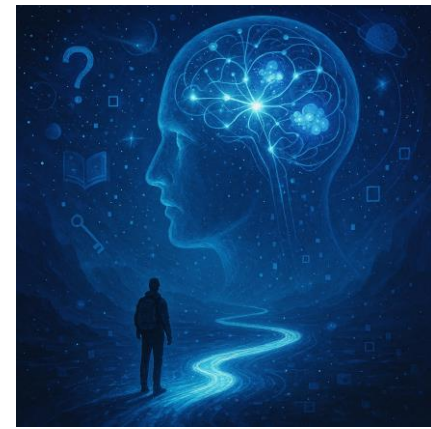
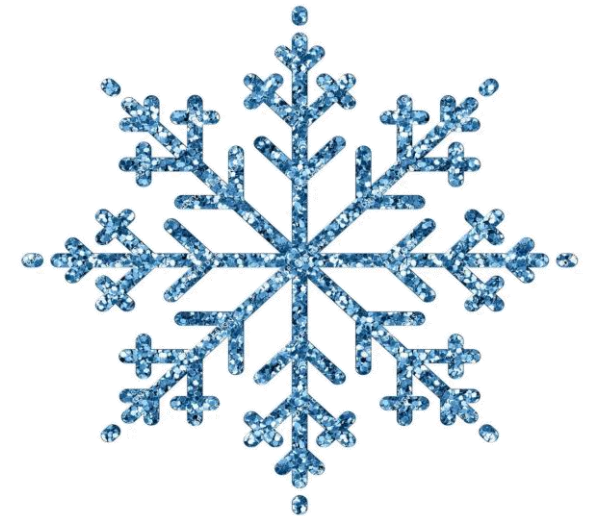


# YEAR 9



## BHA's Knowledge Quest

**Autumn 2  
(Nov - Dec)  
2025-2026**



# How to use your Knowledge Quest Booklet

To support you in making progress in each of your lessons, your teachers have produced Knowledge Organisers which contain all of the main facts, knowledge and information that you need to know to be successful and make progress this half term. There are lots of ways to use these Knowledge Organisers, but the most important thing is that you are revising the knowledge and you are able to recall it in your lessons. Please see below details of how to use this booklet; what your half termly homework looks like and how to secure lots of positive Class Charts points!

**English:** 30 minutes of Sparx Reader, every week.

**Maths:** 30 minutes of Sparx Maths, every week.

**Science:** 30 minutes of Seneca homework, every week.

**MFL:** 1 list of vocabulary to learn for a test in lesson AND 1 quiz to complete on Language Nut, MFL platform every fortnight.

**History:** 30 minutes of Seneca revision, every week. Additional revision provided for assessments.

**Geography:** 1 hour of Seneca per fortnight.

**RE:** Holistic quiz using Knowledge Organiser and lesson on teams, every 4 weeks.

**PSHE:** Independent self quizzing from Knowledge Organiser.

**DT:** Food Studies- Seneca assignment set as part of each 9-week rotation. Engineering Seneca assignment to prepare for BBB assessment set as part of the rotation. Independent self-quizzing from Knowledge Organiser.

**Art:** To research/find and create resource images for projects when required.

**All other subjects:** Revise the information in this booklet using the revision sheets included with each subject.

## Timetable

Use this page to copy out your lessons and room numbers

[illegible]

**Enrichment and Intervention 2025-26**

**Autumn Half Term 2**

	Monday	Tuesday	Wednesday	Thursday	Friday
<b>Breakfast</b> 7.45am – 8.30am	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open
<b>Lunch</b> 12.45pm – 1.15pm	MUGA Year 9 Library Year 11 Yr 7 Table Tennis LG	MUGA Year 11 Library Year 10 Yr 8 Table Tennis LG	MUGA Year 10 Library Year 9 Yr 9 Table Tennis LG	MUGA Year 8 Library Year 8 Yr 10 Table Tennis LG	MUGA Year 7 Library Year 7 Yr 11 Table Tennis LG
<b>Period 7</b> Monday Tuesday Thursday 3.30pm – 4.30pm	Yr 7, 8, 9 Keyboard club- Room 36 SW Year 11 Open / MFL Subject Intervention <b>B Block</b> Week 1: <b>C Block</b> Week 2: Year 9 football (Field) WT All years Chess Club – Room 9 MAG All Years Debate Mate Room 23 BED Sparx Maths Club – Room 15 DHY / RMI All years Table Tennis (Large Gym) NK	Year 11 Science Intervention All years Table tennis (Large Gym) GH All years Basketball (MUGA) WT- <b>New</b> Year 7 and other beginners Latin Club Room 60 AA Year 8 football (Field) JS All years Dance Club (Dance studio) CG All years <i>Hooked on Bristnall</i>	Year 11 English and Maths Intervention Year 7/8 Trampolining (Small Gym) KHA All years Table tennis (Large Gym) WT <b>New</b> Year 10 Football (Field) NK All years Dance Club (Dance studio) JR All years Board Game Club Room 55 AK All years The Rep Theatre – Performing Arts Club Room 16	Year 11 Geography /History Intervention Year 7 Football (Field) NK All years Legacy cohort Latin Club Room 60 AA All years Netball (MUGA) GH <b>New</b> Year 9/10 Trampolining (Small Gym) JS All years <i>The hook and pen society</i> Room 53 JW/LOM/ADI	All years Dungeons and Dragons (MB) Room 5 <b>Yr 10/11 Engineering</b> coursework catch up intervention- By invitation only LN <b>Yr 10/11 Textiles</b> coursework catch up intervention- By invitation only NB/KWK
<b>Wednesday</b> Friday 2.35pm – 3.35pm					

	<p>All years Girl's Football (MUGA) JS/NW- <b>New</b></p> <p>All years Task Master Room 28 GEG</p> <p>All years Science Club Lab 49 SAM/BHO/RHA</p> <p>Year 7 – 9 Masterchef Room 45 (<b>limited to 15 pupils only</b>) CCR/MSH/PCR</p> <p><b>SEND</b> Reading Intervention ADI/LOM Room 2</p>	<p>Room 53 JW</p> <p>All years Beyond the Books (Reading Club) Room 24 FH</p> <p>All years Digital skills Room 30 MCA</p> <p>Year 10 Rock Band- Room 36 SW</p> <p>Basketfields Booster for Year 10 English Room 23 FBA</p> <p>Masterchef (<b>SEND</b>) Room 45 CCR/MSH/MCS</p> <p><b>SEND</b> Y8 Reading Intervention ADI/LOM 33</p>	<p>Room 2 SBW</p> <p>All years Ultimate Uno Club Room 23 QSM</p> <p>All years Scene Stealers Filmmaker Club Room 22 DLA</p> <p>All years Act Up! Drama Club Room 24 SBS</p> <p>Yr 10 GCSE Computer Science students only: Programming practicals Room 62 JM</p> <p>Yr 10 iMedia students only: coursework catch-up Room 10 HA</p> <p>All years- The Articulators Board game articulate for kids RBI/ROOM 38</p> <p>Year 7, 8, 9 Girls Football WBA</p> <p><b>SEND</b> Social Society CCR/CST Room 1</p> <p><b>SEND</b> WBA Multisports/Football LK</p>	<p>All Years Graphics club KWK 43</p> <p>Year 7,8,9 Music Rock Band- Room 36 TW</p> <p>Russian Language Club for beginners Room 58 RMI</p>	
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			<p><b>SEND</b> Homework Club – JRE/MPA Room 31</p> <p><b>SEND</b> Y10 Direct Instruction Lit – JPG Room 3</p>	
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<b>Academic</b>	<b>Creative</b>	<b>Physical</b>
<input type="checkbox"/> Task Master (will meet all parts of the diploma) <input type="checkbox"/> Latin Club (new and legacy co horts) <input type="checkbox"/> Chess Club <input type="checkbox"/> Sparx Maths Club <input type="checkbox"/> Geography Club <input type="checkbox"/> Science Club Lab 49 <input type="checkbox"/> Debate Mate <input type="checkbox"/> 'Beyond the Books' Reading Club <input type="checkbox"/> Russian Language Club for Beginners <input type="checkbox"/> Any other subject intervention	<input type="checkbox"/> Task Master (will meet all parts of the diploma) <input type="checkbox"/> Scene stealers film maker club <input type="checkbox"/> Act up! Drama Club <input type="checkbox"/> Ultimate Uno <input type="checkbox"/> Hooked on Bristnall - Crochet club <input type="checkbox"/> The hook and pen society <input type="checkbox"/> The Rep Theatre Performing Arts Club <input type="checkbox"/> Board Game Club <input type="checkbox"/> Dungeons and Dragons <input type="checkbox"/> Graphics Club <input type="checkbox"/> Digital Skills <input type="checkbox"/> Rock Band <input type="checkbox"/> Lunchtime keyboard cub <input type="checkbox"/> Lunchtime vocal choir <input type="checkbox"/> Masterchef <input type="checkbox"/> The Articulators	<input type="checkbox"/> Task Master (will meet all parts of the diploma) <input type="checkbox"/> Football <input type="checkbox"/> Table Tennis <input type="checkbox"/> Basketball <input type="checkbox"/> Netball <input type="checkbox"/> Trampolining <input type="checkbox"/> Dance

# Dates to remember this half term:

November

December

## Attendance record



Week	Attendance %
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

# Sparx Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write the XRP score that you achieved for each subject. Your form tutor will award you additional CC points for the more XRP points you achieve in addition to the set points for each weekly homework.

	Sparx Reader Points:	Sparx Maths Points:
Week 1		
Week 2		
Week 3		
Week 4		
Week 5		
Week 6		
Week 7		
Total this half term:		

# Seneca Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write the titles of the assignments that you complete for each subject and your overall percentage scores. Your form tutor will award you additional CC points for the highest percentages you achieve in addition to the set points for each weekly homework.

	English Assignments:	Science Assignments:	History Assignments:	Geography Assignments:
Week 1				
Week 2				
Week 3				
Week 4				
Week 5				
Week 6				
Week 7				
Total assignments completed this half term:				

# Language Nut Check!

Remember to click:  
'Login with Microsoft'  
using your academy  
email address and  
password!

In the boxes below, write out how many points you have achieved from your weekly homework. Your form tutor will award you additional CC points for the highest scores you achieve in addition to the set points for each weekly homework.

	MFL Homework:
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Total assignments completed this half term:	

# Independent Study Check!

Your form tutor and your parent/carer will also check that you are completing your independent study within this booklet. Additional positive CC points will be awarded for beautiful presentation and your ability to demonstrate a strong recall of the knowledge within this booklet.

	End of Half term Form Tutor Check:	Parent/Carer Check:
Independent Study Completed?		
Beautiful Presentation?		
Recall of Knowledge?		

**Personal Reflection:** What are you most proud of within your Independent Study Booklet?

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## Homework Log





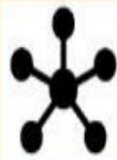













Use this page to record any homework this half term

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## Homework Log

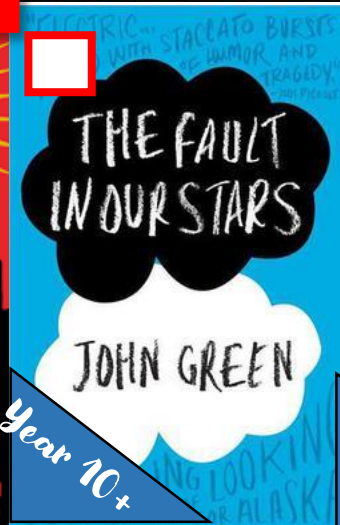
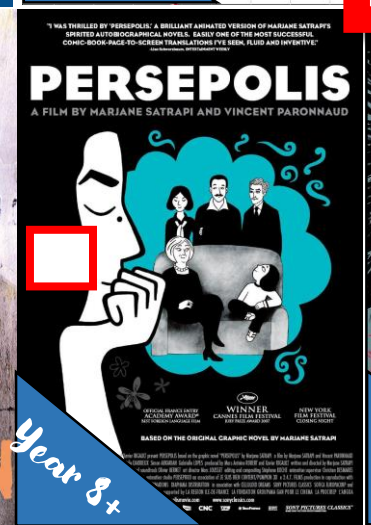
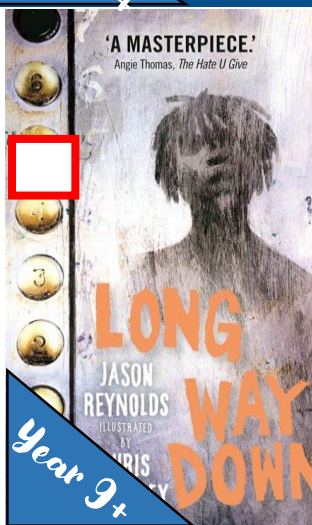
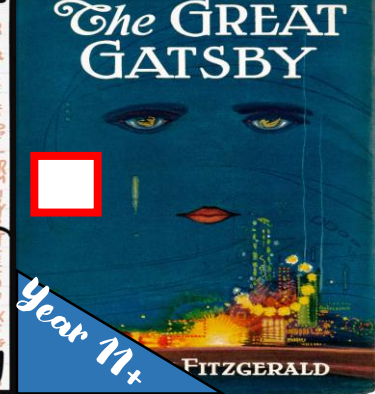
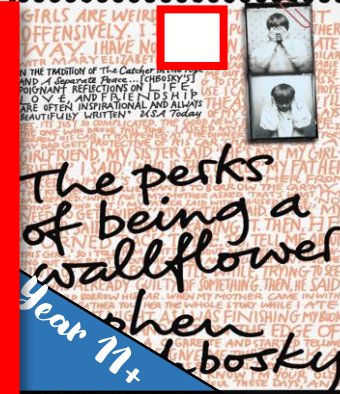
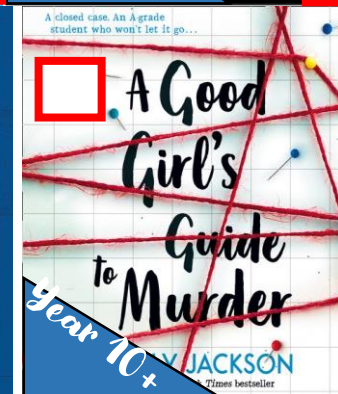
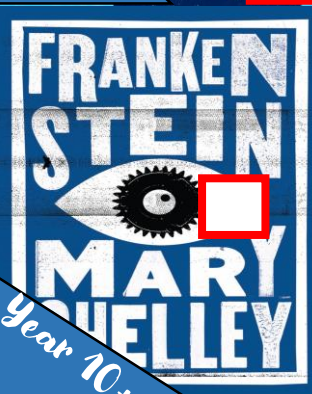
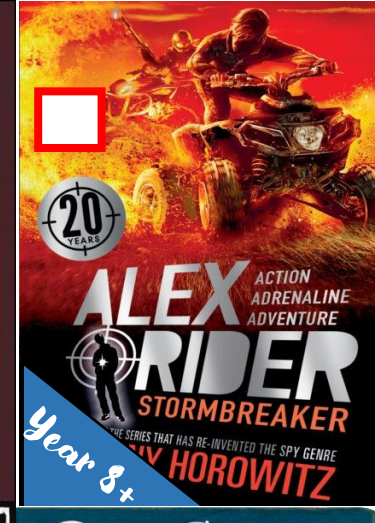
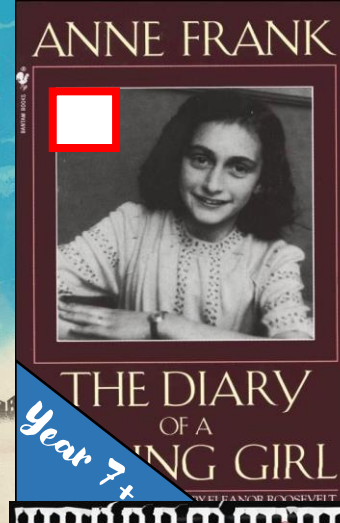
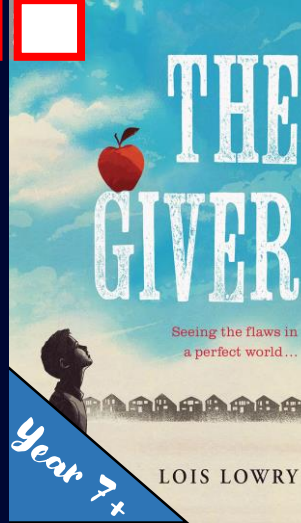
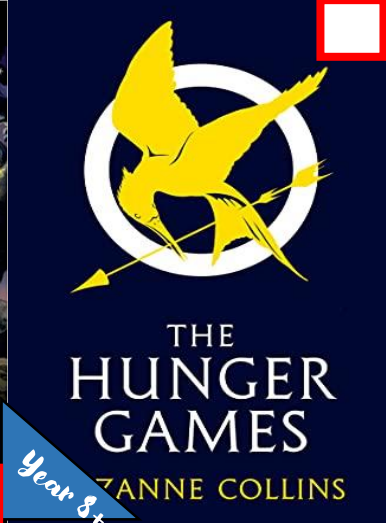
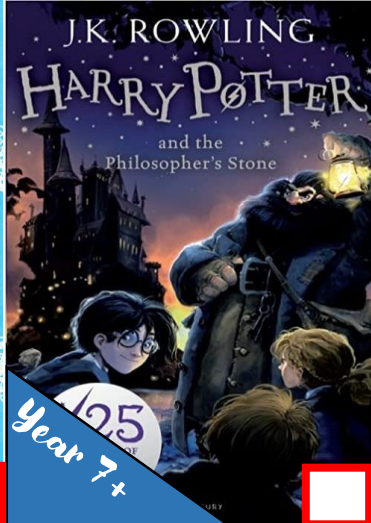
Use this page to record any homework this half term

[illegible]

	Look, Cover, Write, Check	Definitions to Key Words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	<p>Look at and study a specific area of your knowledge organiser.</p> 	<p>Write down the key words and definitions.</p> 	<p>Use your knowledge organiser to condense and write down key facts and or information on your flash cards.</p> 	<p>Use your knowledge organiser to create a mini quiz. Write down questions using your knowledge organiser.</p> 	<p>Create a mind map with all the information you can remember from your knowledge organiser.</p> 	<p>Ask a partner or family member to have the knowledge organiser or flash cards in their hands.</p> 
Step 2	<p>Cover or flip the knowledge organiser over and write down everything you remember.</p> 	<p>Try not to use your knowledge organiser to help you</p> 	<p>Add pictures to help support. Then self quiz yourself using the flash cards.. You can write questions on one side and answers on the other.</p> 	<p>Answer the questions and remember to use full sentences.</p> 	<p>Check your knowledge organiser to see if there were any mistakes with the information you have made.</p> 	<p>They can test you by asking you questions on different sections of your knowledge organiser.</p> 
Step 3	<p>Check what you have written down. Correct any mistakes in green pen and add anything you missed. Repeat.</p> 	<p>Use your green pen to check your work.</p> 	<p>Use a parent/carer or friend to help quiz you on the knowledge.</p> 	<p>You can also use family to help quiz you. Keep self quizzing until you get all questions correct.</p> 	<p>Try to make connections that links information together.</p> 	<p>Write down your answers.</p> 

## WORLD MAP





# Contents page

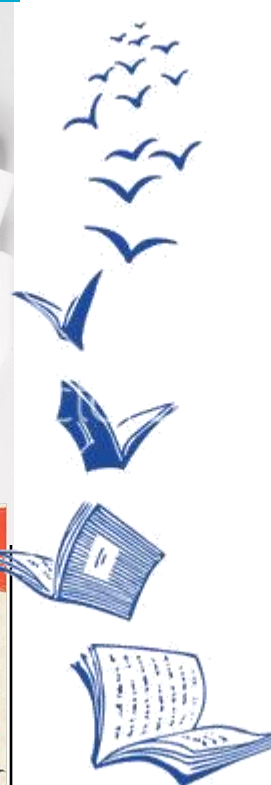
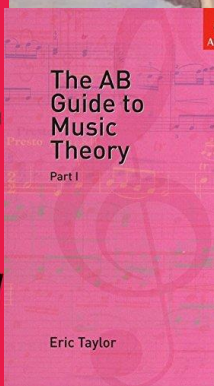
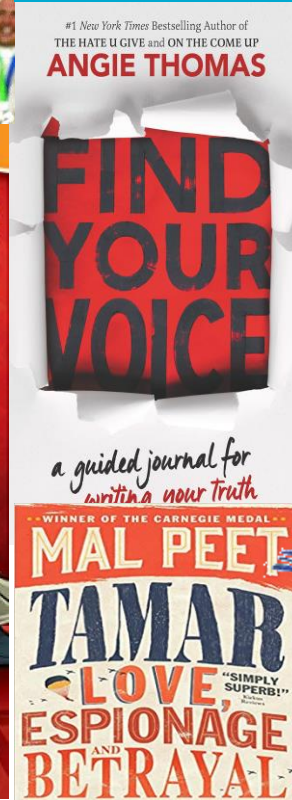
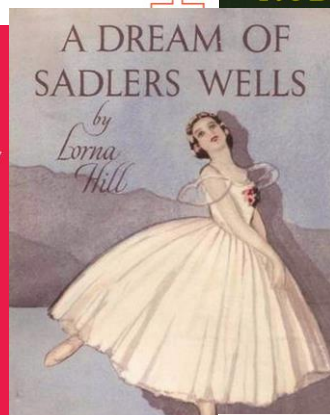
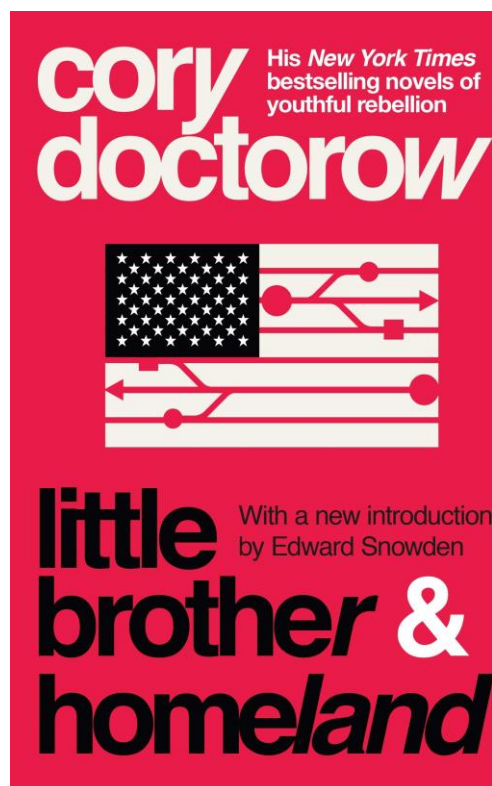
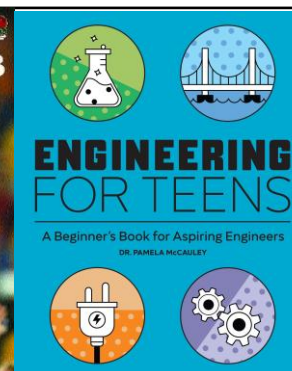
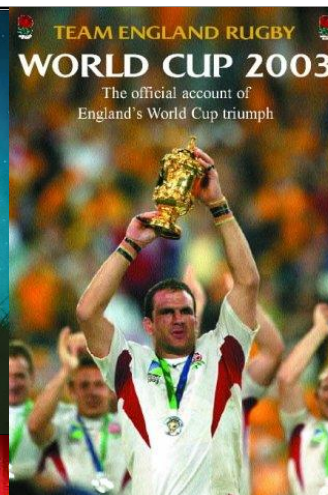
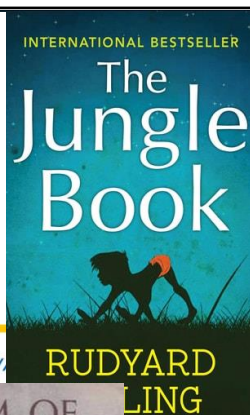
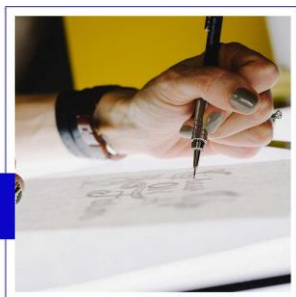
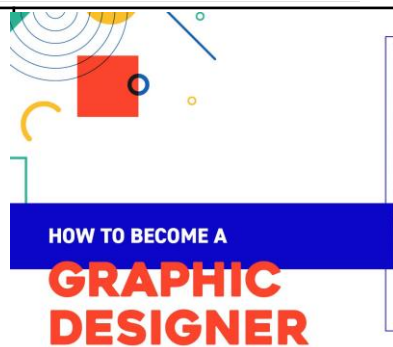
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# Further Reading List

Challenge yourself by reading these topic-related books!

Year 9



### Structural features in writing



**Cliff hanger** – leaving the reader wanting to know more or wondering what will happen next. In this case, the resolution of the story isn't totally completed.



**Shifting** between different times and places (you may notice this between paragraphs).



Changes in **narrative perspective**. When the narrative perspective changes from 1<sup>st</sup> to 3<sup>rd</sup> person or vice versa. Can be used to give a range of angles so that the reader can be fully informed.



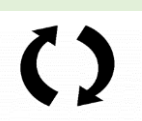
**Withholding information**. For example, avoiding giving a character a name. Giving limited detail. Can make the reader more intrigued and more curious about a character or situation.



**Flashback**. When a narrative or character within a narrative looks back into the past to reflect on something that has happened. This normally affects the view of their future.



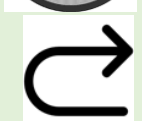
**Narrowing of information**. Where the focus zooms in to give extensive detail on particular part of the story. This can be an object/person or location.



**Cyclical structure**. When the narrative returns to the start at the end. Can be used to provoke further curiosity and suggest there is no way out of a negative situation.



**Foreshadowing**. Clear hints at what will happen in the future, often foreshadowing is negative, sometimes giving the reader a sense of impending doom that is impossible to stop.



A **turning point** is a **moment in a story when a major narrative shift** takes place and the rest of the story will be different.

### Methods for structuring a narrative or description



**DROP = DROP** your reader into the middle of the action or setting.



**SHIFT = SHIFT** your perspective, time, location or atmosphere.



**ZOOM = ZOOM** in on a tiny detail/give a detailed description of an object/person.



**LINK = LINK** your ending to the opening by returning to something you described at the start. You can even repeat words or phrases here.

### Ambitious vocabulary

**trepidation** = a feeling of fear or anxiety.

**imperious** = arrogant and domineering.

**sinewy** = lean and muscular.

**interminable** = endless or apparently endless.

**flagrant** = an action considered wrong or immoral.

**impenetrable** = impossible to pass through or enter.

**heralded** = a sign that (something) is about to happen.

**insidious** = sneaky or being secretly dangerous or harmful.

**accursed** = under a curse.

**obscure** = uncertain or unknown.

**deferential** = respectful.

**tenacious** = to keep a firm hold of something.

WHERE will your journey take you? Your reader?

## **Language features in writing**

**Metaphor** = When you describe one thing as being another thing, that it cannot literally be. **e.g 'A mushroom cloud of toxic smoke erupted into the air.'**

**Motif** = Motifs, on the other hand, are images, ideas, sounds or words that help to explain the central idea of a literary work i.e. theme. **e.g The motif of pairs/pairing used in the Boy in the striped Pyjamas – the two house –the two boys**

**Symbol** = Symbols are images, ideas, sounds or words that represent something else and help the reader to understand an idea or concept in more detail. **e.g The use of the image of the chickens' heads in 'I am Malala' is used to represent the lack of freedom, injustice and violence people are subjected to.**

**Foreshadowing** = when a writer hints at what may happen in the rest of the story/in a character's future.

**Pathetic fallacy** = when human emotions/emotions of the character in a story, are reflected in aspects of nature, such as the weather.

**Violent verbs** = verbs which are forceful, dynamic and require lots of energy. **e.g grab, push, steal, wrench**

**Juxtaposition** = when two things are placed side by side for comparison, often to highlight the contrast between them. **E.g the sense of calm contrasted with the sense of calamity in Frankenstein.**

**Imagery** = visually descriptive or figurative language **e.g through the use of personification, metaphor or simile**

**Auditory imagery** = imagery and description linked to sound **e.g The build up of sound in Murder on the Orient Express**

**Semantic field** = A semantic field is a set of words which are related in meaning. **e.g abandoned, lonely, alone, outcast = semantic field of isolation.**

**Asyndetic list** = means listing connected with a comma instead of a conjunction/connective. **e.g "A man with no hat, with broken shoes, with an old rag tied round his head."**

## **Language Assessment Objectives**

### **Reading:**

**AO2:** Analysis of writers use of language and structure using terminology and the exploration of the effects on reader.

### **Writing:**

**AO5:** Communicate clearly, effectively and imaginatively, adapting tone, style for different forms, purposes and audiences. Organise information and ideas, using structural and grammatical features to support coherence and cohesion of texts;

**AO6:** Use a range of vocabulary and sentence structures for clarity, purpose and effect, with accurate spelling and punctuation.

### What do I need to be able to do?

#### By the end of this unit you should be able to:

- Name 2D & 3D shapes
- Recognise Prisms
- Sketch and recognise nets
- Draw plans and elevations
- Find areas of 2D shapes
- Find Surface area for cubes, cuboids, triangular prisms and cylinders
- Find the volume of 3D shapes

### Keywords

**2D:** two dimensions to the shape e.g length and width

**3D:** three dimensions to the shape e.g length, width and height

**Vertex:** a point where two or more line segments meet

**Edge:** a line on the boundary joining two vertices

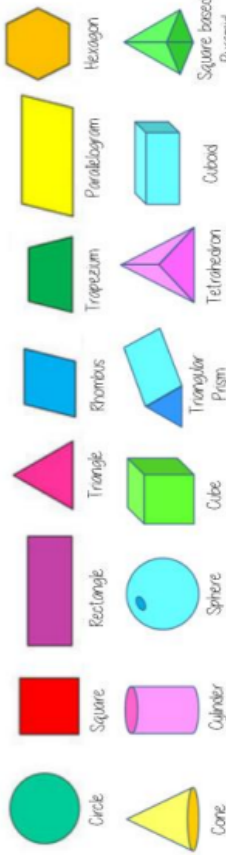
**Face:** a flat surface on a solid object

**Cross-section:** a view inside a solid shape made by cutting through it

**Plan:** a drawing of something when drawn from above (sometimes birds eye view)

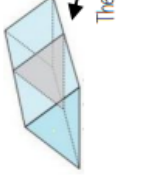
**Perspective:** a way to give illustration of a 3D shape when drawn on a flat surface.

### Name 2D & 3D shapes

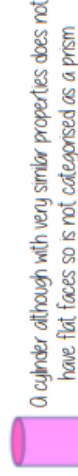


### Recognise prisms

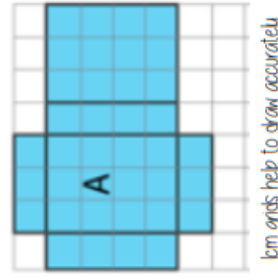
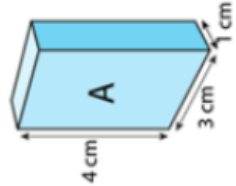
A solid object with two identical ends and flat sides



The cross section will also be identical to the end faces



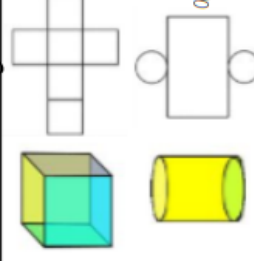
### Nets of cuboids



1cm grids help to draw accurately

Visualise the folding of the net  
Will it make the cuboid with all sides touching

### Sketch and recognise nets

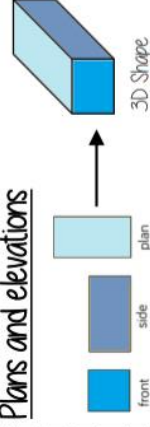


Do they have the same number of faces?

Where do the edges join?

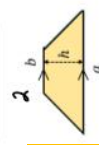
Are the shapes of the faces correct?

### Plans and elevations



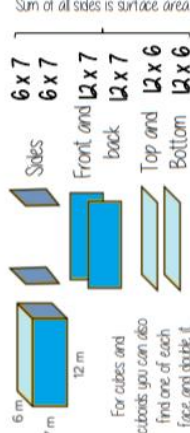
The direction you are considering the shape from determines the front, and side views

### Area of 2D shapes



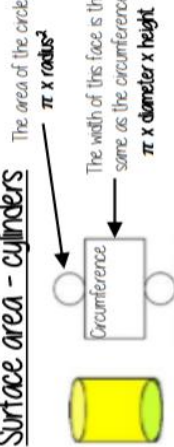
### Surface area

Sketching nets first helps you visualise all the sides that will form the overall surface area



For other shapes - not all the sides are the same, so calculate the individually

### Surface area - cylinders



$$2 \times \pi \times \text{radius}^2 + \pi \times \text{diameter} \times \text{height}$$

### Volumes

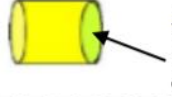
Volume is the 3D space it takes up — also known as capacity if using liquids to fill the space



**Counting cubes**  
Some 3D shape volumes can be calculated by counting the number of cubes that fit inside the shape

$$\text{Cubes/ Cuboids} = \text{base} \times \text{width} \times \text{height}$$

Remember multiplication is commutative



Cross section

$$\text{Prisms and cylinders} = \text{area cross section} \times \text{height}$$

Height can also be described as depth

Areas — square units

Volumes — cube units

Areas and volumes can be left in terms of  $\pi$

# Constructions & congruency

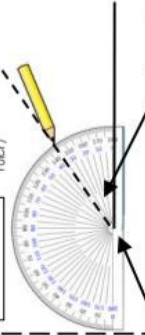
## What do I need to be able to do?

By the end of this unit you should be able to:

- Draw and measure angles
- Construct scale drawings
- Find locus of distance from points, lines, two lines
- Construct perpendiculars from points, lines, angles
- Identify congruence
- Identify congruent triangles

## Draw and measure angles

Make a mark at  $35^\circ$  with a pencil  
And join to the angle point (use a ruler)



The angle  
Make sure the cross is at the end of the line (where you want the angle)

## Scale drawings

A picture of a car is drawn with a scale of 1:30

For every 1cm on my image is 30cm in real life

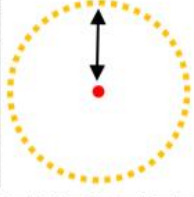


The car image is 10cm

Image: Real life  
10cm : 300cm  
 $\times 30$   
300cm : 3000cm  
 $\times 10$

## R

## Locus of a distance from a point

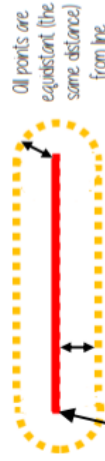


All points are equidistant (the same distance) from the fixed point in the middle

Equipment needed  
The radius is the distance from the fixed point

If the point is in the corner it can only make a quarter arc

## Locus of a distance from a straight line



All points are equidistant (the same distance) from line

Equipment needed  
The line is straight so a ruler is used for the straight lines parallel to your original line

## Locus of a distance from two lines

Also an angle bisector  
This cuts the angle in half

From the angle vertex draw two arcs that cut the lines forming the angle

Keep the compass the same size and use the new arcs as centres to draw intersecting arcs in the middle

Join the vertex to the intersection

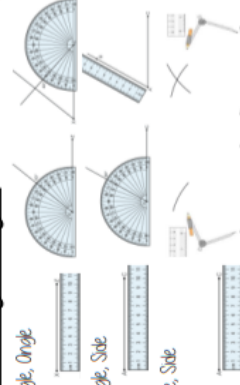
## Constructing Triangles

Side, Angle, Angle

Side, Angle, Side

Side, Side, Side

Link to steps



## Locus equidistant from two points



Also a perpendicular bisector  
Because if the points are joined, this new line intersects it at a  $90^\circ$



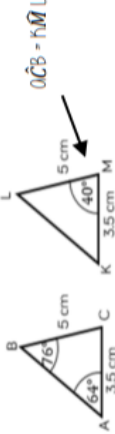
Join the intersections with a ruler  
Keep the compass the same size and draw two arcs from equidistant from both points each point

## Congruent figures



Congruent figures are identical in size and shape — they can be reflections or rotations of each other

Congruent shapes are identical — all corresponding sides and angles are the same size



Because all the angles are the same and  $OC=OM$   $BC=LM$  triangles  $OBC$  and  $OLM$  are congruent

## Construct a perpendicular from a point

a point



Use a compass and draw an arc that cuts the line. Use the point to place the compass

Keep the compass the same distance and now use your new points to make new intersecting arcs

Connecting the arcs makes the bisector

If P is a point on the line the steps are the same

## Congruent triangles

Side-side-side

All three sides on the triangle are the same size

Angle-side-angle

Two angles and the side connecting them are equal in two triangles

Side-angle-side

Two sides and the angle in-between them are equal in two triangles (it will also mean the third side is the same size on both shapes)

Right angle-hypotenuse-side

The triangles both have a right angle, the hypotenuse and one side are the same

## AQA Combined Science: Physics Topic 3 Particle Model of Matter

### Particles

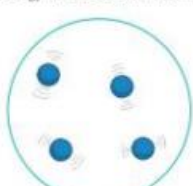
**Solids** have strong forces of attraction. They are held together very closely in a fixed, regular arrangement. The particles do not have much energy and can only vibrate.



**Liquids** have weaker forces of attraction. They are close together, but can move past each other. They form irregular arrangements. They have more energy than particles in a solid.



**Gases** have almost no forces of attraction between the particles. They have the most energy and are free to move in random directions.



### Density

Density is a measure of how much mass there is in a given space.

$$\text{Density (kg/m}^3\text{)} = \frac{\text{mass (kg)}}{\text{volume (m}^3\text{)}}$$

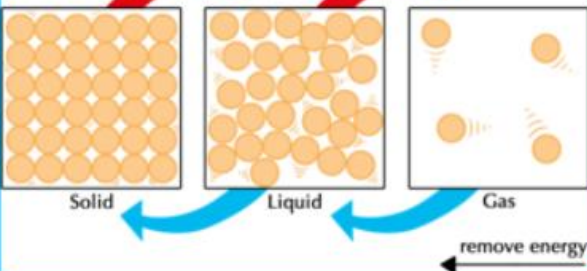
A more dense material will have more particles in the same volume when compared to a less dense material.

notes

### The kinetic theory of matter

The level of energy of the particles in a material determines what state of matter that material is.

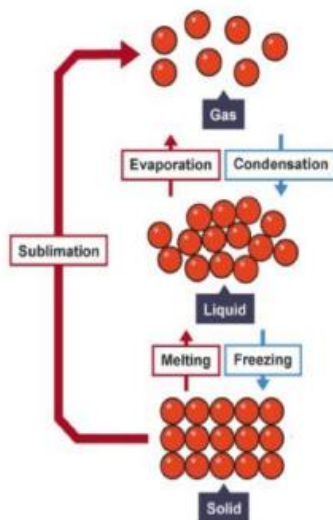
add energy



### Changing State

If a system gains more energy, it can lead to a change in temperature or change in state. If the system is heated enough, then there will be enough energy to break bonds.

When something changes state, there is no chemical change, only physical. No new substance is formed. The substance will change back to its original form. The number of particles does not change and mass is conserved.



### Measuring the density of a liquid:

- Measure mass of the empty beaker with a balance
- Add the liquid and measure the mass of the liquid and beaker
- Calculate the mass of the liquid (mass of the liquid and beaker - mass of the empty beaker)
- Measure volume of the liquid with the measuring cylinder

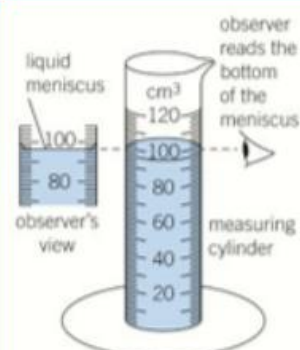


Figure 3 Using a measuring cylinder

### Required Practical

Measuring the density of a regularly shaped object:

- Measure the mass using a balance.
- Measure the length, width and height using a ruler.
- Calculate the volume.
- Use the density ( $\rho = m/V$ ) equation to calculate density.

Measuring the density of an irregularly-shaped object:

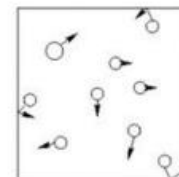
- Measure the mass using a balance.
- Fill a eureka can with water.
- Place the object in the water - the water displaced by the object will transfer into a measuring cylinder.
- Measure the volume of the water. This equals the volume of the object.
- Use the density ( $\rho = m/V$ ) equation to calculate density.



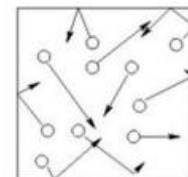
### Particles

Gas particles can move around freely and will collide with other particles and the walls of the container. This is the pressure of the gas.

If the temperature of the gas increases, then the pressure will also increase. The hotter the temperature, the more kinetic energy the gas particles have. They move faster, colliding with the sides of the container more often.



Cool gas, fewer and less energetic collisions



Hot gas, more and more energetic collisions

$$\rho = \frac{m}{V}$$

density

mass

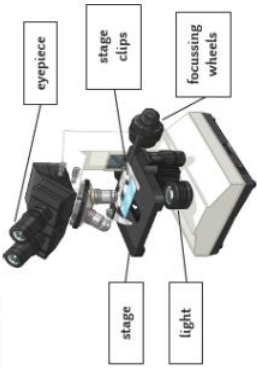
volume

Cell Biology Knowledge Organiser – Foundation and Higher

Required Practical

Microscopy Required Practical

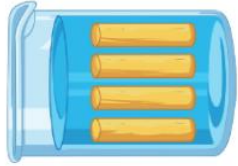
- Includes preparing a slide, using a light microscope, drawing any observations – use a pencil and label important observations.



Osmosis and Potato Practical

- Independent variable – concentration.
- Dependent variable – change in mass.
- Control variable – volume of solution, temperature, time, surface area of the potato.

The potato in the sugar solution will lose water and so will have less mass at the end, the potato in the pure water solution will gain water.



Specialised Cells

When a cell changes to become a specialised cell, it is called differentiation.

Specialised Cell	Function	Adaptation
sperm	To get the male DNA to the female DNA	Streamlined head, long tail, lots of mitochondria to provide energy
nerve	To send electrical impulses around the body.	Long to cover more distance. Has branched connections to connect in a network.
muscle	To contract quickly.	Long and contain lots of mitochondria for energy.
root hair	To absorb water from the soil.	A large surface area to absorb more water.
phloem	Transports substances around the plant.	Pores to allow cell sap to flow. Cells are long and joined end-to-end.
xylem	Transports water through the plant.	Hollow in the centre. Tubes are joined end-to-end.

Equations and Maths

Equation

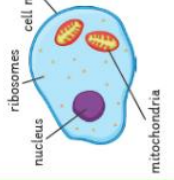


Maths Skills

Conversions:  
Micrometres to millimetres: divide by 1000.  
Standard Form:  
 $0.003 = 3 \times 10^{-3}$   
 $5.6 \times 10^{-4} = 0.00056$

Prokaryotic and Eukaryotic Cells

Animal Cells

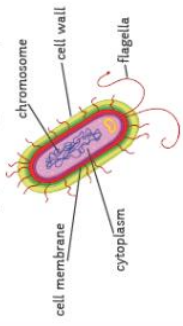


Plant and animal cells have similarities and differences:

	Animal	Plant
nucleus	✓	✓
cytoplasm	✓	✓
chloroplast	✗	✓
cell membrane	✓	✓
permanent vacuole	✗	✓
mitochondria	✓	✓
ribosomes	✓	✓
cell wall	✗	✓

Bacterial Cells

Bacterial cells do not have a true nucleus, they just have a single strand of DNA that floats in the cytoplasm. They contain a plasmid.



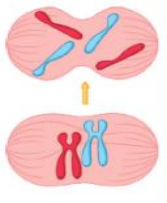
Chromosomes and Mitosis

In the nucleus of a human cell there are 23 pairs of chromosomes. Chromosomes contain a double helix of DNA. Chromosomes have a large number of genes.



The cell cycle makes new cells.

Mitosis: DNA has to be copied/replicated before the cell carries out mitosis.



Key Vocabulary

active transport

alveoli

chromosome

diffusion

eukaryotic

gas exchange

mitosis

multicellular

osmosis

prokaryotic

undifferentiated

replicated

specialised

villi

Stem Cells

Embryonic stem cells are undifferentiated cells, they have the potential to turn into any kind of cell.



Adult stem cells are found in the bone marrow, they can only turn into some types of cells e.g. blood cells.

Uses of stem cells:

- Replacing faulty blood cells;
- making insulin producing cells;
- making nerve cells.

Some people are against stem cell research.

For Stem Cell Research	Against Stem Cell Research
Curing patients with stem cells - more important than the rights of embryos.	Embryos are human life.
They are just using unwanted embryos from fertility clinics, which would normally be destroyed.	Scientists should find other sources of stem cells.

Stem Cells in Plants

In plants, stem cells are found in the meristem. These stem cells are able to produce clones of the plant. They can be used to grow crops with specific features for a farmer, e.g. disease resistant.

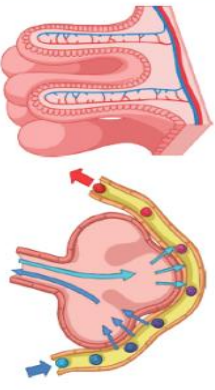
Exchange – Humans

Multicellular organisms have a large surface area to volume ratio so that all the substances can be exchanged.

Gas exchange: Lungs

The alveoli are where gas exchange takes place.

They have a large surface area, moist lining, thin walls and a good blood supply.

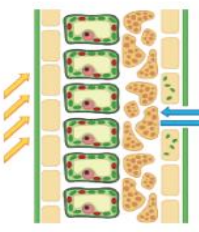


Villi: Small Intestine

Millions of villi line the small intestine increasing the surface area to absorb more digested food.

They are a single layer of cells with a good blood supply.

Exchange in Plants



The surface of the leaf is flattened to increase the surface area for more gas exchange by diffusion.

Oxygen and water vapour diffuse out of the stomata. Guard cells open and close the stomata, controlling water loss.

Key Processes

Diffusion is the spreading out of particles from an area of higher concentration to an area of lower concentration.

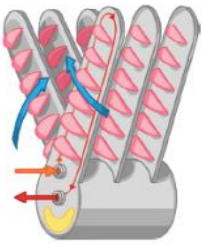
Cell membranes are semi-permeable, only small molecules can get through.

Osmosis is the movement of water molecules across a partially permeable membrane from a region of higher concentration to a region of lower concentration.

Active transport is the movement of substances against the concentration gradient. This process requires energy from respiration.

Exchange in Fish

Fish have a large surface area for gas exchange. These are called gills. Water enters the fish through the mouth and goes out through the gills. The oxygen is transported from the water to the blood by diffusion. Carbon dioxide diffuses from the blood to the water. Each gill has gill filaments which give the gills a large surface area. Lamellae cover each gill filament to further increase the surface area for more gas exchange. They have a thin surface layer and capillaries for good blood supply which helps with diffusion.



## Opinions

Me encanta – *I love*



Me gusta mucho

– *I really like*



Me gusta – *I like*



No me gusta – *I don't like*



odio / detesto – *I hate*



## Justifications

porque es – *because it's*  
dado que es – *because it's*  
porque no es – *because it's not*

\*será– *it will be*

\*fue – *it was*

## Intensifiers

muy – *very*

bastante – *quite*

demasiado – *too*

un poco – *a little bit*

## Connectives

y - *and*

también – *also*

pero – *but*

sin embargo - *however*

## Reasons



divertido – *fun*

interesante – *interesting*

fantástico – *fantastic*

guay – *cool*

genial – *great*



horrible – *horrible*

aburrido – *boring*

difícil – *difficult*

terrible - *awful*

**Instructions** Escribe – *Write!* Escucha – *Listen!* Mira – *Look!* Lee – *Read!*

Empareja – *Match up!* Traduce – *Translate!* Repite – *Repeat!* Copia – *Copy!*

## Questions

Que/Cual es...? *What is it...?*

Como se dice... en ingles / en español? *How do we say... in English/Spanish?*

## Classroom language

Hola señor / señorita – *Hello Sir / Miss*

Sí / no – *Yes / No*

Por favor – *Please*

Gracias – *Thank you*

Necesito... – *I need*

un bolígrafo (verde) – *a (green) pen*

el papel – *some paper*

un diccionario– *a dictionary*

una regla – *a ruler*

un cuaderno – *an exercise book*

¿Puede usted repetir?

– *Can you repeat?*

No entiendo – *I don't understand*

¿Puede usted ayudarme?

- *Can you help me?*

¿Puedo ir al baño?

– *Can I go to the toilets?*

He terminado – *I have finished*

¿Puedo quitarme la chaqueta?

– *Can I take my blazer off?*

¿Cómo se dice.... en español / ingles?

– *How do I say .... in Spanish / English?*

## Los Números

uno..... 1

dos..... 2

tres..... 3

cuatro..... 4

cinco..... 5

seis..... 6

siete..... 7

ocho..... 8

nueve..... 9

diez..... 10

treinta..... 30

treinta y uno..... 31

treinta y dos..... 32

treinta y tres..... 33

treinta y cuatro..... 34

treinta y cinco..... 35

treinta y seis..... 36

treinta y siete..... 37

treinta y ocho..... 38

treinta y nueve..... 39

cuarenta..... 40

cuarenta y uno..... 41

cuarenta y dos..... 42

cuarenta y tres..... 43

cuarenta y cuatro..... 44

cuarenta y cinco..... 45

cuarenta y seis..... 46

cuarenta y siete..... 47

cuarenta y ocho..... 48

cuarenta y nueve..... 49

cincuenta..... 50

sesenta..... 60

setenta..... 70

ochenta..... 80

noventa..... 90

ciento..... 100

veintinueve..... 29

veintidós..... 22

veintitrés..... 23

veinticuatro..... 24

veinticinco..... 25

veintiséis..... 26

veintisiete..... 27

veintiocho..... 28

# Year 9 Spanish Unit 1 Somos Así

**Ways to practise vocabulary:** 1. Look cover, write check 2. Log onto Memrise 3. Getting people at home to test you 4. Log onto Quizlet

## Key vocabulary

### Mi tiempo libre—Free Time

me chifla (n)	I love
me mola (n)	I love
el deporte	sport
el dibujo	art/drawing
los videojuegos	video games
los artes marciales	martial arts
soy miembro de	I'm a member of
un club/grupo	a club/group
no suporto	I hate
el racismo	racism
la violencia	violence
los deberes	homework
los insectos	insects

### ¿cuándo? When?

los lunes	on Mondays
a veces	sometimes
a menudo	often
los fines de semana	on the weekend
siempre	always
(casi) todos los días	(nearly) every day
todos los fines de semana	every weekend

### Organizando mi semana—organising my week

durante la semana	in the week
bailo Zumba	I do Zumba
cocino para mi familia	I cook for the family
escribo canciones	I write songs
leo cómics/libros	I read books/comics
monto en bici	I ride my bike
toco el teclado	I play the keyboard
veo un partido	I watch a match

### Las películas—film genres

veo	I watch
me gusta ver	I like to watch
una comedia	a comedy
una película de acción	an action film
una película de animación	an animated film
una película de aventuras	an adventure film
una película de ciencia-ficción	a sci-fi film
una fantasía	a fantasy
una película de super-héroes	a super-hero film
una película de terror	a horror film

### Future Time markers

Mañana	Tomorrow
La semana que viene	Next week
El mes que viene	Next month
El nueve de febrero	9th February

### Mi próximo cumpleaños—my next birthday

voy a	I'm going to
hacer Karting	go Karting
ir a la bolera	go bowling
ir a un parque de atracciones	go to a theme park
jugar al paintball	go paintballing
pasar la noche en la casa de mi amigo/a	spend the night at my friend's house
sacar muchos fotos	take lots of photos
montar en una montaña rusa	go on a roller coaster
ver películas de terror	watch horror films
tomar un desayuno especial	have a special breakfast
abrir mis regalos	open my presents
dar una fiesta	have a party

### Big Questions Somos Así

What are my hobbies?

What am I doing this weekend?

How do I discuss my film tastes?

What is the future tense and how does it work?

What shall we do for my birthday?

What did I do last birthday?

How do I discuss my favourite celebrity?



### Mi cumpleaños—my birthday

el año pasado	last year
fui/fuimos a	I / we went to
un centro de Laser-Tag	Laser-tag centre
invité mis amigos para...	I invited my friends to...
fue	it was....



### Los opiniones—Opinions

mi película favorita es	my favourite film is
mi actor favorito es	my favourite actor is
mi actriz favorita	my favourite actress

### Intensifiers

muy—very  
bastante—quite  
un poco—a little  
mucho —a lot

Key verbs and grammar

ir	To go (present)
voy	I go/am going
vas	you go/are going
va	he/she/it goes/is going
vamos	we go/are going
vaís	you go/are going
van	they go/are going

ir	To go (preterite)
fui	I went
fuiste	you went
fue	he/she/it went
fuimos	we went
fuisteis	you went
fueron	they went

Forming the preterite tense.

Step 1: find the infinitive.

Step 2: Remove the –ar/-er/-ir .

Step 3: Add the appropriate preterite endings.

Preterite Tense Regular verb endings			
Subject	-ar	-er	-ir
yo (I)	-é	-í	-í
tú (you)	-aste	-iste	-iste
él/ella (s/he)	-ó	-ió	-ió
nosotros (we)	-amos	-imos	-imos

Forming the near future tense.

Step 1: Choose the correct conjugation of ‘ir’

Step 2: Add the infinitive

Examples:

voy a ver una película- I am going to watch a film

voy a sacar fotos—I am going to take photos

The future tense		
voy	a	jugar
vas		pasar
va		invitar
vamos		abrir
vaís		recibir
van		

**Gustar and similar verbs**

Verbs like “me gusta” work in a particular way. They have to agree with the number of the noun you like. e.g. I like sweets (plural) for plurals, we simply add an –n to the end of the verb.

Example:

Me gusta el deporte

Me gustan los deberes

To say a friend’s opinion, you change **me** to **le**

**le gusta el deporte**

**le gustan los deberes**

**Adjectives**

Adjectives agree with gender and number of the noun. They are positioned AFTER the noun. for example: una película divertida (a fun film)

un deporte peligroso (a dangerous sport)

False Friends	emocionante	exciting
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Key Questions	
¿Qué tipo de películas (no)te gustan?	what sort of films do you (not) like?
¿Qué cosas (no) te gustan?	what sort of things do you (not)like?
¿Qué tipo de película es?	what sort of film is it?
¿Cómo organizas tu semana?	how do you organise your week?
¿Cómo vas a celebrar tu próximo cumpleaños?	how will you celebrate your next birthday?
¿Cómo fue tu último cumpleaños?	how was your last birthday?
¿Qué hiciste?	what did you do?

Key verbs for the unit			
Infinitive	past (I)	present (I)	future (I)
ver (to see)	ví	veo	voy a ver
bailar (to dance)	bailé	bailo	voy a bailar
tocar (to play)	toque	toco	voy a tocar
escribir (to write)	escribí	escribo	voy a escribir
leer (to read)	leí	leo	voy a leer
cocinar (to cook)	cociné	cocino	voy a cocinar
hacer (to do)	hice	hago	voy a hacer
jugar (to play)	jugué	juego	voy a jugar

Tricky spelling

atracciones	double -c
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Remember: you can only double the consonants in “**Carolina**”

# Year 9 Spanish Unit 2 Orientéte

**Ways to practise vocabulary:** 1. Look cover, write check 2. Log onto Memrise 3. Getting people at home to test you 4. Log onto Quizlet

## Key vocabulary

### Las tareas—Chores

Para ayudar en casa	to help at home
lavo el coche	I wash the car
pongo/quito la mesa	I set/clear the table
plancho la ropa	I do the ironing
lavo la ropa	I wash the clothes
hago las camas	I make the beds
corto es césped	I cut the lawn
ayudo en el jardín	I help in the garden
preparo la comida	I prepare the dinner
limpio mi habitación	I clean my room
paso la aspiradora	I vacuum
friego los platos	I wash up
hago la compra	I do the shopping.
saco la basura	I take out the rubbish

### Verbos modales—modal verbs of obligation

tengo que	I have to
debo	I must
poner /quitar la mesa	to set/clear the table
planchar la ropa	to do the ironing
lavar la ropa	to wash the clothes
hacer las camas	to make the beds
cortar el césped	to cut the lawn
ayudar en el jardín	to help in the garden
preparar la comida	to prepare the dinner
limpiar mi habitación	to clean my room
pasar la aspiradora	to do the vacuuming
fregar los platos	to wash up
hacer las compras	to do the shopping
sacar la basura	to take out the rubbish

### solicitando trabajo—application

Muy señor/a mío/a	Dear sir/madame
le escribo para solicitar	I am writing to apply for
le adjunto	I enclose
mi curriculum	my CV
le saluda atentamente	Yours faithfully
me interesa este trabajo	I'm interested in this job

### Los trabajos – jobs

soy	I am
mi madre es	my mum is
mi padre es	my dad is
me gustaría ser	I would like to be
cocinero/a	cook
cartero/a	a post person
dependiente	shop assistant
carpintero/a	carpenter
camarero/a	waiter
enfermero/a	nurse
periodista	journalist
abogado/a	lawyer
cantante	singer
diseñador/a	designer
limpiador/a	cleaner
jardinero	gardener

### Lugares—places of work

trabajo en	I work in
un taller	a workshop
una oficina	an office
una obra	a building site

### Problemas - problems

no se debe tolerar	you shouldn't tolerate
el racismo	racism
el sexismo	sexism
las bromas racistas	racist jokes
la discriminación contra	discrimination against
los minusválidos	disabled

### Los opiniones—Opinions

pienso que	I think that
creo que	I believe that
en mi opinión	in my opinion
desde mi punto de vista	from my point of view
monotono	monotonous
me aburre como una ostra	I'm bored out my brains.

### Intensifiers

muy –very bastante -quite  
un poco -a bit mucho—a lot

### The Big Questions

What do I do to help at home?

How do I express my opinions?

What does my family do for a living?

How do I discuss my part time job?

What sort of person am I?

How do I discuss job aspirations?

How do I apply for a job in Spain?

What are the issues at work?

### los números—numbers

10	diez
20	veinte
30	treinta
40	cuarenta
50	cincuenta
60	sesenta
70	setenta
80	ochenta
90	noventa
100	cien

### Personalidad—personality

soy	I am
simpático/a	kind
antipático/a	unkind
cortés	polite
maleducado/a	rude
exigente	demanding
fuerte	strong
valiente	brave
artístico/a	artistic
serio/a	serious

ir	To go (present)
voy	I go/am going
vas	you go/are going
va	he/she/it goes/is going
vamos	we go/are going
vaís	you go/are going
van	they go/are going

ir	To go (preterite)
fui	I went
fuiste	you went
fue	he/she/it went
fuimos	we went
fuisteis	you went
fueron	they went

**Forming the preterite tense.**

Step 1: find the infinitive.

Step 2: Remove the –ar/–er/–ir .

Step 3: Add the appropriate preterite endings.

Preterite Tense Regular verb endings			
Subject	-ar	-er	-ir
yo (I)	-é	-í	-í
tú (you)	-aste	-iste	-iste
él/ella (s/he)	-ó	-ió	-ió
nosotros (we)	-amos	-imos	-imos

**Forming the near future tense.**

Step 1: Choose the correct conjugation of ‘ir’

Step 2: Add the infinitive

Examples:

voy a ver una película- I am going to watch a film

voy a sacar fotos—I am going to take photos

The future tense		
voy	a	jugar
vas		pasar
va		inviter
vamos		abrir
vaís		recibir
van		

Future Time markers	
Mañana	Tomorrow
La semana que viene	Next week
El mes que viene	Next month

**Adjectives**

Adjectives agree with gender and number of the noun.

They are positioned AFTER the noun.

mi padre es seri**o**                      my dad is serious

mi madre es seri**a**                      my mum is serious

mis padres son seri**os**                      my parents are serious

mis hermanas son seri**as**                      my sisters are serious

**Remember: you can only double the consonants in “**Carolina**”**

Key verbs			
infinitive	Past	Present	Future
trabajar (to work)	trabajé	trabajo	voy a trabajar
ganar (to earn)	gané	gano	voy a ganar
ayudar (to help)	ayudé	ayudo	voy a ayudar
comprar (to buy)	compré	compro	voy a comprar
tener que (to have to)	tuve que	tengo que	voy a tener que
querer (to want)	quise	quiero	voy a querer
ser (to be)	fui	soy	voy a ser
hacer (to do)	hice	hago	voy a hacer

**Using the definite article with jobs**

With jobs, we ***DO NOT need to use the article.***

We simply say ***soy + job***

Tricky spelling	
ayudar	no –n (ayundar)
mecánico	no –ch as in English

False Friends	
Conductor	driver

Frequency adverbs	
siempre	always
a menudo	often
de vez en cuando	from time to time
rara vez	rarely
nunca	never

Key Questions	
¿Qué haces para ayudar en casa?	How do you help at home
¿tienes un trabajo?	Do you have a job?
¿Qué vas a hacer en el futuro?	What are you going to do in the future?
¿en qué trabajan tus padres?	what do your parents do?



Verb	Present	Preterite	Near future
1. Ayudar To help	Ayudo I help	Ayudé I helped	Voy a ayudar I'm going to help
2. Comprar To buy	Compro I buy	Compré I bought	Voy a comprar I'm going to buy
3. Descansar To rest	Descanso I relax	Descansé I relaxed	Voy a descansar I'm going to relax
4. Descargar To download	Descargo I download	Descargué I downloaded	Voy a descargar I'm going to download
5. Disfrutar To enjoy	Disfruto I enjoy	Disfruté I enjoyed	Voy a disfrutar I'm going to enjoy
6. Escuchar To listen	Escucho I listen	Escuché I listened	Voy a escuchar I'm going to listen
7. Estudiar To study	Estudio I study	Estudié I studied	Voy a estudiar I'm going to study
8. Hablar To talk	Hablo I talk	Hablé I talked	Voy a hablar I'm going to talk
9. Llevar To wear	Llevo I wear	Llevé I wore	Voy a llevar I'm going to wear
10. Nadar To swim	Nado I swim	Nadé I swam	Voy a nadar I'm going to swim
11. Trabajar To work	Trabajo I work	Trabajé I worked	Voy a trabajar I'm going to work
12. Viajar To travel	Viajo I travel	Viajé I travelled	Voy a viajar I'm going to travel
13. Visitar To visit	Visito I visit	Visité I visited	Voy a visitar I'm going to visit
14. Aprender To learn	Aprendo I learn	Aprendí I learnt	Voy a aprender I'm going to learn
15. Beber To drink	Bebo I drink	Bebí I drank	Voy a beber I'm going to drink
16. Comer To eat	Como I eat	Comí I ate	Voy a comer I'm going to eat
17. Leer To read	Leo I read	Leí I read	Voy a leer I'm going to read
18. Compartir To share	Comparto I share	Compartí I shared	Voy a compartir I am going to share
19. Escribir To write	Escribo I write	Escribí I wrote	Voy a escribir I'm going to write
20. Vivir To live	Vivo I live	Viví I lived	Voy a vivir I'm going to live

## RRIRREGULAR

Verb	Present	Preterite	Near future
1. Conocer* To know	Conozco I know	Conocí I knew	Voy a conocer I'm going to know
2. Creer To believe	Creo I believe	Creí I believed	Voy a creer I'm going to believe
3. Decir To say	Digo I drink	Dije I said	Voy a decir I'm going to say
4. Encontrar To find	Encuentro I find	Encontré I found	Voy a encontrar I'm going to find
5. Estar To share	Estoy I am	Estuve I was	Voy a estar I'm going to be
6. Haber To have (aux.)	Hay There is/are	Hubo There was/were	Va a haber There is/are going to be
7. Hacer To do/make	Hago I do/make	Hice I did/made	Voy a hacer I'm going to do/make
8. Ir To go	Voy I go	Fui I went	Voy a ir I'm going to go
9. Jugar To play	Juego I play	Jugué I played	Voy a jugar I'm going to play
10. Pensar To think	Pienso I think	Pensé I thought	Voy a pensar I'm going to think
11. Perder To lose	Pierdo I lose	Perdí I lost	Voy a perder I'm going to lose
12. Poder To be able to	Puedo I can	Pude I could	Voy a poder I'm going to be able to
13. Poner To put	Pongo I put	Puse I put	Voy a poner I'm going to put
14. Preferir To prefer	Prefiero I prefer	Preferí I preferred	Voy a preferir I'm going to prefer
15. Querer To want	Quiero I want	Quise I wanted	Voy a querer I'm going to want
16. Saber* To know	Sé I know	Supé I knew	Voy a saber I'm going to know
17. Sacar To take	Saco I take	Saqué I took	Voy a sacar I'm going to take
18. Salir To go out	Salgo I go out	Salí I went out	Voy a salir I'm going to go out
19. Ser To be	Soy I am	Fui I was	Voy a ser I'm going to be
20. Ver To see	Veo I see	Vi I saw	Voy a ver I'm going to see

## USEFUL TIME EXPRESSIONS

Present tense	
Hoy Esta mañana/tarde Esta semana Este mes Este verano Esta noche	Today This morn./after. This week This month This summer Tonight
Past tense	
Ayer Anteayer Anoche El otro día El mes pasado La semana pasada El año pasado El verano pasado	Yesterday Day before yest. Last night The other day Last month Last week Last year Last summer
Future tense	
Mañana Pasado mañana La semana que viene El año/mes que viene	Tomorrow Day after tomorr. Next week Next year/month
FREQUENCY EXPRESSIONS	
Todos los días	Every day
Siempre	Always
Casi siempre	Almost always
Muchas veces	Lots of times
A menudo	Often
Dos o tres veces a la semana	Two or three times a week
A veces	Sometimes
De vez en cuando	From time to time
En ocasiones	Occasionally
Casi nunca	Almost never
Nunca	never

# PARENT/CARER QUIZZES

Ask your parent or carer to quiz you on some of the knowledge from **English, Maths, Science** or **MFL**.  
Record your scores below and see if you improve each time.

Date	Subject	Score /10	Did you improve from last time?

# Knowledge Organiser: WW1 (1914-1918)

M	Militarism
A	Alliances
I	Imperialism
N	Nationalism



Schlieffen Plan - Schlieffen's plan involved using 90% of Germany's armed forces to attack France. Fearing the French forts on the border with Germany. Schlieffen suggested an attack through Netherlands, Belgium and Luxembourg. The rest of the German Army would be sent to defend against the Russians. Once France had been overrun, the German Army could focus on Russia. This failed because the British and Belgians were stronger than they thought and the Russians mobilised quicker.

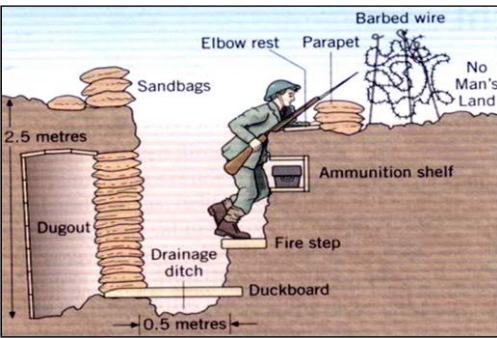


History

## Trenches

## Why did men join the war?

Long-term	A cause that happened a long time before an event.
Short-term	A cause that happened a short time before an event.



Patriotism-  
fight for  
country

The war would be  
over by Christmas-  
a quick victory

Propaganda-  
posters,  
leaflets



N	Nature
O	Origin
P	Purpose

## Living in the Trenches



"Cold nights, the discomfort of wet clothes, dragging minutes of fear on patrol, the sufferings of men ... but most of all the memory of tiredness. The chances of becoming ill were made greater because of the lack of clean water and proper washing and cleaning"



Battle of the Somme (1916)

1,738,000 shells were fired at the Germans. It was hoped that the artillery guns would destroy the German trenches and barbed wire placed in front of the trenches. When the bombardment stopped, the Germans would have known that this would have been the signal for soldiers to advance. They moved from the safety of their dugouts and manned their machine guns to face the British and French. By the end of the battle, the British had lost 420,000 soldiers. The French lost nearly 200,000 men and the Germans lost 500,000. They had gained less than 8 miles of land.

28<sup>th</sup> June 1914 -  
Archduke Franz  
Ferdinand assassinated.

1<sup>st</sup> August 1914 - Germany  
declares war on France.

12<sup>th</sup> August 1914 -  
France and Britain  
declares war on  
Austria-Hungary.



28<sup>th</sup> July 1914 -  
Serbia declares war.

4<sup>th</sup> August 1914 -  
Germany invade  
Belgium.





The Christmas Truce was a name given to a series of unofficial ceasefires upheld by both sides in the week running up to Christmas 1914.

It was initiated by the Germans, and saw both sides exchanging gifts of brandy and cigarettes, swapping addresses and photos, singing carols and playing games

# How did WW1 end?

German Ports were blockaded by the British Royal Navy causing severe food shortages. An estimated quarter of a million people died of hunger.



In April 1917, the USA came into the war against Germany

The German population demanded peace and the Kaiser fled the country – German leaders had no choice but to ask for an Armistice.

## Homefront



During WWI, the Home Front was very important to help Britain win the war in Europe. It wasn't just the soldiers affected by war - everyone in Britain had to help if they wanted to survive.

The Home Front during World War One refers to life in Britain during the war itself.









Terms of the Treaty of Versailles (1919)



## Russian Revolution

February 1913	Tsar Nicholas II celebrates 300 years of Romanov rule of Russia.
August 1914	Start of World War One. Russia does badly against Germany. Millions of Russians are killed and there are <b>severe shortages</b> on the home front.
March 1917	In St. Petersburg there are mass protests against the food shortages and the war. When the Tsar's troops refuse to fire on the crowds and join in the demonstration it becomes a <b>revolution</b> . The Tsar <b>abdicates</b> and a new Provisional Government takes over. However the new government decides to carry on the war.
April 1917	Lenin, the leader of the <b>Bolshevik Party</b> , returns to Russia. He declares everyone should have an equal share of Russia's wealth, peasants should have a share of the land, workers should have a share of the factory where they <u>worked</u> and the war should end immediately.
October 1917	Lenin and the Bolsheviks seize power using force from the Provisional Government. They set about transforming Russia into the world's first <b>communist</b> state.
March 1918	The Bolsheviks sign the <b>Treaty of Brest Litovsk</b> ending the war with Germany. Many felt it was a shameful peace with Russia forced to give up a huge amount of territory.
July 1918	The Tsar and his family are <b>murdered</b> in <u>Ekaterinberg</u> by the Bolsheviks.
1921	The Bolsheviks rename Russia the ' <b>Union of Soviet Socialist Republics</b> ' (U.S.S.R.) and rename themselves the <b>Communists</b> .

### What were the aims of the Big 3 at Versailles?

Country	Aims at the Paris Peace Conference
 Britain	The Prime Minister, David Lloyd George thought it was unwise to be too harsh on Germany but some of the British people wanted to get revenge. They were angry about the war. 
 France	France was keen on getting revenge on Germany because much of North East France was ruined. They wanted money to pay for the damage. 
 USA	The President Woodrow Wilson thought that everyone should discuss their problems rather than fight. He wanted a League of Nations. This would let everyone meet to discuss issues. 

1	<b>G</b> UILT
2	<b>A</b> RMY
3	<b>R</b> EPARATIONS
4	<b>G</b> ERMANY LOST LAND
5	<b>L</b> EAGUE OF NATIONS
6	<b>E</b> XTRAS

# Urban trends and change: Rio

Cities are growing around the world. Cities are growing for two main reasons:

1. **Rural to urban migration** - people are moving from the rural countryside to urban areas in search of jobs and a better quality of life.
2. **Natural increase** - migrants to cities tend to be of child bearing age and so the birth rate increases and this adds to further population growth.

Rural to Urban Migration is usually a result of **Push** or **Pull** Factors.

**Push Factors** - people leave the countryside because:

1. Farming is poorly paid
2. Poor harvests lead to famine
3. No schools or universities.

**Pull Factors** - people move to cities because:

1. Better paid jobs in factories
2. Higher standard of living (\$)
3. Better schools.

We can subdivide countries into three broad categories

LIC	Low Income Country, poor countries with GNI less than \$1045
HIC	High Income Country, rich countries where GNI per capita was \$12746 or more in 2013
NEE	Newly Emerging Economies, where countries are experiencing high levels of economic development. They are getting rich quickly.

The Importance of Rio regionally, nationally and internationally.

Regionally	It has important manufacturing, chemical and pharmaceutical industries.
Nationally	It used to be the capital of Brazil and is the second largest city in Brazil after Sao Paulo.
Internationally	The statue of Christ the Redeemer is on of the Seven New Wonders of the World. It helped host the 2014 World Cup and hosted the 2016 Olympic Games.

Urban Planning is attempting to improve the quality of life for the poor of Rio. **The Favela Bairro Project** aims to improve life in the favelas. Services for residents to build their own homes.

**Successful because...**

1. Paved roads, water supply and proper sanitation are all installed leading to a massive drop in diseases such as cholera.
2. Involving the local community in the making process has encouraged community pride.
3. Schools and health centres have been built improving the education and employability of the residents.
4. Pacifying Police Units (UPP) have been sent into each favela to break up the drug gangs and 'pacify' the area. This greatly reduces crime but they have been accused of being too aggressive.

Key words	Definitions
Urbanisation	The process where an increasing percentage of a country's population comes to live in towns and cities.
Migration	When people move from one area to another.
Natural Increase	The birth rate minus the death rate.
Mega-cities	An urban area with a total population in excess of 10 million people.
Economic opportunities	Chances for people to improve their standard of living through jobs and employment.
Social opportunities	Chances for people to improve their quality of life, includes access to education and healthcare.
Sanitation	Measures designed to protect public health with clean water and the disposal of sewage.
Pollution	Chemicals, noise, dirt and other substances which poison the environment.
Squatter settlement	An area of poor housing which is usually built spontaneously with whatever materials are available, sometimes called shanty towns. They lack services such as electricity, water and sewerage.
Waste recycling	The process of extracting and reusing useful substances found in waste.
Traffic congestion	Occurs when there is too great a volume of traffic for roads to cope with so traffic jams and traffic slows to a crawl.

Geography

Urban Growth has created **opportunities** for people who move to Rio.

Health	Hospitals are available in Rio, no. of doctors per head of much higher in the city than the countryside.
Education	Private university in Rocinha, school grants are given to poor families.
Resources (water and energy)	Seven new water treatment plants have been built recently and 300 km of pipes laid. New nuclear generator being built.
Economic Development	Jobs in factories, tourism and financial sector. Rio has the largest steelworks in S America.

Urban Growth has created **challenges** for the people of Rio.

Managing rapid growth - favelas	40% of people live in squatter settlements such as Rocinha. Waste builds up in the streets.
Providing clean water, sanitation and energy.	Conditions in the favelas are poor. 12% of Rio's population don't have access to running water.
Providing services such as education and health.	Many drop out of education as they need to support family, poor healthcare.
Reducing unemployment and crime	Difficult to provide enough jobs and many work in the informal sector such as street vendors. Pay in the informal sector is less than £60 a month.
Managing environmental Issues.	Rio is the most congested city in South America with huge pollution generating traffic jams.

**Unsuccessful because...**

1. The \$1 billion budget may not be enough.
2. Literacy is still too low making employment difficult.
3. Rents rise in the improved areas forcing poorest to leave.
4. The new infrastructure is not being maintained.



# DUAL CODING

Based on some key knowledge from your *History* and *Geography* knowledge organisers, can you assign different parts of this knowledge to images to help you remember this in the future?  
Consider your images carefully.

Image	Key Knowledge

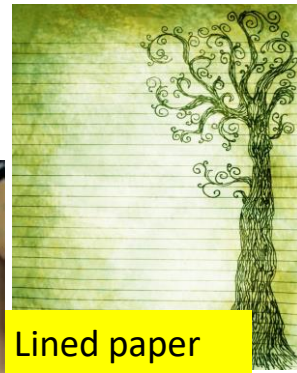
Image	Key Knowledge



Scrap paper



Tracing paper



Lined paper



Newspaper



Wallpaper

# Creative Paper

Ideas on how to produce more interesting backgrounds to create your artwork on.



Old envelopes



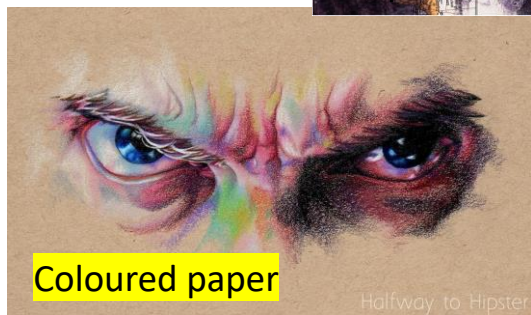
Maps



Maths paper



Collage and water colour wash.



Coloured paper



Coffee wash

**Monoprinting** is the process of making a print using 'mark making'.

Mark making is any mark made using any material on any surface, such as:

- pencil on paper
- photoshop brush mark on a screen
- scratch in clay
- paint on a canvas.

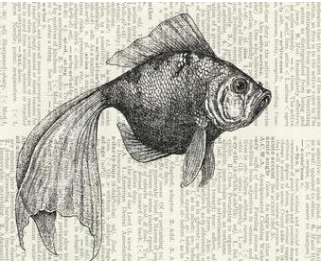
A mark can be a line, a dot, a scratch, a curve, a thumbprint and so on. Using different tools can help create different thicknesses and types of marks.

The colour used to create monoprints is usually water-based ink. A roller is used to apply the ink evenly over the a printing sheet. This is usually an acrylic sheet or other washable flat surfaces.



**Etching** is the process of printing produced by 'etching' patterns, shapes and designs into the surface of a metal or acrylic plastic plate.

- 1.Scratch your image or design into the surface of the plate.
- 2.Apply colour by rolling ink onto the etched surface.
- 3.Wipe the surface so that only the ink collected in the in the scratched areas is left.
- 4.Carefully place paper on top of the inked sheet.
- 5.Use a printing press to apply pressure and lift the image onto your paper.



**Collograph Printing** is a type of printmaking, traditionally made from a collaged printmaking plate. Shapes and textures are layered on a plate (usually metal, masonite or plexiglass) and sealed with a gloss varnish. After the sealed assemblage dries, the surface is inked, and wiped, intaglio style, with tarlatan, which is starched cheese cloth. The wiping removes ink from the uppermost surface area, but leaves plenty of pigment embedded around the textural elements and caught against the curbs of layered shapes on the collage. When the inked and wiped collagraph plate is pressed against paper, usually on a press, the resulting collagraph print is richly textured and wonderful.

## PRINTING TECHNIQUES

There is a wide variety of printing techniques to explore... here are some examples.



### Silkscreen Printing

A print is made using a or **acetate** placed over a mesh cloth stretched over a heavy frame. A stencil can be created by carefully cutting out a design from paper and then attaching it to the silkscreen. The design is printed by having a **squeegee** force colour through the pores of the material in the areas that are not blocked out by the stencil. Silkscreen prints are usually made with acrylic paint that is mixed with a **binder**, to allow the colour to flow easily through the pores and to fix the design. The most successful silkscreen prints use bold, simple shapes and designs with limited colours. For example, Andy Warhol's Cow .



The Great Wave, Katsushika Hokusai, 1830-32, woodblock print.

**Block Printing** Is the process of carving patterns, shapes and designs into a 'block'. The 'block' could be made of wood, acrylic plastic sheet, lino or metal. Different materials are suited to different results:

- Wetal or **acrylic** sheets can produce much finer lines with 'sharper' detail.
- Wood and lino are more suited for bolder images.

The drawback with all of these materials is that each mark you make on the printing sheet will be printed – you cannot afford to make any mistakes. Block prints are usually made with oil-based ink.

Year 9: Photo Frame  
User centred design



So, who are the users?  
What do they do?



**Manufacturer -**  
Responsible for making the product.



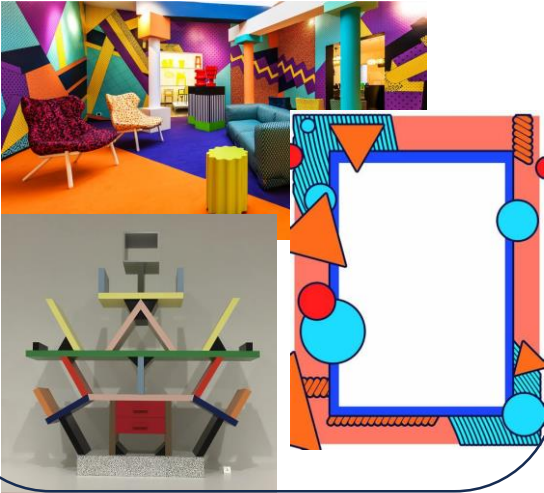
**Retailer -**  
Responsible for selling and advertising the product.



**Consumer -**  
• YOU!  
• The person who the product is targeted at.  
• The person who will buy the product.



Memphis Design is an influential postmodern style that emerged from the celebrated Memphis Design collective of Milan-based designers in the early 1980s. It was spearheaded by the legendary Italian designer Ettore Sottsass (1917-2007)



Production methods

**One off production** – a single unique manufacture of a bespoke item.  
**Batch production** - is a manufacturing method where sets of identical goods go through production stages together.  
Just in time production - is system of production that makes and delivers just what is needed, just when it is needed, and just in the amount needed.  
Mass production - the production of large quantities of a standardised article by an automated mechanical process.

**Technology Push** is when new developments in materials and technologies improve existing products/create new ones.  
**Market Pull** is when consumers demand improvements/new products. Often found by conducting market research.

Sustainable design: The 6 R's

- |         |  |
|---------|--|
| Recycle | Reprocess the material and make something else   |
| Reuse   | Take a product and use for a different purpose without reprocessing it                     |
| Repair  | If something breaks, try to fix it   |
| Refuse  | Refuse to buy or use something that is not needed  |
| Reduce  | Consider making the item small or using less materials, and less impact on the environment |
| Rethink | Look for alternative ways of making something or improving a design                        |

Mitre

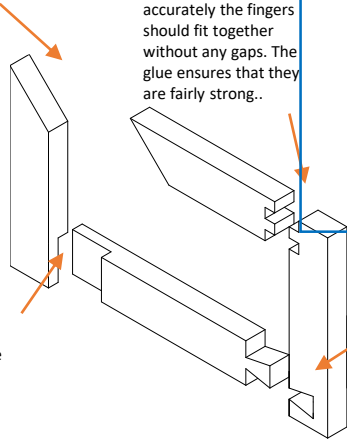
It is made by cutting 2 pieces of timber at angle of 45 degrees to ensure they fit into each other

Finger

If the joint is cut accurately the fingers should fit together without any gaps. The glue ensures that they are fairly strong..

Half lap

This can be used in the construction of picture frames, windows and doors. Half the thickness of the wood is removed from the 2 pieces to be joined. The wood is then fitted together with a resulting joint that is the same thickness as the rest. This can be reinforced by dowels or fasteners.



Manufacturing processes

**Vacuum forming** is a simplified version of thermoforming, whereby a sheet of plastic is heated to a forming temperature, stretched onto or into a single-surface mould, and held against the mould by applying a vacuum between the mould surface and the sheet. The vacuum forming process can be used to make most product packaging and speaker casings.

**Laser Cutting** is a technology that uses a laser to vaporize materials, resulting in a cut edge.

**3d Printing** process of making a physical object from a three-dimensional digital model, typically by laying down many thin layers of a material

**Line Bending** It involves passing an electric current through a conductive wire creating a low heat. The plastic to be formed is then placed over the wire at the precise place where the bend is required.

**Injection moulding** the shaping of rubber or plastic articles by injecting heated material into a mould.

**Die Cutting** is a manufacturing process where a die is customised through cutting, forming or shearing to craft a desired shape

Dovetail

The joint is very strong because of the way the 'tails' and 'pins' are shaped. This makes it difficult to pull the joint apart and virtually impossible when glue is added. This type of joint is used in box constructions such as drawers, jewellery boxes, cabinets and other pieces of furniture where strength is required. It is a difficult joint which requires practice. There are different types of dovetail joint and when cut accurately they are very impressive and attractive

Year 9: Photo Frame User centred design

Engineering Vocabulary: Talk like an Engineer

**Felling**- the process of cutting down trees.

**Veneer**-a thin decorative covering of fine wood applied to a coarser wood or other material.

**Seasoning**-process of drying out or removing moisture from natural wood.

**Prototype**- a draft model to test an idea.

**Smart materials**-materials that have one or more properties that react to stress, moisture, electric or magnetic fields, light, temperature, pH, or chemical compounds.

**Resin** –synthetic substance used in glues and varnishes.

**Adhesive**- glue.

**Crating**- a technique for drawing accurately using boxes.

**Isometric**- horizontal lines are at 30 degrees. A technique for drawing in 3D.

**CAD**- Computer Aided Design.

**Tri-Square**- used for marking straight lines parallel to a straight edge- not measuring.

**Coping Saw**- cuts curves and is used for thick wood or plastic.

**Tenon Saw**- cuts straight edges on wood only.

**Glass Paper**- smooths wooded surfaces to prepare for painting.

**Working drawing** – an accurate drawing of a design with all the measurements used in manufacturing.

**Finger Joint**- used for box joints. Interlocking fingers.

**Butt Joint**- pushing two ends of a material together.

**Dowelling Joint**- small wooden rods used to join wood.

**Iterative Design**- circular design process, continued development and improvement with testing.

**Sustainable** –renewable, green design.

**Sustainable design** is the intention to reduce or eliminate negative environmental impacts through design.

A client profile is a summary of a specific customer type that is based on available statistical information. It helps businesses to identify which potential clients are good prospects and which ones aren't. A client profile is part of a sales strategy that allows businesses to create marketing materials and form valuable connections with clients. The ideal client profile is a very clear description of the type of client you are targeting. A designer will use a client profile to ensure their work is successful and commercially viable.

Target Market

[tär-gat 'mär-kat]

A group of people that have been identified as the most likely potential customers for a product because of their shared characteristics such as age, income, and lifestyle.



**Jigs and Templates** enable more than one part to be made several times, quality control in batch production.

**Bench Hook** is for steadying and supporting work, it hooks into the bench vice.

**Vice** Used to clamp work to the bench to keep it steady.

**Glass Paper** is for smoothing work.

**Flat Files** are also use for smoothing.

**M.D.F.** Medium Density Fibreboard ( Manufactured wood made from wood fibres and glue).

**Pine**: A natural softwood.

**Acrylic**: A type of plastic.

**Copper**: A conductive metal wire used for electronic circuits.

**Conductive**: allows electrical current to travel or 'flow' through it.

**Risk Assessment** a process of evaluating the potential risks that may be involved in a projected activity or undertaking.

**L.E.D**: Light Emitting Diode ( a small light to indicate power in a circuit).

**Resistor**: In electronic circuits, resistors are used to reduce current flow.

**U.S.B**: Univeral Serial Bus; electrical connector.

**Design Situation**: A problem that has been identified.

**Design Brief**: A statement to explain how you will solve the problem ( design situation)

**Design Specification**: A list of requirements your product must have or include to be successful and solve the design situation.

**Prototype**: a fully functional, full size working product. A test model or first draft, sometimes in cheaper materials.

<b>Ferrous</b> These are metals that contain iron. This means the metal will rust.
<b>Non-Ferrous</b> These are metals that do not contain iron and therefore do not rust.
<b>Alloy</b> is a metal (parent metal) combined with other substances resulting in superior properties such as; strength, hardness, durability, ductility, tensile strength and toughness
<b>Thermoplastic</b> These plastics can be re-heated and re-shaped in various ways. They become moldable after reheating as they do not undergo significant chemical change
<b>Thermoset</b> Once heated and moulded, these plastics cannot be reheated and remoulded. The molecules of these plastics are cross linked in three dimensions, and this is why they cannot be reshaped or recycled.
<b>ERGONOMICS</b> Using data to make a product comfortable and easy to use for the user.
<b>ANTHROPOMETRIC</b> Data is used to determine the size, shape and/or form of a product, making it more comfortable for humans to use and easier to use.

## Year 9 Rotation Textiles Knowledge Organiser: Methods of fabric decoration

### Annotating design ideas and work of other designers:

Use the following questions to help you annotate your work:

1. What colours do you use a lot of? What effect does this give?
2. Who do you think your designs are aimed at? Why?
3. Explain what you like/dislike about your work and why that is.
4. What techniques will you use to create your design and why?
5. Could different techniques be used to create different effects?
6. How does your design fit into the theme?

### Batik

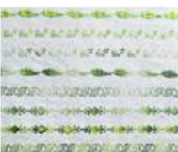
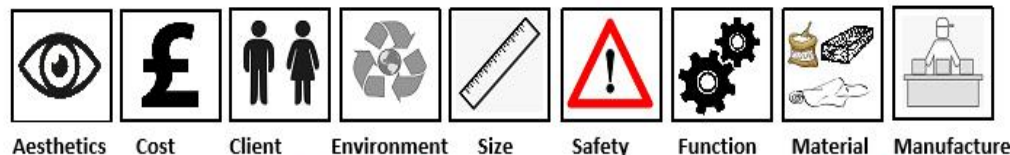
Batik is a traditional Textile technique which combines painting and dyeing. This is traditionally made by dipping a specially designed **Tjanting** tool into **melted wax** and painting various patterns onto pieces of white fabric.

The wax stays on the fabric and often cracks after it hardens. The fabric is then **dye**d, the dye seeps the cracks and makes fine lines.

When the wax is removed, beautiful patterns appear on the cloth.

Batik fabric can be made into garments, scarves, bags, table-cloths, bedspreads, curtains and other decorative items.

### Equipment needed:



Decorative machine embroidery



### KEY POINTS TO REMEMBER

There is a difference between Analysing and Stating. Analysing will always get you more marks than Stating.

**Denotation:** Literally stating what something is

**Connotation:** Explaining the meaning of something, what it represents.

### See example below:

This is a pink heart.  
It represents, love and friendship.



### Decorative hand embroidery

Different types of embroidery thread



Different size embroidery needles



Different size embroidery rings



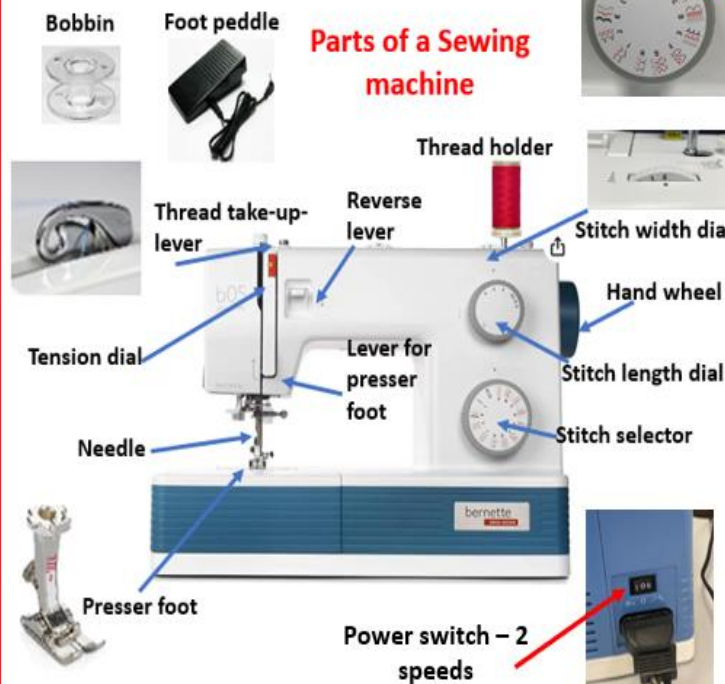
Embroidery scissors



Range of different embroidery stitches



### Parts of a Sewing machine



Stitch selector:  
A = straight stitch  
B = Zig-zag stitch



Stitch length dial



Reverse Lever

### Important points to remember when using a sewing machine:

1. Put both threads under the **presser foot** and to the back of the machine.
2. Lower the **presser foot** down onto your fabric.
3. When lowering the needle and taking it out of your work always turn the **hand wheel towards you**.
4. When taking your work out of the machine make sure the **take-up-lever** is at the **top** and you can see it.

# Graphics

## Vocabulary:

Illustration: a picture illustrating a book, newspaper, etc...

Visualisation: the representation of an object, situation, or set of information an image.

Depiction (depict): represent by a drawing, painting, or other art form

Thumbnail: incredibly rough initial sketch

Initial Idea: Refined more accurate idea, improving the quality and making it look much cleaner

Developed Idea: refine an initial idea to better meet the design brief.

Rendering: adding colour or shade to create texture and depth

Elucidate:make (something) clear; explain.

Depiction ( depict): represent by a drawing, painting, or other art form

Satirical: from the word sarcastic, to be critical or mock others

## Graphic Design

### DESIGN TECHNOLOGY

Problem Solved!

An illustration is a decoration, interpretation or visual explanation of a text, concept or process, designed for integration in print and digital published media, such as posters, flyers, magazines, books, teaching materials, animations, video games and films. An illustration is typically created by an illustrator.

Illustrations can also represent scientific images of flora, medicine or different processes, a biological or chemical processes or technical illustrations to give information on how to use something.

### What is the purpose of illustration?


Examples of where you might find illustration might be in picture books, advertising, magazines, newspapers, instruction manuals, posters for gigs or movies, products like T-shirts or greeting cards and even in fashion and film. An illustrator is responsible for taking an idea and turning it into something visual.

What is the difference between an illustration and a drawing?

An illustration is a drawing (or painting, collage, engraving, photo, etc.) that explains something. The illustration doesn't have to be drawn—a photo in an encyclopaedia is also an illustration, because it explains what is written. So, if your drawing is not explaining something, it is a work of art, not an illustration.



Onomatopoeia visual artwork



Markers are a great way to make 2D drawings look 3D by adding light and dark tones. With practice they are more realistic and vibrant than painting and pencil crayons. Many product designers and illustrators use this method.



Jon Klassen is a Canadian illustrator and cartoonist specialising in children's picture books, editorial cartoons and caricatures.



### What is Pop Art?

Pop art is a fun form of art. Artists takes their images from **everyday culture**, from the objects that surrounded them in their daily lives.

Pop art works also include elements of popular culture such as newspapers, magazines or comics. The designs use cartoon styles with bright vibrant colours and repetitive patterns. A famous pop artist who worked in this comic strip style is called Roy Lichtenstein. Some of Lichtenstein's designs are shown below:



Printing Technique	Outline of process	Uses/Examples
Screen Printing ( Stencil)	Images are printed through a screen mesh using stencilling techniques.	<ul style="list-style-type: none"><li>•fine art prints</li><li>•posters</li><li>•textiles (fabric, t-shirts)</li><li>•interiors (wallpapers, curtains)</li></ul>
Block Printing ( Relief)	Carving patterns, shapes and designs into a 'block'. The 'block' could be made of wood, acrylic plastic sheet, lino (linoleum) or metal.	<ul style="list-style-type: none"><li>• fine art prints</li><li>•printing lengths of fabrics</li><li>•greeting cards</li></ul>
Engraving (Intaglio )	Making incisions or grooves in a plate, covering the plate with ink, and wiping the surface, so that the ink remains in the grooves.	<ul style="list-style-type: none"><li>• Fine art prints</li><li>•Posters</li><li>•Books illustrations</li></ul>
Mono Printing (Planograph hic)	Draw designs directly onto an inked surface lay a piece of paper on top of the inked surface to pick up the design.	<p>Mono-printing is mainly used for fine art prints and textiles work. It is used for single prints or very small 'runs'.</p> <p>Lithographic is used for magazines and posters which are printed in high volumes.</p>

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# Year 9 Food Studies Rotation

Most food poisoning can be traced to one of three major causes: bacteria, parasites, or viruses. These pathogens can be found on almost all of the food humans eat. However, heat from cooking usually kills pathogens on food before it reaches our plate. Foods eaten raw are common sources of food poisoning because they don't go through the cooking process.

Occasionally, food will come in contact with the organisms in faecal matter or vomit. This is most likely to occur when an ill person prepares food and doesn't wash their hands before cooking. Meat, eggs, and dairy products are frequently contaminated. Water may also be contaminated with organisms that cause illness.

## Sources of food poisoning

Food can become contaminated during production, preparation and retailing. The main sources are:

- Raw food-for example meat, poultry, shellfish and eggs.
- People- food-poisoning bacteria are found on the skin, in septic wounds, in the nose and sometimes in the gut.
- Pests- for examples rats, mice, cockroaches, ants, wasps and flies.
- Animals- domestic pets and farm animals can carry *E.coli* in their intestines.
- Air and dust- food must be covered as bacteria in the air can settle on the surface.
- Water- bacteria such as *Salmonella* are carried in untreated water.
- Soil- bacteria and spores can survive in soil, so can be found on unwashed vegetables.
- Food waste-waste needs to be disposed of correctly as it could be a source of contamination and may attract pests.



## Conditions necessary for food poisoning

Visible symptoms	Non-visible symptoms
Shivering Diarrhoea Vomiting	Feeling tired or weak Stomach ache Headache Feeling nauseous (sick)

Bacteria can grow rapidly in the correct conditions. A single **bacterium** can divide into two by the process called **binary fission**. A single bacterium can produce 16 million bacteria in only 12 hours.

Food poisoning bacteria have four essential requirements for growth:

- **Food**- bacteria grow rapidly in high risk foods that are good sources of protein; such as cooked meat and poultry, shellfish, and seafood, undercooked or lightly cooked eggs, unpasteurised milk and cheeses, cooked rice and pasta, and salads.
- **Moisture**- bacteria cannot multiply without moisture, which means that they do not usually affect dried foods or products with high quantities of salt or sugar, which absorb water.
- **Warmth**- most bacteria multiply at **ambient temperature** -normal room temperature. This falls within the danger zone between 5°C and 63°C. Below 5°C most bacteria are unable to multiply rapidly, and below -18°C they become **dormant**. Cooking food at high temperatures above 63°C will destroy most bacteria; when cooked, the food should reach 75°C for at least two minutes.
- **Time**- in the right conditions the number of bacteria can double every 20 minutes.

The acidity and alkalinity of a food can influence the growth of bacteria. If conditions are too acidic or too alkaline, bacteria can not grow.

## Symptoms of food poisoning

- A symptom is a sign or indication of a disease.
- The body reacts to bacteria or toxins by developing symptoms such as diarrhoea, vomiting, stomach pains, headache and sweating.
- Some of these symptoms are visible and some are non-viable

## Symptoms of food allergies

A food allergy is a serious reaction to a food or ingredients in food. It is caused by the body's immune system reacting to an allergen. If the reaction to a food is a bad one, it could give the following symptoms:

- Skin rash
- Itchiness of skin, eyes and mouth.
- Swollen lips, face, eyes
- Difficulties in breathing.

In severe cases, it can bring about anaphylactic shock- the person develops swelling in their throat and mouth, making it difficult to speak or breathe. This can lead to death if appropriate treatment, such as an EpiPen, is not used quickly.

## Symptoms of food intolerances and coeliac disease

Some people have a sensitivity to certain foods, which can cause symptoms such as nausea, abdominal pain, joint aches and pains, tiredness and weakness. This is called a food intolerance- this is not an allergic reaction and it does not involve the immune system.

Coeliac disease is neither a food allergy nor a food intolerance but an autoimmune disease caused by a reaction of the immune system to gluten- a protein found in wheat, rye and barley. The symptoms of coeliac disease vary from person to person and can range from mild to severe.

Symptoms of coeliac disease include:

- Severe diarrhoea, excessive wind and/or constipation
- Persistent or unexplained gastrointestinal symptoms, such as nausea and vomiting.
- Recurrent stomach pain, cramping or bloating.
- Iron, vitamin B12 or folic acid deficiency.
- Anaemia
- Tiredness
- Sudden or unexpected weight loss.

## Symptoms of lactose intolerance include:

- Abdominal pain
- Nausea
- Diarrhoea
- flatulence

**Environmental Health Officers (EHOs)** are responsible for carrying out measures to protect public health and to provide support to minimise health and safety hazards.

## Role of EHOs

- They look after the safety and hygiene of food through all stages of the manufacture or production from distribution to storage and service.
- They help develop, co-ordinate and enforce food safety policies.
- They have the right to enter and inspect food premises at all reasonable hours and can visit without advance notice.
- They carry out routine inspections of all food premises in their area; the frequency of routine inspections depends on the potential risk posed by the type of business and its previous record- some high-risk premises may be inspected at least every six months, others much less often.
- They visit premises as a result of a complaint.
- They have powers of enforcement and can close businesses in extreme cases.

## Responsibilities of EHOs

- They check that food producers handle all food hygienically so as not to give customers food poisoning.
- They check that food is being kept at the specific temperatures at which it should be stored or held.
- They check that staff are properly dressed, with clean nails, no jewellery, hair covered or tied back, and showing good hygiene habits.
- They review processes in the workplace, such as the handling of food, use of equipment, use of colour coded chopping boards, washing-up and disposal of waste.
- They inspect food stores-fridges, freezers and dry stores.
- They check stock rotation and temperature logs
- They check that equipment is clean, well maintained and with safety notices if appropriate.
- They check the temperature of the food when it is cooked with probes to ensure that it is at the correct temperature.
- They ask questions to check compliance with the law or good practice
- They identify potential hazards
- They review safety management systems and plans
- At the end of an inspection they give verbal feedback, discuss any problems and advise on possible solutions. They complete a report of inspection findings, which tells the business what **enforcement action** is to be taken.



## DT: Food



## Enforcement action

Enforcement action is required by law following an inspection from an EHO.

Enforcement action can range from verbal advice, informal or formal letters, and notices through to prosecution.

**Formal Inspection letters-** tells the food business which issues must be addressed to comply with the law. The EHO may revisit the business to check that the issues have been resolved.

**Hygiene Improvement Notices-** An EHO can serve a Hygiene Improvement Notice when they believe that a food business is failing to comply with food hygiene regulations. This notice will specify what's going wrong and what needs to be done by which date. The EHO will visit again to see if the required work has been done. If it has not improved, it can lead to a fine or imprisonment.

**Hygiene Emergency Prohibition Notices-** If an EHO believes that there is a significant risk to health and injury, a Hygiene Emergency Prohibition Notice may be served. The notice stops the use of the unsafe equipment, processes or premises immediately. It can only be removed by an EHO once the issues have been addressed.

**Voluntary closure-** A food business may elect to close voluntarily to carry out improvements. However, should the business reopen before the improvements are completed, the EHO will serve a Hygiene Emergency Prohibition Notice.

**Seizure and detention of food-** EHOs have the power to inspect and seize food suspected of not meeting food safety regulations. Food is taken if there is suspicion that it is contaminated and is likely to cause food poisoning or disease. Seized food may undergo microbiological examination and testing.

**Condemnation of food-** In order to condemn or seize food, the EHO must present their findings to a court. They will consider the information and decide whether the food poses a risk to human health and whether or not to condemn it.

**Voluntary surrender of food-** The owner of a business may surrender unfit food to the EHO voluntarily. This would avoid the involvement of the court.

## Food Safety Act 1990

- This act is concerned with all aspects of food production and sale.
- It affects everyone involved in the production, processing, storage, distribution and sale of food.
- It ensures that all food produced is safe to eat.
- The act states that it is an offence to make food sold for human consumption unsafe to eat.
- A food producer or retailer may not add any substances to food, or subject food to any process or treatment, which will make it harmful to health.
- An EHO may inspect any food intended for human consumption at any reasonable times. If the food is regarded as unfit for human consumption, it may be seized.
- The legislation also provides a defence for food producers, processors and retailers. They must prove that all reasonable precautions were taken to prevent a food safety incidence. This is called **due diligence**.
- Failure to take reasonable precautions can result in prosecution.
- Magistrates' courts may impose a fine, prison sentence or both for offences committed.

## Hazard analysis and critical control points (HACCP)

This is a process that is designed to help look at how you handle food and to put procedures in place to ensure that the food you produce is safe to eat.

Every business that produces, sells or serves food is required to have a HACCP plan in place with a written **food safety plan**. It is the responsibility of the owner of the business to develop an appropriate food safety management system based on HACCP.

HACCP systems should apply the following principles:

1. Create a flow chart or table showing each step in the preparation, making, serving and storing of each dish.
2. Each step should be analysed to identify the hazards. Hazards can be:
  - Physical- foreign materials can cause injury to the consumer; these might be metal or plastic, or natural hazards such as bones in fish.
  - Biological- food can become infected by bacteria, which might lead to food poisoning
  - Chemical- potentially dangerous chemicals such as cleaning fluids can contaminate food.
3. Identify what can be done to control (prevent) the hazard.
4. Set guidelines on how to ensure food is going to be safe to eat- these are known as critical limits- and keep a record of this.
5. When new dishes are made, there needs to be a HACCP review to ensure that they are safe to eat.
6. All the documentation relating to the HACCP needs to be kept safe.

Love Food Hate Waste

BEST BEFORE

‘Best before’ refers to quality: your food will be at its best before the date given. After this date, it might not be at its best, but it will still be safe to eat. Use your senses to make a judgement.

Depending on how your food is stored, it has the potential to be good enough to eat for a long time after this date. Here’s a guide to a few key food items and how long after the date they can be eaten:

- Crisps – one month
- Biscuits – six months
- Cereals – six months
- Canned food – 12 months
- Confectionary – 12 months
- Pasta sauce – 12 months
- Dried pasta – three years!

USE BY

‘Use by’ refers to safety: you must not eat food past the ‘use by’ date. You cannot always smell the bacteria that causes food to spoil, so after the ‘use by’ date, the food may appear perfectly fine to eat, but could still lead to food poisoning. Let’s be absolutely clear: you should NOT eat food after the ‘use by’ date - even if it looks and smells OK.

Top tip: you can freeze food right up to and including the ‘use by’ date. If you’re not sure you will eat it in time, freeze it for another day!

DISPLAY UNTIL / SELL BY

These dates are for the retailers – not us at home. You don’t need to worry about these.

Some products, such as uncut fruit and vegetables and wine, for example, aren’t required to have a date label, and there are specific regulations referring to hen’s eggs, which require the use of a Best Before date.

An average family of four can save £60 a month simply by reducing the amount of food they throw away. There are lots of simple food hacks and tips on this website to help you learn how to be smarter with handling food from the moment you start thinking about shopping through to when you are cooking, preparing and serving your meals.

**Leftover food recipes** – not sure what to do with the odd bits of food left in your fridge? Take a look at the love food hate waste website [leftover recipes](#) to find something to create with your leftovers. Tip: type in two or three of your leftover foods in the search bar to find relevant recipes to make.

**Freeze leftovers** – cooked or prepared too much? No problem – just pop them in a container or sealed bag, write the date and what the food is on a label and place it in your freezer. You can freeze most food. **Planning how to be a smarter shopper** – not everyone likes to plan, however, being ahead of the game with your weekly shopping will help you save a few pounds so it’s worth it. Here are a few tips to think about:

•**Make planning your meals a fun family activity** – ask your younger folk to choose something they would like to help you make during the week. If you have some fussy eaters this might also save some food from the bin too as they are more likely to eat food they’ve helped to make.

•**If you live with friends** – share an evening meal once a week and make it a social affair. Decide what you’ll cook before you go shopping.

•**Plan some one-pot meals** – so meal cooking is simple and you can use up what’s left in your fridge too. You can switch the ingredients to use up the food you already have. **Plan the rest of your meals around your favourites** – remember that you can include frozen food or staples from your cupboard. Mixing up the types of food you buy and use for your meals means there’s less chance of having too much fresh food that is likely to go off before you can use it.

**Top tip** – why not write each of your favourite recipes onto one small piece of card per recipe (suggestion: cut up an old cereal box) plus one card for each day of the week. Stick the days of the week onto your fridge or cupboard door in a row. Then you can easily play around with your meals for the week under each day until you are happy. Plus – you can easily swap meals around if you don’t fancy one on the planned day. Encourage your family, partner or housemates to join in too.

**Know what you need before you get to the shop by making a list** – and stick to it. We know that this is harder than it seems, however, it’s worth finding a way that works best for you. Make it easy and simple by following some of these ideas:

•**Fridge/cupboard/freezer shelfies** – take a snap of the food you have left in your fridge, cupboard and freezer before you hit the shop to remind you what you have already got. This will save you from buying more than you need.

•**Keep an ongoing list on your phone** - using your notes app or send a text message to yourself.

•**Pop some note paper on your fridge door** - and make a note of things you are running out of.

•**Prepare your list in the layout of your supermarket** – this will enable you to spend less time shopping and more time at home enjoying your food.

•**Plan weekly shops** – by reducing the number of times you visit a supermarket you will reduce the temptation to buy extras!



# REVISION CLOCK

Based on your current **DT** rotation, complete a revision clock which revises a number of the key pieces of knowledge included both on your knowledge organiser sheet and from your lessons. For each 5 minute section, add a new title and key information.

Page 28

The diagram is a large square divided into 12 equal segments by lines radiating from a central point. In the center is a circular clock face with numbers 1 through 12. Each segment of the square is associated with a rectangular box for notes, located either inside or outside the segment's boundary. The boxes are positioned as follows:

- Segment 1 (top-right): Box inside the segment.
- Segment 2 (right): Box outside the segment to the right.
- Segment 3 (bottom-right): Box outside the segment to the right.
- Segment 4 (bottom): Box outside the segment to the right.
- Segment 5 (bottom-left): Box outside the segment to the left.
- Segment 6 (left): Box outside the segment to the left.
- Segment 7 (top-left): Box outside the segment to the left.
- Segment 8 (top): Box outside the segment to the left.
- Segment 9 (top-right): Box inside the segment.
- Segment 10 (right): Box outside the segment to the right.
- Segment 11 (bottom-right): Box outside the segment to the right.
- Segment 12 (bottom): Box outside the segment to the right.

There is a small vertical line in the top-left segment, near the 10 o'clock position.

# SOUNDTRACKS

## Exploring Film Music



### A. The Purpose of Music in Film

Film Music is a type of **DESCRIPTIVE MUSIC** that represents a **MOOD, STORY, SCENE** or **CHARACTER** through music. It is designed to **SUPPORT THE ACTION AND EMOTIONS OF THE FILM ON SCREEN**. Film Music can be used to:

- Create or enhance a mood (though the **ELEMENTS OF MUSIC**);
- Function as a **LEITMOTIF** (see D);
- To emphasise a gesture (**MICKEY-DOING** – when the music fits precisely with a specific part of the action in a film e.g. cartoons);
- Provide unexpected juxtaposition/irony (using music the listener wouldn't expect to hear giving a sense of uneasiness or humour!);
- Link one scene to another providing continuity;
- Influence the pacing of a scene making it appear faster/slower;
- Give added commercial impetus (released as a **SOUNDTRACK**) – sometimes a song, usually a pop song is used as a **THEME SONG** for a film;
- Illustrate the geographic location (using instruments associated with a particular country) or historical period (using music 'of the time').

### D. Leitmotifs

**LEITMOTIF** – A frequently recurring short melodic or harmonic idea which is associated with a character, event, concept, idea, object or situation which can be used directly or indirectly to remind us of one not actually present on screen. Leitmotifs can be changed through **SEQUENCING, REPETITION** or **MODULATION**,

giving a hint as to what may happen later in the film or may be heard in the background, giving a "subtle hint" to the listener e.g. the "Jaws" Leitmotif.

### E. History of Film Music

Early films had no soundtrack ("**SILENT CINEMA**") and music was provided live, usually **IMPROVISED** by a pianist or organist. The first **SOUNDTRACKS** appeared in the 1920's and used existing music (**BORROWED MUSIC** – music composed for other (non-film) purposes) from composers such as Wagner and Verdi's operas and ballets. In the 1930's and 1940's, Hollywood hired composers to write huge Romantic-style soundtracks. **JAZZ** and **EXPERIMENTAL MUSIC** was sometimes used in the 1960's and 1970's. Today, film music often blends **POPULAR, ELECTRONIC** and **CLASSICAL** music together in a flexible way that suits the needs of a particular film.

### B. How the Elements of Music are used in Film Music

**PITCH AND MELODY** – **RIISING MELODIES** are often used for increasing tension, **FALLING MELODIES** for defeat. Westerns often feature a **BIG THEME**. **Q&A PHRASES** can represent good versus evil. The **INTERVAL OF A FIFTH** is often used to represent outer space with its sparse sound. **DYNAMICS** – **FORTE (LOUD)** dynamics to represent power; **PIANO (SOFT)** dynamics to represent weakness/calm/resolve. **CRESCENDOS** used for increasing threat, triumph or proximity and **DECRESCENDOS** or **DIMINUENDOS** used for things going away into the distance. Horror Film soundtracks often use **EXTREME DYNAMICS** or **SUDDEN DYNAMIC CHANGES** to 'shock the listener'. **HARMONY** – **MAJOR** – happy; **MINOR** – sad. **CONSONANT HARMONY OR CHORDS** for "good" and **DISSONANT HARMONY OR CHORDS** for "evil". **SEVENTH CHORDS** often used in Westerns soundtracks. **DURATION** – **LONG** notes often used in Westerns to describe vast open spaces and in Sci-Fi soundtracks to depict outer space; **SHORT** notes often used to depict busy, chaotic or hectic scenes. **PEDAL NOTES** – long held notes in the **BASS LINE** used to create tension and suspense. **TEXTURE** – **THIN/SPARE** textures used for bleak or lonely scenes; **THICK/FULL** textures used for active scenes or battles. **ARTICULATION** – **LEGATO** for flowing or happy scenes, **STACCATO** for 'frozen' or 'icy' wintery scenes. **ACCENTS (>)** for violence or shock. **RHYTHM & METRE** – 2/4 or 4/4 for Marches (battles), 3/4 for Waltzes, 4/4 for "Big Themes" in Westerns. **IRREGULAR TIME SIGNATURES** used for tension. **OSTINATO** rhythms for repeated sounds e.g. horses.

### C. Film Music Key Words

**SOUNDTRACK** – The music and sound recorded on a motion-picture film. The word can also mean a commercial recording of a collection of music and songs from a film sold individually as a CD or collection for digital download. **MUSIC SPOTTING** – A meeting/session where the composer meets with the director and decides when and where music and sound effects are to feature in the finished film. **STORYBOARD** – A graphic organiser in the form of illustrations and images displayed in sequence to help the composer plan their soundtrack. **CUESHEET** – A detailed listing of **MUSICAL CUES** matching the visual action of a film so that composers can time their music accurately. **CLICK TRACKS** – An electronic **METRONOME** which helps film composers accurately time their music to on-screen action through a series of 'clicks' (often heard through headphones) – used extensively in cartoons and animated films. **DIEGETIC FILM MUSIC** – Music within the film for both the characters and audience to hear e.g. a car radio, a band in a nightclub or sound effects. **NON-DIEGETIC FILM MUSIC** – Music which is put "over the top" of the action of a film for the audience's benefit and which the characters within a film can't hear – also known as **UNDERScore** or **INCIDENTAL MUSIC**.

### F. Film Music Composers and their Soundtracks



**Jerry Goldsmith**  
Planet of the Apes  
Star Trek: The Motion Picture



**John Williams**  
Star Wars  
Jaws  
Harry Potter



**James Horner**  
Titanic  
Apollo 13  
Braveheart



**Ennio Morricone**  
The Good, The Bad and The Ugly  
For a Few Dollars More



**Danny Elfman**  
Mission Impossible  
Batman Returns



**Hans Zimmer**  
The Lion King  
Gladiator  
Dunkirk



**Bernard Herrmann**  
Psycho  
Vertigo

Contemporary dance is a style of expressive dance that combines elements of several dance genres including modern, jazz, lyrical and classical ballet. Contemporary dancers strive to connect the mind and the body through fluid dance movements.



**RELATIONSHIPS** – WAY in which dancers move with other dancers e.g. lead and follow, mirroring, action and reaction, accumulation, complement and contrast, counterpoint, contact, formations.

**ACTIONS** – WHAT a dancer does e.g. travelling, turning, elevation, gesture, stillness, use of body parts, floor-work and the transference of weight.

**DYNAMICS** – HOW the dancer moves e.g. fast/slow, sudden/sustained, acceleration/deceleration, strong/light, direct/indirect, flowing/abrupt.

**SPACE** – WHERE the dancer moves e.g. pathways, levels, directions, size of movements, patterns, spatial design.

# Knowledge Organiser

## Year 9 Dance

### Change the space

#### Levels

The size of the movement

#### Directions

Shape/body design

Change from near to far  
proximity  
Dance in different areas of stage

### Change the dynamics

The speed – faster/slower  
The quality – stronger, softer, sharper, more direct, more flowing etc.

### Change action

Add in action and add another action E.G a jump and turn together.  
Take out actions  
Instrumentation – different body parts (do on Right then on the Left)  
Repetition – repeat the motif or action

### Choreographic Devices

### Change the relationships

Add in canon, unison  
Make it action reaction with a partner  
Lead and following  
Mirroring it with your partner

### Change the structure/order

Retrograde – motif performed backwards  
Fragmentation – changing the order of the action in motif

# MIND MAPS

## HOW TO TAKE NOTES

## MIND MAPPING AND BRAINSTORMING

### ABOUT





Mind Mapping and Brainstorming is a highly visual method of representing information

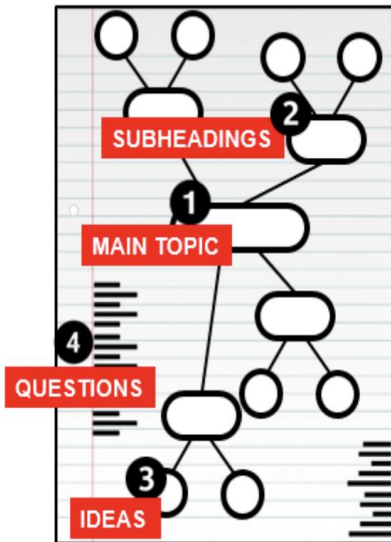
- ✓ Establishes links and relationships between ideas and concepts
- ✓ Can be used to take notes as part of the Cornell Method
- ✓ Effective when working from textbooks or written notes

### HOW

This works far better on paper than as a digital method

Make sure you start in the centre of the page

- 1  TOPIC
- 2  SUBHEADINGS
- 3  IDEAS
- 4  QUESTIONS



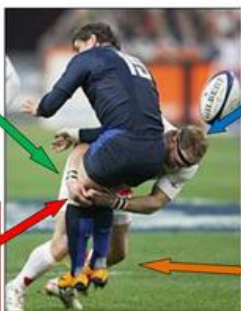
- 1 Determine the overall topic or theme  
Write this in the centre of your page and circle it  
If the main focus of your mind map changes – create an additional mind map – do not add the new focus to the mind map that you are already working on.
- 2 You will need to add major facts (subheadings) that relate to your main topic
- 3 Each subheading will have at least one idea related to it.  
Make sure that your ideas are visually distinct from your subheadings
- 4 Use the edges of your document to write questions  
These should relate to the ideas in your mind map  
You could also use these areas to expand on points that need additional clarification on the main mind map

Mind maps are a great way to revise key information. Have a read through the information on your ***Dance*** and ***Music*** pages and then use the information below to help you create mind maps.

# Rugby – Year 9

## Rugby Tackling Technique

Approach attacker low to tackle their legs and waist



Keep head to the side of the attacker's hip to avoid damage to neck, face or head

Create 'lock' around the back of attacker's knees by claspng hands together to collapse opponent's legs

Drive the player backwards with power coming from legs, forcing them to the ground

## Rules

Games start with a kick off.

Passing must be sideways or backwards.

Ball can be kicked forwards.

Teams aim to score a try in oppositions area.

Any player in front of a player kicking must wait for the kicker to pass or they will be offside.

Try = 5 pts

Conversion = 2 pts



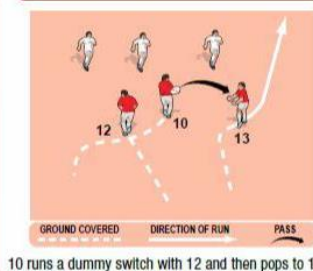
## Tactics/ Strategies

*Strategies* – Your teams overarching approach to being successful within the game.

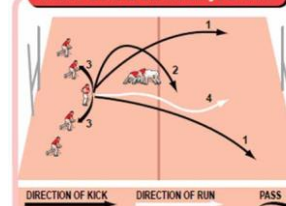
*Tactics* - Specific actions or steps that a team takes to achieve their strategy, e.g. passing the ball to fast wingers.

Strategies and tactics are a great way in helping a team to outwit their opposition.

### Dummy switch pop



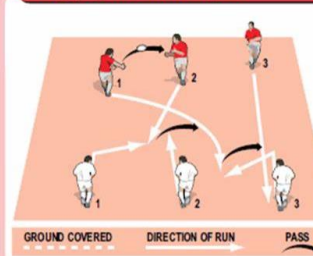
### Tactics from a scrum in your half



### Covering the switch



### Wrapping around the pass



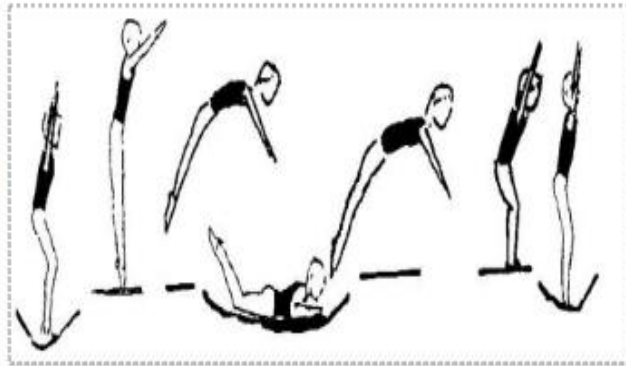
## Health & Safety

Players engaging in contact rugby must wear their PPE (mouthguard) at all times.



## Landings

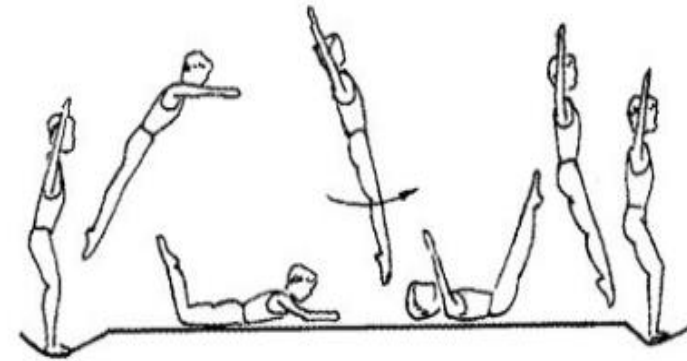
### Front landing



#### TEACHING POINTS

- Push feet back so centre of mass remains over cross.
- Vision – focus on end bed.
- Land with whole forearm in contact with the bed.
- Arms, stomach and thighs land at the same time.
- Push with hands to return to feet.

### Front to back landing



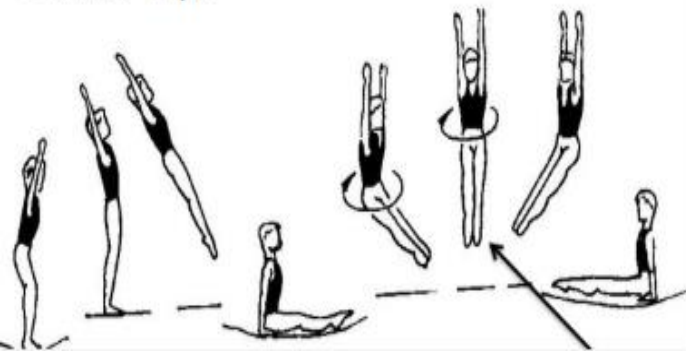
#### TEACHING POINTS

- Attempt to stand up straight between the 2 seat landings by straightening hips after take off.
- Push with hands so arms are up between landings.
- Look from front end to the mat behind you.
- Keep legs tight and straight.

#### Front to back landing

- Keep legs straight and tight after the front landing and drive hips forward to get a good rotation to land on your back
- Arms come up above your head ready for the back landing.
- If the rotation isn't enough, try front of to seat to get used to the way your legs need to swing through.

### Swivel Hips



#### TEACHING POINTS

- Take off for flat back and then pike into the landing.
- Vision – focus on the end frame on the ascent and roof on landing.
- To return to feet – kick upwards and forwards.

### Back Landing



# BRAIN DUMPING

Within the 'brain', add all of the knowledge you can remember from **PE** without looking back at the sheets.

Once you have added everything you can remember, look at these pages again and using a different colour pen, add in the knowledge that you missed out. This is the knowledge you should now continue to revise.

Continue this process until you can remember everything on the page.



# Year 9: How do Sikhs practice their religion in modern society?

## Knowledge organiser

### Key vocabulary

- atma** The soul
- Bandi Chhor Diwas** A festival where Sikhs celebrate the release of Guru Hargobind from prison
- chauri** A fan traditionally used by rulers but now waved over the Guru Granth Sahib as a sign of respect
- dhan** Material sewa
- Diwan Hall** The main hall in a gurdwara, where worship services take place
- Gurmukh** Someone who puts God and the teachings of the Gurus at the centre of their life
- Gurpurb** A festival to mark the birth or death of a Guru
- Hola Mohall** A Sikh adaption of the Hindu spring festival of Holi, involving military displays
- karma** The forces that influence people's future rebirths
- Kirtan Sohila** An evening prayer that is also said during a Sikh funeral
- man** Mental sewa
- Manmukh** Someone who is self-centred and does not put God at the centre of life
- Maya** The temporary and illusory nature of the world
- mukti** Union with Waheguru; to escape the world of illusion and the cycle of life, death and rebirth
- Nishan Sahib** A flag that flies over every gurdwara
- pilgrimage** A journey taken to a place of religious importance
- sarovar** The pool of water that surrounds the Golden Temple
- Sewa** Selfless service to others
- Sikh Council** The largest organisation representing Sikhs in the UK
- takht** The throne on which the Guru Granth Sahib is placed each day for services in the gurdwara
- tan** Physical sewa
- Vaisakhi** The Sikh festival marking the start of the new year; it also remembers the foundation of the Khalsa by Guru Gobind Singh in 1699
- Zafarnama** A letter written by Guru Gobind Singh to the Mughal emperor; it is the basis of many Sikh beliefs about war

### Key people

- Jarnail Singh Bhindranwale** A Sikh leader who with his supporters occupied the Golden Temple in 1984, demanding rights for Sikhs
- Indira Gandhi** An Indian Prime Minister who ordered the army to clear Sikh protesters from the Golden Temple in 1984; she was later murdered by two of her Sikh bodyguards
- Mahatma Gandhi** An Indian Hindu leader who campaigned for Indian independence from Britain in non-violent ways
- Duleep Singh** The first Sikh to live in the UK
- Manmohan Singh** The first Sikh Prime Minister of India
- Ravinder Singh** A British Sikh who founded Khalsa Aid in 1999



The first Sikh Prime Minister of India meeting The Queen at Buckingham Palace.

### Key facts

- Sikhs believe that we are all in a cycle of birth, death and rebirth. We can influence our rebirth by our actions in this life (karma). Performing good deeds creates good karma; living selfishly creates bad karma.
- The ultimate goal is to achieve mukti – freedom from this cycle and union with God.
- The Sikh place of worship is called a gurdwara. An orange flag called a Nishan Sahib always flies above a gurdwara.
- During Sikh worship services, the Guru Granth Sahib is placed on a throne in the Diwan Hall; the people all sit on the floor during the service.
- The langar is a communal place for cooking and eating; every gurdwara must have a langar, which is open to everyone, whatever their gender, ethnicity or religion.
- In recent years, many non-Sikhs living in poverty have started to visit langars to have a meal each day. This has led to Sikh organisations such as SWAT taking langar on to the streets to help even more people.
- Sewa, serving others, is a key Sikh belief. There are three forms of sewa: tan (physical service), man (mental service) and dhan (material service, which includes giving to charity).
- The Harmandir Sahib, or Golden Temple, at Amritsar is the holiest place in the world for Sikhs. It receives 5.5 million visitors a year.
- The Golden Temple has been the site of two violent events in its history: the Amritsar Massacre in 1919 and Operation Blue Star in 1984.
- The Sikh festival of Vaisakhi marks the start of the new year and is also a celebration of the founding of the Khalsa.
- The festival of Bandi Chhor Diwas is on the same day as the Hindu festival of Diwali and commemorates the release of Guru Hargobind from prison.
- Gurpurbs are festivals held throughout the year to mark the births and deaths of the Ten Gurus.
- Sikhs believe it is acceptable to fight as long as this is a last resort and is in self-defence or in defence of innocent people. Rules for fighting state that civilians cannot be deliberately harmed and that no religious building – of any faith – should be damaged.
- Many Sikhs fought for Britain during the First and Second World Wars, and recently Sikhs have become members of the Queen's Guard at Buckingham Palace.
- Most Sikhs in the UK today are descendants of people who left the Punjab after the partition of India in 1949. However, there were Sikhs in the UK beforehand, and the first gurdwara was built in London in 1911.
- In recent years there has been controversy over marriages between Sikhs and people of other faiths, with some Sikhs concerned that this may lead to the extinction of the Sikh religion in the long term. Other Sikhs stress the idea of equality that Sikhism embraces and say that Sikhs should be free to marry whomever they love.



Sikhs light candles at the Golden Temple at Amritsar to celebrate the anniversary of Guru Nanak's birth.

# KEYWORD REVISION

Copy some of the definitions of the **RE** key vocabulary into the boxes below from your knowledge sheet and then see if you can add in the keywords without looking back at your work. Alternatively, you can do it the other way round and see if you can add in the correct definitions without looking.

Keyword:	Definition:

**Fancy some additional Class Charts points? Impress your teachers with any of these BHAmazing pieces of vocabulary, and they will award you extra CC points.  
Challenge: Can you use them in any sentences and show a member of the Senior Leadership Team?**

Word List 1	Word List 2	Word List 3	Word List 4	Word List 5	Word List 6	Word List 7
<b>Myriad</b> (adjective) – many <b>Assert</b> (verb) – state a fact confidently or forcefully <b>Egregious</b> (adjective) – outstandingly bad <b>Erroneous</b> (adjective) – wrong <b>Engender</b> (verb) – to cause <b>Employ</b> (verb) – to make use of <b>Salient</b> (adjective) – most noticeable and important <b>Advantageous</b> (adjective) – providing an advantage / beneficial <b>Galvanize</b> (verb) – to shock or excite someone into action <b>Substantiate</b> (verb) – to provide evidence	<b>Caustic</b> (adjective) – mean / harsh <b>Elucidate</b> (verb) – to make clear <b>Esoteric</b> (adjective) – likely to only be understood by a small number of people / obscure <b>Tenuous</b> (adjective) – weak or fragile <b>Perfunctory</b> (adjective) – carried out with minimal effort <b>Moral</b> (noun) – a lesson <b>Autonomy</b> (noun) – independence <b>Assertive</b> (adjective) – confidence <b>Conceited</b> (adjective) – excessively proud / vain <b>Superior</b> (adjective) – better than	<b>Tension</b> (noun) – feeling of anxiety or nervousness <b>Oblivious</b> (adjective) – unaware <b>Naïve</b> (adjective) – Inexperienced / unaware <b>Pretentious</b> (adjective) – arrogant <b>Pompous</b> (adjective) – arrogant <b>Privileged</b> (adjective) – having an advantage over other, usually wealth <b>Compassionate</b> (adjective) – sympathetic <b>Vindictive</b> (adjective) – spiteful, cruel <b>Duplicitous</b> (adjective) – having two sides <b>Narcissistic</b> (adjective) – self-obsessed	<b>Omniscient</b> (adjective) – all-knowing <b>Gullible</b> (adjective) – believes things easily <b>Supercilious</b> (adjective) – arrogant <b>Tyrannical</b> (adjective) – a cruel dictator <b>Brazen</b> (adjective) – bold, shameless <b>Elusive</b> (adjective) – mysterious <b>Chauvinistic</b> (adjective) – has an attitude of superiority to opposite sex <b>Materialistic</b> (adjective) – cares for objects and commodities <b>Prophetic</b> (adjective) – able to accurately predict <b>Impulsive</b> (adjective) – rash / careless	<b>Sentimental</b> (adjective) – emotional <b>Bawdy</b> (adjective) – rude or vulgar <b>Hypermasculine</b> (adjective) – overly masculine <b>Atavistic</b> (adjective) – has characteristics of an earlier generation <b>Troglodytic</b> (adjective) – like a caveman <b>Apathetic</b> (adjective) – indifferent / lazy <b>Segregated</b> (adjective) – separated <b>Misogynistic</b> (adjective) – hateful towards women <b>Choleric</b> (adjective) – quick-tempered, angry <b>Secular</b> (adjective) – not religious	<b>Oppressed</b> (adjective) – subjected to cruel mistreatment <b>Subservient</b> (adjective) – obedient / submissive <b>Exploit</b> (verb) – to use someone for your own good <b>Epiphany</b> (noun) – a sudden realization <b>Façade</b> (noun) – a front (to ‘wear a façade’ means you wear a metaphorical mask, covering your true emotions or character) <b>Microcosm</b> (noun) – a smaller community which represents a larger one <b>Aloof</b> (adjective) – stand-offish <b>Degenerate</b> (adjective) – disgusting <b>Depraved</b> (adjective) – immoral / evil <b>Feral</b> (adjective) – wild	<b>Metamorphosis</b> (noun) – a change / transformation <b>Abhorrent</b> (adjective) – repulsive <b>Abhor</b> (verb) – to hate <b>Fate</b> (adjective) – destiny <b>Integral</b> (adjective) – important <b>Demise</b> (noun) – a person’s downfall or death <b>Ridicule</b> (verb) – to make fun of <b>Deride</b> (verb) – to mock <b>Contempt</b> (noun) – hate <b>Hysterical</b> (adjective) – uncontrolled emotion

## My BHAmazing vocabulary, written in sentences:

1.

2.

3.

4.

5.

6.

7.