



Year 9 Knowledge Organiser

Autumn Term
2023/24

Name:

Form:

Week 1/A

	Monday	Tuesday	Wednesday	Thursday	Friday
Tutor Time					
1					
2					
3					
4					
5					

Week 2/B

	Monday	Tuesday	Wednesday	Thursday	Friday
Tutor Time					
1					
2					
3					
4					
5					

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Autumn Term

Attendance and Absence

In cases of absence, parents are asked to contact the relevant staff office, as early as possible, giving details. The only acceptable reasons for absence are unavoidable ones such as illness. Appointments of all kinds should be made out of school time whenever possible.

Punctuality

While some delays are unavoidable, pupils should be punctual to lessons. Anyone arriving late to school must report to the relevant staff office and use the late system in order to get a mark. Late after registration closes is technically an **unauthorised absence**.

Pastoral Support Contacts

Telephone Number:

Email Address:

Term Dates Summary

Autumn Term 2023		
Wednesday 6 Sept - Friday 20 Oct 2023	Half-term: Monday 23 – Friday 27 Oct 2023	Monday 30 Oct - Wednesday 20 Dec 2023
Spring Term 2024		
Thursday 4 Jan - Friday 16 Feb 2024	Half-term: Monday 19 – Friday 23 Feb 2024	Monday 26 Feb – Wednesday 27 Mar 2024
Summer Term 2024		
Monday 15 Apr – Friday 24 May 2024	Half-term: Monday 27 – Friday 31 May 2024	Monday 3 Jun - Friday 19 Jul 2024

My best subject is:

What I want to achieve this term:

School Login Details:

My extra curriculums this term:

Autumn Term 1 Calendar

September 2023		
1	Fri	
2	Sat	
3	Sun	
4	Mon	
5	Tue	
6	Wed	
7	Thu	
8	Fri	
9	Sat	
10	Sun	
11	Mon	
12	Tue	
13	Wed	
14	Thu	
15	Fri	
16	Sat	
17	Sun	
18	Mon	
19	Tue	
20	Wed	
21	Thu	
22	Fri	
23	Sat	
24	Sun	
25	Mon	
26	Tue	
27	Wed	
28	Thu	
29	Fri	
30	Sat	

October 2023		
1	Sun	
2	Mon	
3	Tue	
4	Wed	
5	Thu	
6	Fri	
7	Sat	
8	Sun	
9	Mon	
10	Tue	
11	Wed	
12	Thu	
13	Fri	
14	Sat	
15	Sun	
16	Mon	
17	Tue	
18	Wed	
19	Thu	
20	Fri	
21	Sat	
22	Sun	
23	Mon	
24	Tue	
25	Wed	
26	Thu	
27	Fri	
28	Sat	
29	Sun	
30	Mon	
31	Tue	

Autumn Term 2 Calendar

November 2023		
1	Wed	
2	Thu	
3	Fri	
4	Sat	
5	Sun	
6	Mon	
7	Tue	
8	Wed	
9	Thu	
10	Fri	
11	Sat	
12	Sun	
13	Mon	
14	Tue	
15	Wed	
16	Thu	
17	Fri	
18	Sat	
19	Sun	
20	Mon	
21	Tue	
22	Wed	
23	Thu	
24	Fri	
25	Sat	
26	Sun	
27	Mon	
28	Tue	
29	Wed	
30	Thu	

December 2023		
1	Fri	
2	Sat	
3	Sun	
4	Mon	
5	Tue	
6	Wed	
7	Thu	
8	Fri	
9	Sat	
10	Sun	
11	Mon	
12	Tue	
13	Wed	
14	Thu	
15	Fri	
16	Sat	
17	Sun	
18	Mon	
19	Tue	
20	Wed	
21	Thu	
22	Fri	
23	Sat	
24	Sun	
25	Mon	
26	Tue	
27	Wed	
28	Thu	
29	Fri	
30	Sat	
31	Sun	

Homework Log and Parental Check

Week 1	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 2	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 3	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 4	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 5	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 6	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 7	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

Homework Log and Parental Check

Week 8	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 9	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 10	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 11	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 12	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 13	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Week 14	Subject 1	Subject 2	Signed
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

Reading Log

Use this reading log to keep a record of the books you read during the year. You should also use this reading log to record the books from the Reading Passport that you have read but make sure your tutor records them, too.

Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials
Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials
Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials

Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials
Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials
Title and Author	Date	Starting Page	Last Page	Review and Test Score	Reading Log
					Teacher Initials

Year 9 Reading Passport

We have created a Reading Passport to inspire students to read some of the best literature available to them. Over the course of the year, we expect students to read as many of the texts included in the passport for their year group as possible.

If students manage to read 7, or more, books from this passport by the end of the year they will receive a certificate. They can, of course, read other books and texts throughout the year and we encourage and support students' wider reading. Students can track which texts they have read using the tick boxes on the next page.

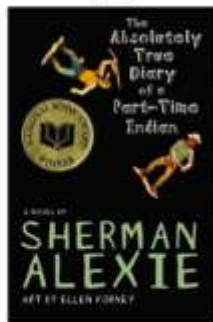
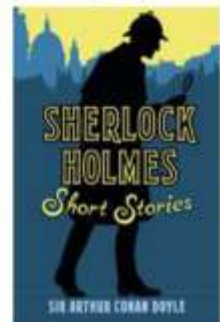
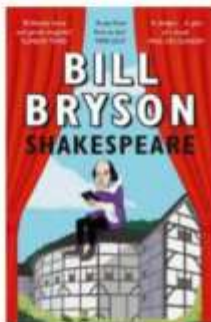
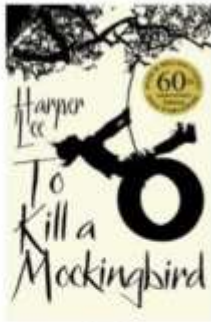
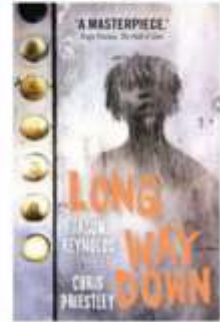
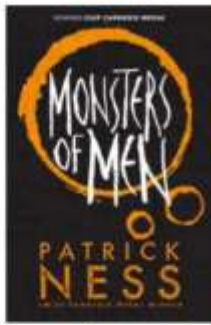
The books selected are fantastic examples of modern and classical literature, representing the best the world has to offer. Students can read these texts independently or they could listen to them on audiobook. The important thing is that they will experience a variety of genres, authors, and stories! We hope that all students will finish Year 11 having read at least 35 incredible books.

The easiest way to get hold of these books is from our school library where children can take them home to read. These texts can also be purchased from Amazon, or from many local bookstores.

Whilst every care has been taken to check the suitability of the books included in our Reading Passport, we are aware that children mature at different rates. Therefore, we strongly recommend that parents discuss their child's reading choices to ensure they are appropriate for them.



Year 9 Reading Passport



Instructions for Using Your Knowledge Organiser

Every school day, you should study 1 to 2 subjects from your knowledge organiser for homework lasting at least 1 hour in total.

On pages 8 and 9 there is space for you to record the subjects you have studied to make sure you are giving equal time to all of them. Your parent should sign off your homework each evening on these pages.

Your parent should also sign your reading log on pages 10 and 11. You can use the note pages in this booklet to help with your studies.

You need to bring your Knowledge Organiser to school every day. It will be checked regularly during form time.


You will be regularly tested on knowledge contained in this booklet in your lessons and through quizzes on Show My Homework.

8 Top Revision Tips

1 Start Early
Last minute cramming is stressful and has limited success.




2 Make a Plan
Work out how much time you have and how much of it you can spend on each subject.



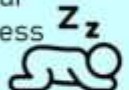
3 Pick a Good Spot
Find a quiet and comfortable spot away from distractions and keep all of your things in one place.



4 Find a Good Method
Choose the best revision methods for you and try to use a mixture of methods for the best results.




5 Takes Breaks
It is possible to work too hard! Your brain needs rest and time to process the information you've studied.




6 Revise with Friends
Talking through what you've learned with a friend can help information stick.



7 Use Past Papers
These are a great way to test yourself and a good way to get used to the exam format



8 Eat Well
You need to maintain a healthy diet to be able to retain information and not lose energy or focus during study.



LONG TERM MEMORY



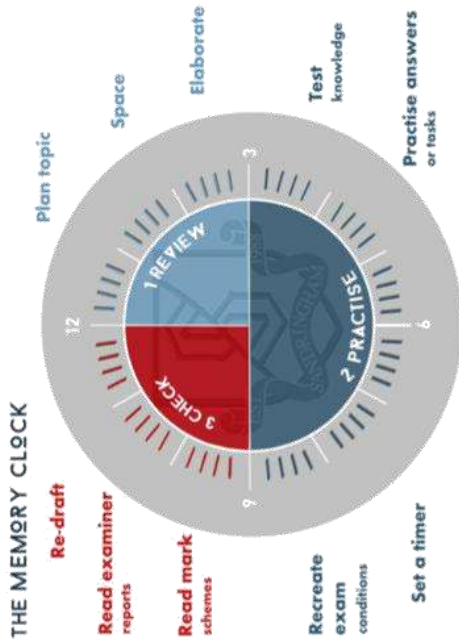
Retrieval Practice

Create your own quizzes based on topics.
Create them, test yourself or get someone to test you, it works!



Deliberate Practice

Apply your knowledge!
Revise it, practice exam questions and then go over using your notes, adding or redrafting!



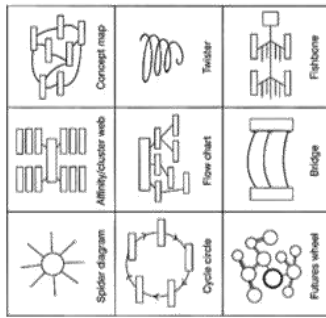
Answer Planning

Practice planning exam question answers.
Bullet point, speed plan and draft key paragraph questions.



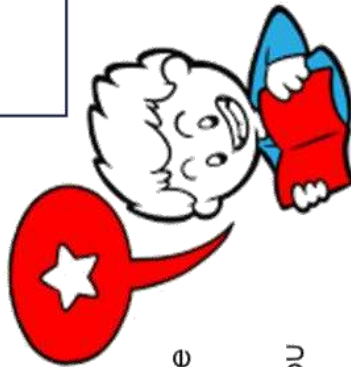
Graphic Organisers

Transform the information into visual revision to create links, show a narrative, identify the causes, consequences and importance.



Read Aloud

Simply speak the facts and dates out loud as you're reading the Knowledge Organiser. Even try to act out some of the facts – it really helps you remember!



Sketch it

Draw pictures to represent each of the facts or dates. It could be a simple drawing or something that reminds you of the answer.



PRACTICE MAKES PERFECT

Practice!
Some find they remember by simply writing the facts over and over again.

Hide and Seek
Read through your knowledge organiser / book, put it down and try and write out as much as you can remember. Then keep adding to it until its full!



Teach it!
Teach someone your key facts and the get them to test you, or even test them!

Flashcards



Create with questions on one side and answers on the other side. Colour code specific topics and quiz yourself.

Record It

Record yourself on your phone or tablet reading out the information. These can be listened to as many times as you want!



Post its
Using a pack of post-it notes, write out as many of the keywords or dates as you can remember in only 1 minute!

Year 9 Autumn Term Knowledge Organiser

Art – Illustrative Art – Automatic Drawing:

Automatic Drawing: A drawing technique developed by surrealists as a way of expressing the subconscious. In automatic drawing, the hand can move randomly and freely across the paper.

Art Specific Language and Terms		
Contemporary Art	Contemporary art is the art of today, produced in the second half of the 20th century or in the 21st century.	Composition
Control	How carefully you work with a specific media.	Illustrator
Extended Drawing	When you are given a starting point for a drawing and then complete the drawing using your own creative imagination.	Mono-chromatic
Doodle	Random, thoughtless drawings on whatever topics happen to be flowing through the artist's' head.	Murals
		Where you place objects / imagery on the page or in a space.
		A person who draws or creates pictures for magazines, books, advertising, etc.
		When something only contains one colour or is black and white.
		A mural is a painting or illustration applied directly onto a wall, ceiling or other permanent surfaces.

Illustration as a Form of Art:

An illustration is a drawing, painting or printed work of art which explains or visually represents something or a particular story. Historically, book illustration and magazine/newspaper illustrations have been the predominant forms of this type of visual art, although illustrators have also used their graphic skills in the fields of poster art, advertisements, comic books, animation, greeting cards & cartoon-strips.

Lucy

McLauchlan:

Lucy is an artist from Birmingham. She makes murals, installations, painting, and other types of mixed media work. The images are often complex black and white patterns and recently she has explored the abstract forms created by large brush strokes.



Grand union canal



Out of the circle



It takes two

Year 9 Autumn Term Knowledge Organiser

Art – Illustrative Art – Printmaking:

Screen printing: A printing technique where a mesh or screen is used to transfer ink onto a surface, except in areas made impermeable to the ink by a blocking stencil.

Art Specific Language and Terms		
Contact Printing (Cyanotypes & Chemigrams)	Reduction Lino Printing	Producing reduction lino prints involves cutting and inking several layers from a single lino block to create a multi-coloured print.
Relief Printing	Photo-emulsion (Screen printing)	An emulsion which is 'scooped' across the mesh of a screen and then exposed to ultra-violet light, through a film or transparency printed with the required design. This hardens the emulsion in the exposed areas but leaves the unexposed parts soft. They are then washed away using a water spray, leaving behind the desired image.
Contact Printing - Photographic prints created by placing objects onto cyanotype paper and exposing to UV light. Chemigrams - Objects dipped into photographic chemicals and then placed onto photo paper.		
Relief Printing is a printing method where a printing block or plate is created by removing/cutting away negative sections of an image or by adding layers to create a raised surface (collagraph). Ink is then applied to its surface, but not to any recessed areas and then brought into contact with paper. Pressure is applied to transfer the ink either by hand or by using a printing press.		

Lino Printing:

Lino printing is a form of fine art printmaking where the printing plate is cut into lino. The lino is then inked, a piece of paper placed over it, and then run through a printing press or pressure applied by hand to transfer the ink to the paper. The result is a linocut print. The advantage of this printing method is that multiple prints can be made allowing for experimentation of colour and layering of colour.

Examples of Artists That Use Printmaking Techniques:



Screen printing
Shepard Fairey, Eye 2009



Cyanotype
Anna Atkins



Lino cut
Brian Reedy

Key words	
Fixed Term Parliament Act 2011	A law created by Parliament that states a General Election must take place every five years.
Democracy	A system of government based upon the consent of the people through an open and fair electoral system.
Legislator	The body that makes new laws – fancy name for Parliament.
Legislation	A law that has been passed in Parliament and must be followed.
Non-democratic	A political system of government that lacks some or all of the elements that make up a democratic political system.
First Past the Post	The voting system used in UK general elections. The person with the most votes wins a seat in Parliament, even if they only win by a single vote.

Laws are made by **Parliament**. They must pass through Commons, Lords and get approval from the Monarch.

Government is formed from the winning party elected in a General Election. The winners are the party with the most **seats**.

MPs work in the House of Commons and Peers work in the House of Lords. MPs are **elected** and Peers are **appointed**.

Government vs. Parliament

The winning party in a general election form the government.

Known as the 'executive' elected to run the country.

At its centre is the cabinet – a group of important, senior MPs with specific roles.

Known as the legislature.

Debates and discusses new laws, can also remove old laws.

Includes the Queen, Government, MPs and Peers.

Challenges and scrutinises the government.

Democratic vs Undemocratic

CASE STUDY

United Kingdom

North Korea

Choice of candidates to vote for

Only one candidate to vote for

Allowed to vote in private (secret ballot)

Voting in private is seen as disloyal and disrespectful

Anyone can become a candidate

Only pre-approved loyal people can be candidates

You have the right to choose whether to vote or not

Everyone must vote – those who do not are punished



Brush up on your skills

Critical enquiry - Looking into a topic in detail. Questioning different opinions and seeking to discover a range of other views.

Informing opinions - Giving other people information in order to try and change their opinions and views.

Active Participation - Taking part by becoming involved; doing something or saying something to try and make a change or make a difference.



Making connections

How can you link different topics together?

Government + Parliament + MPs + Peers
Legislature + Laws + Citizens
Democracy + PR + FPTP

Laws + Head of State + House of Lords + House of Commons
Political Parties + MPs + Representative + Democracy

Question time!

The Head of State in the UK is...?

Who is the symbolic head of the Commonwealth?

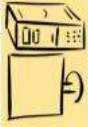
How do Life Peers get their job?

The UK constitution is uncodified... True or false?

When was the Magna Carta originally introduced?



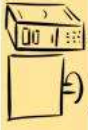
9.1 Computing – Photo Editing



Key Vocabulary

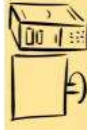
RGB	Colour method using Red, Green and Blue. Used onscreen.
CMYK	Colour method using Cyan, Magenta, Yellow and Black (or Key). Used for professional printing.
Native File Types	The file types that belong to a specific piece of software. (e.g. PSD is a Photoshop Document).
Bitmap Image	Image made of pixels (picture elements).
Vector Image	Image made from a set of lines and shapes/objects.
Selection	Using tools including magic wand, lasso and marquee to select specific pieces of an image/layer in Photoshop.
Resolution	Number of pixels in a fixed area (e.g. dpi - dots per inch).
Hi Resolution	300dpi is classed as hi resolution. It is suitable for professional printing.
Lo Resolution	72dpi is classed as lo resolution. It is suitable for online images. It is adequate quality for the eye to see solid colours on screen.
JPG	A common file type used for lo resolution images which uses lossy compression and produces small file sizes.
TIFF	A common file type used for hi resolution images which uses lossless compression and is able to be saved with layers.
Transform	Modify part or an entire image in ways that include scale, distortion, rotation etc.
Compression	The process of reducing the file size.
Lossy	Permanently removes data such as duplicated data elements (e.g. jpeg).
Lossless	Removes data from image but restores it when file is opened using an algorithm (e.g. .tif).
Filters	A range of effects that can be used on part or an entire image (e.g. water colour, neon glow, blur etc).
Layers	The separate parts of an image that can be edited separately. It also allows for layer styles to be applied to independent layers.
Colour Adjustments	The methods used to change the colours in an image. There are a range used for different purposes, including levels, hue/saturation and selective colours.
Retouching	Tools used to edit or change an image. (e.g. clone or healing brush tool).

Key Questions



1. What type of image is made up of picture elements (pixels)?
2. What type of compression reduces the file size without removing any of the quality?
3. Give one advantage of using a vector image?

Tasks



Explain how false photographs can make people feel bad about themselves

Try the following techniques to alter your digital photograph –

Change the colour of just one thing in your photo, e.g. the colour of the flower.

Change the highlights and shadows.

Smooth a surface.

Change the shape of something or one of its features.

Use selective focus or a blur to highlight part of your photo.

Year 9 Dance Knowledge Organiser – Technical Skills

Posture	The way the body is held.
Coordination	The efficient combination of body parts.
Extension	Lengthening one or more muscles or limbs.
Alignment	Correct placement of body parts in relation to each other.
Control	The ability to start and stop movement, change direction and hold a shape efficiently.
Strength	Muscle power.
Balance	A steady or held position achieved by an even distribution of weight.
Flexibility	The range of movement in the joints (involving muscles, tendons and ligaments).
Stamina	The ability to maintain physical and mental energy over periods of time.
Projection	The energy the dancer uses to connect with and draw in the audience.
Spatial Awareness	Consciousness of the surrounding space and its effective use.
Facial Expression	Use of the face to show mood, feeling or character.
Musicality	The ability make the unique qualities of the accompaniment evident in performance.

Why are these technical skills important?

E.g. Why do you need good stamina?

Stamina is crucial for the prevention of injury. In extended performances, the heart and lungs need to deliver oxygen to the blood and muscles as efficiently as possible. Once **fatigue** sets in, mistakes in judgement or undue stress on muscles and joints make continued dancing **unsafe**. Good stamina allows high intensity actions to be performed accurately throughout a dance performance

How can you improve these technical skills?

Exercise to Improve Core Strength:



Task: Bridge
Lie on your back with your knees bent and feet hip distance apart. Slowly raise hips rolling up through spine from pelvis to shoulders. Hold position for 8 counts making sure back remains straight. Slowly roll back down through spine from shoulders to pelvis.

Complete 3 reps of 10 every other day.



Development over time to maintain improvement:

- 1) After 1 week increase to 3 reps of 15
- 2) After 2 weeks increase challenge by adding alternate leg lifts



Make sure back remains straight and hips do not twist.

Check your progress by ...

- watching yourself in a mirror and correct it
- filming yourself and watching back and correct it
- asking a friend or teacher to watch you and give **feedback**. (look at balance, height in jumps, fluency of movement into and out of the floor)



Year 9 Dance Knowledge Organiser – Safe Practice

Remember

(Her Majesty Just Bought Five Cats!)

- Tie **H**air back
- Wear clothes that **M**ove with you
- Do not wear **J**ewellery
- Do not wear any **B**aggy clothes that you can get caught up in
- Ensure appropriate **F**ootwear is worn
- **C**lose fitting to see the lines of the dancer

Nutrition

- Carbohydrate and fat: Provide energy.
- Protein: Muscle growth and repair.
- Vitamins & Minerals: The immune system requires an assortment of vitamins and minerals from Vitamin A through to Zinc.

Hydration

- Helps prevent build-up of lactic acid
- Helps to avoid cramps
- Keeps muscles working at optimum
- Helps to prevent potential dizziness



What happens in a warm-up?

(Put Every Naughty Teenage Boy In Jail)

- **P**ulse is raised
- Muscles become more **E**lastic
- **N**erve messages from the brain to the limbs speed up
- Internal body **T**emperature is raised
- Increase of **B**lood flow to the muscles
- Reduce the risk of **I**njury
- **J**oints are mobilised



Why Cool-down?

(Blue Peter Was Pretty Hilarious Really)

- Prevent **B**lood **P**ooling in the muscles which can make you feel dizzy due to the reduced blood supply to the brain
- Prevent the build up of **W**aste **P**roducts in the muscles (e.g. lactic acid), which helps to prevent muscle stiffness and soreness
- Allow the **H**ear**T** **R**ate to gradually return to normal

As a rule, dancers are advised that their overall diet should take at least 50-65% of its energy from carbohydrate; around 12-15% should come from protein; and less than 20-35% from fat.





Drama-Script Work

Duologue



Vocabulary	Definition
Duologue	A speech presented by two characters in a performance, often used to explore/develop relationships.
Interpretation	A particular way of performing a part in a play.
Intention	Something that you want and plan to do in a play.
Innovative	Original and creative approach.
Realism	Theatre that attempts to create an illusion of reality through a range of dramatic and theatrical strategies.
Period	Scripts from different time periods such as Greek, Elizabethan or Victorian.
Stylised	Non-naturalistic, performed in a particular manner or with emphasis on one element.
Physicalise	Drama technique where performers communicate their characters in a physical way (body language, movement, facial expression & gesture).
Ensemble	An approach to acting that aims for a unified effect achieved by members of the cast working together on behalf of the play, rather than emphasising individual performances.

Practice Task

Learn your lines for performance.

Strategies for Learning Lines

- Write your lines out
- Run lines with someone
- Look, Cover, Write, Check
- Use line learner apps
- Record your lines and listen back
- Learn your cue lines

Skills Learnt

- Annotate text
- Interpreting text
- Exploring a plays context
- Create and communicate meaning through performance
- Realising artistic intention in text-based drama

Key Questions

- How would you annotate and perform duologues?
- How can you apply interpretations and intentions to scripts?
- How would you use a range of drama elements when creating?
- How do you research and demonstrate contextual elements of a script?

Vocabulary	Definition
Pitch	Speaking in a high, low or natural voice.
Pace	The speed at which someone speaks, e.g. the speed of response in an argument.
Intonation	The rise and fall of the voice. There's a clear movement up at the end of a sentence when we ask a question for example. Intonation also helps us to say what we mean.
Volume	You might be considering the audibility (can we hear it) but you're more likely to be thinking about the effect of a loud, powerful voice or a quiet, nervous or sad voice.
Pause	A dramatic pause at a crucial moment could communicate meaning.
Tone	This suggests your mood and your intention towards the listener. E.g. happy or sad.
Accent	Your character may be from a different part of the UK or another country.

Drama - Artaud 1896-1948



Artaud was a French dramatist, poet, essayist, actor, and theatre director, widely recognised as one of the major figures of twentieth-century theatre and the European avant-garde. He influenced many of Salvador Dalí's art works. He wanted to change theatre and the world around him.

Techniques
 Breath
 Scream
 Puppetry
 Shadow
 Repetitive movement



Space & Actor/Audience Relationship

- Artaud experimented with the actor-audience relationship.
- Relationship between the actor and audience in the 'theatre of cruelty' was intimate.
- Preference for actors to perform around the audience in the centre (rectangle/ring/boundary).
- He attempted to reduce or eliminate the special space set aside for the actors (the stage).
- Performers placed in four corners on four sides of the space.
- The audience was therefore placed in a weaker, less powerful position (encircled by actors).
- The audience was often seated on swivel chairs (easily swinging around to follow the action).
- Galleries and catwalks enable the performers to look down on the audience (trapping them).

Movement & Gesture

- Inspired by a performance of Balinese dance.
- Artaud wished to create a new language for the theatre (largely non-verbal).
- Ritualistic movement (often replacing traditional lead/spoken words)
- Performers communicated some of their stories through 'signs'
- 'Signs' in the 'theatre of cruelty' were facial expression and movement
- Stylised movement was known as 'poetry' visual.



Artaud's Theory

- His theatre set aimed to awaken the dormant dream images of our minds.
- He wanted to shock and scare his audience into changing society and the world around them.
- Artaud attempted to appeal to the irrational mind, one not conditioned by society.
- He wanted to appeal to the subconscious, freeing the audience from their negativity.
- His theatre could not communicate using spoken language (primary tool of rational thought).
- His was a return to a theatre of myth and ritual.
- The 'theatre of cruelty' was an enhanced double of real life. He claimed if the theatre is the double of life, then life is the double of theatre.
- Artaud's theatre aimed to appeal to, and release the emotions of, the audience.
- By bombarding the audiences senses, they underwent a catharsis experience.

Vocabulary	Definition
Catharsis	The uncontrollable outperforming of strong emotion.
Surrealism	A 20th-century avant-garde movement in art and literature which sought to release the creative potential of the unconscious mind, for example by the irrational juxtaposition of images.
Theatre of Cruelty	"A primitive ceremonial experience intended to liberate the human subconscious and reveal man to himself". The 'theatre of cruelty' called for a "communion between actor and audience in a magic exorcism; gestures, sounds, unusual scenery and lighting combine to form a language, superior to words, that can be used to subvert thought and logic and to shock the spectator into seeing the baseness of his world".

Key Questions

- What other theatre practitioners was around in this period?
- Which genre was Artaud's work linked to?
- Finish the title 'theatre of.....' and explain what this means.
- What influenced Artaud's life and work?

Practice Task

- 1- Read the articles on Artaud <https://www.bl.uk/20th-century-literature/articles/antonin-artaud-and-the-theatre-of-cruelty>
- 2- Watch some Artaudian performances on 'YouTube'

Representation

Core Text: *Othello* by William Shakespeare

Representation is the **depiction** of a thing, person or idea. In representing the world, writers make **conscious** and **unconscious** choices. There are many different ways of seeing the world as our view is framed by **context** and **culture**. This means that representation does not offer a definitive view of reality, but instead, each representation offers a different construction of the world and of experience in it.

English

Vocabulary

- Representation
- Perception
- Influence
- Derogatory
- Media
- Prejudice
- Stereotype
- Authentic
- Otherness
- Marginalised
- Tragic hero
- Hamartia
- Argument
- Semicolon
- Iambic pentameter
- Blank verse
- Hyperbole

Practise spelling vocabulary words and matching definitions to words.



Test yourself - Cover the vocabulary words. Can you recall each term using the definitions?

- A. Real, true, genuine - not a copy
- B. Non-rhyming iambic pentameter
- C. A low opinion or disrespectful attitude
- D. A tragic hero's fatal flaw
- E. Extreme exaggeration to emphasise a point
- F. A line of writing that consists of ten syllables
- G. The power to have an important effect on someone or something
- H. A reason or set of reasons given in support of an idea
- I. A group or individual is made to feel isolated and unimportant.
- J. A form of mass communication through radio, television, internet or print
- K. Being or feeling somehow different from the dominant group
- L. The way that something is thought of, understood, or interpreted
- M. A preconceived opinion, not based on reason or actual experience
- N. Speaking or acting on behalf of, or in place of, a person or group
- O. An assumption about what someone will do or how they will behave based on what social groups they belong to
- P. A noble protagonist whose traits or choices cause their downfall
- Q. A punctuation mark indicating a pause - typically between two main clauses

Challenge: Witchcraft also features in Shakespeare's *Macbeth*. Research the significance of witchcraft to Elizabethan / Jacobean society. Keep notes on your findings.

<https://www.bl.uk/> - British Library

ANSWERS: A- authentic, B- blank verse, C- derogatory, D- hamartia, E- hyperbole, F- iambic pentameter, G- influence, H- argument, I- marginalised, J- media, K- otherness, L- perception, M- prejudice, N- representation, O- stereotype, P- tragic hero, Q- semicolon

Representation in *Othello*

Shakespeare's representation of 'otherness' reflects the social context and ideologies of Elizabethan / Jacobean England. This includes the representation of women through Desdemona, Emilia and Bianca and the representation of otherness through the eponymous character, Othello.

- Representation is influenced by context.
- A writer's representation of a group may or may not reflect their own context or perspective.
- Representations may or may not be authentic; they can draw on or challenge stereotypes.
- As readers, our individual perspective and response can be influenced by the writer's representation of a group.
- Characterisation is a method of representation.

Task 2 - What is Brabantio's attitude towards Othello? Toward his daughter, Desdemona? Use vocabulary from the list above in your response.

Extract from Act 1, scene 2 *Othello*

BRABANTIO

- O thou foul thief, where hast thou stow'd my daughter?
Damn'd as thou art, thou hast enchanted her;
For I'll refer me to all things of sense,
If she in chains of magic were not bound,
5 Whether a maid so tender, fair and happy,
So opposite to marriage that she shunned
The wealthy curled darlings of our nation,
Would ever have, to incur a general mock,
Run from her guardage to the sooty bosom
10 Of such a thing as thou, to fear, not to delight.
Judge me the world, if 'tis not gross in sense
That thou hast practised on her with foul charms,
Abused her delicate youth with drugs or minerals
That weaken motion: I'll have't disputed on;
15 'Tis probable and palpable to thinking.
I therefore apprehend and do attach thee
For an abuser of the world, a practiser
Of arts inhibited and out of warrant.
Lay hold upon him: if he do resist,
20 Subdue him at his peril.

Task 1 - From the extract below, identify language associated with witchcraft.

Building on **SYMBOLISM** from Year 8: What does Othello's handkerchief represent? What other symbols does Shakespeare use / manipulate?



Task 3 - How does the media stereotype teenagers? Find examples of teenage stereotyping and compare with your own experience of being a teenager.



Year 9 KS3 Cooking and Nutrition: Food Choice

Prior Learning / Context:

Prior learning includes the Eatwell Guide and the principles of healthy eating. Medium cooking skills, including sauce making, bread and pastry making, also completed.

Assessment:

- Retrieval Practice – quizzing, starter/plenary tasks
- Formal knowledge assessments – delivered in time with reporting
- Food preparation skills assessed after every practical (P, D, C, E)

Key Questions:
What allergy information is required on food packaging? (2 marks)

Plan a 3 course meal for someone who is gluten intolerant – explain your reasons for choice (6 marks)

Give 2 examples of food that contain vitamin A (2 marks)

Food Allergies



An allergen - a substance that can cause an extreme allergic reaction
An intolerance - causes symptoms such as bloating, stomach aches

Some manufacturers might choose to dedicate a production line or equipment to products that are free from particular allergens e.g. nuts or wheat free. These production lines could still be used to make a number of different products as long as they do not contain that particular allergen.

Vitamins A, D, E and K are fat soluble and can be stored by our body in our body fat. A fat soluble example is Vitamin A which is needed for healthy eyesight, health skin and healthy immune system. Its antioxidant properties also help to protect the body from cancer and cardiovascular disease.

- Themes:**
- Nutrition and Health
 - Food preparation
 - Food safety
 - Food provenance
 - Food choice
 - The science of cooking

Consumer Awareness

Food labelling is required by law. It helps consumers make food choices.

Food waste in the home occurs because we make too much food or we don't use it before it goes off. Food we waste the most includes fresh fruit and salad.

Future Learning:

KS4: AQA GCSE in Food Preparation and Nutrition

Key Vocabulary

Allergy, Intolerance, Contamination, Anaphylactic Shock, Medical, Lifestyles, Economic, Religion and Culture, Physical Activity Levels (PAL), Celebration, Cuisine, Traditions, Food Waste, Labelling, Consumer Awareness

Food Preparation Outcomes:



Year 10 – AQA GCSE in Food Preparation and Nutrition

Food Allergies and Intolerances & Healthy Eating – Micronutrients and Water



An allergen is a substance or food that may cause an allergic reaction. Some food allergies are mild but others can be very serious if the correct treatment is not given quickly. People with severe reaction need an injection of adrenaline from an EpiPen because they can stop breathing.

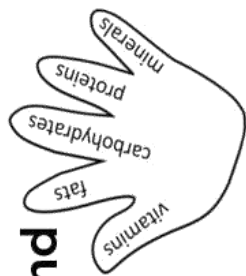
There are 14 common food allergens and information for these must be highlighted in bold in the main ingredients list on the back food packaging.

A food intolerances are more common and symptoms such as diarrhoea, bloating and weight loss are noticeable a short time after someone has eaten the food they are intolerant to.

Lactose intolerance is one of the most common with people not able to digest lactose which is the natural sugar in milk and other dairy products.

Gluten intolerance happens when someone is intolerant to gluten which is the natural protein found in wheat flour and other cereals such as rye and barley. About 1 in a 100 people suffer from coeliac disease which is a more serious intolerance to gluten. Their body attacks the healthy tissues in the body by mistake.

To prevent people consuming food they are allergic or intolerant to, there are strict laws about how food is made in factories or prepared in restaurants to prevent cross-contamination.



We need food for growth and repair of cells, energy, warmth, protection from illnesses and keep our bodies working properly.

Food is made of 5 nutrients. Each nutrient does a different job in the body. Eating a balanced diet means we get all the nutrients we need for a long and healthy life.

Some of these nutrients you need in large amounts (protein, carbohydrates and fats) – these are called macronutrients. Some of these nutrients we need in small amounts (vitamins and minerals) – these are called micronutrients.

Vitamins A, D, E and K are fat soluble and can be stored by the body in our body fat. A fat soluble example is **Vitamin A** which is needed for healthy eyesight, healthy skin and a healthy immune system. Its antioxidant properties also helps to protect the body from cancer and cardiovascular disease (CVD).

You also need minerals such as calcium and iron, for example **Calcium** is needed for bone density and to maintain healthy, strong teeth and **Iron** is needed to make red blood cells which transport oxygen around the body.

Water is not a nutrient but it is required for life. You need to stay hydrated because your body is 70% water and you need to replace water you lose when you breathe, sweat or urinate. Water is needed to cool the body, remove waste and to digest and transport nutrients around the body. It is recommended that you drink 6-8 glasses of water a day.



Qu'est-ce que tu aimes faire ?

J'adore...	<i>I love...</i>
J'aime...	<i>I like...</i>
J'aime beaucoup...	<i>I like ... a lot</i>
Je n'aime pas...	<i>I don't like...</i>
Je déteste...	<i>I hate...</i>
le cinéma.	<i>cinema.</i>
le sport.	<i>sport.</i>
la lecture.	<i>reading.</i>
la musique.	<i>music.</i>
la télé.	<i>TV.</i>
les animaux.	<i>animals.</i>
les jeux vidéo.	<i>video games.</i>
C'est...	<i>It's...</i>
amusant.	<i>fun.</i>
génial	<i>great.</i>
intéressant.	<i>interesting.</i>
ennuyeux.	<i>boring.</i>
nul.	<i>rubbish.</i>
J'aime...	<i>I like...</i>
Je n'aime pas...	<i>I don't like...</i>
aller au cinéma.	<i>going to the cinema.</i>
danser.	<i>dancing.</i>
écouter du R'n'B.	<i>listening to R'n'B.</i>
jouer au basket.	<i>playing basketball.</i>
nager.	<i>swimming.</i>
regarder des comédies.	<i>watching comedies.</i>
surfer sur Internet.	<i>surfing the internet.</i>
tchatter	<i>faire du judo.</i>
prendre des selfies.	<i>taking selfies.</i>

Qu'est-ce que tu fais comme activités extra-scolaires ?

What after school activities do you do ?

Je chante dans la chorale.	<i>I sing in the choir.</i>
Je joue au badminton.	<i>I play badminton.</i>
Je joue du violon dans l'orchestre.	<i>I play violin in the orchestra.</i>
Je fais du théâtre.	<i>I do drama.</i>
Je fais de la gymnastique.	<i>I do gymnastics.</i>
Je vais au club de danse.	<i>I go to the dance club.</i>
Je vais au club d'informatique.	<i>I go to the computer club.</i>
Je ne fais rien.	<i>I don't do anything / I do nothing.</i>
Je fais ça...	<i>I do that...</i>
le lundi / le mardi.	<i>on Mondays / on Tuesdays</i>
après les cours.	<i>after lessons.</i>
à midi.	<i>at lunchtime.</i>
avec mon copain / ma copine.	<i>with my friend.</i>
avec mes ami(e)s.	<i>with my friends.</i>
avec mon équipe.	<i>with my team.</i>

Qu'est-ce que tu as fait le weekend dernier? What did you do last weekend?

J'ai mangé au restaurant.	<i>I ate in a restaurant</i>
Je suis allé(e) à un concert.	<i>I went to a concert.</i>
Je suis allé(e) à une fête.	<i>I went to a party</i>
Je suis allé(e) au mariage de mon cousin / ma cousine.	<i>I went to my cousin's wedding.</i>

Qu'est-ce que tu as porté? What did you wear?

J'ai porté...	<i>I wore...</i>
un blouson / un jogging ...	<i>a jacket / tracksuit</i>
un pull / un tee-shirt...	<i>a jumper / tee-shirt.</i>

Amis pour toujours!

Je suis...	<i>I am...</i>
Mon meilleur ami est...	<i>My best friend is...</i>
Ma meilleure amie est...	<i>My best friend is...</i>

grand(e).	<i>tall.</i>
petit(e).	<i>small.</i>
de taille moyenne.	<i>medium-sized.</i>

J'ai les yeux...	<i>I have ... eyes.</i>
Il / Elle a les yeux...	<i>He / She has ... eyes.</i>
bleus / gris.	<i>blue / grey</i>
marron / verts.	<i>brown / green</i>

J'ai les cheveux...	<i>I have ... hair.</i>
Il / Elle a les cheveux ...	<i>He / She has ... hair.</i>
blonds / bruns.	<i>blond / brown</i>
noirs / roux.	<i>black / red</i>
courts / longs / mi-longs.	<i>short / long / medium-length</i>
bouclés / raides.	<i>curly / straight.</i>

Il / Elle porte des lunettes.	<i>He / She wears glasses.</i>
Je m'entends bien avec...	<i>I get on well with...</i>
Je me dispute avec...	<i>I argue with...</i>
parce qu'il / elle est...	<i>because he / she is...</i>
arrogant(e).	<i>arrogant.</i>
impatient(e).	<i>impatient.</i>
drôle.	<i>funny.</i>
égoïste.	<i>selfish.</i>
sympa.	<i>nice.</i>
timide.	<i>shy.</i>

Sur la photo, il y a ...	<i>In the photo there is / are ...</i>
au centre	<i>in the centre</i>
à droite	<i>on the right</i>
à gauche	<i>on the left</i>

Comment as-tu fêté ton anniversaire?

How did you celebrate your birthday?

J'ai regardé mes messages	<i>I looked at my messages.</i>
J'ai mangé du gâteau d'anniversaire.	<i>I ate birthday cake.</i>
J'ai joué au laser tag.	<i>I played laser tag.</i>
J'ai dansé.	<i>I danced.</i>
J'ai bu du coca.	<i>I drank cola.</i>
J'ai fait une fête d'anniversaire.	<i>I had a birthday party.</i>
J'ai ouvert mes cadeaux.	<i>I opened my presents.</i>
Je suis allé(e) au cinéma.	<i>I went to the cinema.</i>
J'ai fait une soirée pyjama.	<i>I had a sleepover.</i>
C'était ...	<i>It was ...</i>
amusant / génial.	<i>fun / great.</i>
hyper-cool.	<i>really cool.</i>
marrant / sympa.	<i>funny / nice.</i>

une jupe / une robe / une veste...	<i>a skirt / dress.</i>
une veste...	<i>a blazer</i>
bleu(e) / noir(e) / vert(e) / gris(e) / blanc(he) / violet(te)	<i>blue / black / green / grey / white / purple</i>

rouge / jaune / rose / orange / marron	<i>red / yellow / pink / orange / brown</i>
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des baskets / des bottes / des chaussures...	<i>trainers / boots / shoes.</i>
bleues / noires / vertes / grises / blanches / violettes	<i>blue / black / green / grey / white / purple</i>
rouges / jaunes / roses / orange / marron	<i>red / yellow / pink / orange / brown</i>

Argent de poche

Pocket money

Pour gagner de l'argent, ... on peut / je dois...
aider à la maison.
aider les voisins.
trouver un petit boulot.
faire du babysitting.

*to earn money
you can / I must
help at home.
help the neighbours.
find a part-time job.
do babysitting.*

Qu'est-ce que tu fais pour gagner de l'argent ?
What do you do (in order) to earn money ?

Je lave la voiture.
Je garde mon petit frère.
Je garde ma petite sœur.
Je range ma chambre.
Je travaille dans un café.
Je travaille à la boulangerie.
Je fais la cuisine.

*I wash the car.
I look after my little brother.
I look after my little sister.
I tidy my room.
I work in a café.
I work at the bakery.
I do the cooking.*

Je gagne 8 euros par semaine / par mois.
I earn 8 euros a week / a month.

Qu'est-ce que tu vas faire à l'avenir ?

What are you going to do in the future ?

I am going to live... abroad.

Je vais habiter... à l'étranger.

Je vais acheter... une grande maison.
une Ferrari rouge.

*I am going to buy... a big house.
a red Ferrari.*

Je vais être... célèbre.
heureux/heureuse.

*I am going to be... famous.
happy.*

Je vais avoir... cinq enfants.

I am going to have... five children.

Je vais aller... à New York.
en Chine.

*I am going to go... to New York.
to China.*

Je vais faire du travail bénévole.
à l'avenir
dans dix ans
dans vingt-cinq ans

*I am going to do voluntary work.
in the future
in 10 years
in 25 years*

Ce sera... cool / fantastique.

It will be... cool / fantastic.

Qu'est-ce que tu veux faire comme métier?

What job do you want to do?

je veux être...
je ne veux pas être ...
scientifique.
pilote.
ingénieur(e).
danseur / danseuse.
acteur / actrice.
dessinateur / dessinatrice.
instituteur / institutrice
professeur
infirmier / infirmière
policier / policière
mécanicien / mécanicienne
musicien / musicienne
architecte
vétérinaire

*I want to be a...
I don't want to be a...
scientist
pilot
engineer
dancer
actor / actress.
designer.
primary school teacher
teacher (secondary and beyond)
nurse
police officer
mechanic
musician
architect
vet*

C'est...
créatif / dangereux / ennuyeux / fatigant / passionnant / pratique / varié / bien payé.
creative / dangerous / boring / tiring / exciting / practical / varied / well paid.

Je veux...
travailler seul(e).
travailler en équipe.
travailler avec des enfants / animaux.
aider les autres.

*I want...
to work on my own.
to work in a team.
to work with children / animals.
to help others.*

Au travail, les robots!

Robots at work

Qu'est-ce que tu as fait hier?
What did you do yesterday?

J'ai gardé les enfants.
J'ai joué aux jeux vidéo.
J'ai préparé les repas.
J'ai rangé les chambres.
J'ai travaillé dans le jardin.
J'ai fait la vaisselle.
J'ai bu un café.

*I look after the children.
I played video games.
I prepared meals.
I tidied the bedrooms.
I worked in the garden.
I did the washing-up.
I drank a coffee.*

Je suis allé(e) au supermarché.
Je suis resté(e) à la maison.

*I went to the supermarket.
I stayed at home.*

Je n'ai pas aide à la maison.
Je n'ai pas regardé la télé.
Je ne suis pas allé(e) au supermarché.

*I didn't help at home.
I didn't watch TV.
I didn't go to the supermarket.*

hier
d'abord
ensuite
après
l'après-midi
cependant
C'était...

*yesterday
first of all
then
afterwards
in the afternoon
however
it was...*

The Future Tense

The future tense is formed with part of the verb **Aller** and an **infinitive**:

Aller – to go

Je vais - I am going
Tu vas – you are going
Il / elle / on va – He / she / we is (are) going
Nous allons – we are going
Vous allez – you are going (plural / formal)
Ils / ells vont – they are going

For negative verbs ne pas forms a sandwich round part of the verb aller.

e.g. Il va visiter le musée
(He is going to visit the museum)

Il ne va pas visiter le musée
(He is not going to visit the museum)

Future Tense

Complete each sentence with the correct part of *Aller*.

1. Je acheter une maison.
2. Il visiter ses grands-parents.
3. Nous aller à l'université.
4. Tu manger au restaurant?
5. On travailler seul.
6. Elles être musiciennes.

Year 9 Geography: Glaciation

Key Term	Definition <small>(use the read cover write check technique to revise these terms)</small>
Erosion	The glacier will carve and change the shape of the mountain by plucking rocks from under it and then uses them to scrape and smooth it by abrasion .
Transportation	The glacier moves material at the base when it plucks it. It transports other material which falls on top of it and are carried on and within it. This is also known as bulldozing .
Deposition	When the glacier starts to melt it drops the material it is carrying which is called glacial till , and stops pushing material at the snout which has built up called moraine . Other deposition landforms include drumlins and eskers .
Cirque or Corrie	Cirques are bowl-shaped, armchair-like depressions that glaciers carve into mountains and valley sidewalls at high elevations.
U-shaped valley	They were formed in river valleys which, during the ice age, have been filled by a large glacier. These glaciers have deepened, straightened and widened the valley by plucking and abrasion. These are sometimes called glacial troughs .
Ribbon Lake	U-shaped valleys are formed by glacial erosion and can form into long, thin valleys. Over time, after the ice has melted, precipitation fills the valley bottom to form a long, thin lake. This is a ribbon lake.
Tarn	Tarn, a small mountain lake, especially one set in a glaciated steep-walled cirque.
Economic Opportunities	Present and past glaciated areas can be used for activities like agriculture (pastoral & arable), forestry , mineral extraction and tourism .
Conflict	Sometimes different stakeholders have different opinions and ideas of how glaciated areas should be managed . This is often conservation v development .

Ice Age - Key questions

What is an Ice Age?
 When was the last Ice Age?
 How did it effect the UK?
 When did it recede?

The words in bold in the definition table have not been given. It is up to you to find the meanings of these words and be able to recall the definition.



Glacial extent across Europe during the last Ice Age.
 Which countries? Can you see the UK?

Glaciers form from snow. In cold places snow falls layer on layer. Over time, the layers get compacted to ice. It could take a layer of snow 10 metres thick to make a 1 metre layer of ice. As it gets thicker and heavier, eventually it starts flow under the pressure of its own weight.

Geography Questions to consider?
 Why are glaciers important socially?
 Why are glaciers important to scientists?
 Why are glaciers important environmentally?

Prior learning - Key questions
 Think back to year 7 & 8. Which topics might link with glaciation? How? Why? So what?

Y9 German - Autumn Term 1

1. Beweg dich! Move!

Das ist/sind ...	This is/are...
der Körper	the body
der Kopf	the head
der Arm	the arm
der Rücken	the back
der Bauch	the belly
der Po	the bottom
der Fuß	the foot
die Schulter	the shoulder
die Hand	the hand
das Bein	the leg
das Knie	the knee
das Gesicht	the face
das Auge	the eye
das Ohr	the ear
das Kinn	the chin
die Nase	the nose
der Mund	the mouth

2. Wer ist dein Vorbild?	Who is your idol ?
Warum?	Why ?
Was macht er/sie?	What does he/she do ?
Wie ist er/sie?	What is he/she like ?
... ist mein Vorbild,	... is my idol.
weil er/sie ... ist.	because he/she is...
Ich liebe ...,	I love...
weil er/sie ... ist.	because he/she is...
Ich mag ... (nicht),	I like... (not),
weil er/sie ... ist.	because he/she is...
begabt	talented
berühmt	famous
dynamisch	energetic
erfolgreich	successful
lustig	funny
originell	original
reich	rich
arrogant	arrogant
nervig	annoying
launisch	moody

3. Irregular Verbs	haben to have	fahren to go	laufen to run	sehen to see	lesen to read	essen to eat	sein to be
ich	habe	fahre	laufe	sehe	lese	esse	bin
du	hast	fährst	läufst	siehst	liest	isst	bist
er/sie/es/man	hat	fährt	läuft	sieht	liest	isst	ist

4. The Perfect Tense

spielen (to play)		fahren (to go)	
ich habe gespielt	I played	ich bin gefahren	I went
du hast gespielt	you (sing) played	du bist gefahren	you (sing) went
er/sie/es/man hat gespielt	he/she/it/you played	er/sie/es/man ist gefahren	he/she/it/you went
wir haben gespielt	we played	wir sind gefahren	we went
ihr habt gespielt	you (plural) played	ihr seid gefahren	you (plural) went
sie haben gespielt	they played	sie sind gefahren	they went
Sie haben gespielt	you (polite) played	Sie sind gefahren	you (polite) went

5. Was hast du in deinem Leben gemacht?

Ich habe ...
 viele Reisen gemacht.
 mit Kindern gearbeitet.
 viele Preise gewonnen.
 viele Länder gesehen.
 viel Geld verdient.
 viel trainiert.
 Ich bin nach Afrika gefahren.

What did you do in your life ?

I (have)...
 travelled a lot. (literally : done lots of journeys)
 worked with children.
 won lots of prizes.
 seen lots of countries.
 earned a lot of money.
 trained a lot.
 I went to Africa. (literally: I have driven to Africa)

Independent Task: Research a famous person. What have they done during their life?

Y9 German - Autumn Term 2

1. Was wirst du in der Zukunft machen?	What will you do in the future ?
In der Zukunft werde ich ...	In the future I will...
viele Reisen machen	travel a lot. (literally: do lots of journeys)
viele Länder sehen	see lots of countries.
Arzt/Ärztin werden	become a (male) doctor/(female) doctor.
in Asien arbeiten	work in Asia.
Theaterwissenschaft studieren	study drama.
viel Geld verdienen	earn a lot of money.
für eine Hilfsorganisation arbeiten	work for an aid organisation.

2. The Future Tense with werden (will)		
Ich	werde	+ infinitive ...machen ...sehen ...arbeiten ...fahren ...verdienen
Du	wirst	
Er/sie/es/man	wird	
wir	werden	
ihr	werdet	
sie	werden	
sie	werden	

3. Was ist passiert?	What happened?
Ich habe mir (das Bein) verletzt.	I injured my leg.
Ich habe mir (den Arm) gebrochen.	I broke my arm.
Ich habe einen Unfall (im Schwimmbad) gehabt.	I had an accident (at the swimming pool)
Ich bin (vom Rad) gefallen.	I fell (of my bike)
Ich bin ins Krankenhaus gekommen.	I went to hospital. (literally: I came into the hospital)

4. Bist du wild auf Musik?	Are you wild about music?
R&B-Musik / Jazzmusik	R&B music / Jazz music
Rap-Musik/Hip-Hop	Rap/hip Hop
klassische Musik	classical music
Sie klingt positiv/negativ.	It sounds positive/negative.
Sie ist kitschig / energiegeladen	It is corny/ energetic. (full of energy)
Sie macht gute Laune.	It puts you in a good mood.
Was für Musik hörst du (nicht) gern?	What type of music do you not like listening to?
Ich höre (nicht) gern ..., weil sie ... ist/macht.	I (don't) like listening to... , because it is/does...
Mein(e) Lieblingssänger(in) ist	My favourite singer is ...
Meine Lieblingsband ist ...	My favourite band is...
Mein Lieblingslied ist ...	My favourite song is...

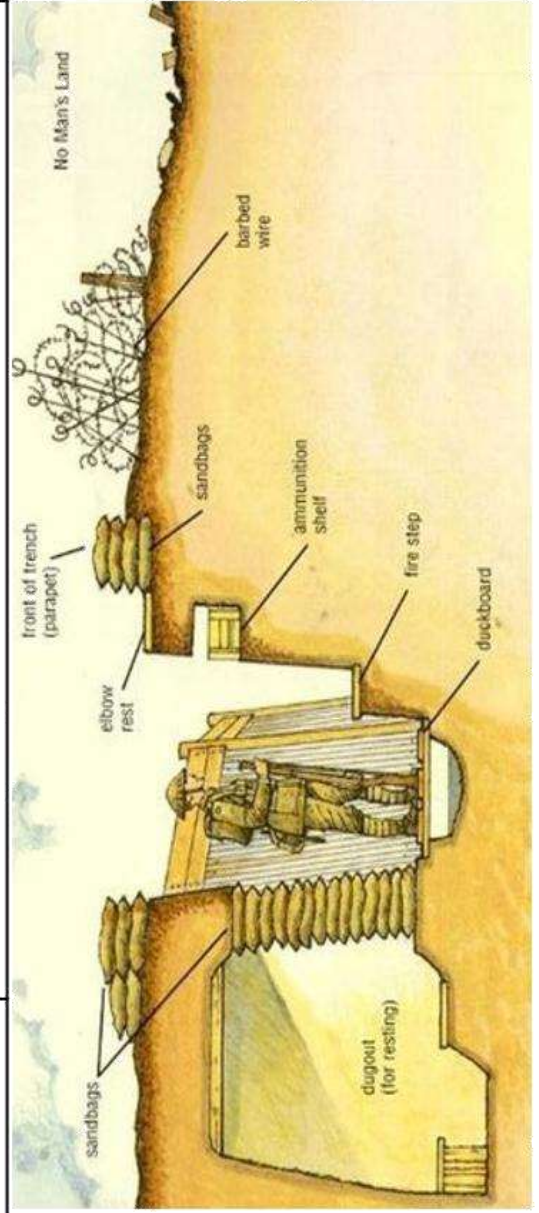
Independent Task: Research German music online.

The First World War

Chronology	
June 1914	Murder of Archduke Franz Ferdinand
1917	Russia withdrew from the war and the United States joined the war
July – Nov 1916	The Battle of the Somme
11 th Nov 1918	Armistice

Key People	Role
Archduke Franz Ferdinand	Heir to the Austrian throne who was murdered in June 1914
Gavrilo Princip	Member of the Black Hand Gang who murdered Franz Ferdinand
General Haig	British General at the Battle of the Somme
Kaiser Wilhelm II	German Kaiser (King) during the First World War

Key Words	Definition
Militarism	People taking pride in their armies and wanting to spend money to make it bigger and better.
Alliance	An agreement between countries to support each other in the event of a war.
Imperialism	The desire to have a big empire and control other countries.
Nationalism	To love your country and think that it is superior to others.
Triple Entente	An alliance between Britain, France and Russia.
Triple Alliance	An alliance between Germany, Austria-Hungary and Italy.
Black Hand Gang	A gang of Serbian nationalist who wanted Bosnia to become part of Serbia. Carried out the murder of Archduke Franz Ferdinand.
Propaganda	False or misleading information used to spread a certain point of view.
Pals Battalion	A group of friends or co-workers who enlist to fight the First World War together.
Western Front	The area of Northern France and Belgium where British, French and Belgian forces fought Germany in the First World War.
Artillery	Large guns that fired shells which were used on the battlefield to destroy trenches.
Shell Shock	A nervous condition suffered by some soldiers exposed to the noise and the chaos of battle.
Armistice	The end to fighting a war.



Questions

- What were the causes of the First World War?
- How was the First World War fought?

Second World War

Chronology	
1933	Hitler becomes Chancellor of Germany
1939	German Invasion of Poland and the outbreak of Second World War
1940	Battle of France Battle of Britain
1940-1	The Blitz
7th Decemb er 1941	Japanese attack on Pearl Harbor
1941	Battle of Stalingrad
6th June 1944	D-Day
6th and 9th August 1945	Atomic bomb dropped on Hiroshima and Nagasaki

Questions

What caused the Second World War?
 What tactics were used in the Second World War?

Key People	Role
Adolf Hitler	Chancellor and then dictator of Germany, 1933-45.
Neville Chamberlain	British Prime Minister, 1937-40. Associated with the policy of appeasement.
Franklin D. Roosevelt	USA's longest ever serving President, 1933-45.
Winston Churchill	British Prime Minister, 1940-5. He would later become Prime Minister again, 1951-5.
Joseph Stalin	Communist dictator of the USSR from the late 1920s until 1953.
Harry S. Truman	US President, 1945-53. Made the decision to drop the atomic bomb on Japan.



Key Words	Definition
Appeasement	To pacify or placate someone by acceding to their demands (particularly to avoid conflict).
Isolationist	A policy of remaining apart from the affairs of interests of other countries.
Fascism	A right-wing nationalist political ideology.
Dictatorship	A country led by a ruler with total power, usually obtained by force.
Blitzkrieg	“Lightning War” – The German tactic of fighting an intense military campaign designed to bring about a swift victory.
Blitz	“Lightning” – Coined by the British press to describe the German bombing campaign on British cities.
Blitz Spirit	The determination of the British public in the face of the German bombing campaign. The reality of the spirit has been debated.
Operation Barbarossa	The code name for the German invasion of the USSR.

Right: Nazi Germany's conquests in the Second World War.
 Occupied countries are marked in brown. Allies of Germany are marked in yellow.
 The furthest extent of Operation Barbarossa into the USSR is marked in pink.

Year 9 Knowledge Organiser

REVERSE PERCENTAGES

Key Concepts

Calculating percentages of an amount without a calculator:

10% = divide the value by 10
1% = divide the value by 100

Calculating percentages of an amount with a calculator:

Amount \times percentage
as a decimal

Calculating percentage increase/decrease:

Amount \times (1 \pm percentage
as a decimal)

Percentage change:

A dress is reduced in price by 35% from £80. What is its **new price**?

$$\begin{aligned} \text{Value} \times (1 \\ - \text{percentage as a decimal}) \\ = 80 \times (1 - 0.35) \\ = £52 \end{aligned}$$

Reverse percentages:

A bag of sweets is 60% full, with 18 sweets remaining. How many sweets did the bag contain originally?

$$\begin{aligned} = 18 \div 0.6 \\ = 30 \end{aligned}$$

Reverse percentage change: This is when we are trying to find out the original amount.

A pair of trainers cost £35 in a sale. If there was 20% off, what was the **original price** of the trainers?

$$\begin{aligned} \text{Value} \div (1 - 0.20) \\ = 35 \div 0.8 \\ = £43.75 \end{aligned}$$

A vintage car has increased in value by 5%, it is now worth £55,000. What was it worth **originally**?

$$\begin{aligned} \text{Value} \div (1 + 0.05) \\ = 55,000 \div 1.05 \\ = £52,380.95 \end{aligned}$$

Examples

Sparx

M528, U286

Key Words

Percent
Increase/Decrease
Reverse
Multiplier
Inverse

- 1a) Decrease £500 by 6%
- b) Increase 70 by 8.5%
- 2) A camera costs £180 in a 10% **sale**. What was the **pre-sale** price?
- 3) The cost of a holiday, including **VAT** at 20% is £540. What is the **pre-VAT** price?

ANSWERS A 1a) £470 b) £75.95 2) £200 3) £450

Year 9 Knowledge Organiser

REPEATED PERCENTAGE CHANGE

Key Concepts

Calculating percentages of an amount without a calculator:

10% = divide the value by 10
1% = divide the value by 100

Per annum is often used in monetary questions meaning **per year**.

Depreciation means that the value of something is going down or reducing.

Examples

Simple interest:

Joe invest £400 into a bank account that pays 3% **simple interest** per annum. Calculate how much money will be in the bank account after 4 years.

$$\begin{aligned} 3\% &= £4 \times 3 \\ &= £12 \\ 4 \text{ years} &= £12 \times 4 \\ \text{Interest} &= £48 \\ \text{Total in bank account} &= £400 + £48 \\ &= £448 \end{aligned}$$

Compound interest:

Joe invest £400 into a bank account that pays 3% **compound interest** per annum. Calculate how much money will be in the bank account after 4 years.

$$\begin{aligned} \text{Value} \times (1 \pm \text{percentage as a decimal})^{\text{years}} \\ = 400 \times (1 + 0.03)^4 \\ = 400 \times (1.03)^4 \\ = £450.20 \end{aligned}$$

Sparx

M533, M901,
U533, U332

Key Words

Percent
Depreciate
Interest
Annum
Simple
Compound
Multiplier

- 1) Calculate a) 32% of 48 b) 18% of 26
- 2) Kane invests £350 into a bank account that pays out simple interest of 6%. How much will be in the bank account after 3 years?
- 3) Jane invests £670 into a bank account that pays out 4% compound interest per annum. How much will be in the bank account after 2 years?

ANSWERS A 1a) 15.36 b) 4.68 2) £413 3) £724.67

Year 9 Knowledge Organiser

EQUATIONS

Key Concepts

Solving equations:
Working with inverse operations to find the value of a variable.

Rearranging an equation:
Working with inverse operations to isolate a highlighted variable.

In solving and rearranging we **undo the operations** starting from the last one.

For each step in solving an equation we must do the **inverse** operation

Solve:

$$5(x - 3) = 20$$
 Expand

$$5x - 15 = 20$$

$$+15 \qquad +15$$

$$5x = 35$$

$$+5 \qquad +5$$

$$x = 7$$

Examples

Rearrange to make r the subject of the formulae :

$$Q = \frac{2r - 7}{3}$$

$$\times 3 \qquad \times 3$$

$$3Q = 2r - 7$$

$$+7 \qquad +7$$

$$3Q + 7 = 2r$$

$$\div 2 \qquad \div 2$$

$$\frac{3Q + 7}{2} = r$$

Solve:

$$12 = 3x - 18$$

$$+18 \qquad +18$$

$$30 = 3x$$

$$\div 3 \qquad \div 3$$

$$x = 10$$

Solve:

$$7p - 5 = 3p + 3$$

$$-3p \qquad -3p$$

$$4p - 5 = 3$$

$$+5 \qquad +5$$

$$4p = 8$$

$$\div 4 \qquad \div 4$$

$$p = 2$$

Sparx

M707, M509, M387,
M554, M957, M184

Key Words

Solve
Rearrange
Term
Inverse operation

- Solve $7(x + 2) = 35$
- Solve $4x - 12 = 28$
- Solve $4x - 12 = 2x + 20$
- Rearrange to make x the subject:
 $y = \frac{3x + 4}{2}$

ANSWERS: 1) $x = 3$ 2) $x = 10$ 3) $x = 16$ 4) $x = \frac{2y - 4}{3}$

Year 9 Knowledge Organiser

REARRANGING FORMULAE

Key Concepts

Rearranging an equation:
Working with inverse operations to isolate a highlighted variable.

When rearranging we **undo the operations** starting from the last one.

Rearrange to make r the subject of the formulae :

$$Q = \frac{2r - 7}{3}$$

$$\times 3 \qquad \times 3$$

$$3Q = 2r - 7$$

$$+7 \qquad +7$$

$$3Q + 7 = 2r$$

$$\div 2 \qquad \div 2$$

$$\frac{3Q + 7}{2} = r$$

Examples

Rearrange to make c the subject of the formulae :

$$2(3a - c) = 5c + 1$$
 expand

$$6a - 2c = 5c + 1$$

$$+2c \qquad +2c$$

$$6a = 7c + 1$$

$$-1 \qquad -1$$

$$6a - 1 = 7c$$

$$+7 \qquad +7$$

$$\frac{6a - 1}{7} = c$$

Rearrange to make a the subject of the formulae :

$$\sqrt{\frac{ac}{b}} = d$$
 square

$$\frac{ac}{b} = d^2$$

$$\times b \qquad \times b$$

$$ac = bd^2$$

$$\div c \qquad \div c$$

$$a = \frac{bd^2}{c}$$

Sparx

M184, U556

Key Words
Rearrange
Term
Inverse

- Rearrange to make a the subject $r = \frac{5a + 3}{t}$
- Rearrange to make m the subject $2(2p + m) = 3 - 5m$
- Rearrange to make x the subject $\sqrt{\frac{4x}{y}} = z$

ANSWERS: 1) $a = \frac{rt - 3}{5}$ 2) $m = \frac{3 - 4p}{4}$ 3) $x = \frac{y z^2}{4}$

YEAR 9 – UNIT 1

MUSICAL THEATRE

Musical Theatre (or 'Musicals') is a Theatrical Presentation where the main story is told through song. However, unlike Opera (*another Theatrical Presentation where the story is told through song*) there will be some spoken dialogue (*in Operas there is NO speech, EVERYTHING is sung*).

Musical Theatre is an important part of the British Entertainment Industry. Focussed in the West End District of London (*otherwise known as "The Theatre District"*) it brings visitors from all over the world and, along with them, millions of pounds into the UK economy.

To help tell the story there are six main types of song/music within musicals. These are:

SOLO CHARACTER SONG: One character sings about how they are feeling (in love, full of hate, over the moon etc.), their story or about themselves.

DUET: Basically the same as solo character songs but two people are singing so you get two different reactions to a situation.

TRIOS/QUARTETS etc: Similar to Solo Character Songs and Duets, these give a chance for more lead characters to tell their stories together in one song.

ACTION SONG: A song that tells the audience something they need to know such as a bit of back story/history or what is happening in the plot.

CHORUS NUMBER: Basically the whole cast get together and have a big sing-song. These will usually be used to start, or finish a show (or 'act').

INCIDENTAL MUSIC: This involves no singing at all and is just the orchestra playing Instrumental Music. This could be an 'Overture', a Dance Number or something as simple as Music for a Scene Change.

TYPES OF MUSICAL THEATRE

BOOK MUSICAL: A book musical is a musical that includes an originally written story, music and lyrics. Sometimes, a book musical, be called a "musical play", as book musicals often tell stories through songs.

MUSICAL REVUE: A musical revue combines song, dance, music and other forms of entertainment into a show that's often a lively, celebratory affair, and gets the audience up on their feet.

GOLDEN AGE MUSICAL: Golden Age musicals are productions which premiered in the 1940s and 1950s. Rodgers and Hammerstein and Stephen Sondheim were leading figures in Golden Age musicals, including *Oklahoma!*, *Kiss Me Kate* and *Guys and Dolls*.

JUKEBOX MUSICAL: A jukebox musical is a stage show that uses the songs of a recording artist, band or style of music to form the basis for a production. With many chart-topping musicians' tracks in a jukebox musical, this type of show has offered audiences the chance to appreciate their favourite artists in a new light

CONCEPT MUSICAL: A concept musical is a powerful way to present a message. Rather than focusing on characters, a concept musical will focus on themes. Concept musicals can be based upon a pre-existing story, such as Joseph and the Amazing Technicolor Dreamcoat offering a musical re-telling of the story in the Book of Genesis or the final few days in Jesus' life as told in *Jesus Christ Superstar*.

ROCK MUSICAL: A rock musical is a type of musical theatre with a soundtrack that lends itself to commercial rock music. In recent years, rock musicals have frequently been performed in the West End, with examples including the jukebox rock show *Rock of Ages* featuring 1970s glam rock tracks made famous by Journey, Bon Jovi and Foreigner. Rock has also had an influence in newer musicals, including *Heathers* and *Spring Awakening*.

FILM MUSICAL: A film musical brings the magic of the silver screen to the stage. Film-based stage adaptations regularly draw large theatregoers to the West End, as audiences look forward to seeing some of their favourite cinematic blockbusters brought to life. In most cases, film musicals incorporate songs from the film with original music written for the stage production.

YEAR 9 – UNIT 1 'HAMILTON'

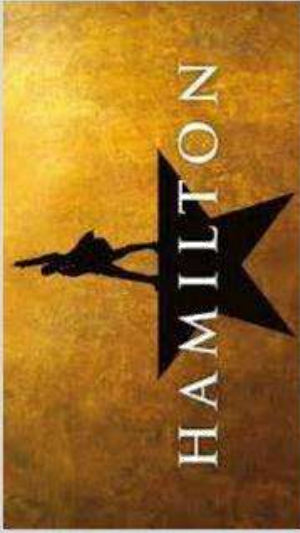
Written by Lin-Manuel Miranda, as his second musical production, "Hamilton" tells the story of the American Founding Father, Alexander Hamilton. You would not think that this is a particularly exciting story for a musical but, with a ground-breaking mix of Rap, Hip-hop, R&B and Pop styles along with traditional Musical Theatre-style numbers Hamilton is no ordinary musical.

It opened 'Off-Broadway' (New York) in 2015 but swiftly moved onto Broadway itself, selling out night after night. Now, with productions around the world and box office records being smashed it is THE musical of the moment and has gone onto escalate its composer to new heights of popularity as well as inspiring new historical musicals such as "Six", a musical that tells the stories of the wives of Henry VIII.



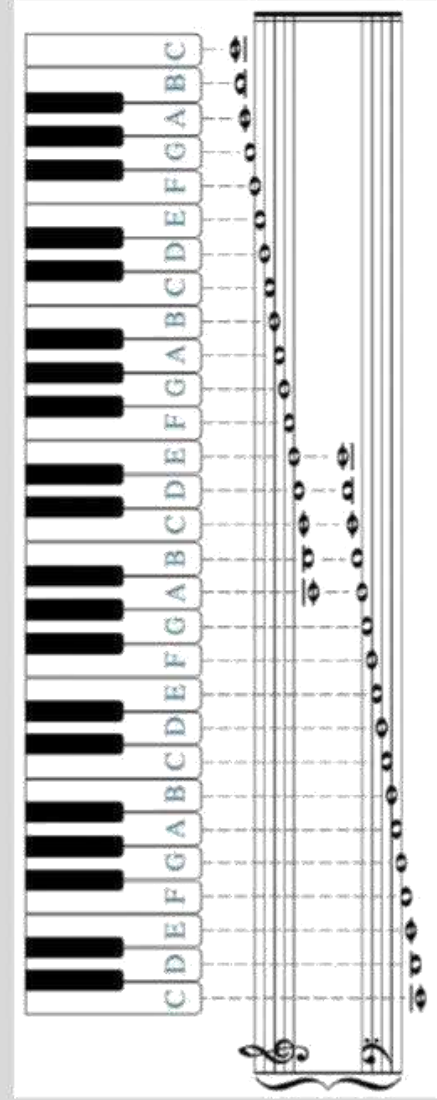
Lin-Manuel Miranda (born January 16, 1980) is an American actor, singer-songwriter, playwright, and filmmaker. He is known for creating the Broadway musicals *In the Heights* (2005) and *Hamilton* (2015), and the soundtrack of Disney's *Encanto* (2021). His accolades include three Tony Awards, three Grammy Awards, two Laurence Olivier Awards, two Primetime Emmy Awards, an Annie Award, a MacArthur Fellowship Award, a Kennedy Centre Honour, and a Pulitzer Prize.

A frequent collaborator of the Walt Disney Company, Miranda has written original songs for the studio, which has garnered him two nominations for the Academy Award for Best Original Song ("How Far I'll Go" and "Dos Oruguitas"). He worked on the 2016 animated musical *Moana*, and wrote the story and music for *Encanto*—a widespread critical and commercial success; its song "We Don't Talk About Bruno" broke various records, marked Miranda's first-ever number-one song on the US Billboard Hot 100 and the UK Singles charts, and cemented his mainstream fame. He starred as Jack in the musical fantasy *Mary Poppins Returns* (2018), for which he was nominated for a Golden Globe Award for Best Actor – Motion Picture Musical or Comedy. For his performance in the Disney+ live stage recording of *Hamilton* released in 2020, he received Golden Globe and Primetime Emmy Award nominations.



Rhythm in Music
Note Values - UK

Term	Symbol	Value
semibreve		4 beats
minim		2 beats
crotchet		1 beat
quaver		1/2 beat
pair of quavers		1/2 + 1/2 = 1
semiquaver		1/4 beat
joined semiquavers		1/4 + 1/4 + 1/4 + 1/4 = 1



Rhythm in Music
Rest Values - UK

Term	Symbol	Value
semibreve rest		4 beats of silence
minim rest		2 beats of silence
crotchet rest		1 beat of silence
quaver rest		1/2 beat of silence
semiquaver rest		1/4 beat of silence

Year 9.1 - KS3 Core PE Knowledge Organiser —Principles of Training

Principles of training

		Description
Principle		
1	Individual Needs	No two exercise programmes should be exactly the same because they should be designed to meet the needs of an individual . A PARQ is used to help understand individual needs, this questionnaire determines what an individual is capable of and will inform the intensities and types of activities to be used as part of a training program. Training should be matched to the requirements of the activity that the performer is involved in, i.e. specific to the event.
2	Specificity	
3	Progressive Overload	The frequency, intensity, time and/or type of exercise are gradually increased to ensure levels of performance continue to improve until a plateau (limit) is achieved. E.g. increase the training session by 10 mins (time). We would NEVER train so much that we would become injured, this MUST BE avoided.
4	Reversibility	Any adaptation that takes place as a result of training will be reversed when you stop training. If you take a break or don't train often enough you will lose fitness (this includes when you get injured – and is why is someone breaks their arm, when the come out of the cast the arm can be skinny) .
5	Overtraining	This occurs when you train too hard and do not give your body enough time to rest and recover between training sessions.



		Worked Examples
Principle		
1	Individual Needs	Yr 11 pupil completing a PEP (Personal exercise plan) would complete a PARQ before they start so they can match their PEP to their individual needs. These include o Age, o Gender o Ability, o Fitness Levels. E.g. The Yr 11's PEP would look very different to that of a Premiership footballer – different age and ability.
2	Specificity	A basketball player looking to improve his rebounding would use plyometric training to develop his power. They would use box jumps as this is specific to the movement and the muscle groups they use when they jump for a rebound.
3	Progressive Overload	A football player looking to improve the strength of shooting would use weight/resistance training, for example a leg extension. During week 1 of a PEP they would lift 10kg, then each week they would increase the intensity by 2.5kg (being careful not to exceed their limits).
4	Reversibility	A long distance runner, would use continuous training and they would avoid having gaps in their training to stop the effects of reversibility and returning to their untrained state. Reversibility also sets in when an injured athlete has to have a break in training due to INJURY .
5	Overtraining	A weightlifter would use weight training and train 3-5 times a week and allow time for rest and recovery and avoid overuse injury and allow adaptation.

Key Misconceptions/mistakes

- If you are training cardio-vascular endurance or muscular endurance you would need to work in your aerobic training zone.
- If you are training muscular strength, speed or power you would need to work in your anaerobic training zone.

Year 9.2– KS3 Core PE Knowledge Organiser —Principles and Thresholds of Training

FITT Principles

Principle		Description	Worked Examples
1	Frequency	How often to train.	Frequency is increased by training a greater number of times each week.
2	Intensity	How hard to train.	Intensity is increased by lifting a greater resistance , such as with weight training, or by training at a higher percentage of maximum heart rate. This can be done either as continuous or interval training.
3	Time	How long to train.	Time can be manipulated by training for longer , reducing recovery times or by completing a greater number of sets or repetitions (also known as reps).
4	Type	Which methods of training to use.	Type of training is manipulated by offering a variety of training types and experiences to the athlete by combining training methods.

Key Vocabulary

Heart Rate, Resting Heart Rate, Aerobic, Anaerobic, Endurance, Strength, Plateau

Worked e.g. - thresholds of training

Basic method

Max HR x Intensity

Example—aerobic training zone for John who is 16

Max HR is 220-age (220-16 = 204) $204 \times 0.6 = 122.4$ $204 \times 0.8 = 163.2$ **aerobic training zone is 122-163 bpm**

Key Terms

Key terms	Recall the definitions
1 Heart Rate (HR)	
2 Resting Heart Rate (RHR)	
3 Maximum Heart Rate (MHR)	
4 Recovery Heart Rate	

Your Turn

On a piece of paper, workout the AEROBIC and ANAEROBIC training thresholds for.....
Yourself and the people who live with you.

(Don't forget you need to work out their Max Heart Rate first)



Training thresholds

Key Term	Definition	Key Term	Definition
1 Aerobic Training Zone	60-80% of your maximum heart rate.	3 Muscular Endurance	Low Weight with High Repetitions & Low Sets
2 Anaerobic Training Zone	80-90% of your maximum heart rate.	4 Muscular Strength	High Weight with Low Repetitions & High Sets

RE Year 9 Topic 1: Crime and Punishment

Evil

Evil actions are those that cause suffering, injury or possible death. Some actions are considered evil even though they are legal. Evil can be linked to the devil (Satan). Evil actions may be blamed on not resisting temptation. People are created good, there is usually a reason why they do wicked things, this could be due to psychological illness. Not all evil actions come from evil intentions, sometimes a person may be influenced by the situation in which they find themselves. Many Christians would claim there is no such thing as an evil person. The belief in original sin came from the disobedience of Adam and Eve means that all humans have a tendency to do things that are evil even though they are not evil themselves. The teachings in the Bible warn against having evil or wrong thoughts or intentions: 'You have heard it was said to the people, 'You shall not murder', and anyone who murders will be subject to judgement.' (Matthew 5:21). God will make this judgement.

Suffering

Christians believe they should try to help everyone, they have a duty. They should follow the example of Jesus. Why would a loving God, who cares about his people, allow them to suffer? God gave humanity free will and given guidance about how to use free will responsibly. Christians try to heal the wrong that has been done as Jesus taught to love and respect each other.

Treatment of Criminals

How severe the punishment is depends on the seriousness of the crime. Reformation is an important factor as both the individual and society will benefit. Christians focus on positives sanctions that help offenders change their ways. Under Shari'ah law (Muslim countries follow) the severity of the punishment depends on the seriousness of the crime committed.

Forgiveness

Christians and Muslims believe that forgiveness is important for a living a peaceful life. They do not think it is a replacement for punishment. If the aim of punishment is to reform, the punishment should benefit the offender. When Jesus was being crucified, Jesus forgave those who crucified him. God expects Christians to show forgiveness to others, in turn they believe God will forgive them for any sins they may commit. Muslims believe only God can truly forgive and will forgive those he knows are truly sorry and intend to follow the faith properly in the future.

KEY TERMS

Crime	Breaking the law, which is punishable.
Punishment	Something legally done to somebody as a result of being found guilty of breaking the law.
Evil	The opposite of good; a force or the personification of a negative power. E.g. the devil
Hate Crime	Crimes often involving violence that are usually targeted at a person because of their race, religion, sexuality, disability or gender. Jesus taught to 'Love your neighbour.' This means to show compassion, care and respect to all. Christians believe God created all humans with equal value
Sanctity of life	All life is holy as it is created and loved by God; Christians believe human life should not be misused or abused.
Free Will	The ability of people to make decisions for themselves without constraint
Forgiveness	Showing mercy and pardoning someone for what they have done wrong.
Justice	Making things fair again.
Sin	1. Any action or thought that separates humans from God 2. Behaviour which is against God's laws and wishes or against principles of morality
Corporal Punishment	Punishment of an offender by causing them physical pain – now illegal in the UK.

Key Quotes

<p>"There is neither Jew nor Gentile, slave nor free, male nor female, for you are all one in Christ Jesus." (Galatians 3:28) Shows equality.</p> <p>"Forgive us our sins as we forgive those who sin against us." (The Lord's Prayer) Shows forgiveness.</p> <p>"Do not take revenge.....Do not overcome by evil, but overcome evil with good." (Romans 12:19-21)</p>
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Key Questions

What is the original sin? How does this link to beliefs about evil? Do you think is it ever right to break an unjust law? Imagine living in a country without any laws; What would life be like? How would religious believers answer the question: Why does God allow people to suffer?

The philosophical **principle of utility** suggests that an action is right if it promotes maximum happiness for the maximum number of people affected by it.

Practice task

'Nobody should expect to be forgiven more than once.' Write an argument to agree and disagree with the statement. How would a Christian respond?

Religious Studies: Hinduism Beliefs and Teachings

How do Hindus see the Divine?

Hindus believe in one overall God (Brahman) who is non-personal and impossible to worship directly. This is Nirguna Brahman, God beyond the universe. They worship God through deities like Lady Lakshmi, they can have a personal relationship with them. This is Saguna Brahman, god(s) with shape and form.

What do Hindus say about the soul?

The Atman is the soul inside all living beings. When a being dies the Atman is reincarnated taking on a new body. Humans and animals have Atmans. The Atman can be seen as a bit of the Divine, a bit of Brahman inside all beings. The aim of Hinduism is to escape samsara, then your Atman unites with Brahman.

Who are the key Hindu deities?

The Trimurti are often seen as the three most important deities as they act together to keep the universe in motion. Brahma is the creator, Vishnu the preserver and Shiva the destroyer. Brahma's consort is Lady Saraswati, goddess of music and of learning. Vishnu's consort is Lady Lakshmi, goddess of wealth, prosperity and good fortune. Lord Ganesha, with an elephant head, is the god of new beginnings and the remover of obstacles. Vishnu can come down to earth as an avatar when times are hard. As Lord Rama he defeated the evil Ravana, with help from Hanuman, the monkey warrior. As Lord Krishna he defeated King Kamsa. Hindus say there are 10 avatars of Vishnu in total.

What is Diwali?

The festival of lights, and Hindu New Year. It remembers Rama and Sita returning from exile, lights were lit to welcome them home. Fireworks celebrate their victory over the 10 headed demon Ravana.

Lady Lakshmi is also worshipped, houses are cleaned and rangoli patterns drawn to welcome her. Those in business pray she will help them prosper in the new year.

Key quotes on deities:

The Ramayana is the story of Rama, Sita, Hanuman and Lakshmana, it shows the victory of light over dark, of good over evil.

Key quotes on the divine:

Svetaketu – his father used salt in a glass of water to help him understand God is everywhere, but unseen. A seed helped him understand the idea of atman inside all living things. Unseen, but there within.

What is Holi?

The festival of Spring, and of colours. It remembers Krishna's fun loving side, with children throwing paint powder. This is also a reminder all are equal. It also remembers the evil Holika being burned to death, defeated by her nephew Prahlad. Bonfires celebrate her destruction.

Key quotes on deities:

The Krishna stories show how an avatar fights and overcomes evil, but Krishna is also shown as loving and mischievous.

Key Terms

Key Terms	Definitions
Divine	God/gods.
Brahman	The overall God, the supreme being. Non-personal. 'it'
Deities	Different gods/goddesses. Show one side of Brahman.
Nirguna Brahman	God with no shape/form, non-personal.
Saguna Brahman	God(s) with shape/form, the deities like Ganesha.
Beyond	The Divine is beyond the universe, not within it.
Non-personal	Brahman is everywhere, not a single being to have a relationship with.
Personal	As the deities, Saguna Brahman, gods can be pictured and worshipped, a relationship can develop.
Atman	The soul inside all living beings.
Soul	Spiritual, not physical, does not die when the body does.
Trimurti	The three main Hindu deities.
Shakti	The female side of the divine.
Avatara	The idea that Vishnu comes down to earth to help humans.
Diwali / Diwali	The Hindu festival of light.
Holi	The Hindu festival of Spring, and of colours.
Svetaketu	A confused little boy.
Upanishads	Hindu Scriptures.

Key quotes on the divine:

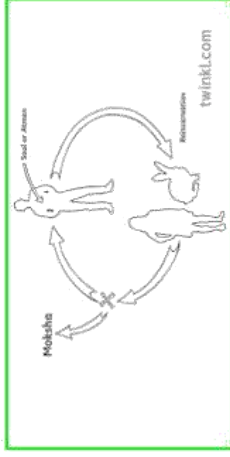
"How many gods are there? Three and three hundred, three and three thousand."

"But really... how many gods are there? One." (Upanishads)
Hindus believe in both one God (Brahman) and many deities.

Religious Studies: Hinduism Beliefs and Teachings

How do Hindus see the universe?

A cluster of bubbles float in space, each one contains a universe. In each universe there is an upper realm of heavens, an earthly realm and a lower, unpleasant realm. In a new life we might be reborn in a different realm.



What do Hindus say about matter?

The world is made up of spirit (purusa), which can't be seen or touched, and matter (prakriti) which can be experienced through the senses. Some Hindus see both as working together, others say the spirit is more important. At enlightenment matter is seen as an illusion (maya) – just as a coiled rope can be mistaken for a snake, so we worry about material things that are only temporary. No material thing last forever, matter goes through three stages, the tri-guna, it is created, maintained or looked after and will be destroyed.

How do Hindus see time?

Universes go through a cycle of 4 ages, the 4 yugas. Gold is the longest lasting, and the best. Then there is the age of silver, the age of copper and finally, shortest and most corrupt, the age of iron. We are living in the age of iron. At the end of this age (in about 427 000 years!) Kalki, the tenth and final avatar of Vishnu, will come and destroy the evil, allowing a new universe to be created and the process start again.

Key quotes on the Atman/soul:

“The self is hidden in all beings.” (Upanishads)

Key quotes on Brahman and the universe:

“All this universe is in truth Brahman. He is the beginning and the end and the life of all.” (Upanishads)

Key quotes on Brahman:

“He moves, and he moves not. He is far and he is near. He is within all and he is outside all.”



Key terms	Definitions
Cosmology	Ideas about the universe.
Cosmos	The universe.
Prakriti	Matter.
Matter	Physical, material, experienced through the senses. Will not last forever.
Tri-guna	Three stages of matter: creation, maintenance, destruction.
Spirit	Links to the Atman, can't be experienced physically. Purusa = spirit.
Maya	Illusion, ultimately all material things are an illusion.
Cycle of 4 Ages	Time is made up of 4 ages: gold, silver, copper, iron.
Kalki	The tenth avatar of Vishnu.
Many Worlds	Many universes, and each universe has different realms.
Diverse Inhabitants	Each universe contains different forms of beings.
Spiritual Worlds	Upper realms where deities live.

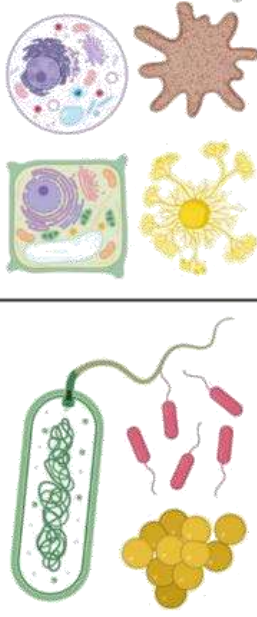
Key quotes on cosmology:

“Who truly knows... whence comes this creation?” (Rg Veda 10)
Hindus say there is a lot we don't know about the cosmos.

Year 9 Cells Knowledge Organiser

Eukaryotic cell - Plant and animal cell – Nucleus and membrane bound organelles.
Prokaryotic cell – Bacterial cell – No nucleus and only ribosomes.

Prokaryotes vs Eukaryotes



Resolution - The degree to which it is possible to distinguish between two objects that are close together.

Magnification - The degree to which the size of an image is larger than the image itself.

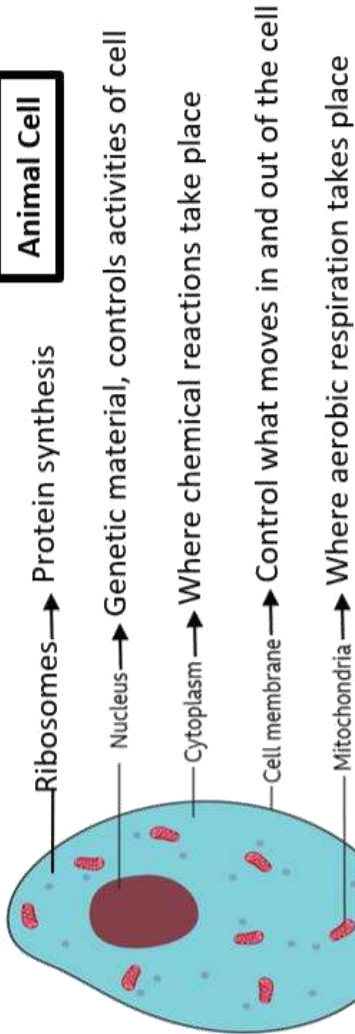
Tier 2 Vocabulary

Accurate	Estimate	Investigate
Adapt	Evaluate	Research
Approximate	Focus	Specific
Chemical	Gender	Trend
Data	Hypothesis	Volume

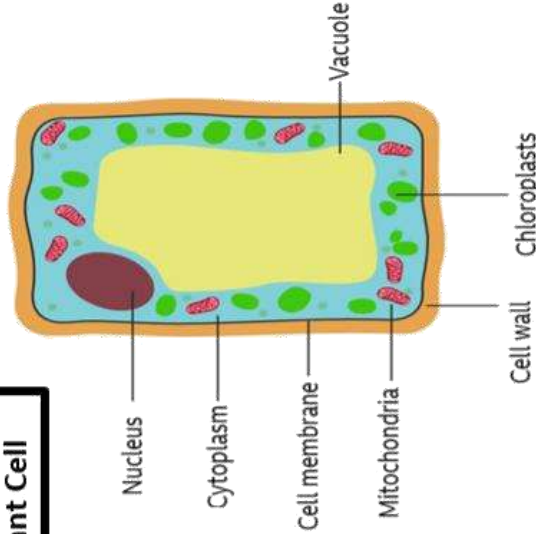
Tier 3 Vocabulary

Ribosome	Prokaryotic	Nucleus
Stem Cell	Mitochondria	Acrosome
Chloroplast	Phloem	Vacuole
Xylem	Cytoplasm	Sperm Cell
Magnification	Diffusion	Resolution
Osmosis	Microscope	Active Transport
Eukaryotic	Semi-permeable	Mitosis
	Chromosomes	

Animal Cell



Plant Cell



Vacuole – Contains cell sap.
Chloroplast – Contain chlorophyll, that absorbs light for photosynthesis to make glucose.
Cell wall – Strength and support.

Task: A red blood cell has a size of 7.5 µm.

The image is 75mm.

What is its magnification?



Calculations

Total magnification = eyepiece lens x objective lens

$$\text{Magnification} = \frac{\text{Image size}}{\text{Actual size}}$$

$$\% \text{ change} = \frac{\text{Change}}{\text{Starting value}} \times 100$$

Standard form

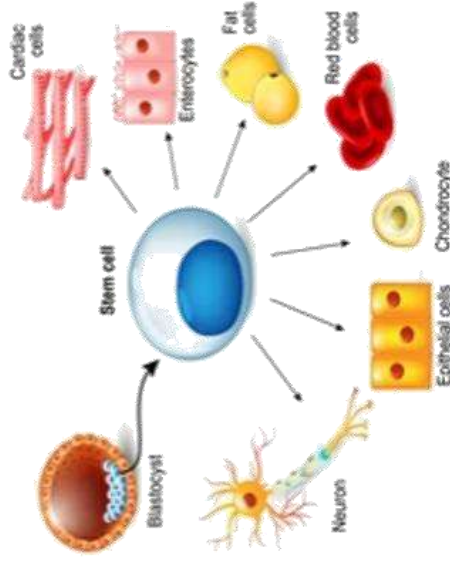
$$0.0000742 = 7.42 \times 10^{-5} \text{ OR } 345000 = 3.45 \times 10^5$$

Stem cell – Unspecialised cell. There are embryonic and adult stem cell.

Therapeutic cloning - Stem cells with the same genetic make-up as the patient.

Stem cells - Some have the potential to become lots of different types of cells e.g new nerve cells.

STEM CELL



Chromosomes

Made up of DNA and control out gender and characteristics.



Specialised Cells

Nerve cell – Long, insulated.

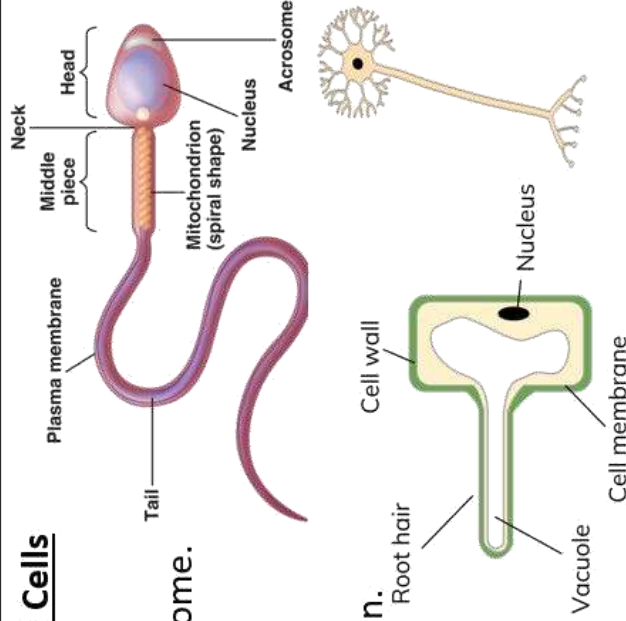
Sperm cell – Tail, many mitochondria, acrosome.

Muscle cell – Many mitochondria.

Xylem cell – Hollow, strengthened with lignin.

Phloem cell – End cells.

Root hair cell – Large surface area.



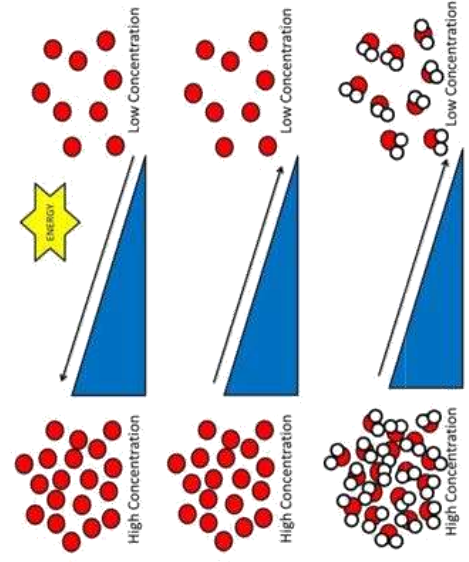
Transport

Diffusion: Particles moving from high to low concentration.

Osmosis: Water moving from high to low concentration through a partially permeable membrane.

Active transport: Particles moving from low to high concentration, through a partially permeable membrane, requiring **energy**.

Concentration Gradient Movement.



Active Transport

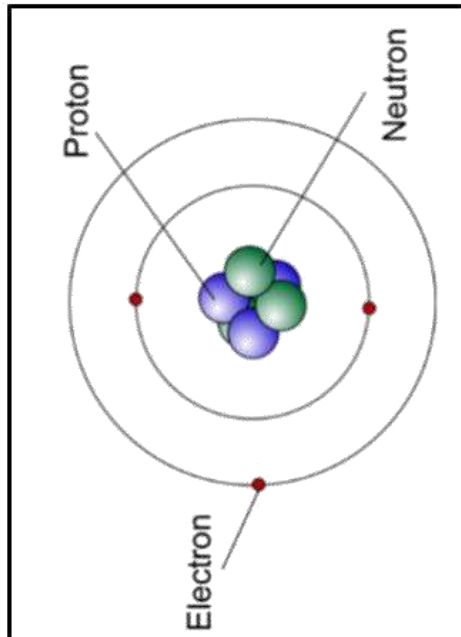
Diffusion

Osmosis

Year 9 Topic 1 - Chemistry Knowledge Organiser

Atom – The smallest reacting particle.
Element – One type of atom.
Compound – Two or more different atoms chemically joined together.
Mixture – Two or more different substances not chemically joined.

Sub-Atomic Particle	Charge	Mass	Where Found
Proton	+1 (Positive)	1	Nucleus
Neutron	0 (Neutral)	1	Nucleus
Electron	-1 (Negative)	0	Electron Shell



Tier 2 Vocabulary

Filter
 Energy
 Symbol
 Conservation

Tier 3 Vocabulary

Proton
 Neutron
 Electron
 Atomic mass
 Atomic number
 Electron shell
 Periodic Table
 Ion
 Chromatography
 Distillation
 Crystallisation

The Law of Conservation of Mass:

In a reaction, the mass of the reactants is the same as the mass of the products. Matter is not created or destroyed.

Modelling Atoms:

J.J. Thompson – Plum Pudding Model (ball of positive charge containing negative electrons).

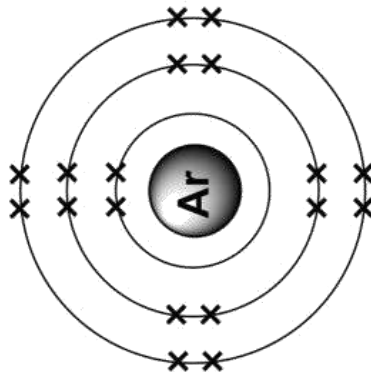
Rutherford – Gold scattering experiment identified a solid nucleus with electrons around it.

Bohr – Placed electrons in shells around the positive nucleus.

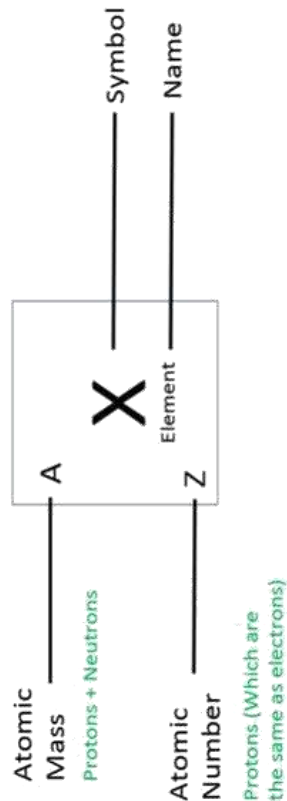
Chadwick – Discovered neutrons in the nucleus.

Electronic Structure:

Energy level 1 = 2
 Energy level 2 = 8
 Energy level 3 = 8
 Energy level 4 = 8



Task: What is the electron structure of Magnesium.



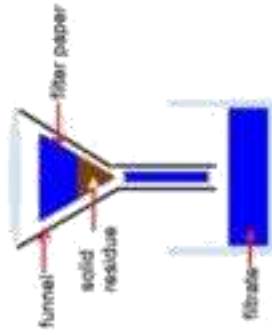
Soluble – Something that will dissolve.

Insoluble – Something that will not dissolve.

Solvent – A substance that will dissolve something else.

Solute – A substance that is dissolved.

Filtration – Insoluble solid from a liquid.

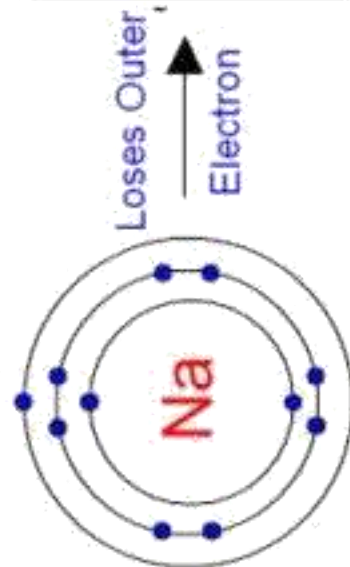
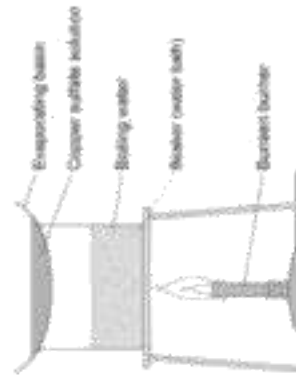


Group 0 – The Noble Gases:

These elements are inert (not reactive) because they have a full outermost shell of electrons. They don't need to lose or gain any to be stable.



Crystallisation – Soluble solid from a solution.



Sodium Atom

If an atom loses an electron it will become a positive ion.
If an atom gains an electron it will become a negative ion.

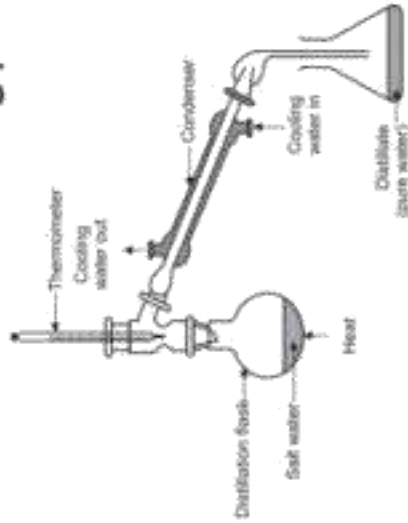
Sodium Ion

Group 7 – The Halogens:

- Reactivity decreases as you go down the group.
- The all have seven electrons in their outermost shell.
- Astatine is the least reactive, fluorine is the most reactive.
- Displacement reactions can be used to see which halogen is more reactive.



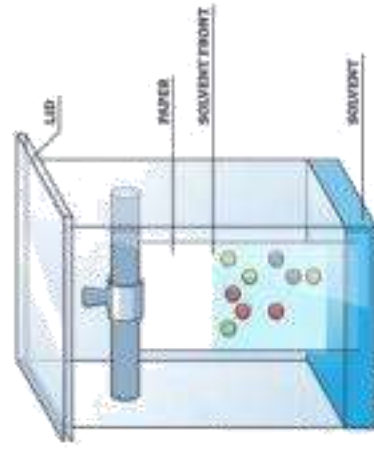
Distillation – Soluble solids from liquids with different boiling points.



Group 1 – Alkali Metals:

- Reactivity increases as you go down the group.
- The all have one electron in their outermost shell.
- Lithium is the least reactive, francium is the most reactive.

Chromatography – Substances with similar boiling points (ink).



Year 9 Topic 1 – Energy Knowledge Organiser



Objects with greater mass or speed will have more kinetic energy.

$$\text{kinetic energy, } E_k = \frac{1}{2} \times \text{mass, } m \times \text{speed}^2, v^2$$

(joules, J) (kilograms, kg) (metres per second, m/s)²

$$\text{change of gravitational potential energy store, } \Delta E_p = \text{mass, } m \times \text{gravitational field strength, } g \times \text{change of height, } \Delta h$$

(joules, J) (kilograms, kg) (newtons per kilogram, N/kg) (metres, m)

For any device that transfers energy:

$$\text{efficiency} = \frac{\text{useful output energy transferred by the device (J)}}{\text{total input energy supplied to the device (J)}}$$

$$\text{work done, } W = \text{force applied, } F \times \text{distance moved along the line of action of the force, } s$$

(joules, J) (newtons, N) (metres, m)

Tier 2 Keywords	
Chemical	Movement
Heat	Height
System	Light
Work	

Tier 3 Keywords				
Closed System	Dissipated	Efficiency	Elastic Potential	Electrostatic
Gravitational Potential	Kinetic	Magnetic	Lubrication	Open System
Thermal	Nuclear			

ENERGY SOURCES

RENEWABLE ENERGY

NON-RENEWABLE ENERGY

Burning fossil fuels cause the following problems:

- Carbon dioxide - Climate change/Global warming
- Sulfur dioxide - Acid rain, toxic to plants and animals
- Nitrogen oxides - Acid rain, smog, toxic to plants and animals

Energy flow through filament lamp

When energy is transferred some might end up in a form that is not useful. This is wasted energy. For example at lamp will produce light energy that we want and heat that is wasted energy.

Energy stores

kinetic	energy an object has because it is moving
gravitational potential	energy an object has because of its height above the ground
elastic potential	energy an elastic object has when it is stretched or compressed
thermal (or internal)	energy an object has because of its temperature (the total kinetic and potential energy of the particles in the object)
chemical	energy that can be transferred by chemical reactions involving foods, fuels, and the chemicals in batteries
nuclear	energy stored in the nucleus of an atom
magnetic	energy a magnetic object has when it is near a magnet or in a magnetic field
electrostatic	energy a charged object has when near another charged object

Energy transfers

Energy can be transferred to and from different stores by:

Heating

Energy is transferred from one object to another object with a lower temperature.

Waves

Waves (e.g., light and sound waves) can transfer energy by radiation.

Electricity

When an electric current flows it can transfer energy.

Forces (mechanical work)

Energy is transferred when a force moves or changes the shape of an object.

Energy cannot be created or destroyed, it can only be transferred usefully or dissipated (wasted).
This is the Conservation of Energy

Work can be done in fields by moving a charged object in the opposite direction to the attraction force.

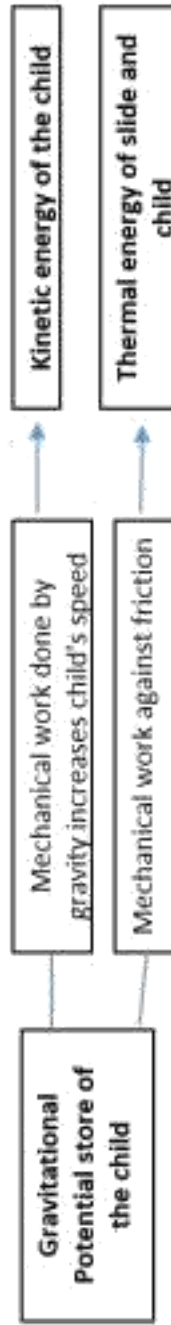
This occurs in the following stores:

- Electrostatic
- Gravitational
- Magnetic

Examples of energy transfers and energy transfer diagrams

1. Stretching a rubber band – chemical energy is mechanically transferred to the elastic potential store in the rubber band.

1. Child sliding down a slide -



Objects with greater mass or more height will have more gravitational potential energy. It will also increase in places with more gravity.



Key spellings 1

Learn these spellings, they will be really useful for this unit and you will be tested on them.

1. a menudo often
2. voy al polideportivo I go to the sports centre
3. monto en bici I ride my bike
4. voy a ir a la bolera I'm going to go bowling
5. las películas de terror horror films

¿Cómo organizas tu semana?	How do you organise your week?
Los lunes, martes, miércoles, jueves, viernes...	On Mondays, Tue, Wed, Thur, Fri...
Los fines de semana...	At the weekend...
Después del insti(tuto)	After school...
escribo canciones	I write songs
juego en mi consola	I play with my console
cocino para mi familia	I cook for my family
bailo Zumba	I dance Zumba
monto en bici	I ride my bike
leo libros/cómics	I read books/comics
toco la guitarra/el teclado	I play the guitar/keyboard
veo un partido de fútbol	I watch a football match
hago judo/natación	I do judo/swimming
voy al parque	I go to the park
voy al polideportivo	I go to the sports centre
soy miembro de un club/equipo	I'm a member of a club/team

¿Con qué frecuencia?	How often?
(casi) todos los días	(almost) every day
a menudo	often
dos o tres veces a la semana	2 or 3 times a week
a veces	sometimes
una vez a la semana	once a week
siempre	always
todos los fines de semana	every weekend
una vez al mes	once a month
dos veces al mes	twice a month
los domingos por tarde	on Sunday evenings
los sábados por la mañana	on Saturday mornings

¿Qué cosas te gustan/no te gustan?	What things do you like/not like?
Me gusta(n) (mucho)...	I (really) like...
Me encanta(n)/Me chifla(n)	I love...
No me gusta(n) (nada)...	I (really) don't like...
Odio...	I hate...
el deporte/el dibujo	sport/art
el racismo/la violencia	racism/violence
la música/la tele	music/TV
los insectos	animals/insects
los videojuegos	videogames
las artes marciales	martial arts.
¿Qué tipo de película te gusta?	What type of film do you like?
las comedias	comedies
las películas de acción	action films
las películas de animación	animated films
las películas de aventuras	adventure films
las películas de ciencia ficción	sci-fi films
las películas de fantasía	fantasy films
las películas de terror	horror films
las películas de superhéroes	superhero films
Mi película favorita es...	My favourite film is...
Mi actor/actriz favorito/a es...	My favourite actor/actress is...

¿Cómo vas a celebrar tu cumpleaños?	How are you going to celebrate your birthday?
Mañana	Tomorrow
La semana que viene	Next week
El fin de semana que viene	Next weekend
El mes que viene	Next month
El nueve de febrero	On February 9th
Voy a...	I'm going to...
hacer karting	do go-karting
ir a la bolera	go bowling
ir a un parque de atracciones	go to a theme park
pasar la noche en casa con mis amigos/as	have a sleepover
sacar muchas fotos	take lots of photos
jugar al paintball	play paintball
Vamos a...	We're going to...
montar en una montaña rusa	ride on a rollercoaster
ver películas de terror	watch horror films
¡Va a ser genial!	

Key grammar – The present tense (regular verbs)

The present tense is used to talk about actions you do regularly or something you are doing right now (I play, I am playing)

To form it: 1. Remove the infinitive AR/ER/IR ending

2. Add the correct ending from the table below

Nadar	To swim	Comer	To eat	Vivir	To live
nado	I swim	como	I eat	vivo	I live
nadas	you swim	comes	you eat	vives	you live
nada	(s)he/it swims	come	(s)he/it eats	vive	(s)he/it live
nadamos	we swim	comemos	we eat	vivimos	we live
nadaís	you pl. swim	coméis	you pl. eat	vivís	you pl. live
nadan	they swim	comen	they eat	viven	they live

Key spellings 2

Learn these spellings, they will be really useful for this unit and you will be tested on them.

1. tengo que	I have to
2. organizado/a	organised to work
3. trabajar	I write emails
4. escribo correos	I listened to music
5. escuché música	
¿En qué trabajas?	What's your job?
Soy...	I am...
camarero/a	a waiter/waitress
cocinero/a	a chef
jardinero/a	a gardener
peluquero/a	a hairdresser
dependiente/a	a shop assistant
limpiador(a)	a cleaner
repcionista	a receptionist

¿Qué tienes que hacer?	What do you have to do?
Tengo que...	I have to...
ayudar a los clientes	help customers
cortar el pelo a los clientes	cut clients' hair
hablar por teléfono	talk on the phone
limpiar habitaciones	clean rooms
preparar comida	prepare food
servir en el restaurante	serve in the restaurant
vender productos en la tienda	sell products in the shop

¿Cómo es un día típico?	What's a typical day like?
escribo correos	I write emails
hago reservas/entrevistas	I do reservations/interviews
organizo excursiones	I organise trips
preparo el programa	I prepare the program
trabajo con mi equipo	I work with my team
viajo mucho	I travel a lot
voy a la oficina	I go to the office
hablo inglés y español	I speak English and Spanish

¿Qué te gustaría hacer?	What would you like to do?
Me gustaría...	I would like to...
No me gustaría...	I wouldn't like to...
trabajar en el aire libre	work outside
trabajar con animales/niños	work with animals/kids
trabajar en equipo/ sólo/a	work in a team/alone
trabajar en una oficina	work in an office
hacer un trabajo creativo/manual	do a creative/manual job
Por eso, me gustaría ser...	For this reason, I would like to be ...
cantante/periodista	a singer/journalist
enfermero/a/mecánico/a	a nurse/mechanic
policia/veterinario/a	a police officer/vet
profesor(a)/diseñador(a)	a teacher/designer

¿Te gusta tu trabajo?	Do you like your job?
Me gusta (mucho) mi trabajo	I (really) like my job
No me gusta (nada) mi trabajo	I don't like my job (at all)
porque es...	because it is...
creativo/fácil	creative/easy
interesante/interesante	stressful/interesting
monótono/repetitivo	monotonous/repetitive
práctico/variado	practical/varied
Mi jefe/a es severo/a	My boss is strict
Los clientes (no) son simpáticos	The customers are (not) nice

¿Qué tipo de persona eres?	What type of person are you?
En mi opinión, soy...	In my opinion, I am...
Creo que soy...	I think that I am...
muy/bastante	very/quite
ambicioso/a	ambitious
práctico/a	practical
organizado/a	organised
trabajador(a)/	hard-working
hablador(a)	chatty
independiente	independent
inteligente	intelligent
paciente	patient
sociable	sociable
responsable	responsible

¿Qué tal ayer en el trabajo?	How was work yesterday?
Por la mañana/Por la tarde...	In the morning/afternoon
A la hora de comer	At lunchtime
bebí una botella de coca	I drank a bottle of Coke
comí una hamburguesa	I ate a hamburger
dormí un poco	I slept a bit
escuché música	I listened to music
escribí SMS	I wrote texts
hablé por Skype	I spoke on Skype
jugué a un videojuego	I played a videogame
llegué tarde al trabajo	I arrived late to work
perdí mi trabajo	I lost my job

Key grammar – The preterite tense (regular verbs)

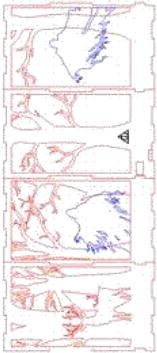
Use the preterite to talk about past actions (I went, I ate, I swam).

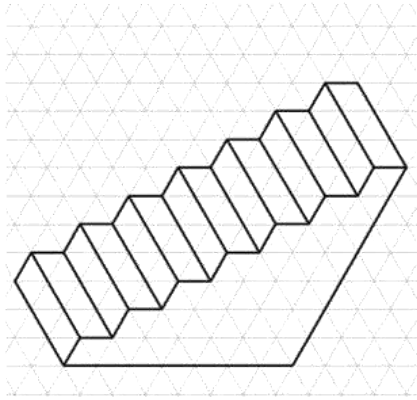
To form it: 1. Remove the infinitive AR/ER/IR ending.

2. Add the appropriate ending, using the table below.

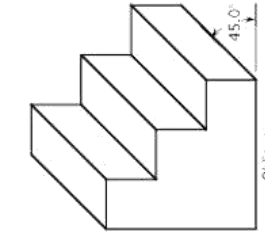
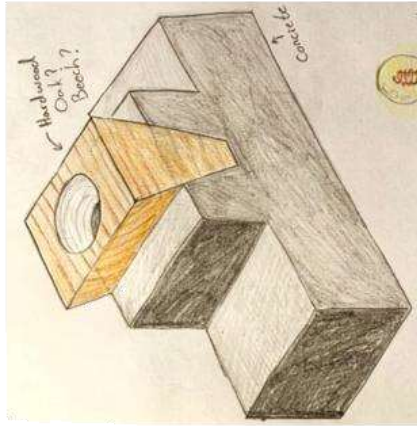
Bailar	To dance	Comer/Subir	To eat/To climb
bailé	I danced	comí/subí	I ate/climbed
bailaste	you danced	comiste/ subiste	you ate/climbed
bailó	(s)he/it danced	comió/ subió	s(he)/it ate/climbed
bailamos	we danced	comimos/ subimos	we ate/climbed
bailasteis	you pl. danced	comisteis/ subisteis	you pl. ate/climbed
bailaron	they danced	comieron/ subieron	they ate/climbed

Year 9 – Knowledge Organiser – Design & Technology – Design

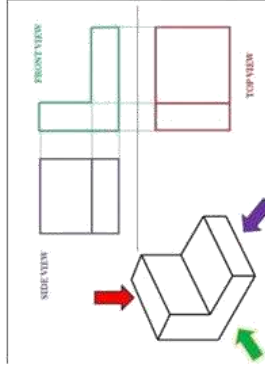
Design and Technology Specific Language and Terms	
CAD	 <p>Computer Aided Design</p>
Isometric Drawing	<p>An isometric drawing is a type of 3D drawing that is set out using 30-degree angles. It's a type of drawing in which the same scale is used for every axis, resulting in a non-distorted image.</p>
Oblique Drawing	<p>A item is drawn in 2D in the correct proportions, it is then forced into 3D by projecting lines out at 45 degrees.</p>
Orthographic Drawings	<p>2D drawings drawn in detail and to scale. Orthographic projections provide 3 views, front, side and plan.</p>
Working Drawing	<p>An accurate drawing providing all information required to make a product. Usually presented as an isometric or orthographic drawing.</p>
Parts List	<p>Goes with a working drawing and breaks a design down into its individual parts, stating what it is to be made from and the quantity required of each part.</p>



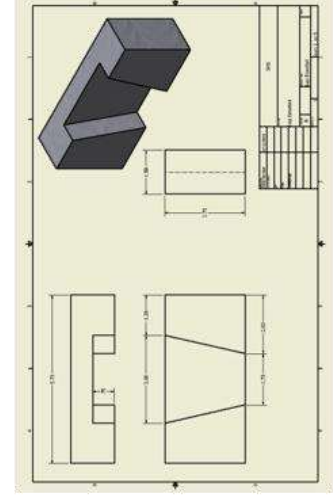
Isometric Drawings



Oblique Drawing



Orthographic Drawing









Working Drawing



Year 9 – Knowledge Organiser – Design & Technology – Tools / MACHINERY

HAND TOOLS		MACHINERY		CUTTING	
	Bench Hook		<ul style="list-style-type: none"> Removes material a thin layer at a time Can be used to ensure an absolutely flat surface Very accurate 		<ul style="list-style-type: none"> Thin blade allows for intricate curves to be cut in timber a plastic sheet material
	Coping Saw (timber/plastic)		<ul style="list-style-type: none"> Used to 'turn' material (rotates) A tool or bit is used to shape the rotating material There are wood and engineers (metal) lathes 		<ul style="list-style-type: none"> Spinning cutting tool removes wood as in is move along a surface Used to create slots, grooves or fancy edges
	Tennon Saw (timber)		<ul style="list-style-type: none"> Used to polish metal or plastics to a high shine 		<ul style="list-style-type: none"> Used to make straight or curved cuts in all materials Blades and speed can be changed to suit material
	Hacksaw (metal)		<ul style="list-style-type: none"> Rotating abrasive disc removes material Used for timber and plastics 		<ul style="list-style-type: none"> Blade is one continuous flexible loop Mainly used for timber but blades can be changed to cut plastics Can cut straight or curved lines
	G Clamp		<ul style="list-style-type: none"> Used to apply heat along an area of thermoforming plastic allowing it to be bend along a line Process is called line bending 		<ul style="list-style-type: none"> Circular blade rotates through the table surface Used to make straight cuts only Mainly used to cut boards to size
	Woodwork Vice		<ul style="list-style-type: none"> A rotating drill bit can be lowered into a work piece to create holes Work must be secured to the table. 		<ul style="list-style-type: none"> Can be used for multiple thin materials Requires designs to be created on a computer first
	Hand Clamp				
	Glass Paper				





Year 9 – Knowledge Organiser – Design & Technology – MATERIALS

Plastics			
Type	Example of	Advantages	Disadvantages
Acrylic 	Thermo-Forming (shaped with heat)	Available in many colours and styles Weather proof Can be laser cut	Brittle Scratches easily Made from oil - unsustainable
Epoxy Resin 	Thermo-Setting (Can only shape once)	Hard wearing Can be mixed with pigments/powders to create effects Will not burn	Non recyclable Gives off fumes Made from oil - unsustainable

Timber			
Type	Example of	Advantages	Disadvantages
Pine 	Softwood	Cheaper More sustainable as faster growing Widely Available	Knoity Can be weaker than hardwoods Less durable
Oak 	Hardwood		Generally harder to cut and shape More expensive Less sustainable as slower growth rate
Mahogany 	Hardwood		Good aesthetic Extremely durable Easy to maintain High strength
Plywood 	Manufactured Board		Available in large sheets Good strength and durability Can be laser cut

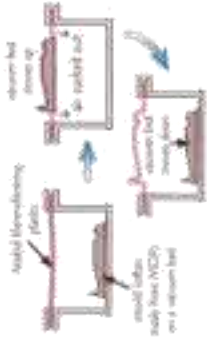
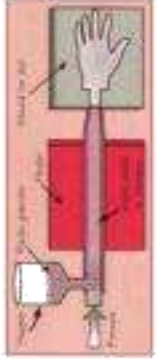



3D Printing uses PLA or PVC plastic on a reel. This is heated and used to print a thin layer at a time

Metals			
Type	Example of	Advantages	Disadvantages
Steel 	Ferrous (Contains iron)	Relatively cheap Widely available Strong/Tough	Rusts Requires a surface finish
Aluminium 	Non-Ferrous (Does not contain iron)	Does not rust Lightweight Easy to cut and shape	Relatively expensive
Copper 	Non-Ferrous (Does not contain iron)	Good conductor of heat and electricity	Corrodes Relatively expensive
Pewter 	Alloy (Mix of multiple metals)	Does not rust Low melting point for easy casting Polishes to a high shine	Relatively expensive Heavier than alternatives

Year 9 – Knowledge Organiser – Design & Technology – PROCESSES / H&S

Shaping Plastics

 <p>Diagram illustrating the Vacuum Forming process. It shows a plastic sheet being heated by a heater, then being sucked into a mold by a vacuum pump. Labels include: 'Liquid thermoplastic plastic', 'vacuum pump', 'vacuum bed', 'plastic sheet', 'vacuum bed', 'vacuum pump', 'vacuum bed', 'vacuum pump'.</p>	<h3>Vacuum Forming</h3> <ul style="list-style-type: none"> A mould is placed onto the vacuum bed A thermforming sheet or film (usually HIF's) is clamped above the bed and heated until soft <ul style="list-style-type: none"> Bed is lifted into the heated plastic All air is sucked out creating a vacuum, pulling the plastic over the mould Moulded plastic then cools and becomes rigid
 <p>Diagram illustrating the Injection Moulding process. It shows molten plastic being injected into a mold. Labels include: 'Molten plastic', 'Injection nozzle', 'Mold cavity', 'Part ejection', 'Mold'.</p>	<h3>Injection Moulding</h3> <ul style="list-style-type: none"> Molten material is forced into a mould Tool steel moulds have the negative shape within them Used to create items like: plastic buckets and school chairs




Health & Safety



Design and Technology Specific Language and Terms

<h3>Health and Safety</h3> <p>Anything to do with a persons wellbeing in any given situation. From sitting at a computer for long periods to operating machinery.</p>	
<h3>Risk Assessment</h3> <p>A document that considers all risk to a person/s carrying out a task, and all control measure put in place to minimize or remove risk to health, this could be training, following certain rules or using PPE.</p>	
<h3>PPE</h3> <p>Personal Protective Equipment Goggles, aprons, dusk masks, gloves</p>	
<h3>Extraction</h3> <p>Can be dust extraction when using machinery or fume extraction when gluing or painting.</p>	


Bending Materials

	<h3>Sheet metal folder</h3> <ul style="list-style-type: none"> Used to shape aluminium and tin Flat sheet material is marked up and bent one fold at a time Joints can be riveted, soldered, brazed etc Process is called Line Bending
	<h3>Strip Heater</h3> <ul style="list-style-type: none"> A heating element softens a thermforming plastic (acrylic) along a line This can then be bent to shape and held in place until cooled
	<h3>Lamination</h3> <ul style="list-style-type: none"> Woods can be bent by laminating Thin strips are glued together and held in a jig to keep them in the desired shape Once set the item is removed from the jig and trimmed to size






Two leaves cast in pewter

Casting

	<h3>Die Casting</h3> <ul style="list-style-type: none"> Used to cast metals or thermforming plastics. Material is melted and pours into a mould Once cooled it can be removed and any seams fixed up
	<h3>Die Casting</h3> <ul style="list-style-type: none"> Thermosetting plastics are mould by mixing two part which set through a chemical reaction <ul style="list-style-type: none"> Often referred to as Resin

Year 9 – Knowledge Organiser – Design & Technology – CAM

COMPUTER AIDED MANUFACTURE

MACHINERY	
	Laser Cutter
	3D Printing
	Vinyl Stickers

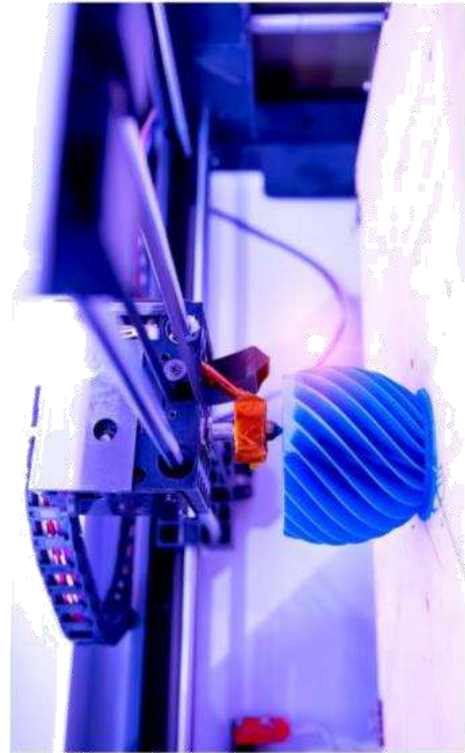
Advantages	Disadvantages
Accurate to low tolerances	Expensive to set up
Quick – rapid prototyping	Requires specialist training
Multiples can be produced easily	Job loss to automation



Interlocking laser cut toy in plywood



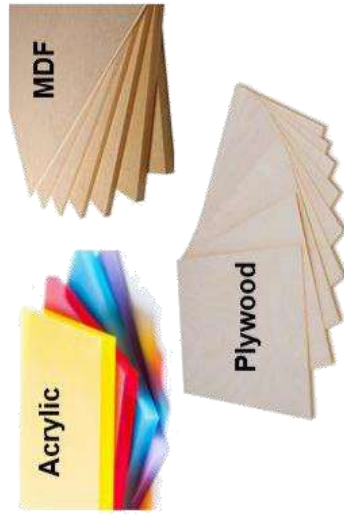
Sticky back vinyl cut to shape



3D printer using thin layers to create a 3D shape

Materials suitable for laser cutting:

- Acrylic – Thermofforming Plastic
- MDF – Manufactured Board
- Plywood – Manufactured Board
- Card/Paper – Paper/Board
- Felt – Fabric



Card/Paper



Felt



Some materials such as **glass** can be engraved but not cut.



Garage Keys

- Black** = Laser engrave
 - Laser moves quickly at a low power
 - Red** = Laser cut
 - Laser moves **slowly** at **high power**
- Other colours can be set up and used as required

Technical Textiles

1. Explain what is meant by Technical textiles.
2. Why is Kevlar used for protective clothing?
3. How do microfibrers prevent body odour?

Kevlar:

Used for: Body armour, bullet proof vests, personal protective equipment, tyres etc.

Characteristics:

Tightly woven cloth
Cut, puncture, bullet resistant
Flame & heat resistant
Light weight & flexible
Hard wearing
Disadvantage: Absorb water.



What are Technical Textiles?

Are manufactured for **performance properties** rather than **visual appearance**.

They are made from **fibres (natural and synthetic) spun** from **materials** with the **required properties** and **woven** into **fabric**.

Microfibrers:

Used for: Socks and underwear, antibacterial medical textiles etc.

Characteristics:

Reduces body odour
Synthetic fibres/Woven
Polyester
Absorbs water – cloths/great for cleaning
Hold anti-microbial agents
insecticides/moistures & medicines to be released under control



Gore-Tex:

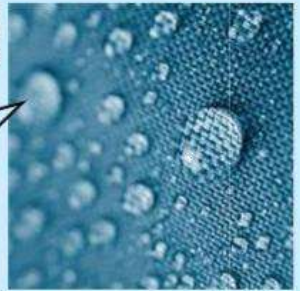
Used for: Camping, outdoor clothing, motorbike clothing, bags etc.

Characteristics:

Breathable fabric
Waterproof
Repels water making, effective waterproof fabric
Keeps you dry!



Waterproof

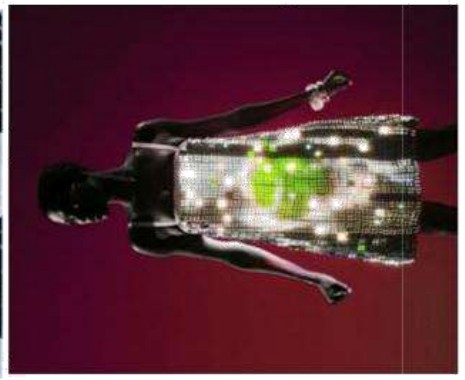


Conductive Fibres:

Used for: GPS tracking, mobile phones, performance monitors for athletes etc.

Characteristics:

Fibres and threads made from carbon steel and silver
Woven in to textiles fabrics and made into clothing
Sewn into circuits
Touch screen glove – great for cold weather conditions
LEDs



Mechanical Devices & Forces

1. Name the four movements.
2. Describe the function of pivots in linkages.
3. What force is used when cutting with scissor?

Types of Movements:

There are four types of movements:

Change or movement of an object over time. Motion is described in terms of displacement, distance, velocity, acceleration, time and speed.



A wheel turning.



Linear

Straight line.



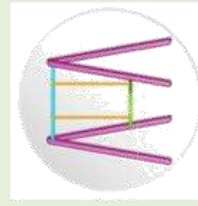
Reciprocating

Saw moving back and forwards.



Oscillating

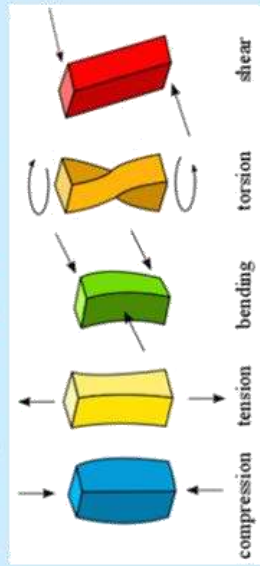
A swinging movement.



Forces:

Mechanical properties of a material are how it reacts when different forces are applied to it.

The strength of a material is its ability to resist a force applied to it, and this will vary depending on the type of force:



Resistance:

Compression: Crushing, squeezing.

Tensile: Tension caused by a pulling force.



Bending: Shape or force (something straight) into a curve or angle.



Torsion: Twisting force.

Shear: Two parallel forces acting in opposite directions.



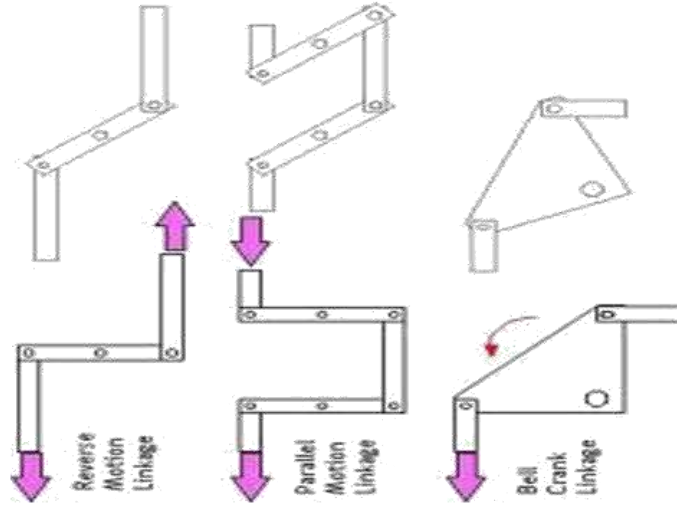
Linkages:

Can be used to change the direction of a motion, or amount of force.

Constructed by joining together links, rods or levers using pivots.

Pivots: fixed into position or moveable.

A linkage is joined to one or more levers to provide movement. A lever and a linkage combined creates a mechanism.



Core British Values

- I recognise that it is unacceptable to dismiss the beliefs and opinions of anyone.
- I understand that discussions about sensitive issues will be controlled and structured.

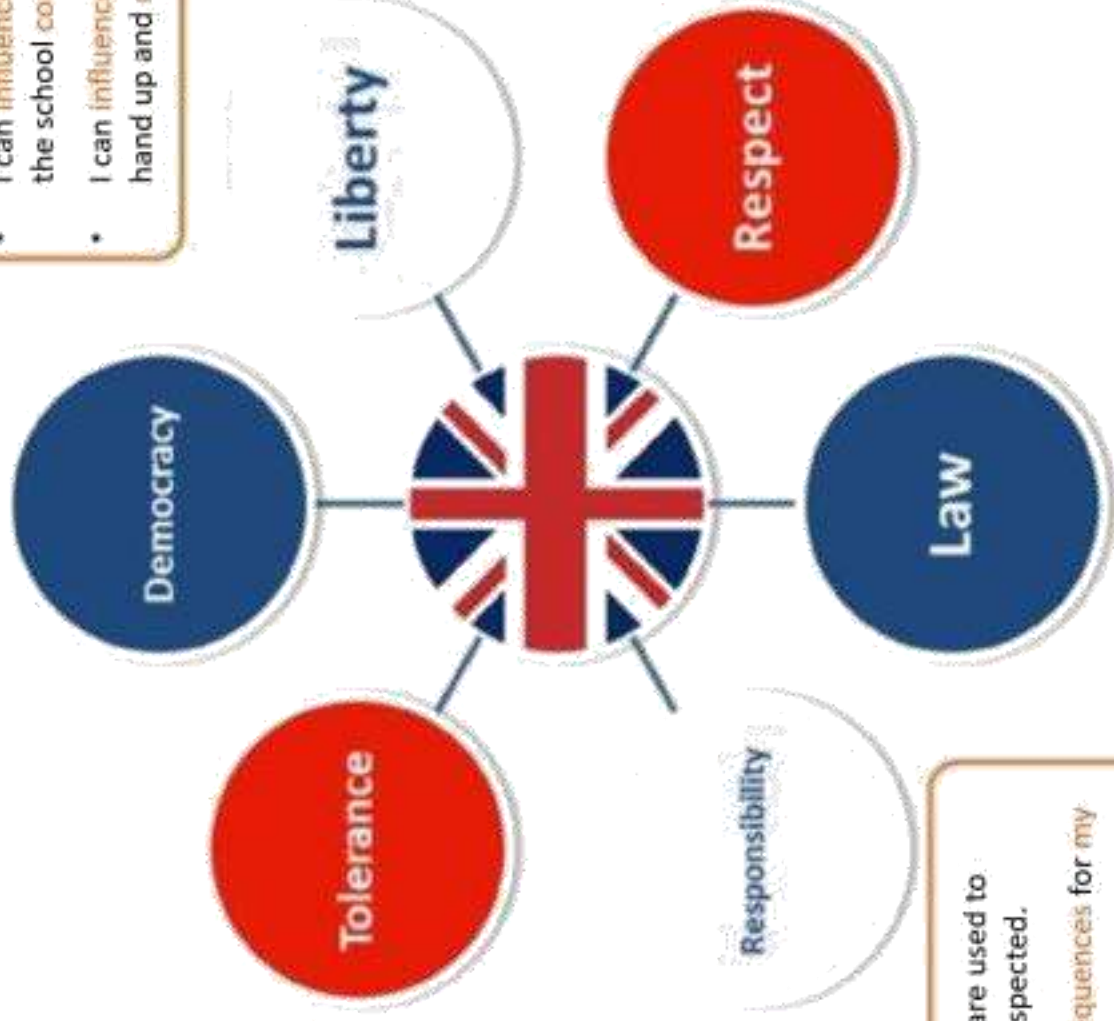
- I recognise that I am as responsible for my learning as my teacher.
- I take responsibility for all of my actions – good or bad.
- We all have a responsibility to promote and protect the wellbeing of others.

- I understand that the school rules are used to mirror society laws and must be respected.
- I recognise that there will be consequences for my actions.

- I can influence the way the school runs through the school council and by talking to staff.
- I can influence my lessons through putting my hand up and responding.

- I am free to think as I see fit.
- I have the freedom to make choices that affect me but I recognise that I am accountable for all my actions.

- I recognise that everyone is entitled to their opinion as long as it does not promote extremism.
- I understand that everyone is entitled to a voice within the classroom.
- I will listen to others as I would like to be listened to.

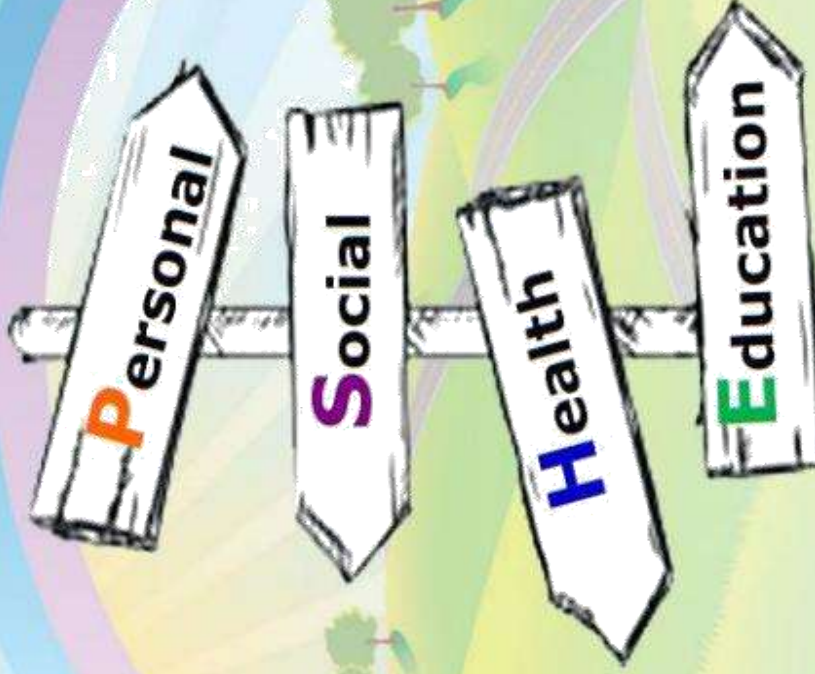


Social - Moral - Spiritual - Cultural



YEAR 9

STAYING SAFE



Theme: Sexual health, STIs, pregnancy, contraception and genitals
Organisation: Brook
Website: www.brook.org.uk

Theme: Sexual health, STIs and contraception
Organisation: Young & Free/Terrence Higgins Trust
Website: <https://youngandfree.org.uk/>

Theme: Healthy Lifestyle, balanced diet and exercise
Organisation: NHS Better Health
Website: www.nhs.uk/better-health/

Theme: Health, Wellness and Mental Health
Organisation: NHS
Phone: 111
Website: www.nhs.uk

Theme: Mental Health, Wellness and self-care
Organisation: Young Minds
Text line: 85258
Website: www.youngminds.org.uk

Theme: Drugs, addiction and dependency
Organisation: FRANK (National Drugs Helpline)
Phone: 0300 123 6600
Website: www.talktofrank.com/

Theme: First Aid
Organisation: St John Ambulance
Phone: 0370 0104 950
Website: www.sja.org.uk/

Theme: Testicular Cancer and Breast Cancer
Organisation: Movember
Website: uk.movember.com/

Theme: Female Genital Mutilation
Organisation: NSPSS FGM Helpline
Phone: 0800 028 3550
Email: fgmelp@nspcc.org.uk
Website: www.nspcc.org.uk/what-is-child-abuse/types-of-abuse/female-genital-mutilation-fgm/

Theme: Healthy teen relationships
Organisation: Act on it
Phone: 01270 250 390
Website: www.actonitnow.org.uk

Theme: Safety, support and abuse
Organisation: Childline
Phone: 0800 1111
Website: www.childline.org.uk

Theme: LGBTQ+, equality, sexuality and gender
Organisation: Stonewall
Website: www.stonewall.org.uk

Theme: LGBTQ+ Equality
Organisation: Kite Trust (Camps)
Website: <https://thekitetrust.org.uk/>

Theme: LGBTQ+ Equality
Organisation: Norfolk LGBT+ Project
Phone: 01603 219299
Website: <https://norfolkglbtproject.org.uk/>

Careers:

Unifrog - www.unifrog.org

Help you choose: <https://helpyouchoose.org/content/>

National Careers Service: <https://nationalcareers.service.gov.uk/>

I Can Be A: <https://www.icanbea.org.uk>



