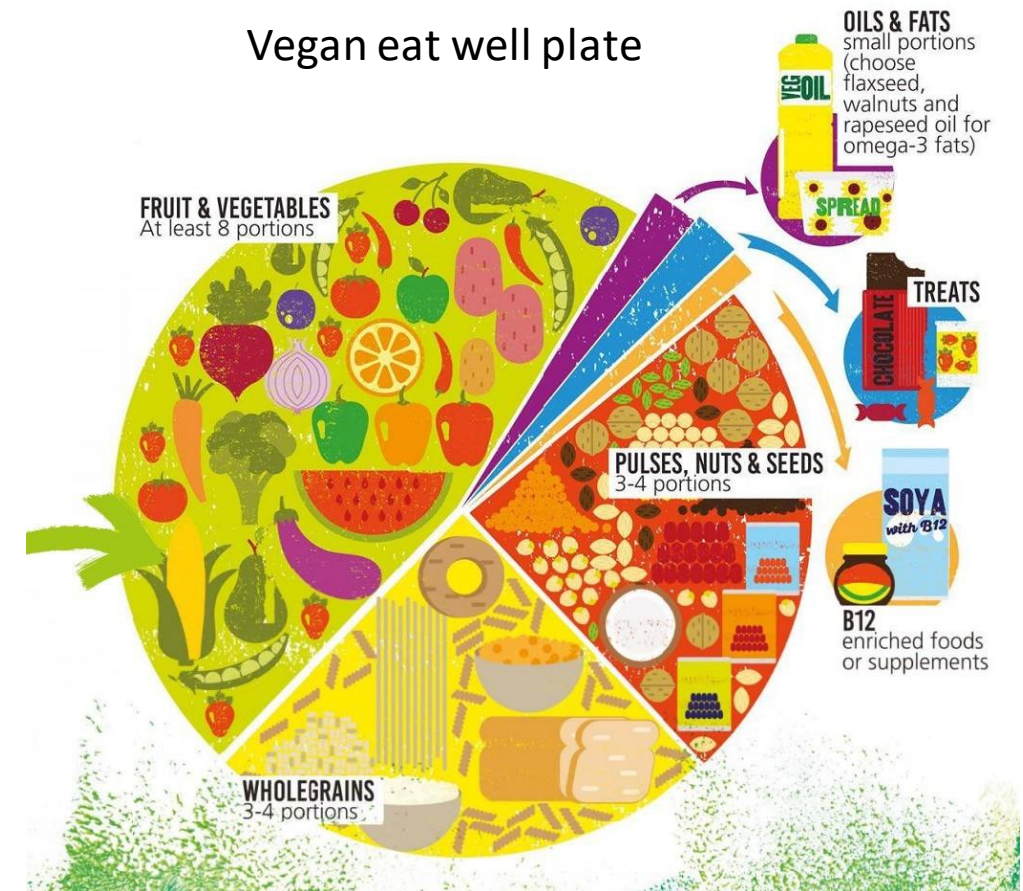
sulphur dioxide and sulphites

(preservative)

Dietary Illnesses and diseases

- Diabetes type 1 & 2
- Coeliac disease
- Lactose intolerant
- Illnesses linked to obesity

Vegan eat well plate



Religious diets

[Vegetarian and Vegan Diets](#)

[Muslim Diets](#)

[Hindu Diets](#)

[Sikh Diets](#)

[Buddhist Diets](#)

[Rastafarian Diets](#)

[Jewish Diets](#)

- Poverty is the **main cause** of hunger in the **world**
- Job Instability
- **Food** Shortages and Waste
- Poor infrastructure
- Unstable Markets
- Climate Change
- War and Conflict
- Nutritional Quality

Textiles

Techno-spellings-

- 1. Research-** Collating information about a range of products and identify needs by conducting a survey.
- 2. Specification-** List of success criteria.
- 3. Analysis-** Using analysis acronyms to find out how successful something is.
- 4. Designing-** Using 2D and 3D sketching techniques and colour to produce a range of ideas.
- 5. Creativity-** Using inspiration from nature in designs.
- 6. Users needs-** Identified success criteria based on an individual or group needs.
- 7. Manufacturing-** The process of making.
- 8. Planning-** Using dual coding to plan stages of making.
- 9. CAD/CAM-** Computer aided design, computer aided manufacture.
- 10. Repeat pattern-** Using a motif to create different patterns on fabric such as full drop and mirror image.
- 11. Pattern lay-** Strategic laying of pattern pieces.
- 12. Accuracy-** Working to within +1 or -1 tolerance.
- 13. Testing-** Finding out how successful a product is.
- 14. Evaluation-** Analysing the final product.
- 15. Modification-** Making improvements.

Equipment	Use	risk	Safe Practice
Wax Kettle and Tjanting.	Used for Batik –embellishment on fabric.	Burns Wax spilled on clothing.	Wear an apron. 2 people only to use wax kettle at any time Do not touch metal parts.
Scissors.	To cut fabric, card and paper.	Cuts, injury with sharp blades. <u>Clothes damaged.</u>	Concentrate, cut fabric with bottom blade <u>resting on the table.</u>
Pins and sewing needles.	Pins used before sewing to hold fabric firm. Needles used for hand sewing and embroidery.	Injury as they are sharp. You could sit on a pin. If in school bag, they could poke out of bag and injure someone.	Sit on a chair when sewing, concentrate. Put pins and needles back in tray at end of lesson. Transport sewing needles in a safe, hard case only if they are going home.
Iron and ironing board.	Used for pressing fabrics, ironing on gems, melting wax out of batik work.	You could drop it on your foot. Burns to yourself or work.	2 people at the iron only. No queuing. Stand iron on end when not ironing. Cover work with paper.
Dyes and printing inks.	Used to decorate fabric such as tie and dye, screen printing and adinkra.	Drip on floor – slipping hazard. Damage clothing.	Carry wet work on newspaper – dry rack Wear an overall.
Craft knife.	Used to cut card and stencils in paper.	Injury with sharp blade.	Use cutting mat. Cut away from your body. <u>Use a safety rule.</u>
Sewing machine and over locker.	Used to machine sew fabrics, edge trim and overlock. Sew in zips and <u>CAD/CAM embroidery.</u>	Injury with needle or blades.	Work alone and concentrate fully. Turn off power unless sewing. Fingers away from <u>needle/blades.</u>

Working with fabric

- Fabric;** The reversible bag and juggling balls are made from calico, 100% cotton fabric. Cotton is a sustainable material because it is a plant which will continue to grow once the cotton bols have been harvested.
- Tie and dye;** The dyes use mostly natural pigments and come in a powder form. They are mixed with cold water. When natural fabric such as cotton, wool and silk are dipped into the dye, the fibres take on the pigment which is then made colourfast by sea salt usually mixed in with the dye.
- Resist method of dying;** Patterns of different colours can be built up to create decorative effects. To achieve tie and dye, string is used as a resist. For batik, was is used and a flour and water paste can also be used.
- Embellishment;** This word describes the effect of using a range of manufactured components to achieve decorative techniques such as; seed beads, sequins, buttons, embroidery and applique.
- Sewing;** We will use sewing machines and hand stitching to make our products. There is also a range of decorative embroidery techniques available by using the CAD/CAM embroidery machine.

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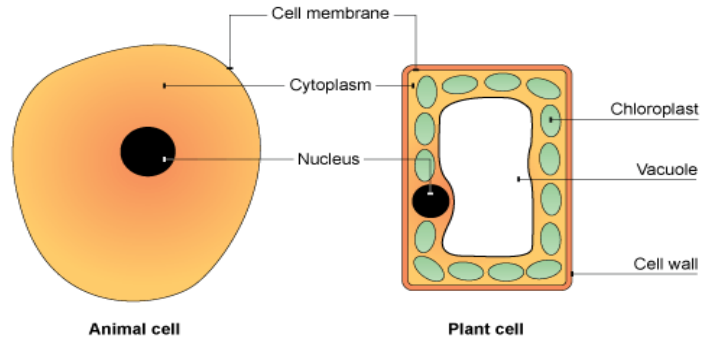
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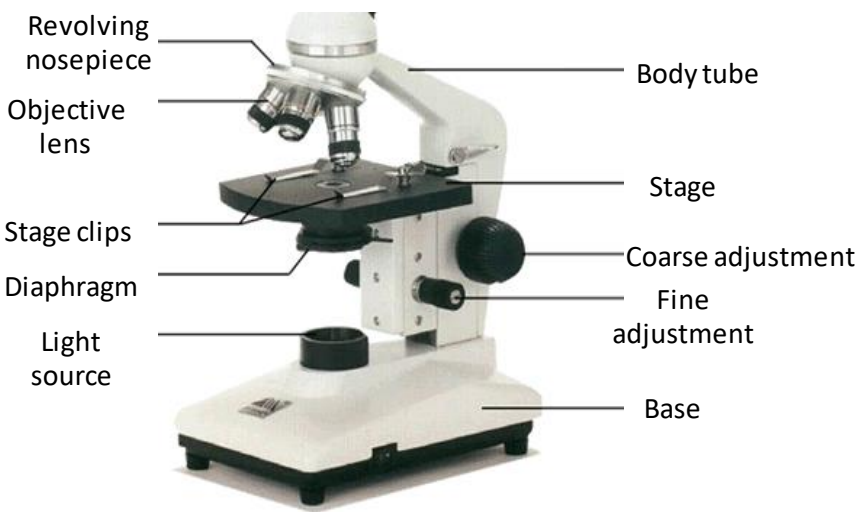
KNOWLEDGE ORGANISER
BIOLOGY: CELLS

Key word	Definition
amoeba	A unicellular organism.
cell wall	The plant cell component that surrounds the cell, providing support.
cells	The smallest functional units in an organism – the building blocks of life.
Cell membrane	The cell component that surrounds the cell and controls movement of substances in and out.
chloroplasts	The plant cell component where photosynthesis takes place.
concentration	A measure of the number of particles of a substance in a given volume.
Cytoplasm	Jelly like substance in cells where most chemical processes happen
diffusion	The movement of liquid or gas particles from a place of high concentration to a place of low concentration.
euglena	Unicellular organism that performs photosynthesis.
flagellum	A tail-like structure that allows euglenas to move.
leaf cell	The plant cells that contain chloroplasts, where photosynthesis takes place.
microscope	An optical instrument used to magnify objects, so small details can be seen clearly.
nerve cell	An animal cell that transmits electrical impulses around the body.
nucleus	The cell component that controls the cell and contains genetic material.
observation	Carefully looking at an object or process.
organisms	Living things.
red blood cell	An animal cell that transports oxygen around the body.
root hair cell	A plant cell that takes in water and minerals from the soil.
specialised cell	A cell whose shape and structure enable it to perform a particular function.
sperm cell	A cell containing male genetic material.
unicellular	Consisting of just one cell.
vacuole	The plant cell component that contains cell sap and helps to keep the cell firm.

Animal 'V' Plant Cells


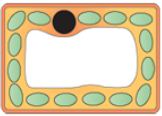
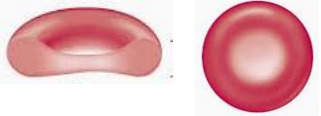
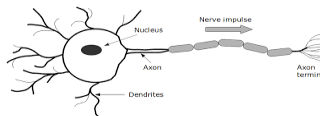
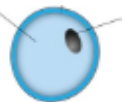

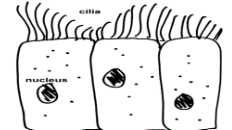


Microscopes



Total magnification =
magnification of eye piece lens x magnification of objective lens



Type of plant cell	Function	Special features
Root hair cell 	To absorb water and minerals	Large surface area
Leaf cell 	To absorb sunlight for photosynthesis	Large surface area Lots of chloroplasts
Type of animal cell	Function	Special features
Red blood cells 	To carry oxygen	Large surface area, for oxygen to pass through. Contains haemoglobin, which joins with oxygen
Nerve cells 	To carry nerve impulses to different parts of the body	Long Connections at each end. Can carry electrical signals
Female reproductive cell (egg cell) 	To join with male cell, and then to provide food for the new cell that's been formed	Large Contains lots of cytoplasm
Male reproductive cell (sperm cell) 	To reach female cell, and join with it	Long tail for swimming. Head for getting into the female cell
Ciliated Cells 	The hairs sweep hair, mucus, trapped dust and bacteria up to the back of the throat where it can be swallowed	Hair like structures Present in many structures e.g. ear, nose, trachea

Movement of substances

Substances move from an area where they are in high concentration to an area where they are in low concentration. This process is called **diffusion**.

Oxygen diffuses into cells from an area of high concentration outside the cell to a low concentration of oxygen inside the cell. Carbon dioxide moves out of the cell.

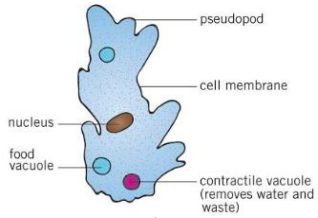
Water moves into a plant from a high concentration of water in the soil to a low concentration of water in the root hair cells.

Unicellular Organisms

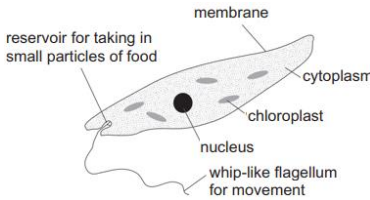
Amoebas and Euglenas are examples of unicellular organisms. This means that they are only made up of one cell.

Both organisms reproduce by binary fission.

Amoebas have to find food to survive but Euglenas can carry out photosynthesis to produce their own food.



Amoeba

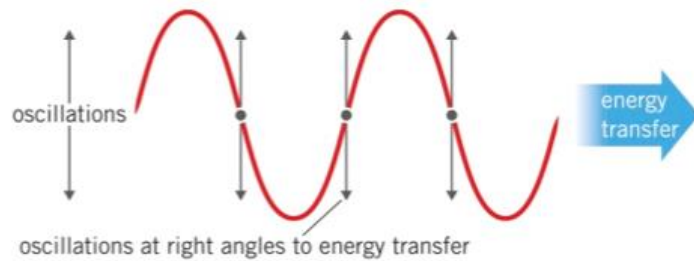


Euglena

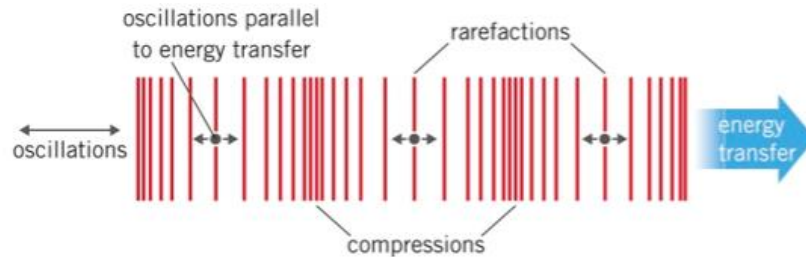


Properties of Waves

Waves are **oscillations** (vibrations) that transfer **energy**. They can be **transverse**:



or **longitudinal**:



Waves have **wavelength**, **amplitude** and **frequency**:



Frequency is how many waves pass a point in 1 second.

Sound Waves

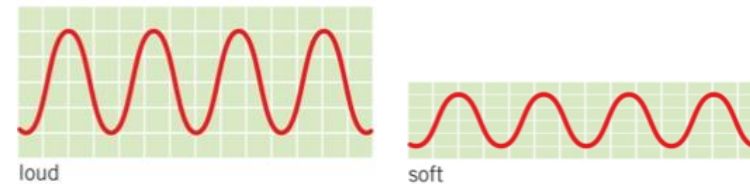
Sound waves are longitudinal.

Sound cannot travel through a **vacuum**, it must travel through a material (**medium**).

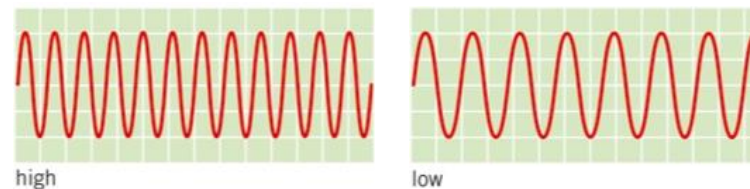
Its speed depends on the medium, e.g.:
air - 340 m/s, water - 1500 m/s, steel - 5000 m/s

Loudness and Pitch

The larger the amplitude of a wave, the louder the sound:



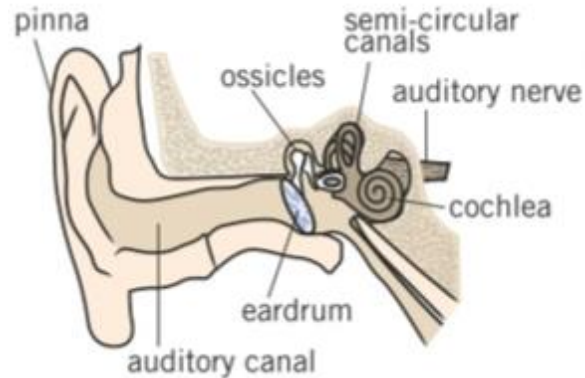
The higher the frequency of a wave, the higher pitched the sound is:





Detecting Sound

We hear sounds using our **ears**.



We measure how loud a sound is in **decibels** (dB). If you are exposed to loud sounds for too long you can permanently damage your hearing.

0 dB	20 dB	40 dB	60 dB	80 dB	100 dB	120 dB	140 dB
cannot be heard	leaves rustling	talking quietly	normal speech	heavy traffic	jet taking off	pain threshold	gun shot

An increase of 10 dB means that the sound has got 10 times louder!

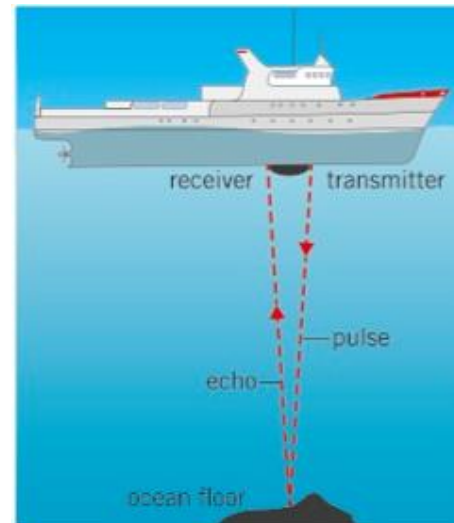
Microphones have a **diaphragm** that acts in a similar way to the eardrum to detect sound. An **amplifier** then makes the detected sound louder.

Echoes and Ultrasound

We can only hear sounds in the human **audible range**: 20-20 000 Hz. Any sound above 20 000 Hz cannot be heard by humans and is known as **ultrasound**.

An **echo** is heard when sound **reflects** off of a surface and you hear it again as it travels back to you. Echoes can be used to measure distances.

Usually it the echo of an ultrasound wave that is used to measure distances, e.g. in sonar:



Transmitters send out beams of ultrasound, which travel through the water and hit the seabed. These reflect back up to **receivers** on the ship.

The time this takes is used to calculate the depth of the ocean.

A similar technique is used to image unborn babies.



KNOWLEDGE ORGANISER PHYSICS - LIGHT

Be REFLECTIVE: Review your learning

Name: _____

1. Light

Something that gives out light is called a **luminous** object. Most objects are non-luminous, you only see them because they reflect light into your eyes. Light travels in straight lines.

Objects that do not give out light are **non-luminous**.

How does your eye see non-luminous objects such as a book?

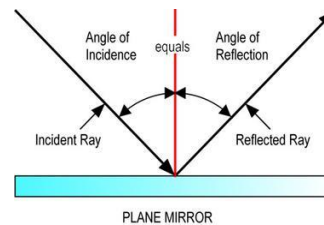


Light from the light source strikes the book and some of the light is reflected into your eye.

When you look through a window, light travels through the glass and into your eye. The glass transmits the light and is **transparent**. Materials like frosted glass are **translucent**. Light can travel through it but is scattered so you can't see clearly. Materials that do not transmit light (light cannot pass through) are **opaque**. Light can travel through gases like air, some liquids like water and some solids like glass. Light can even travel through empty space, which is called a **vacuum**. The **speed of light** is 300 000 km/s. Sound travels slower than light. A **light year** is the distance that light travels in 1 year.

2. Reflection

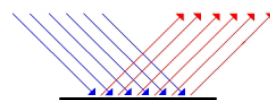
When you look into a mirror it looks like there is someone just like you behind the mirror, this is a **virtual image**. The image looks the same size and shape as you are, it appears to be as far behind the mirror as you are in front of the mirror. Left and right appear swapped.



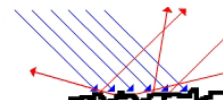
The ray that hits the mirror is called the **incident ray**. The ray that reflects off the mirror is called the **reflected ray**. There is an imaginary line at 90° to the mirror called the **normal line**. The **law of reflection** is that when light is directed at a mirror the angle of incidence is equal to the angle of reflection.

Reflection from a smooth surface like a mirror is called **specular reflection**, the rays of light reflect off the surface in the same way so an image is seen in the surface.

Reflection from a rough surface like a wall is called **diffuse scattering**, the rays are reflected at different angles so you won't see an image.



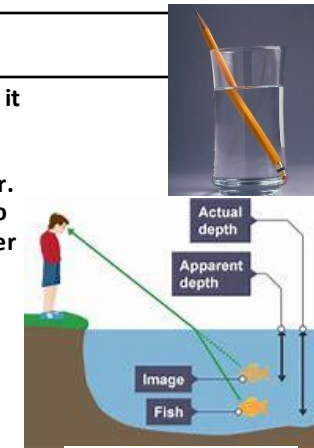
Specular Reflection
(smooth surfaces)



Diffuse Reflection
(rough surfaces)

3. Refraction

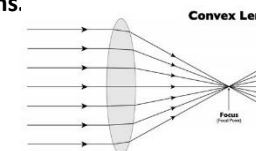
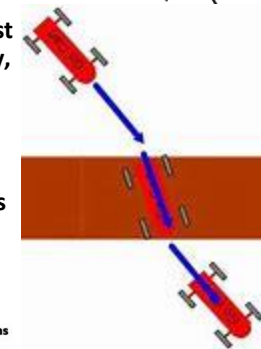
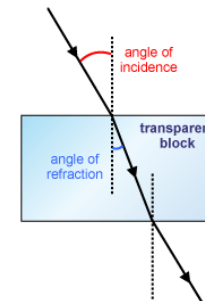
A pencil looks bent when you put it into a glass of water. The pencil reflects light and the light travels from the pencil through the water. It then travels through the air into your eye. As light leaves the water it changes direction, this is called **refraction**. Refraction happens whenever light travels from one medium (material) to another medium. Refraction also explains why a fish looks higher up than it actually is.



When light travels into a glass block it slows down when it goes in and speeds up when it comes out. Light bends towards the normal when it goes into the glass and away from the normal when it comes out of the glass. The 2 rays outside the block are parallel.

This is similar when a car goes from the road where it travels quickly to mud where it travels slowly. The first wheels hit the mud and travel slowly, the back wheels keep going at the same speed so the car is pushed in another direction.

There is a **lens** in your eye, this is a convex or **converging lens**. It focuses light into a point called the **focal point**, this allows you to see. The light is refracted as it goes into and out of the lens.



Convex Lens



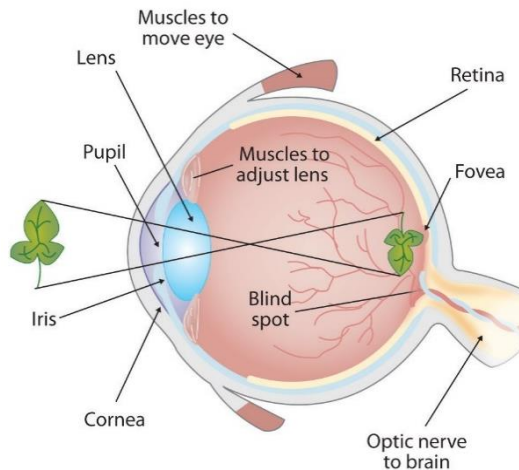
KNOWLEDGE ORGANISER PHYSICS - LIGHT

Be REFLECTIVE: Review your learning

Name: _____

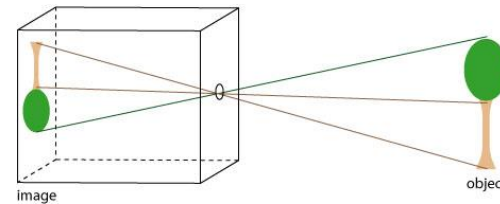
1. The eye

When you look at a leaf, an image of the leaf is formed on the retina of your eye. Light reflected from the leaf goes through the pupil of your eye. The iris is a muscle that controls the size of your pupil. The cornea (the transparent outer part of the eye) and the lens focus the light onto the retina. There are photoreceptors (sensitive to light) called rods and cones in the retina. Rods and cones are sensitive to movement and dim light and cones are sensitive to colour and bright light. When light hits the retina an electrical impulse is made that travels along the optic nerve to the brain. The image that forms is inverted (upside down) but your brain sorts it out so you see the leaf the right way up.



2. The camera

A camera makes an image just like your eye.

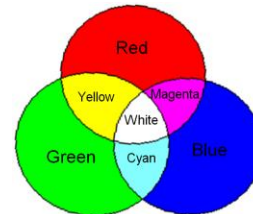


Light travels through the pinhole from the object in a straight line. This is just like the light travelling through your pupil. An image forms on the screen of the camera, this is like the image forming on the retina in your eye. The image is real, this means that it can be made on a screen. The image formed in a mirror is not a real image. Cameras used to contain photographic film, when light hit the film there was a chemical reaction that made the image.

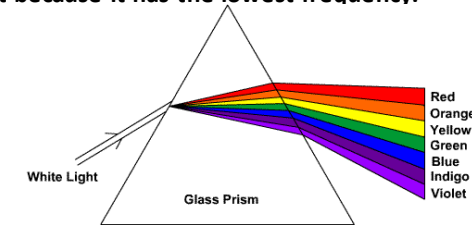
Cameras now have a grid of photosensitive picture elements called pixels. When light hits a pixel it makes a charge which is stored.

3. Colour

Red, blue and green are primary colours. When you mix primary colours you make secondary colours.



White light is made up of 7 different colours of light. We can show the colours that make white light by using a prism to split white light into a spectrum. This is called dispersion. Dispersion happens because violet light is refracted more because it has a higher frequency and red light is refracted least because it has the lowest frequency.



A red filter absorbs all colours...

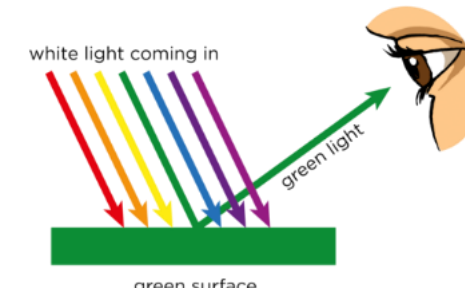


A blue filter absorbs all colours...



A red object would look black in blue light because the red object would absorb the blue light and there would not be any other colours of light to reflect in blue light.

White objects appear white because they reflect all colours of light. Black objects appear black because they absorb all colours of light. A green object appears green because it reflects green light and absorbs the other colours.



Be REFLECTIVE: Review your learning



KNOWLEDGE ORGANISER

MATTER - Elements

Key Word	Definition
Element	An element contains only one type of atom .
Chemical symbol	A one of two letter code for an element that is issued by scientists in all countries.
Atom	The smallest part of an element that can still be recognised as that element.
Compound	Two or more elements chemically bonded with each other.
Molecule	A group of two or more atoms strongly bonded together.
Chemical formula	A formula that shows the elements present in a compound and their relative proportions.
Physical property	A property of a material that you can observe or measure.
Hydroxide	A compound that includes hydrogen and oxygen atoms. There is one atom of oxygen for every atom of hydrogen. E.g. NaOH
Nitrate	A compound that includes nitrogen and oxygen atoms. There are three atoms of oxygen for every atom of nitrogen. E.g. NaNO ₃
Sulfate	A compound that includes sulphur and oxygen atoms. There are four atoms of oxygen for every atom of sulphur. E.g. MgSO ₄
Carbonate	A compound that includes carbon and oxygen atom. There are 3 atoms of oxygen for every atom of carbon. E.g. MgCO ₃
Polymer	Very large molecules made by joining up thousands of smaller molecules in a repeating pattern.
Natural polymer	A polymer made by plants or animals. E.g. starch, wool, cotton, silk and rubber.
Synthetic polymer	A polymer made by people, often in a factory. E.g. plastic, poly(ethene) and poly(propene).

Elements

An element is a substance that cannot be broken down into other substances. An element is a substance made of one type of atom only.

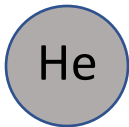
All matter (solids, liquids and gases) in the universe is made up of a combination of different elements.

All elements are found on the periodic table.

Every element has its own symbol. This is a 1 or 2 letter code for the element. The first letter of a symbol is a capital letter and the second letter is lower case, e.g. Na is the symbol for sodium.



Hydrogen is an element and a molecule and is made up of 2 hydrogen atoms strongly bonded to each other.



Helium is an element, it is made from 1 atom of helium.

Atoms

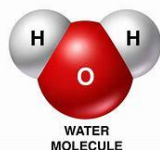
The smallest part of an element that can exist is called an atom. All atoms of an element are the same. The atoms of one element are different to atoms of all other elements.



Be REFLECTIVE: Review your learning

Compounds

A compound is a substance made up of atoms of two or more elements, strongly joined or bonded together. The properties of a compound are different to the properties of the elements that its made up from. For e.g. the boiling point of water is higher than the boiling point of hydrogen and oxygen because there are stronger forces between water molecules than hydrogen and oxygen molecules. So more energy is needed to separate water molecules from each other compared to the energy required to separate hydrogen and oxygen molecules from each other.



Water is a compound because it is made from 2 different atoms (2 hydrogen atoms and 1 oxygen atom) that are strongly bonded to each other. Water is also a molecule, not all molecules are compounds.

Chemical formulae

The chemical formula shows the number of atoms of each element in a compound.



The formula of carbon dioxide is CO_2 . This shows that a molecule of carbon dioxide is made up of 1 carbon atom and 2 oxygen atoms strongly bonded to each other.

Compounds made up of oxygen and another element have two word names. The second word is oxide. E.g. Magnesium oxide MgO

Compounds made up of chlorine and another element have 2 word names. The second word is chloride. E.g. Sodium chloride NaCl

Poly(ethene)

Molecules in Low-density Poly(ethane) LDPE slide over each other making the polymer flexible. LDPE is strong and is used for carrier bags.

High-density Poly(ethene) HDPE is also strong and flexible but is harder than LDPE. It is also smooth and used in artificial knee joints.

Naming compounds

To name simple compounds of metals and non-metals:

1. Write down the name of the metal
2. Write down the name of the non-metal, changing the ending of the word to **-ide** e.g. Magnesium oxide, sodium chloride.

Many compounds contain more than two elements. For elements containing two elements plus oxygen, the ending of the other non-metal usually changes to **-ate**.

E.g. Nickel, sulphur and oxygen = nickel sulfate

Magnesium, nitrogen and oxygen = Magnesium nitrate

Polymers

A polymer is a substance with very long molecules. A polymer molecule has identical groups of atoms repeated many times.

The properties of polymers depend on its molecules.

- Polymers are big and heavy so they melt at higher temperatures than substances with smaller molecules

Natural polymers are made by plants and animals. Examples include wool, cotton, starch and rubber.

Wool fibres trap air between them so heat is trapped making it useful for jumpers and socks.

Synthetic polymers are man made and are produced in chemical reactions.

Examples include plastics like **Poly(ethene)** and Poly(propene)

Religious Studies

Year 8 Knowledge Organiser Islam

Key Topics:

- Introduction to Islam
- The nature of Allah
- Prophethood
- The prophet Muhammad
- The Qur'an
- The Five Pillars of Islam
- Wealth and poverty
- 21st century Muslim




Islam and Muslims


Muslims can be from any nation or race, anywhere in the world. Islam is an international faith. The religion is called 'Islam,' and a follower of it is a 'Muslim'.

Islamic Symbol:

This is the **symbol** of the Muslim faith:

- The five-pointed star can represent the **five pillars**, or main beliefs of Islam
- The moon and the star speak about **God's creation**
- A new star rises as the moon fades. Muslims believe that their religion **renewed** God's message on Earth, as had been taught by many prophets over the ages. The last of these was Muhammad.





Subject Specific Key Terms:

Muslim	Means 'one who finds peace' or 'one who submits.'
Monotheism	The belief in only one God
Halal	An act that is allowed e.g. animals are slaughtered in a way that their blood is drained away. Meat produced in this way is called halal.
Haram	An act that is forbidden e.g. gambling
Qur'an	The most important source of authority as it is believed to be the revealed word of God
Surahs	Chapters in the Qur'an
Tawhid	The Islamic term for the oneness of Allah
The al-Fatihah	The first surah (chapter) in the Qur'an. It means 'the opening'.
<u>Risalah</u>	Prophethood or the belief in prophets.
Sources of authority	People can go to for guidance and help e.g. friends, religious leaders, scripture etc.
Shahadah	saying the declaration of faith, 'there is no God but Allah and Muhammad <u>is</u> the prophet of God'.
Salah	Performing the five daily prayers
Zakat	Giving 2.5% of your wages to charity every year
Sawm	Fasting during the month of Ramadan
Hajj	The religious journey to Mecca in Saudi Arabia
Islamophobia	The fear or hatred of Islam or Muslims

Year 7 Christianity Knowledge Organiser

Key Topics:

- God the Creator
- Jesus
- Holy Spirit
- Salvation and Atonement
- The Omni's
- The Judge

Christians believe there is only one God, this belief is known as **monotheism**, so Christianity is a **monotheistic** religion.

All Christians believe that God created everything and is still involved with the world in a mysterious way.

The Christian Creation Story: Genesis 1

For all Christians what is important is that God is the creator of the universe. They believe that however the universe was created, it was created by God. They believe that God is omnipotent, which means that God is all-powerful. This is shown in the creation story because God creates everything out of nothing (ex nihilo).

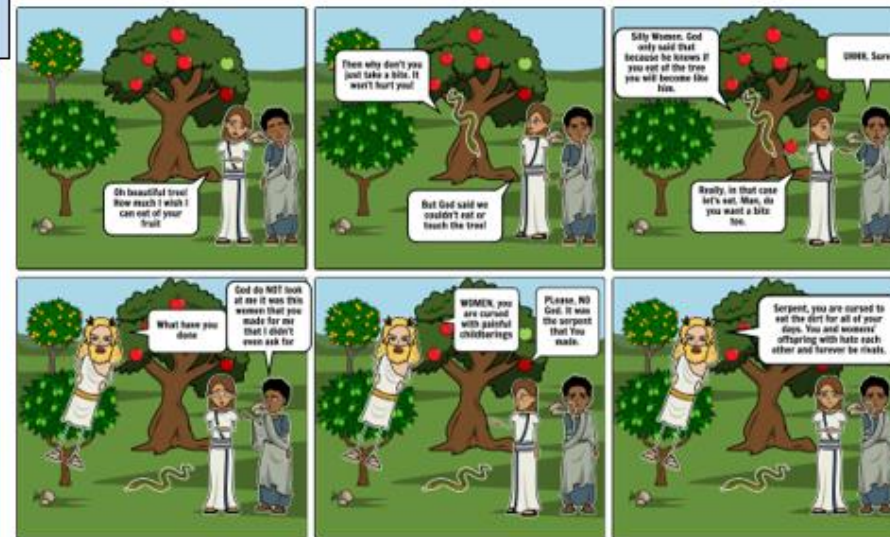
DAYS OF CREATION IN GENESIS ONE



Subject Specific Key Terms:

Monotheism	The belief in one God
Omnipotent	All-powerful God
Incarnation	God becoming human in the form of Jesus
Miracle	An extraordinary event that can't be explained by science
Saviour	Jesus' role was to save humans
The Holy Trinity	The belief that God is one but made up of three person: the Father, the Son and the Holy Spirit
The Holy Spirit	The part of God that guides Christians to live their lives in the best way possible
Atonement	The belief that Jesus' death on the cross healed the broken relationship between God and humans
Salvation	Taking away sins and consequences of bad behaviour
Gospel	The teachings of Jesus and the apostles
Omniscient	All-knowing God
Omnipresent	God is everywhere
Omnibenevolent	God is all-loving

The Fall: Genesis 3




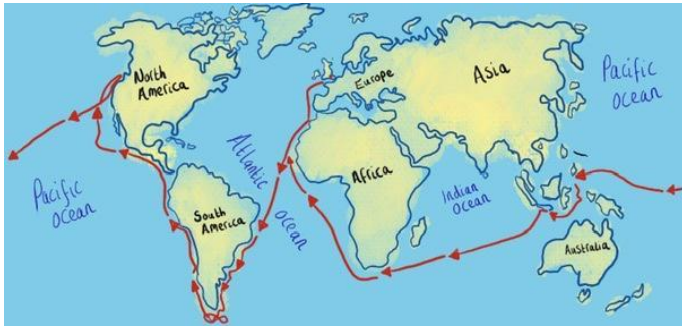
The Incarnation: The birth of Jesus


Some Christians believe that Jesus was God incarnated. This means 'God made flesh' or God in human form.





Knowledge Organiser – 1. Elizabethan England (1558-1603)

Problems for Elizabeth	Elizabeth and Marriage	Religion and Plots
<p>Background and family</p> <ul style="list-style-type: none"> Elizabeth's mother, Anne Boleyn, was executed by her father king Henry VIII when she was only two years old Her step-mother Catherine Howard was also executed by Henry Elizabeth was arrested and locked in the Tower of London during the reign of her half-sister Mary I 	<ul style="list-style-type: none"> Elizabeth did not get married throughout her reign She rejected some suitors because they were Catholic and foreign rulers who English people might reject However, the key reason was that Elizabeth did not want to share power with a man and wanted to maintain her independence and make her own decisions 	<p>Religious Settlement (1559) Compromise – Elizabeth's religious settlement attempted to find a 'middle-way' that would keep both Protestants and Catholics happy Governor – Elizabeth gave herself the title of Governor of the church of England rather than supreme head this was designed to keep Catholics happy as they saw the Pope as supreme leader Church services – would be conducted in English and priests were allowed to marry which pleased Protestants</p>
<p>Problems when Elizabeth became queen (1558):</p> <ol style="list-style-type: none"> Bad harvests – in 1554 and 1556 had caused widespread starvation in England Disease – outbreaks of the plague in 1558 and influenza in 1556 had led to more deaths in her kingdom Dissolution of the monasteries – Henry VIII had shut down all the religious monasteries that used to help the poor and the sick, Elizabeth would have to find new ways to take care of them Population growth – the population of England grew by 1 million during her reign causing unemployment and homelessness Enclosure of land – rich landowners forced peasants off their land so they could farm sheep, peasants were forced to move to towns to look for work Vagabonds – homeless people who travelled across England looking for work were labelled vagabonds – they were feared by many people Religion – there were major divisions between Catholics and Protestants in England and Elizabeth would struggle to keep both sides happy 	<div data-bbox="1202 465 1498 859" data-label="Image"> </div> <p>Religious Divisions</p> <ul style="list-style-type: none"> Catholics and Protestants were both Christians but there were major disagreements between them Language – Catholics believed that the Bible and church services should be in Latin whereas Protestants believed they should be in English Church decoration – Protestants wanted their churches to be plain and simple whereas Catholics favoured elaborate decoration Leadership – Catholics believed that priests were above ordinary people and that they should not marry, but Protestants believed that all were equal in God's eyes 	<p>Catholic plots Many Catholics were still angry about their treatment under Elizabeth and there were a number of plots to remove her as queen:</p> <ol style="list-style-type: none"> Revolt of the northern earls (1569) – 4600 Catholic rebels took over Durham in the north of England and Elizabeth had to send loyal troops to crush the revolt Ridolfi plot (1571) – Duke of Norfolk and Roberto Ridolfi tried to organise an army of foreign Catholics to invade England and overthrow the queen but the plot was discovered and Norfolk was executed Throckmorton plot (1583) and Babington plot (1586) were further attempts by Catholics to remove Elizabeth and replace her with the Catholic Mary, Queen of Scots <p>Sir Francis Walsingham – Elizabeth's spymaster helped to keep the queen safe by uncovering plots against her. Walsingham used spies to find Catholic rebels and codebreakers to read their secret messages</p>

Relations with Spain	Elizabethan Exploration	James I and Jamestown
<p>Why were relations between England and Spain at breaking point by the 1580s?</p> <ol style="list-style-type: none"> Personal differences – the Catholic king of Spain Philip II was angry that Elizabeth had made England Protestant and that she refused to marry him English privateers – had been sailing to the ‘new world’ and stealing from Spanish ships War in the Netherlands – Elizabeth gave her support to Protestants in the Netherlands who were fighting against the Spanish 	<p>Why was the Elizabethan era a time of great exploration?</p> <ol style="list-style-type: none"> Improvements in shipbuilding meant sailors could make longer journeys New equipment for reading the stars and greatly improved maps helped sailors to find where they were at sea Empire and colonies – Elizabeth’s reign saw the early beginnings of empire as English people tried to establish settlements in the ‘New World’ (North America) 	<p>James I became king of England in 1603 when Elizabeth died</p> 
<p>The Spanish Armada (1588) – battleplan</p> <ul style="list-style-type: none"> Philip II organised a huge Armada of 130 Spanish galleons (warships) to attack England 7,000 sailors and 21,000 soldiers came with the Armada The plan involved sailing to the Netherlands to collect more Spanish troops before landing in England The Spanish forces would then march on London and overthrow Elizabeth English navy led by Admiral Howard and Sir Francis Drake would resist the attack 		<p>Jamestown</p> <ul style="list-style-type: none"> 1607 – a successful English colony is established in North America Settlement was named Jamestown in honour of the king of England Early years of the colony were tough as the settlers struggled to grow food, winters were difficult and there were large numbers of deaths Eventually the colony is a success and grew crops such as tobacco which could be traded with Europe More settlements were built and by 1624 the colony of Virginia had been established
<p>Why was the Armada defeated?</p> <ul style="list-style-type: none"> Leadership – Spanish commander of the Armada was inexperienced English ships were faster and more manoeuvrable Fireships were used to break up the Spanish formation Bad weather and storms wrecked the Armada off the coast of Ireland and Scotland 	<p>Slavery</p> <ul style="list-style-type: none"> Elizabeth’s reign saw the early stages of England’s involvement in the slave trade English sailors travelled to Africa and bought African slaves These Africans were then transported to the ‘New World’ and forced to work without pay, and in poor conditions John Hawkins and Sir Francis Drake were both very prominent in the slave trade 	<p>Native Americans</p> <ul style="list-style-type: none"> The Jamestown settlers managed to collaborate with local native American tribes Europeans often assumed that they were more civilised and their way of life was superior to the Native Americans However, without the help and support of the Native Americans it is unlikely that the Jamestown settlers would have been able to survive

Gunpowder Plot (1605)	Causes of the Civil War (1625-42)	English Civil War (1642-45)
<ul style="list-style-type: none"> James I became king of England and Scotland after Elizabeth's death in 1603 James passed a number of anti-Catholic laws and a small number of Catholics began plotting against the king Robert Catesby led the plot - planned to blow up the king and Parliament using gunpowder Guy Fawkes was given the task of loading gunpowder into a cellar under Parliament 	<p>Charles I (1625-49)</p> <ul style="list-style-type: none"> Charles I became king in 1625 after the death of his father James I He believed in the Divine Right of Kings and married a Catholic which upset many Puritans in Parliament Personal Rule – from 1629-40 Charles ruled without consulting Parliament and introduced the hated Ship Money tax 	<p>Cavaliers vs Roundheads</p> <p>Royalists/Cavaliers – fought for the king Parliamentarians/Roundheads – fought for Parliament</p> <p>Three types of soldier:</p> <ol style="list-style-type: none"> Pikemen – fought with a long, wooden spike Musketeer – used a musket (an early type of gun) as their main weapon Cavalry – fought on horseback armed with a heavy sword and two pistols
<p>How was the plot uncovered?</p> <ul style="list-style-type: none"> One of the plotters sent a warning letter to Lord Monteagle warning him not to attend Parliament on November 5th The king's men searched the cellars under Parliament and captured Fawkes who was tortured The other plotters were killed or captured, put on trial for treason and hung, drawn and quartered when found guilty 		<p>Key battles of the Civil War:</p> <p>Battle of Edgehill (1642) – ended with no obvious winner, both sides lost about 1,500 men</p> <p>Battle of Newbury (1643) – Charles missed a key opportunity to defeat Parliament's army when he withdrew and retreated back to Oxford</p> <p>Battle of Marston Moor (1644) – largest battle of the civil war, Oliver Cromwell attacked the Royalists from the rear and won an important victory</p> <p>Battle of Naseby (1645) – New Model Army defeated the Royalist army over 5,000 Royalist soldiers were captured and 1,000 killed – the Royalists had lost the Civil War</p>
<p>Role of Robert Cecil</p> <ul style="list-style-type: none"> Cecil was the king's chief minister and adviser at the time of the plot Some historians believe that he may have known about the plot all along and even helped the plotters to obtain gunpowder and rent the cellar This theory is linked to Cecil's desire to force James to take a tougher line against Catholics by proving their threat to this throne However, not all historians agree with this theory and we cannot be sure about Cecil's role in the plot 	<p>Short-term causes of the Civil War</p> <p>1640 – Charles was forced to recall Parliament</p> <p>Nov. 1640 – Parliament publishes Grand Remonstrance a document attacking Charles and his ministers</p> <p>1641 – Lord Strafford (Charles closest adviser) was executed on the orders of Parliament – led by John Pym (Puritan)</p> <p>January 1642 – Charles took troops into Parliament to try and arrest the 5 leading MPs who opposed him (including John Pym)</p> <p>August 1642 – Charles gathered his forces in Nottingham and Parliament organised their own army to fight against the king signalling the start of the Civil War</p>	<p>Why did Parliament win the Civil War?</p> <ol style="list-style-type: none"> New Model Army – created by Cromwell and Fairfax to fight for Parliament it was disciplined and religious – e.g. their men often prayed together before battle and believed God was on their side Leadership – Charles and Prince Rupert made a number of tactical errors during the war whereas Cromwell used clever tactics Money – Parliament controlled London – the richest city in England – they could therefore pay their soldiers more and give them better weapons

Execution of Charles I	Cromwell and Ireland	Witchcraft in the 16 th and 17 th centuries
<p>The Trial</p> <ul style="list-style-type: none"> Charles was accused of treason because evidence was discovered that he had been encouraging the Scots and the French to attack England to restore him to the throne Charles did not defend himself as he did not believe the trial was legal He was executed on 30th January 1649 	<ul style="list-style-type: none"> Ireland was a mainly Catholic country but James I had tried to give Irish land to English Protestant settlers 1641 – Irish Catholics rebelled against the English and killed thousands of Protestants 1649 – after the end of the Civil War many English Protestants called for action against the Irish – they wanted revenge for the Protestants killed during the rebellion 	<ul style="list-style-type: none"> Belief in witchcraft seems to have peaked in the 17th century Maleficium – evil acts people believed were performed by witches by working with the Devil Single women who were widowed and elderly were most likely to be accused of witchcraft Women who had pets were treated with suspicion because people believed they were a Familiar (a small demon given to her by the Devil) Witches were blamed for farm animals dying or crops failing
<p>Oliver Cromwell – Lord Protector</p> <ul style="list-style-type: none"> After Charles' execution Parliament ran the country – England was a republic (ruled without a king) Disagreement between MPs meant that Parliament did not rule effectively 1653 – Cromwell seized power and made himself Lord Protector which he meant he ruled England just like a king Cromwell's major-generals helped him to rule the country and strict Puritan laws were introduced Theatre, bear-baiting, drinking alcohol and Christmas celebrations were all banned 		<p>Why did people believe in witches?</p> <ol style="list-style-type: none"> Uncertainty – people were scared that everything was changing after the Civil War and were convinced that witches were at work The Church – encouraged a belief in witches so people would turn to them for help Attitudes – people did not have an understanding of science so they blamed witches for negative events Royalty – James I was an avid witch-hunter and wrote a popular book called Demonologie all about the dangers of witches Literature – theatre became very popular in the 1600s and many plays included witches e.g. Shakespeare's Macbeth had three witches as main characters
<p>Painting showing Charles' execution in 1649</p> 	<p>Cromwell 'the curse of Ireland'</p> <ul style="list-style-type: none"> August 1649 – Cromwell and his New Model Army of 12,000 soldiers invade Ireland Siege of Drogheda – Cromwell laid siege to this Irish Catholic town and when it refused to surrender he ordered his men to slaughter the people inside the town 3,500 people were killed in the siege including civilians Over the next ten years the New Model Army went on to kill or starve about one-third of the Irish population 	

Key word definitions

Development: People reaching an acceptable standard of living through the use of resources.

Quality of life: This is the general well-being of people and includes income, health, education and the environment.

Extreme poverty: People living on less than \$1.90 or £1.40 per day meaning they lack essentials such as shelter, food, clean water.

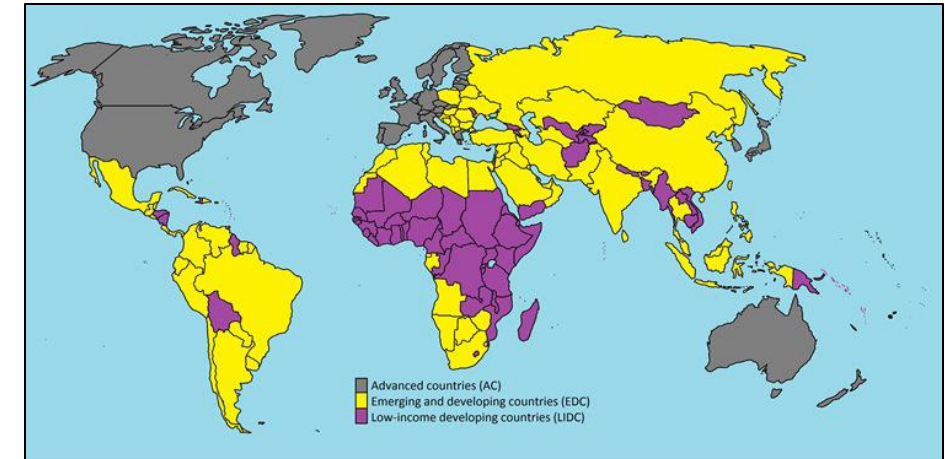
Classifying countries

The International Monetary Fund divides countries into one of three categories;

Advanced Countries (ACs): Countries with higher incomes and many people working in service sector e.g. UK, USA, Japan.

Emerging and Developing Countries (EDCs): These countries' economies are rapidly growing and many people work in secondary industries e.g. China and India.

Low Income Developing Countries (LIDCs): These are the least developed countries with many people working in primary industries e.g. Nepal, Sudan.

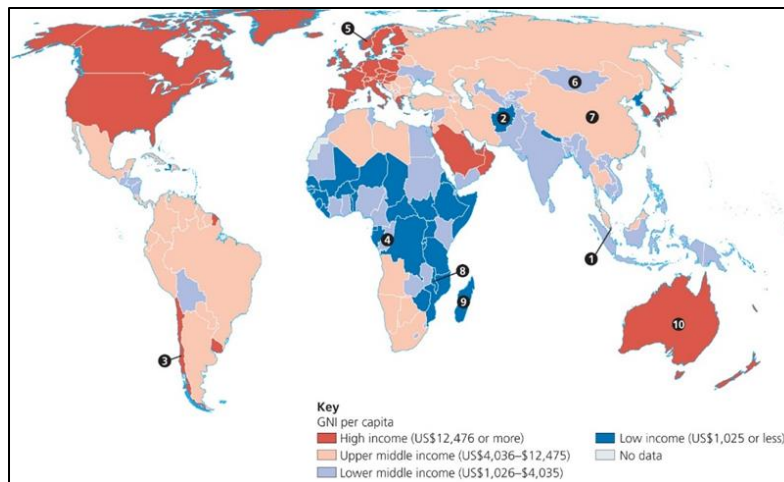


Economic measures of development

GNI/capita: This is a country's final income in a year divided by its population.

- It is an economic measure as it focuses on money in the country.
- The 3 countries with the highest GNI/capita = Norway, Switzerland and Luxembourg.
- The 3 countries with the lowest GNI/capita = The Gambia, Mozambique and Sierra Leone.
- The map shows the distribution of GNI/capita globally.

Key to the map:
 Red = high income
 Pink = upper middle income
 Pale blue = lower middle income
 Dark blue = low income



Other ways of measuring development: Human Development Index

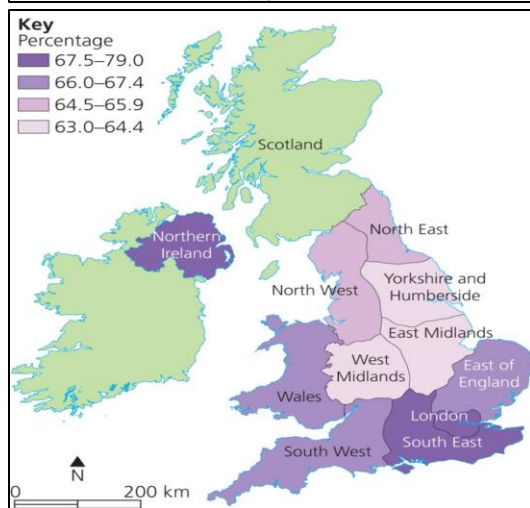
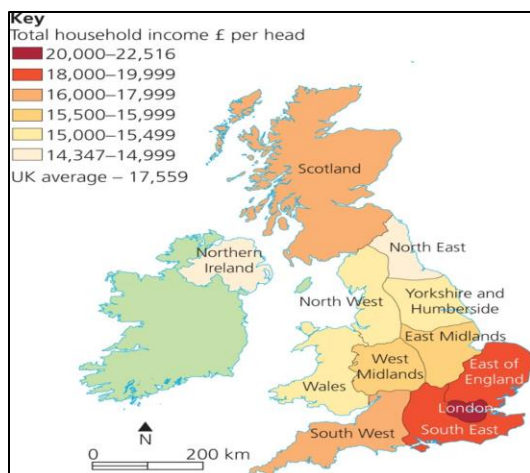
- The Human Development Index (HDI) is a composite indicator which measures 3 different aspects of a country's development. It includes;
 - Living Standards:** GNI per capita
 - Health:** Life expectancy (average age people live to)
 - Education:** Average number of years of schooling children receive.
- HDI values range from 0 to 1 with numbers closest to 1 representing highest values.
- It is a better measure of development than GNI/capita as it includes more aspects of a country's development and gives a better indication of the quality of life for people in terms of healthcare and education. GNI/capita is simply an economic measure.

Development over time: BRICS and MINT countries

- Some countries are developing rapidly and have been grouped together to reflect the pace of their development.
- The BRICS refers to Brazil, Russia, India, China and sometimes South Africa.**
- The MINT countries are Mexico, Indonesia, Nigeria and Turkey. The economies of these countries are also growing rapidly but not as rapidly as those of the BRICS countries.**
- These countries are developing rapidly as they are able to benefit from global ideas such as the shipping container which means goods can be transported all around the world.
- Many of these countries are increasing the number of people working in manufacturing.

Inequalities within countries

- As well as differences in development between countries there are also differences **within** countries, e.g. the UK.
- The North-South divide refers to an imaginary line drawn across the UK to divide the UK into the north and south.
- There are variations in factors such as life expectancy, % GCSE grades (bottom map) and house prices.
- Evidence suggests that in societies that are more unequal people are unhappier.



What are the causes of poverty?

- There are often several reasons why a country may experience poverty, these can be physical or human factors.
- Physical; natural hazards** – countries that experience earthquakes, floods or hurricanes frequently have to rebuild after disasters which costs money and makes it harder for them to develop, leading to poverty.
- Physical; climate** – in extreme climates such as Ethiopia it can be hard to grow crops as there is often drought and so the price of food increases, meaning more people experience poverty.
- Human; war** – countries that are affected by war such as Syria suffer from people being killed and injured and then cannot work, buildings collapsing, and thousands of people are forced to flee their homes leaving their belongings.
- Human; access to education** – a lack of education means there may be fewer people to do the skilled jobs and so it can be harder to maintain good healthcare for the population.

How does gender equality promote development?

Gender inequality is when people are treated differently and given different opportunities just because they are male or female.

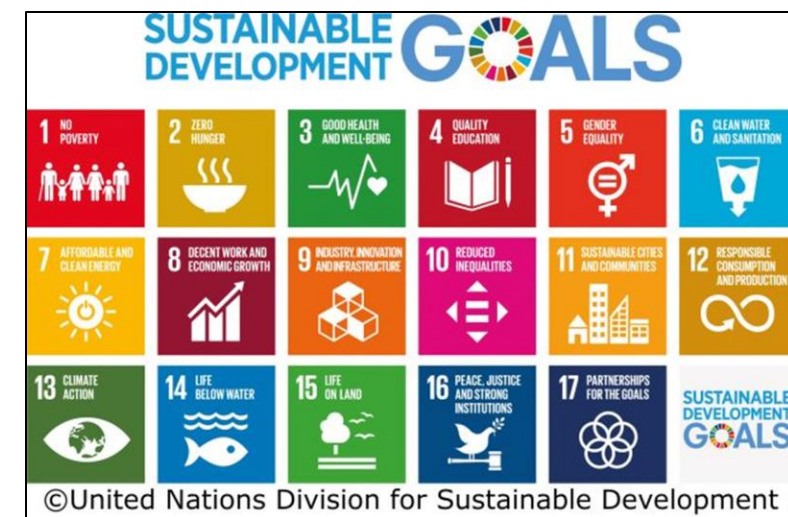
- Gender inequality may be present in education or in the opportunities that are given to some people and not others.
- For example, One in five teenage girls around the world is denied access to education.
- In the UK for every £1 earned by a man, a woman earns 81p.
- Gender equality means treating people equally.
- This can promote development as it means a country is taking full advantage of the skills of its population and so more money can be earned, which improves the economy, and helps with the overall development of the country.

How do countries and NGOs support development?

Aid is the donation of money or resources to people in need - 2 types;

- Bilateral Aid** – a government provides aid to the government of a foreign country.
- Non-Governmental Aid** – charities called Non-Governmental Organisations (NGOs) raise money from the public to support development projects in other countries.

Aid provides money and/or resources e.g. education materials, food, shelter when countries are suffering from natural disasters, war. It helps development as more money can be spent on other costs.



What are the Sustainable Development Goals?

Sustainable development: Development that meets the needs of present generations without compromising (reducing) the ability of future generations to meet their needs.

- The Sustainable Development Goals are a set of 17 goals that aim to end poverty, fight inequality and injustice, and tackle climate change by 2030.
- The goals are not legally binding, but governments are monitored to see if they are working towards them.

Key word definitions

Population density: The amount of people living in a given area, normally a kilometre squared.

Birth rate: The number of births per 1000 people per year.

Death rate: The number of deaths per 1000 people per year.

Migration: The movement of people from one place to another.

Push factor: Reasons to leave a place e.g. fewer jobs and schools in rural areas.

Pull factor: Reasons that attract people to a new place e.g. higher paid jobs and better schools in urban areas.

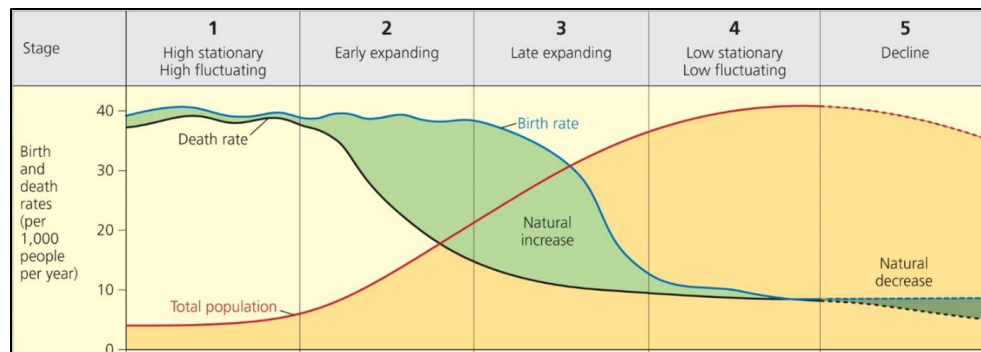
Urbanisation: An increase in the proportion of people living in urban areas.

The world's population

- The world's population in 2022 is 7.9 billion.
- The world's population has grown rapidly over time from 1 billion in 1800, to 7 billion in 2011.
- The UN predict that by 2050 the population will be 9.8 billion, with 50% world's population growth expected to be in Africa, but the population of Europe is ageing (average age increasing).

The Demographic Transition Model

- This is a model that shows how a country's population changes as it becomes more developed.
- It shows the birth rate, death rate and total population.
- Over time the death rate falls as medical care improves and people live longer.
- The birth rate then falls as there is better access to family planning.
- By stage 5 there is natural decrease - population starts to decline as birth rate is very low.



Example countries

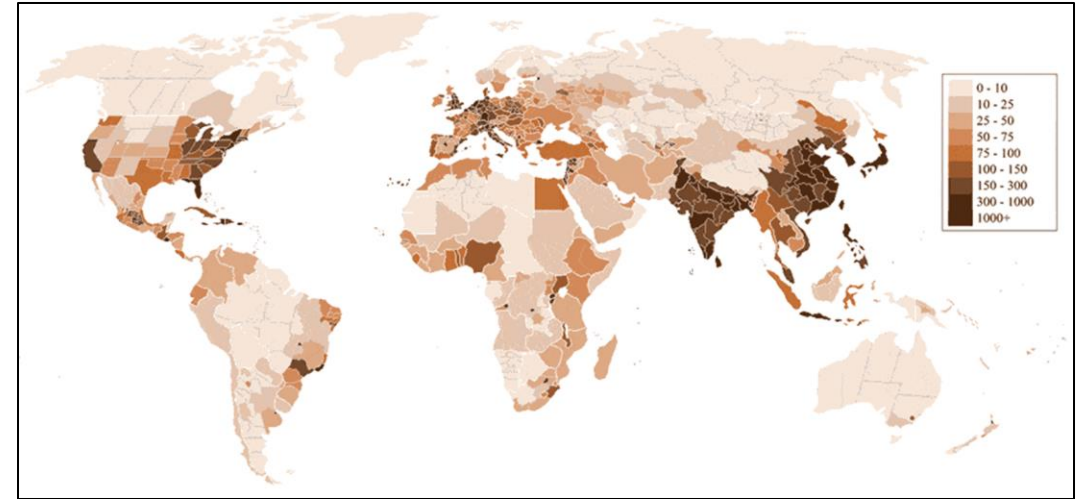
Stage 1: Tribes in the Amazon.

Stage 2: Niger

Stage 3: Brazil

Stage 4: UK

Stage 5: Japan



Reasons for world population distribution

- As the map shows the world's population is not evenly spread around the world.
- Some areas such as Eastern China and India have high population densities, whilst parts of Canada, Russia and Australia have much lower population densities.

Physical reasons:

Climate: Some places have very hot climates such as the Sahara desert, whilst areas such as Canada have very cold climates which makes it harder to grow food.

Relief: Steep slopes in mountain ranges such as the Himalayas and Andes make it harder to build houses.

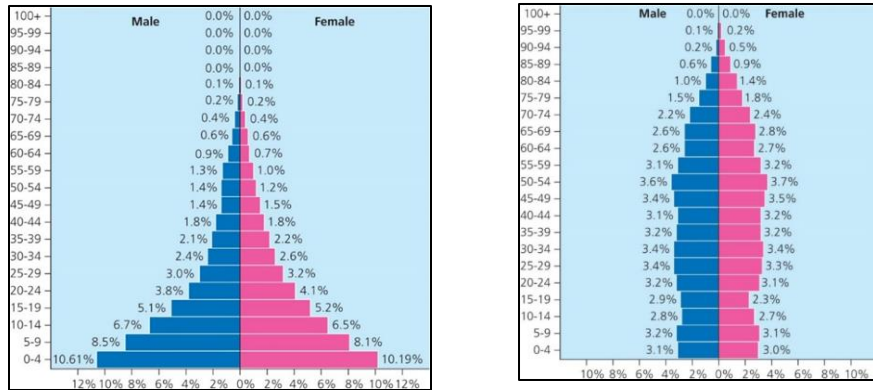
Human reasons:

Employment: Jobs and industry can attract people in search of work e.g. factories in eastern China.

Infrastructure: Places that are better connected make it easier for people to work so attract more people to live there.

Population pyramids

Population pyramids show the number of males and females in each age group. We can then identify the **young dependents** (aged 0-14), the **independent or working population** (15-64) and the **elderly dependents** (65 and over). This allows governments to plan how many schools and other facilities are needed for their population.



The left pyramid has a high birth rate, low life expectancy and high death rate. The right pyramid has a lower birth rate, higher life expectancy and lower death rate.

What is urbanisation and how is it changing over time?

- Urbanisation is an increase in the proportion of people living in cities. It is caused by **rural to urban migration – the movement of people from the countryside (rural area) to the city (urban area)**.
- The number of **megacities is increasing – these are cities with more than 10 million people living there**.
- By 2030, 7 of the top 10 largest cities will be in Asia, 2 will be in Africa and 1 will be in S. America.
- Tokyo is the world's largest city with an expected population of 37.2 million by 2030.
- 828 million people currently live in informal settlements or slums and the number keeps rising.
- Rapid urbanisation puts pressure on fresh water supplies, sewage, the living environment, and public health.

China's strategy to manage their population

- In 1970 China's population was 800 million and it was growing very rapidly so it was at risk of **over population when there are too many people for the resources available**.
- In 1979 a law was brought in to make it a legal requirement that families only had one child.
- The policy lasted until 2015 and it is thought it reduced population by 400 million.
- Some families wanted a son to carry on the family name which created a gender imbalance with too many males and not enough females, as well as more elder people and less workers.
- The policy was changed to 2 children in 2015 and has recently been changed to 3 children.

Russia's strategy to manage their population

- Russia was experiencing population decline as there 16 deaths for every 10.4 births. This is called **under population when there is not enough people to make use of the available resources**.
- They introduced a policy to provide mothers with \$11 000 if they had more than one child. This money could be put towards buying a house, the child's education or the mother's pension.
- By 2015 there were 1.9 million births a year, up from 1.5 million in 2005.
- The death rate also fell due to promotion of a healthier lifestyle but

Why do people migrate from Central America to Mexico/USA?

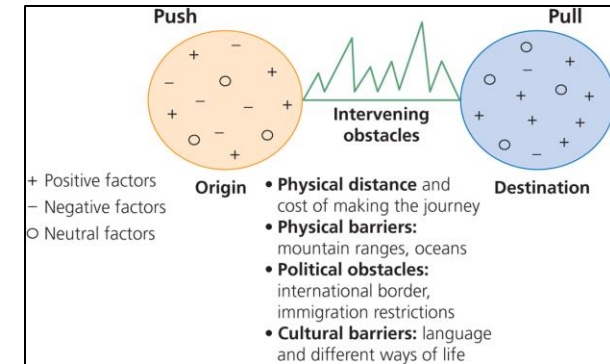
- Migration is the movement of people from one place to another. There are several different types of migration and reasons that people migrate e.g. refugees move due to war, people migrate for a better job or to join family.
- Push factors make people leave a place while pull factors draw them in to a new place.

Push factors:

- Work on banana plantations in Honduras is low paid - \$5/day.
- Widespread corruption in Honduras so peoples' needs are not always prioritised by the government.
- High rates of violence in Honduras.






Pull factors:

- The "American Dream" idea that the USA offers lots of opportunities for people migrating.
- There are more jobs available in Mexico and USA.
- USA has a much lower crime rate.



CORE			
Time phrases/Sequencers		Key verb phrases	
normally	<u>normalement</u>	I have	<u>j'ai</u>
often	<u>souvent</u>	I have not	<u>je n'ai pas de</u>
usually	<u>d'habitude</u>	I am	<u>je suis</u>
from time to time	<u>de temps en temps</u>	I am not	<u>je ne suis pas</u>
sometimes	<u>quelquefois/parfois</u>	I would like	<u>je voudrais</u>
tomorrow	<u>demain</u>	it is	<u>c'est</u>
next week	<u>la semaine prochaine</u>	it is not	<u>ce n'est pas</u>
Summer / Autumn	<u>en été / en automne</u>	there is	<u>il y a</u>
Winter / Spring	<u>en hiver / au printemps</u>	there is not	<u>il n'y a pas de</u>
morning/afternoon/evening	<u>le matin/l'après-midi/le soir</u>	it will be	<u>ce sera</u>
then	<u>puis</u>	I'm going to....	<u>je vais +infinitive</u>
always/still	<u>toujours</u>	you must	<u>on doit +infinitive</u>
at the moment	<u>en ce moment</u>	you must not	<u>on ne doit pas +infinitive</u>
later	<u>plus tard</u>	you can	<u>on peut +infinitive</u>
in the future	<u>a l'avenir</u>	you cannot	<u>on ne peut pas +infinitive</u>
yesterday	<u>hier</u>	it was	<u>c'était</u>
last night	<u>hier soir</u>	it wasn't	<u>ce n'était pas</u>
last week	<u>la semaine dernière</u>	there was	<u>il y avait</u>
last year	<u>l'année dernière</u>	there wasn't	<u>il n'y avait pas de</u>
next	<u>ensuite</u>	it would be	<u>ce serait</u>
firstly	<u>d'abord</u>	it would not be	<u>ce ne serait pas</u>
after	<u>après ça</u>	if I was rich	<u>si j'étais riche</u>
before	<u>avant</u>	in an ideal world	<u>dans un monde idéal</u>
lastly	<u>enfin / finalement</u>	in my dreams	<u>dans mes rêves</u>
Connectives			
but	<u>mais</u>		
and	<u>et</u>		
because	<u>car/ parce que</u>		
also	<u>aussi</u>		
however	<u>cependant</u>		
therefore	<u>donc</u>		
as	<u>comme</u>		
or	<u>ou</u>		
however	<u>pourtant</u>		
on the other hand	<u>par contre</u>		
fortunately	<u>heureusement</u>		
unfortunately	<u>malheureusement</u>		
in addition	<u>en plus</u>		
Negatives			
not	<u>ne....jamais</u>		
never	<u>ne...pas</u>		
Comparisons			
more... than	<u>plus ... que</u>		
less... than	<u>moins ... que</u>		
Quantifiers/ Intensifiers		Opinions	
very	<u>très</u>	In my opinion	<u>à mon avis / selon moi</u>
too	<u>trop</u>	I think that	<u>je pense que</u>
quite	<u>assez</u>	I Like	<u>j'aime</u>
a bit	<u>un peu</u>	I love	<u>j'adore</u>
really	<u>vraiment</u>	I don't like	<u>je n'aime pas</u>
a lot	<u>beaucoup</u>	I hate	<u>je déteste</u>
		I prefer	<u>je préfère</u>
		My favourite ... is	<u>ma/mon.... préféré(e) est</u>
		I find that	<u>je trouve que</u>
Idioms			
How awful !	<u>Quelle horreur !</u>		
What luck !	<u>Quelle chance !</u>		
What a surprise !	<u>Quelle surprise !</u>		
What an idiot!	<u>Quel imbécile !</u>		
It's brilliant !	<u>C'est le pied !</u>		
It's not my thing !	<u>Ce n'est pas mon truc !</u>		
It's a waste of time!	<u>C'est une perte de temps !</u>		
It's a waste of money!	<u>C'est une perte d'argent !</u>		

CHALLENGE					
Time phrases/ Sequencers		Key verb phrases		Opinions	
today	<u>aujourd'hui</u>	you can see	<u>on peut voir</u>	for me	<u>d'après moi</u>
each/every	<u>chaque</u>	if it is	<u>si c'est</u>	I believe that	<u>je crois que</u>
currently	<u>actuellement</u>	there would be	<u>il y aurait</u>	according to...	<u>selon...</u>
the next day	<u>le lendemain</u>	there would not be	<u>il n'y aurait pas de</u>	I really hate	<u>j'ai horreur de</u>
in my dreams	<u>dans mes rêves</u>	you could	<u>on pourrait +infinitive</u>	I really love	<u>j'apprécie</u>
in an ideal world	<u>dans un monde idéal</u>	you couldn't	<u>on ne pourrait pas</u>	I can't stand	<u>je ne supporte pas</u>
when I was little	<u>quand j'étais petit (e)</u>	you should	<u>on devrait +infinitive</u>	my friends say that	<u>mes copains disent que</u>
when I'm older	<u>quand je serai plus âgé (e)</u>	you shouldn't	<u>on ne devrait pas</u>	my parents say that	<u>mes parents disent que</u>
for 5 years	<u>depuis 5 ans</u>	you must	<u>il faut +infinitive</u>	my teachers say that	<u>mes profs disent que</u>
since I was 5 years old	<u>depuis l'âge de 5 ans</u>	you must not	<u>il ne faut pas</u>	my mum tells me that	<u>ma mère me dit que</u>
				my dad tells me that	<u>mon père me dit que</u>
Quantifiers/ Intensifiers		Negatives		I would say	<u>je dirais que</u>
so	<u>si</u>	no...more/longer	<u>ne... plus</u>	I like /love it / them	<u>j'aime/j'adore ça</u>
rather	<u>plutôt</u>	nothing	<u>ne... rien</u>	I am for	<u>je suis pour</u>
extremely	<u>extrêmement</u>	no one/nobody	<u>ne... personne</u>	I am against	<u>je suis contre</u>
frankly	<u>franchement</u>	neither ...nor	<u>ne... ni... ni</u>	I agree with	<u>je suis d'accord avec</u>
hugely	<u>énormément</u>			I disagree with	<u>je ne suis pas d'accord avec</u>
incredibly	<u>incroyablement</u>			what I like is	<u>ce que j'aime c'est</u>
				it seems that	<u>il semble que</u>
				as far as... is concerned	<u>en ce qui concerne...</u>
Connectives		Comparisons/ Superlatives		Idioms	
nevertheless	<u>néanmoins</u>	best	<u>meilleur (e)</u>	Although it is...	<u>Bien que ce soit...</u>
whereas	<u>tandis que</u>	worst	<u>pire</u>	That's life !	<u>C'est la vie !</u>
even if	<u>même si</u>	the best thing is	<u>la meilleure chose est</u>	What a shame !	<u>Quel dommage !</u>
furthermore	<u>de plus</u>	the most important	<u>la chose la plus</u>	What a disaster !	<u>Quelle catastrophe !</u>
since	<u>puisque</u>	thing is	<u>importante est</u>	What a pain !	<u>Quel ennui !</u>
not at all	<u>pas du tout</u>	what I like the most is	<u>ce que j'aime le plus est</u>	It was so boring !	<u>C'était la barbe !</u>
				I was over the moon!	<u>J'étais aux anges !</u>
				I was bored to death!	<u>Je m'ennuyais à mourir !</u>
				I've had enough!	<u>J'ai le cafard !</u>
				I was so fed up!	<u>J'en avais marre !</u>

Food and drinks Knowledge Organiser (KS3 French)			
What do you like to eat and drink ?		Qu'est-ce que tu aimes manger et boire ?	Why do you like..... ? Pourquoi aimes-tu..... ?
<div><div><div>J'aime.... J'adore...</div><div>Je n'aime pas... Je déteste....</div><div>Je préfère....</div></div><div><div>I like... I love...</div><div>I don't like... I hate...</div><div>I prefer...</div></div></div> <div><div></div><div></div><div></div></div>		<div><div>chicken fish meat sausages sea food rice soup salad eggs pasta chips pizza burger ham fruit apples oranges strawberries bananas vegetables carrots potatoes ice cream yoghurt cake pancakes chocolate sweets water coke lemonade tea coffee hot chocolate milk</div><div>le poulet le poisson la viande les saucisses les fruits de mer le riz la soupe la salade les œufs les pâtes les frites la pizza le burger le jambon les fruits les pommes les oranges les fraises les bananes les légumes les carottes les pommes de terre la glace le yaourt le gâteau les crêpes le chocolat les bonbons l'eau le coca la limonade le thé le café le chocolat chaud le lait</div></div>	<div><div>parce que c'est.... because it is.... car c'est.... because/as it is...</div><div></div><div><div><div>sucré salé amer ça a du goût délicieux sain malsain bon pour la santé mauvais pour la santé</div><div>sweet salty / savoury bitter tasty delicious healthy unhealthy good for your health bad for your health</div></div><div></div></div></div>

Saying 'some': 'le' word: du
 'la' word: de la
 'les' word: des
 'l' word: de l'

What do you eat/drink for..... ?			
<div><div>Qu'est-ce que tu manges/bois pour le petit déjeuner ? What do you eat/drink for breakfast ?</div><div>Qu'est-ce que tu manges/bois pour le déjeuner ? What do you eat/drink for lunch ?</div><div>Qu'est-ce que tu manges/bois pour le dîner ? What do you eat/drink for dinner ?</div></div>		<div><div>Normalement/d'habitude (usually) souvent (often) parfois / quelquefois (sometimes) de temps en temps (from time to time)</div><div><div>je mange... je bois... je prends...</div><div>I eat I drink I take</div></div><div><div>aussi (also) de plus (in addition) mais (but) cependant (however)</div></div></div>	<div><div>du pain du lait des céréales du poulet du riz des pâtes du jus d'orange de l'eau de la limonade des haricots de la confiture des pommes de terre du fromage</div><div>(some) bread (some) milk (some) cereal (some) chicken (some) rice (some) pasta (some) orange juice (some) water (some) lemonade (some) beans (some) jam (some) potatoes (some) cheese</div></div>

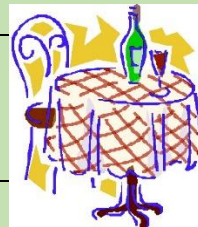


What did you eat last weekend ?

Qu'est-ce que tu as mangé le week-end ?



?

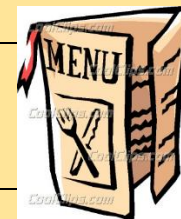


FUTURE

What are you going to eat next weekend ?

Qu'est-ce que tu vas manger ce week-end ?

Qu'est-ce que tu vas manger le week-end prochain ?



Le week-end dernier	Last weekend	Le week-end prochain	Next weekend
Je suis allée au restaurant... avec mes amis avec ma famille avec mon petit ami	I went to the restaurant... with my friends with my family with my boyfriend	Je vais aller au restaurant. On va aller au restaurant.	I am going (to go) to a restaurant. We are going (to go) to a restaurant.
Comme entrée j'ai pris... Comme plat principal j'ai mangé... Comme dessert j'ai choisi...	For the starter I took (had)... As a main course I ate... For dessert I chose...	Je vais manger / boire... On va manger / boire... Nous allons manger / boire...	I am going to eat / drink... We are going to eat / drink... We are going to eat / drink...
Comme boisson j'ai pris....	As a drink I took (had)...	Mon père va manger.... Il va boire....	Ma dad is going to eat... He is going to drink...
Ma mère a mangé / bu... Mon père a mangé / bu... Mon ami(e) a pris	My mum ate / drank... My dad ate / drank... My friend took(had)...	Ma mère va prendre... Elle va boire...	My mum is going to take (have)... She is going to drink...
à mon avis / Je pense que...	In my opinion / I think that...	Je pense que...	I think that...
c'était bon c'était délicieux c'était dégoûtant	it was good it was delicious it was disgusting	ce sera bon ce sera délicieux ce sera un bon repas	it will be good it will be delicious it will be a good meal



Pour manger sainement.....	To eat healthily....				
Il faut... Il ne faut pas ...	You have to.. You should/must not ...	manger (to) eat	beaucoup de / d'	a lot of	fruits légumes produits laitiers
Il est recommandé de...	It is recommended to...	boire (to) drink	un peu de / d'	a bit of	viande produits sucrés
Il est essentiel de...	It is essential to...	consommer (to) consume	peu de	little of / few	gras chocolat eau bonbons
Il est important de...	It is important to...				fruit vegetables dairy products meat sweet things fat chocolate water sweets
All these phrases are followed by a verb infinitive!					

CORE					
Time phrases / Sequencers		Key verb phrases		Connectives	
normally	normalmente	I have	tengo	but	pero
often	a menudo	I have not	no tengo	and	y
usually	generalmente	I am	soy / estoy	because	porque / ya que
from time to time	de vez en cuando	I am not	no soy / estoy	also	también
sometimes	a veces	I would like	me gustaría	however	sin embargo
tomorrow	mañana	it is	es / está	therefore	por lo tanto / por eso
next week	la semana próxima	it is not	no es / está	as	como
summer / autumn	en verano / otoño	there is	hay	or	o
winter / spring	en invierno / primavera	there is not	no hay	however / although	aunque
morning/afternoon/evening	por la mañana/ tarde/ noche	it will be	será	on the other hand	por otro lado
then	luego / después	I'm going to	voy a + infinitive	fortunately	por suerte
always/still	siempre / aún	you must	se debe + infinitive	unfortunately	por desgracia
at the moment	en este momento / ahora	you must not	no se debe + infinitive	in addition	además
later	más tarde / después	you can	se puede + infinitive		
in the future	en el futuro	you cannot	no se puede + infinitive		
yesterday	ayer	it was	fue	Negatives	
last night	anoche	it wasn't	no fue	not	no...
last week	la semana pasada	there was	había	never	no... nunca
last year	el año pasado	there wasn't	no había		
two years ago	hace dos años	it would be	sería	Comparisons	
next	luego	it would not be	no sería	more... than	más... que
firstly	primero	if i was rich	si fuera rico/a	less... than	menos... que
after	después (de)	in an ideal world	en un mundo ideal		
before	antes (de)	in my dreams	en mis sueños		
lastly	finalmente				
Quantifiers / Intensifiers		Opinions		Idioms	
Very	muy	In my opinion	en mi opinión	How great !	¡ Qué bien !
Too	demasiado	I think that	pienso que	How bad !	¡ Qué mal !
Quite	bastante	I like	me gusta(n)	How funny !	¡ Qué divertido !
A bit	un poco	I love	me encanta(n)	How cool !	¡ Qué guay !
so	tan	I don't like	no me gusta(n)	How boring / annoying !	¡ Qué aburrido! ¡Qué rollo !
Really	adjective ending -ísimo/a(s)	I hate	odio	How dreadful !	¡ Qué horror !
A lot	mucho	I prefer	prefiero	It's crazy !	¡ Es una locura !
		My favourite is	mi... favorito/a es...	It's a waste of time!	¡ Es una pérdida de tiempo !
		I find it	me parece	It's a waste of money!	¡ Es una pérdida de dinero !

Lionheart Modern Languages Year 7-9 High Frequency Words – SPANISH CHALLENGE

CHALLENGE					
Time phrases / Sequencers		Key verb phrases		Opinions	
today each/every currently the next day in my dreams in an ideal world when i was little when i'm older for 5 years (now) since i was 5 years old	hoy cada actualmente al día siguiente en mis sueños en un mundo ideal cuando era pequeño/a cuando sea mayor desde hace 5 años desde que tenía 5 años	you can see if it is there would be there would not be you could you couldn't you should you shouldn't you must you must not	se puede(n) ver si es habría no habría podría + infinitive no podría + infinitive debería + infinitive no debería + infinitive hay que + infinitive no hay que + infinitive	for me as I see it I believe that according to... I really hate I really love I can't stand my friends say that my parents say that my teachers say that my mum/dad tell me that i would say I like/love it / them I am for I am against I agree with I disagree with what I like... it seems that as for me	para mí a mi modo de ver / a mi juicio... creo que según / para... detesto me chifla/ me mola no aguanto / no soporto mis amigos dicen que mis padres dicen que mis profesores dicen que mi madre /mi padre me dice que diría que me gusta(n) / me encanta(n) estoy a favor de estoy en contra de estoy de acuerdo con no estoy de acuerdo con lo que me gusta.. me parece que por mi parte / en cuanto a mí
Quantifiers / Intensifiers		Negatives			
so rather extremely frankly entirely/ totally incredibly	tan bastante extremadamente francamente totalmente increíblemente	no...more/longer nothing no one/nobody neither... nor	ya no... no... nada no... nadie no... ni...		
Connectives		Comparisons / Superlatives		Idioms	
nevertheless whereas even if additionally since not at all	aun así mientras que aunque asimismo dado que / ya que en absoluto	best worst the best thing is the most important is what I like the most is	mejor peor lo mejor es lo más importante es lo que más me gusta es	No more excuses ! I am fed up ! What a shame ! What a disaster ! It sounds funny /curious ! A dream come true ! It is the most exciting thing I have ever seen! It has been the most important / unforgettable experience of my life! I have enjoyed it a lot	¡ Basta de excusas ! ¡ Estoy harto/a ! ¡ Qué lástima ! ¡ Qué desastre ! ¡ Suena muy gracioso / curioso ! ¡ Es un sueño hecho realidad ! ¡ Es lo más emocionante que he visto jamás ! ¡ Ha sido la experiencia más importante / inolvidable de mi vida ! ¡ Lo he disfrutado muchísimo !

What do you like to eat and drink ?		¿Qué te gusta comer y beber?		Why do you like..... ?	¿Por qué te gusta..... ?
I like... I love... I don't like... I hate... I prefer...	Me gusta(n).... Me encanta(n).. No me gusta... Odio.... Prefiero....	chicken fish meat sausages sea food rice soup salad eggs pasta chips pizza burger ham fruit apples oranges strawberries bananas vegetables carrots potatoes ice cream yoghurt cake pancakes chocolate sweets water coke lemonade tea coffee hot chocolate milk	el pollo el pescado la carne las salchichas el marisco el arroz la sopa la ensalada los huevos la pasta las patatas fritas la pizza la hamburguesa el jamón la fruta las manzanas las naranjas las fresas los plátanos las verduras las zanahorias las patatas el helado el yogur el pastel las tortitas el chocolate los caramelos el agua la coca la limonada el té el café el chocolate caliente la leche	 <	

What do you eat/drink for..... ?	¿Qué comes/bebes para ...?
What do you eat/drink for breakfast ? ¿Qué comes/bebes para el desayuno ?	Normally / usually Normalmente/generalmente Often A menudo Sometimes A veces From time to time De vez en cuando
What do you eat/drink for lunch ? ¿Qué comes/bebes para el almuerzo?	I eat... como ... I drink... bebo ... I usually eat... suelo comer ... I like to drink... me gusta beber...
What do you eat/drink for dinner ? ¿Qué comes/bebes para la cena ?	con (with) / también (also) / además (in addition) / pero (but) / sin embargo (however)
	bread pan (m) milk leche (f) cereal cereales (mp) chicken pollo (m) rice arroz (m) pasta pasta (f) orange juice zumo de naranja (m) water agua (m) lemonade limonada (f) beans judías (fp) jam mermelada (f) potatoes patatas (fp) cheese queso (m)

Spanish

PAST		FUTURE	
What did you eat last weekend ?		What are you going to eat next weekend ?	
¿Qué comiste el fin de semana pasado ?		¿Qué vas a comer el fin de semana que viene ?	
Last weekend	El fin de semana pasado	Next weekend	El fin de semana que viene
I went to the restaurant... with my friends with my family with my boyfriend / girlfriend	Fui al restaurante... Con mis amigos/as Con mi familia Con mi novio/a	I am going (to go) to a restaurant. We are going (to go) to a restaurant.	Voy a ir al restaurante Vamos a ir al restaurante
For the starter I ate... As a main course I chose... For dessert I had...	De primero comí De segundo elegí De postre tomé...	I am going to eat / drink... We are going to eat / drink...	Voy a comer / beber... Vamos a comer / beber
As a drink I had...	Para beber tomé...	My dad is going to eat... He is going to drink...	Mi padre va a comer... Va a beber...
My mum ate / drank... My dad ate / drank... My friend ate / drank...	Mi madre comió / bebió... Mi padre comió / bebió... Mi amigo/a comió / bebió...	My mum is going to take (have)... She is going to drink...	Mi madre va a tomar... Va a beber...
In my opinion / I think that...	En mi opinión / pienso que...	I think that...	pienso que...
it was good it was delicious it was disgusting	Estaba bueno Estaba delicioso Estaba asqueroso	it will be good it will be delicious it will be a delicious dinner	estará bueno estará delicioso será una cena rica

To eat healthily....		Para comer saludable.....					
You have to..	Hay que...	(to) eat	comer	a lot of	mucho/a (s)	fruit	fruta (f)
You should/must not...	(no) Se debe						
It is recommended to...	Se recomienda...						
It is essential to...	Es esencial....						
It is important to...	Es importante...						
		(to) drink	beber	a bit of	un poco de	vegetables	verduras (fp)
		(to) consume	consumir	little of / few	poco/a (s)	dairy products	productos lácteos (mp)
						meat	carne (f)
						sweet things	dulces (mp)
						fat	grasa (f)
						chocolate	chocolate (m)
						water	agua (m)
						sweets	caramelos (mp)



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