



Frank Field
Education Trust

*“You will face many defeats
in your life but never let
yourself be defeated”*

- Maya Angelou



Year 9 Knowledge Organiser

Learning Programme 4

Pupil Name:

Form Group:

Contents page

Content	Page
Instructions to use the Knowledge Organiser	3
How do I self-quiz?	4
Homework diary	5-7
Art	8
Drama	9
English	10-11
Geography	12-13
History	14-15
ICT	16-17
Maths	18-19
Modern Foreign Languages	20-21
Music	22-23
Physical Education	24-25
Religious Education	26-27
Science	28-29
Technology	30
SPARX Maths and Science	31
The Oracy Compass	32

Instructions to use the Knowledge Organiser

Use of the Knowledge Organiser

Every school day you should be studying at least 1 section of your Knowledge Organiser (KO) for homework.

The timetable outlines the tasks you will study during that week.

Your subject teacher will set the relevant homework task from the Knowledge Organiser booklet and inform you of when the homework is to be handed in.

Your homework is to be completed in your subject exercise book, unless the instructions are different within the task.

You need to bring your Knowledge Organiser and exercise books with you EVERYDAY to the academy.

You will also be tested in your lessons on knowledge from the organisers every week to ensure that the core knowledge is retained over time.

You should also be developing your core knowledge by developing your self-testing, revision and study skills techniques alongside the homework tasks.

You can use any of the adjacent techniques on top of the core homework tasks to enhance your revision skills.

Self-testing, revision and study skills techniques

You can use your KOs and book in a number of different ways but you should not just copy from the Knowledge Organiser into your book. Use the 'How to self-test with the Knowledge Organiser' booklet to help you.

Below are some possible tasks you could do in your workbooks, no matter which task you do you should always check and correct your work in a different coloured pen.

- Ask someone to write questions for you
- Write your own challenging questions and then leave it overnight to answer them the next day
- Create mind maps
- Create flashcards
- Put the key words into new sentences
- Look, cover, write and check
- Mnemonics
- Draw a comic strip of a timeline
- Use the 'clock' template to divide the information into smaller sections. Then test yourself on different sections
- Give yourself spelling tests
- Definition tests
- Draw diagrams of processes
- Draw images and annotate/label them with extra information
- Create fact files

How do I self quiz?

How to use...Flashcards

1. On one side of the flash card, write the word or question.
2. On the other side, write the definition for the word, or answer to the question.
3. Once you have completed your set of cards, put them in a pile. Then for each card, see if you can remember the definition or answer to the question. Tick or cross when you get it right or wrong.
4. When you get the card right, place it in the 'correct' pile. When you get it wrong, place it in the 'wrong' pile. Repeat until all cards are in the 'correct' pile.

You can also use the Leitner Method: <https://www.youtube.com/watch?v=C20EvKtdJwQ>

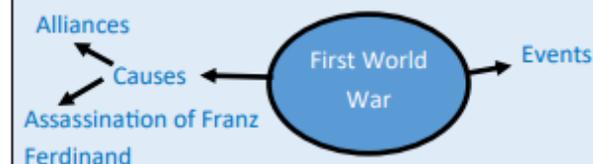
How to use... Look, Cover, Write, Check and Correct

1. Write your key words into the 'Look, Cover' column and then cover it.
2. Write out the meaning, definition or spelling in the 'Write' column.
3. Put a 'tick' or 'cross' in the 'Check' column depending on if you got the answer right.
4. If you got the answer incorrect, write the correct answer in the 'Correct' column.

Look , Cover	Write	Check	Correct
Noun	A person, place or	✓	
Algorithm	Algorithm	X	Algorithm

How to use... Mind Maps

1. Write out your topic or idea in the centre. E.g. The First World War.
2. Off of the main bubble, write out important categories to organise your ideas. E.g. causes of WWI and events in WWI
3. Then add your knowledge off of these branches. You might even be able to make connections between them.
4. Once made, then redraw as many of the connections as possible from memory. Correct any errors.



How to use... Explaining a process/ idea further

Your teacher might ask you to explain a key idea, process or event from your learning. This could be the water cycle (Geography), photosynthesis (Science) or something else. In your answer, try to use the words **because**, **but**, and **so**. These will help you to:

1. **Because:** helps to explain a reason, cause or why something works.
2. **But:** helps to explain a limitation or problem.
3. **So:** helps to explain what happens next in a sequence, process or event.

Check your sentences to see if your explanations or right or wrong. Correct any errors.

How to... Summarise a process/idea

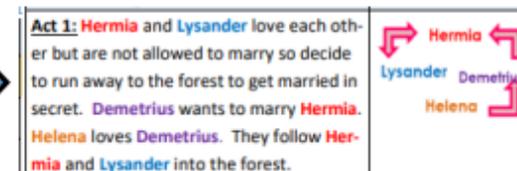
Rather than expand or explain a process, your teacher might ask you to summarise it into its key parts. E.g. summarising the plot 'A Midsummer Night's Dream' in English.

1. Read through the relevant part of your knowledge organiser as directed by your teacher.
2. Write out the (up to) 5 most important parts in your KO book, leaving a two lines in-between.
3. For each part, add **one** main idea.
4. E.g. here, the 4 key characters are picked out, and the direction of love is shown through the arrows. Check and correct any errors.

How to use... Subject Specific Tasks or Questions

Your teacher might choose to set a task that is not outlined here, and which is specific to that topic or their subject.

In this case, your teacher will outline specifically what it is you need to do, and how. This will still include you checking and correcting any errors.



Week	Subject	Task
LP4.1	English	Task 1 in the homework Booklet.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	History	List the key dates and events of Jewish persecution.
	RE	Mind map the causes of conflict.
	Art	Collect examples of typography that can be added to your sketchbook.
	Technology	Choose a country of your choice and create a 'cuisine card' - exploring ingredients from that country and what dishes they can be used in.
IT	Complete the task on Seneca.	

Week	Subject	Task
LP4.2	English	Task 2 in the homework Booklet.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	Geography	Write a paragraph explaining which you think are the most effective development indicators, justifying your reasons.
	Spanish	Use your knowledge organiser to revise the vocabulary for a short vocabulary test.
	Drama	Look at the key vocabulary in the knowledge organiser. Choose 6. Learn their spelling and definition. Then use look, cover, write, check to test yourself.
	Music	Create a poster based on your ignition activity about Blur vs Oasis.
PE	Create a list of the positions (team sports) or events in your sport (athletics).	

Week	Subject	Task
LP4.3	English	Task 3 in the homework Booklet.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	History	Create a mind map for what happened in concentration camps.
	RE	Explain how a Holy War is different to a Just War. What similarities do they have? What differences do they have?
	Art	Select imagery relating to circus and theatre.
	Technology	Choose a country of your choice and create a 'cuisine card' - exploring ingredients from that country and what dishes they can be used in.
IT	Complete the task on Seneca.	

Week	Subject	Task
LP4.4	English	Task 4 in the homework Booklet.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	Geography	Use the website 'World Factbook' to compare development indicators for a HIC and LIC of your choice.
	Spanish	Use your knowledge organiser to revise the vocabulary for a short vocabulary test.
	Drama	Create a timeline of musical theatre on A4. Can you add any examples of shows on to the timeline too?
	Music	Complete the genre profile for Britpop in your homework booklet.
PE	Practice some of the key techniques that are used within your sport/activity at home.	

Week	Subject	Task
LP4.5	English	Task 5 in the homework Booklet.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	History	Create a PEE paragraph explaining what happened in the ghettos.
	RE	Create 10 quiz questions of Just War, Jihad, Holy war and pacifism.
	Art	Create a tonal study relating to circus and theatre.
	Technology	Choose an ingredient you regularly eat at home - research where it is from and what journey it takes to reach your plate.
IT	Complete the task on Seneca.	

Week	Subject	Task
LP4.6	English	Task 6 in the homework Booklet.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.
	Geography	Make a key word glossary for LP4.
	Spanish	Use your knowledge organiser to revise the vocabulary for a short vocabulary test.
	Drama	Explain how you have used three of the key vocabulary in your own performances in lessons during this learning programme.
	Music	Complete the theory worksheet in your homework booklet.
PE	Create a strengths and weaknesses list/table for athletics around your knowledge.	

Week	Subject	Task
LP4.7	English	Task 7 in the homework Booklet.
	Maths	Complete the Maths homework task set on Sparx Maths.
	Science	Complete the Science homework task set on Sparx Science.

This Learning Programme you will be focusing on completing your final piece.

1. Evaluate your work so far
2. Create final piece ideas
3. Explore your ideas
4. Test your process' and materials
5. Produce final piece
6. Produce final piece
7. Refine final piece

Keyword	KS3-Friendly Definition
Composition	How all the parts of an artwork are arranged — where things are placed to make the picture look balanced and interesting.
Tone	How light or dark something is. Artists use tone to show depth, shadows, and form.
Review	To look back at your work and think about what is good and what could be better.
Analyse	To look closely at an artwork and explain how it has been made and why it looks the way it does.
Reflect	To think carefully about your own work and what you've learned.
Resolution	How clear or detailed a digital image is. High resolution = sharp; low resolution = blurry.
Inspiration	Something that gives you ideas for your artwork — such as an artist, a place, an object, or an experience.



A04 OUTCOME

PRESENT FINAL IDEAS

DEVELOPED AS PLANNED

CLEARLY RESPONDS TO ARTISTS EXPLORED

CONNECTION

CONCLUSION

This Learning Programme you will be learning about MUSICAL THEATRE.

- ★ Musicals combine singing, dancing and acting to tell stories. The purpose is to entertain and usually aim to be light and comical however more recently some serious topics have been explored through musical theatre.
- ★ They usually have a live orchestra.
- ★ The types of musicals around today began in the 1920s and developed into the 21st Century. The genre started out on Broadway, New York.
- ★ Many musicals have been made into popular musical films; The Sound of Music, Hairspray, Grease, Billy Elliot, Mamma Mia, Les Miserables, Rent, Annie and West Side Story are just a few.
- ★ Musical theatre is a stylistic genre using techniques such as costume, set design, lighting and technology nowadays such as projections to enhance the performance.

Key Vocabulary

- ★ **Choreography:** The process of creating movement or dance.
- ★ **Dialogue:** A conversation between two or more people.
- ★ **Ensemble / Chorus:** A group of people who act, sing and / or dance at the same time.
- ★ **Blocking:** The placement of characters on stage to ensure clear visibility.
- ★ **Humour:** The quality of being amusing or comic
- ★ **Pathos:** The quality of evoking sadness or pity
- ★ **Vocal skills:** The ability to adapt voice to suit a character
- ★ **Physical skills:** Movement, gestures, body language, facial expressions
- ★ **Interpretative skills:** Presenting yourself to the audience and creating emotion
- ★ **Evaluate:** Identify strengths and areas for improvement of both the rehearsal and performance
- ★ **Characterisation:** Creating a character through movement and dynamic choices

LP2.1

LP2.2

LP2.3

LP2.4

LP2.5

LP2.6

LP2.7

TYPES OF MUSICALS;

- **Book musical:** A musical with a story
- **Concept musical:** The idea or concept is more important than the plot
- **Jukebox musical:** Popular songs by one artist such as Mamma Mia and We Will Rock You.
- **Rock musical:** Uses rock music

MUSICAL THEATRE HISTORY

- **Pre 1900: Musical comedies and operettas emerge** - traced back to Ancient Greece originally
- **1900 – 1929: Musical revues and Broadway extravaganzas emerge** - little plot but lavish entertainment
- **1930 – 1939: Jazz musical and naturalistic dialogue emerge** – musical revues and large dance numbers
- **1940 – 1949: The Golden Age** - more inclusive, integrating consistent plots with song and dance

- **1950 – 1959: Book musicals and romantic comedies emerge** – love stories, comedies, feel good shows.
- **1960 – 1969: Post Golden Age** - deeper and thought-provoking plots
- **1970 – 1999: Pre-Contemporary** - larger range of music genres and plots
- **2000 – 2019: Contemporary** – big influence of rock and pop music plus more musical based on other pieces.



This Learning Programme you will be learning about articles and reports. You will look at various examples, seeing what they do well and how to apply those techniques to your own work.

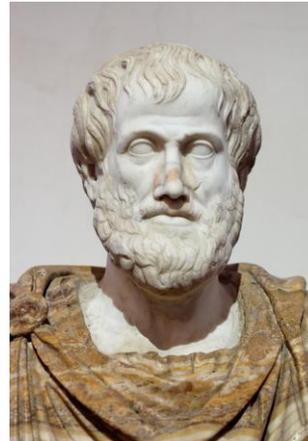
Key Vocabulary	
Tone	The attitude or emotions a writer is showing the reader in their writing.
Bias	When a writer has a specific view or belief that they argue in their writing.
Anecdote	A short story that is true, which can be used to prove a point.
Authority	When a writer shows you they are well informed about a topic, and trustworthy to listen to.
Logos	Using evidence and reason to persuade your reader.
Pathos	Appealing to a reader's emotions to get them to agree with you.
Respectable	Showing that a writer is reliable and trustworthy.

Introductions:

In week 1, you will look at how articles are structured. You will then look at various examples of introductions to articles, focusing on how writers effectively introduce their topic, hook their readers and show their authority, before applying this in your own writing.

Greek Philosopher Aristotle believes that a really convincing argument has to include these three components:

1. **Ethos** – This is about *trust*. You try to sound reliable, knowledgeable, and fair so the reader believes you.
2. **Pathos** – This is about *feelings*. You use emotional language to make the reader feel sympathy, anger, excitement, or concern.
3. **Logos** – This is about *logic*. You use facts, statistics, and clear reasoning to persuade the reader.



Opinions and bias:

In week 2, you will look at several different articles focusing on the writer's opinions. You will look at how they present their own opinion, how they argue it with the goal of persuading the reader, and how to spot any biases from the writer.



Opinion article – A piece of writing (often found in newspapers, magazines or online news sites) where the writer shares their personal viewpoint on an issue and aims to influence readers by presenting arguments and opinions.

Evidence and persuasion:

In week 3, you will look at how writers use evidence to argue their points. You will write various articles, looking at how facts, statistics and examples are used as evidence to show the writer's expertise on the topic. You will practise using emotive language and other techniques to appeal to the reader's emotions.

Persuasive report – A more formal piece of writing (often found in school reports, organisations, councils or charities) that presents information and evidence about an issue in order to convince the reader to agree with a recommendation or take action.



4 Experts and planning:

In week 4, you will look at how writers use statements from specialists to further their arguments. You will then take all the techniques you have looked at so far and look at how to plan an effective article, before writing a full article.

5 Reports:

In week 5, you will move on from articles and start looking at reports. You will start by looking at the structure of reports, before you start looking at examples to look at how reports give information to their readers.

6 Evidence and persuasion:

In week 6, you will look at how reports use evidence to show their points and expertise. You will then look at how reports are used to persuade readers to agree with viewpoints and opinions. Finally, you will look at how reports are written factually and without any bias.

7 Writing a report:

In week 7, you will use everything you have learnt from the past 2 weeks and start writing a report. You will go through the process step by step. First, you will look at how to research and gather evidence for your report. Next, you will look at how to plan out a report, before you finally write a report.

Direct address	Talk directly to your reader in order to appeal to their emotions – use words like you or we.
Alliteration	You can start words with the same sounds as it makes your writing sound more appealing to the reader.
Facts	Use facts as evidence to support your arguments.
Opinions	Make sure you clearly present your opinion and argue why your reader should agree with it.
Rhetorical questions	Questions with no answers that are meant to make the reader think instead. You can use them to convince your reader that your views are right.
Emotive language	Language that is meant to make your reader feel a certain emotion. You can use it to appeal to your readers emotions.
Statistics	Use statistics as evidence to both support your point and show your expertise in your topic.
Triples	List examples in groups of 3, as this will be more appealing to your reader.



INTO DA FOREST

These strategies can help to augment your argument and make them more persuasive.

- 1 **Claim** – State your main argument or position clearly.
- 2 **Reason(s)** – Explain why you believe this.
- 3 **Evidence** – Support your reasons with facts, examples, statistics, or expert opinions.
- 4 **Counterargument** – Acknowledge an opposing viewpoint.
- 5 **Rebuttal** – Respond to the counterargument and explain why your argument is stronger.
- 6 **Conclusion** – Summarise your main point and reinforce why the reader should agree with you.

This Learning Programme you will be learning about

Key Vocabulary

Development	Economic, social and technological progress.
Top down	Large scale, capital-intensive projects initiated by governments, international agencies, or trans national corporations.
Development gap	The difference in economic and social well-being between the world's richest and poorest nations.
Disparity	Difference/unfairness.
Emerging Economy	Countries which are progressing rapidly.
Economic	Related to money and finances.
Aid	Assistance given to countries.

1

Uneven development

Uneven development refers to the widening gap in wealth, health, and education between High Income Countries (HICs) and Low Income Countries (LICs). Key causes include poor infrastructure, debt, conflict, and being landlocked. Consequences include migration, "brain drain," and, for many, a lower quality of life.

2

Development gap

The development gap is the widening difference in economic and social prosperity between the world's wealthiest (HICs) and poorest (LICs) nations. Key causes include poor infrastructure, limited education, conflict, and debt. Indicators like GDP, life expectancy, and literacy rates help measure this inequality.

3

Causes of the development gap

Historical factors

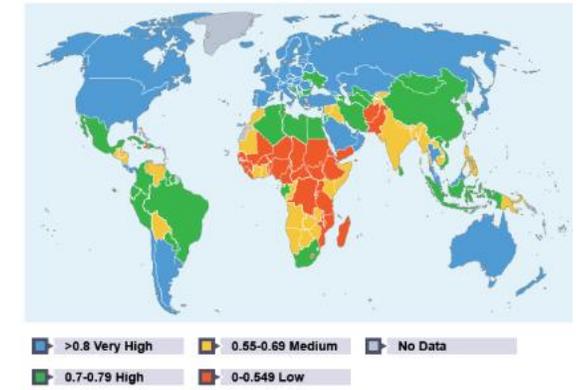
Colonialism hindered a LEDCs level of development. A colony was exploited to supply food and minerals to countries like Britain and France. There was investment in colonies, but this was focused on things that would help trade between the countries.

Environmental factors

Natural Hazards: many poor countries have no defences for floods, storms or earthquakes. When a natural hazard hits, people will struggle even more than usual.

Climate extremes: many LICs experience climatic extremes in deserts or tropical rainforest areas. It is difficult to grow food in these environments.

HUMAN DEVELOPMENT INDEX (2021)



4

Effects of the development gap

Health: Levels of health vary between different countries and within countries. Many people in LICs cannot access safe, clean water and sanitation. This can lead to higher incidences of disease and lower life expectancies. HICs have good, clean water supplies and sanitation systems. Life expectancy is usually higher so people in HICs can expect to live into old age.

Wealth: There are large variations in wealth between countries and within countries. It's estimated that the richest 10% of the world's population receives 52% of global income. Meanwhile, the poorest 50% receives just 8% of global income.

Migration: Uneven development can lead to higher rates of migration. People migrate for many different reasons, usually as a result of push and pull factors. Some people move to find better employment opportunities, others flee dangerous situations.

5

Development in India

India is an HIC found in southern Asia. It is the world's largest , and one of the world's fastest growing economies. Estimates suggest that India will become the second largest economy by 2050.

India is an example of a country that has become richer.

The population of India in 2022 was approximately 1.4 billion people, and a recent report predicts that India will overtake China as the most populous country in 2026. India has around 50 millionaire cities (with a population of over a million people), and is home to five of the world's largest cities (over 10 million people) - Delhi, Mumbai, Kolkata, Chennai and Bengaluru.

However, despite its rapid growth, poverty in India is widespread. The UN places India 131st out of 189 countries, with around 10% of the nation's population still living on less than \$1.90 (US dollar) a day.

6

Effects of economic growth in India

Quality of life refers to the wellbeing of individuals or groups of people. Instead of measuring the amount of money that people have, it refers to where people live and whether they are healthy and happy. The quality of life for some Indian people has improved dramatically over the last 30 years.

The structure of the population in India is changing. Health and hygiene improvements have meant that life expectancy has increased from 38 to 68 years within a generation.

The increase in older people has meant that the population is less youthful . This is good as there are fewer dependents and more people of working age. The nature of the workforce is also changing, with India seeing a growing middle class.

7

How the development gap can be reduced

Strategies to reduce the development gap focus on economic, social, and political interventions, including international aid, fair trade to ensure better prices for producers, debt relief, investing in infrastructure (roads, water, schools), promoting industrial & service sector growth (tourism, manufacturing), providing education & skills training, offering microfinance loans, and implementing appropriate intermediate technology for local needs. These efforts aim to boost incomes, improve quality of life, and create self-sustaining economies in less developed countries.



1933
Jews removed from professions



1935
Nuremberg Laws



1938
Kristallnacht



1939
Star of David



1940
Ghettos



1942
Death camps



1944-45
Liberation



T2 Words for the world

Genocide	Deliberate killing of a large number of people from a particular nation or ethnic group
Persecution	Hostility and ill-treatment of a group of people because of their ethnicity, religion, sexual orientation or political beliefs.
Holocaust	Destruction or killing on a mass scale
Discrimination	Unjust treatment of different categories of people
Dehumanise	Deprive of positive human qualities
Liberation	The action of setting someone free from imprisonment, slavery or oppression
Persecutor	Someone who commits a crime
Bystander	Someone who witnesses an event and does not act
Displacement	People being forced to move or flee their homes due to violence and human rights violations

T3 History specific words

Kristallnacht	Deliberate killing of a large number of people from a particular nation or ethnic group
Final Solution	The Nazi policy of how to deal with the 'Jewish problem' = by exterminating European Jews,
Concentration camp	A place where large numbers of people, especially political prisoners and persecuted minorities are deliberately imprisoned in a small area with inadequate facilities, sometimes forces to provide labour or to await mass execution
Ghetto	A poor urban area occupied primarily by a minority group - During the Holocaust = where groups of people were forcibly segregated.
Final Solution	The Nazi policy of how to deal with the 'Jewish problem' = by exterminating European Jews,

This Learning Programme you will be learning about the development of Nazi persecution of Jewish people to genocide, how this developed, this impact of it and how this has left an impact of the world, exploring power dynamics, religious and economic rationale for such a travesty.



Kristallnacht

On the night of 9th-10th November 1938, Jewish communities across Germany and Austria were attacked in an event known as Kristallnacht.

At least 91 people were murdered and many others committed suicide. Some were rounded up and sent to concentration camps. This led to a campaign of violence against the Jews leading ultimately to the 'final solution'.

Heinrich Himmler was one of Hitler's right-hand men, he was Reich Minister of the Interior and was the main architect of the Holocaust.

1

Jewish persecution timeline:

1933: Jewish people were removed from public office and professions - civil servants, lawyers and teachers were sacked. School lessons were to reflect the view that Jewish people were 'Untermensch'. On 1 April 1933, a boycott of Jewish shops and other businesses took place.

SA officers actively encouraged Germans to avoid entering Jewish places of work. Many Jewish shops were vandalised.

1935: The Nuremberg Laws were introduced at the Nuremberg Rally on 15 September and removed many Jewish rights. Jewish people were denied the right to be German citizens. Marriage and relationships between Jewish people and Germans became illegal.

2

1938: Jewish people were banned from becoming doctors. Jewish people had to carry identity cards which showed a 'J' stamp. Jewish children were denied education and banned from schools. Jewish men had to add 'Israel' to their name, women had to add 'Sarah'.

Kristallnacht - A On the night of the 9 November 1938 Jewish homes, businesses and synagogues were attacked throughout Germany and Austria.

Around 7,500 Jewish shops were damaged or destroyed. 400 synagogues were burned to the ground. Almost 100 Jewish people were killed and 30,000 were sent to concentration camps.

1939: Jewish people were banned from owning businesses. The first ghettos (segregated housing within towns, with a controlled entrance and exit) were opened in Eastern Europe to separate Jewish people from 'ordinary' citizens. Jewish men, women and children display the Star of David emblem on their clothing

A group of Jews display the Star of David emblem.

On 23 November 1939, Jewish people were ordered to wear the Star of David emblem on their clothes. This helped identify them more easily.

The Nazis persecution of the Jewish people meant that many other Germans lived in fear of the Nazis turning on them. This severely reduced the number of people who were willing to openly oppose the Nazis.

Concentration camps

- The fit, healthy and strong Jews were taken to have their heads shaved. (The hair was then used to make clothes i.e. socks for submarine crews.)
- They were then issued uniforms (usually pin striped pyjamas) and they would then begin to work in the camp. Their old clothes and any possessions they had were confiscated and sold.
- The weak, elderly, and mothers with small children were labelled 'undesirables' they were then told that they were going to be 'showered'.
- They were told that they were soon be sent into the camp, but they first had to undergo disinfection and wash. After the victims undressed, they were taken into the gas chamber which was fitted with real taps and showers. They were then locked in.
- Zyklon B was emptied into the chamber through a vent above. Once the gas became airborne anyone who breathed it in would die in minutes. It took around fifteen minutes to kill everyone.



Ghettos

- A Ghetto is an overcrowded section of a town or city usually associated with one race or group.
- From 1940 the Jews were housed in walled off Ghettos before being transported to concentration camps.
- During the next year and a half, thousands of Jews were brought into the Ghetto, while diseases (especially typhus), and starvation spread and killed thousands at the same time.
- Despite this life in the Ghetto had many educational and cultural activities, conducted by its underground organizations. Hospitals, public soup kitchens, orphanages and refugee centers as well as a school system. There were secret libraries, classes for the children and even a symphony orchestra.
- Over 100,000 Ghetto residents died due to rampant disease or starvation.

Liberation

- When the Allies advanced across Europe, they came across concentration camps filled with sick and starving prisoners.
- On 27th January 1945, Auschwitz was overrun by Russian soldiers. It was the largest concentration camp, to which over a million people had been deported from all over Europe. Upon liberation, only a few thousand prisoners remained.
- Bergen-Belsen was liberated by British forces on 15 April 1945. It had become exceptionally overcrowded after the arrival of survivors of the death marches. Thousands of unburied bodies lay around the camp, while in the barracks some 60,000 starving and mortally ill people were packed together without food or water.

5

4

The Nuremberg Laws (introduced 15 September 1935) The Reich Law on Citizenship

- Stated only those of German blood could be citizens: Jews become subjects and lost their citizenship rights
- Jews were required to wear the yellow Star of David so that they could be easily recognised.

The Reich Law for the Protection of German Blood and Honour

- Forbade Jews from marrying German citizens
- Forbade sexual relations between Jews and German citizens. From 1938 Jews also had to register all of their possessions and carry identity cards.

7

Reginald Mitchell



Reginald Mitchell was born in Stoke-On-Trent and is known for his work as a British aircraft designer. His best-known work is the development of the Spitfire used in World War Two.



He is considered an important historical figure for Stoke-on-Trent. There is multiple memorials for him where we live.



This Learning Programme you will be learning about 2D Animation

Key Vocabulary

Frame by Frame	Every frame shows a slightly different pose or position of the character or object. The changes between consecutive frames determine the motion
Moodboard	a visual tool used to collect, organise, and display ideas—such as images, colors, textures, and words—to establish the "vibe" or aesthetic direction of a design project before starting to create.
Storyboard	a visual planning tool, typically a series of sketched panels, used to map out key events, scenes, or actions for projects like films, animations, or stories
Assets	Files used to create content. Examples include images (JPG, PNG), video clips, sound effects/audio, animations, and text documents
Tweening	an animation technique where the computer software automatically generates the frames between two keyframes to create smooth movement.
Requirements	a thing that is needed or wanted
Testing	The process of checking that a computer program, system, or application works as intended and is free from bugs
Pre-Production	Before the creation/planning
2D Animaton	is a type of animation that involves creating moving images in a two-dimensional space

1

Key terms

2D Animation is a type of animation that involves creating moving images in a two-dimensional space.

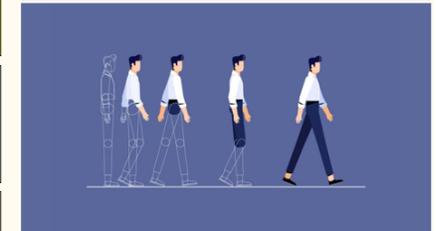
Features of 2D Animation

It focuses on characters, objects, and backgrounds, which are designed and animated on flat surfaces using height and width but without depth, unlike 3D animation.

How does it work?

- Images are drawn or digitally created in a sequence where each frame represents a slight change in motion.
- These frames are played in rapid succession to create the illusion of movement.

Frame-by-Frame animation



Frame-by-Frame animation

Every frame shows a slightly different pose or position of the character or object. The changes between consecutive frames determine the motion.

2

Key terms

A **moodboard** will provide a visual feel for the animation. It helps to represent the overall theme.

Common elements in a Moodboard

- Images/photos
- Typography (font choices)
- Colour palette
- Keywords

What needs to be included in this moodboard?

- Images relating robots
- Images relating to glowing/flashing lights
- Colour palette
- Keywords used in the animation in your chosen font.

Moodboard example: Vintage car show



3

Storyboard components

Frames/Scene numbers

Each frame represents a shot or scene, showing a specific moment of action denoted by a **number**.

Action descriptions
Brief notes under each frame to describe what is happening in the scene.

Camera Directions
Indications of camera movements like zoom, pan, or tracking shots.



Dialogue/Script
Text associated with the scene, including character lines, voiceover, or important sound effects.

Timing/Duration Optional notes indicating how long a scene or shot should last.



Visual/Sketches
Simple drawings or illustrations that depict the key visual elements of a scene (characters, backgrounds, actions).

Audio: Other than dialogue and voiceovers, it could include sound effects and background music.

Transitions: Notes describing how one scene moves to the next (fade, cut, dissolve).

4

Key terms

Preparing assets for use in media products refers to the process of creating, optimising, organising and formatting assets.

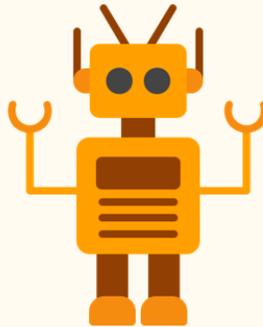
Examples of preparing assets

- Creating assets from scratch
- Repurposing (changing) existing assets
- Sourcing assets (use of assets that already exist and are ready to use without further preparation)

Examples of repurposing assets

- Resizing the asset
- Changing the colours
- Increase/decrease resolution
- Create a background that is transparent

Preparing assets for your animation



Discussion

You are required to create an animation that assembles the body parts of a robot.

Using the image on the left, how does this need to be prepared for use in the final animation?

5

Key terms

Tweening in animation is a short for inbetweening and it's the process of generating images that go between keyframes.

Why is tweening used?

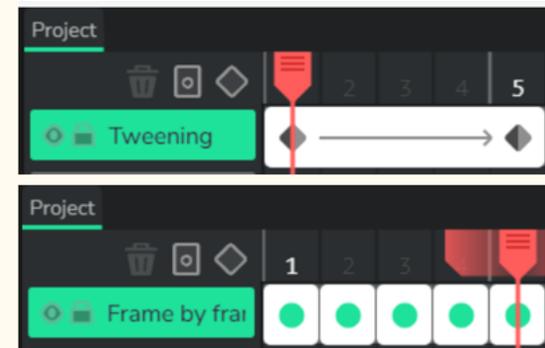
Tweening makes it more convenient to change the movement between from one key frame to another.

Types of tweening

Depending on the software you use, there are different types:

- Motion Tween – This is used to create movement, sizes and rotation of symbols.
- Shape Tween – The conversion of objects such a shape into another shape.
- Classic Tween - Used when making objects fade in and out; or move across a scene and are also used to change the size of an object.

Example



Discussion

Tweening and Frame-by-Frame animation can be used to do the same thing, but how are they different?

6

Key terms

Creating the animation has two key components: **Stage and Timeline.**

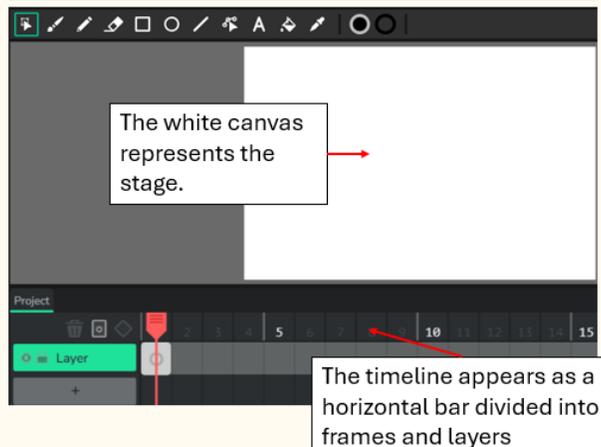
What is the stage?

- The stage is the virtual workspace where animation takes place.
- It represents the visible area where characters, objects, and scenes are arranged and animated.

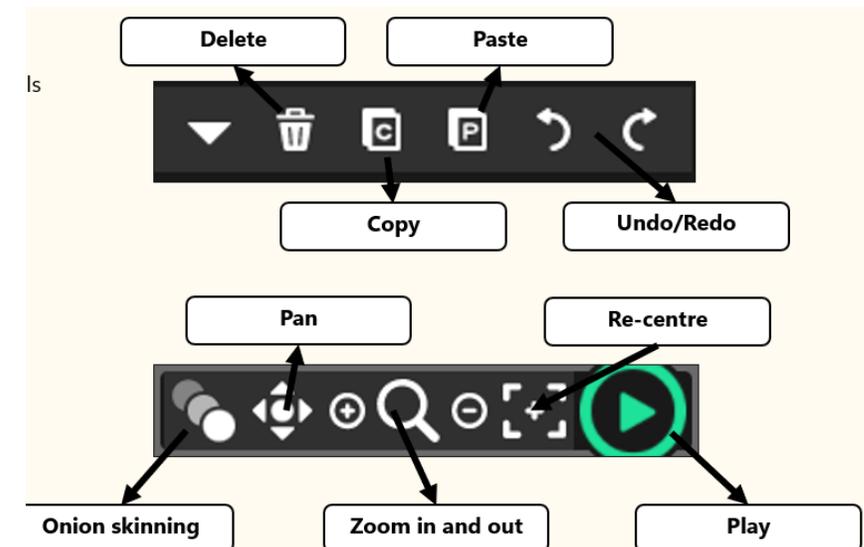
What is a timeline?

- The timeline is a crucial tool that organises and controls the sequence of frames over time.
- It allows animators to manage different layers, keyframes, and motion paths to create smooth movement and transitions.

Example



7



This LP I will learn about quadratic graphs angles and bearings transformations, similarity and congruence.

Parabola	A parabola is a symmetrical, curved, U-shaped graph.
degrees	The size of an angle given as a number.
angle	An angle is a measure of how much something has turned.
clockwise	The direction of rotation that follows the movement of the hands of a clock.
translation	A translation moves a shape from one location to another without the orientation or size changing.
Scale - factor	How much a shape has been enlarged (made larger or smaller).
dimensions	How the size or distance of an object is measured.

1

Quadratic Graphs

By first completing the table of values for $y = x^2 - 4x + 3$, draw the graph of $y = x^2 - 4x + 3$ on a set of axes.

x	-1	0	1	2	3	4	5
y	8	3	0	-1	0	3	8

e.g.

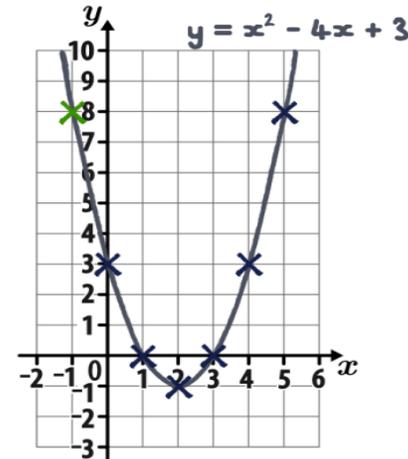
$$y = x^2 - 4x + 3$$

$$y = (-1)^2 - 4(-1) + 3$$

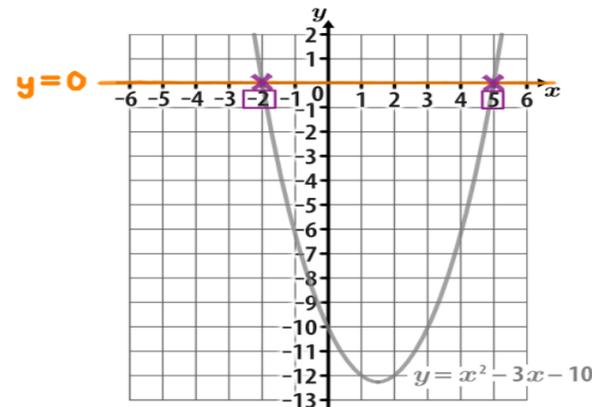
$$y = 1 + 4 + 3$$

$$y = 8$$

$$(-1, 8)$$



The diagram below shows the graph $y = x^2 - 3x - 10$. Use the graph to solve the equation $x^2 - 3x - 10 = 0$.

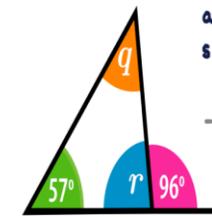


Answer: $x = -2$ and $x = 5$

2

Angle Facts

Work out the values of angles q and r .



angles which make a straight line sum to 180°

$$-96 \quad | \quad r + 96 = 180 \quad | \quad -96$$

$$r = 84$$

angles in a triangle sum to 180°

$$q + r + 57 = 180$$

$$q + 84 + 57 = 180$$

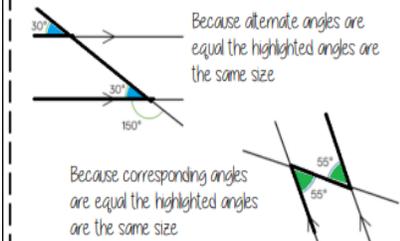
$$q + 141 = 180$$

$$q = 39$$

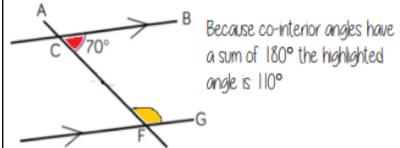
$$-141 \quad | \quad q + 141 = 180 \quad | \quad -141$$

Answer: $q = 39^\circ$ $r = 84^\circ$

Alternate/ Corresponding angles



Co-interior angles

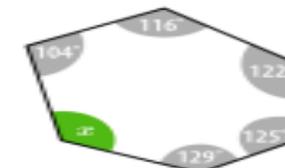


As angles on a line add up to 180° co-interior angles can also be calculated from applying alternate/ corresponding rules first.

3

Angles in Polygons

Find the size of x .



sum of interior angles
= $180 \times (n-2)$

6 sides, so $n = 6$

$$= 180 \times (6-2)$$

$$= 180 \times 4$$

$$= 720$$

$$x + 104 + 116 + 122 + 125 + 129 = 720$$

$$-596 \quad | \quad x + 596 = 720 \quad | \quad -596$$

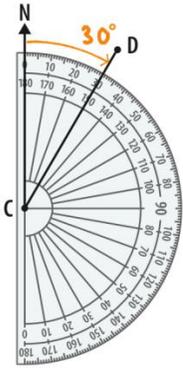
$$x = 124$$

Answer: 124°

4

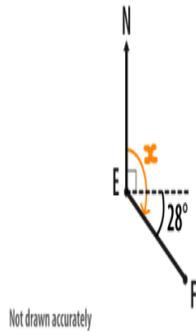
Bearings

Work out the bearing of D from C.



Answer: 030

a) Work out the bearing of F from E



Not drawn accurately

$$x = 90 + 28 = 118$$

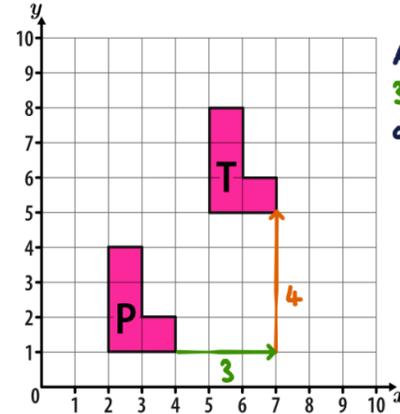
bearing of F from E = 118°

Answer: 118

5

Transformations

Describe fully the transformation from shape P to shape T.

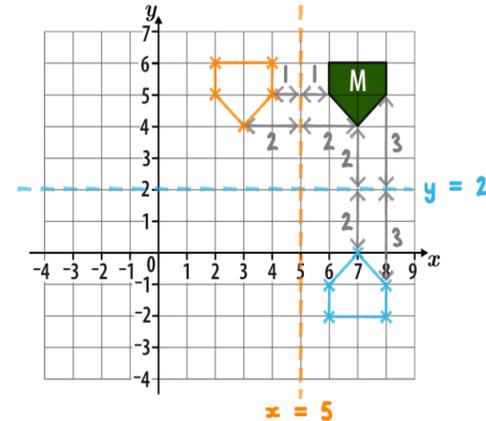


A translation of 3 units to the right and 4 units up

$$\begin{pmatrix} 3 \\ 4 \end{pmatrix}$$

Reflect shape M in the line

- $y = 2$
- $x = 5$

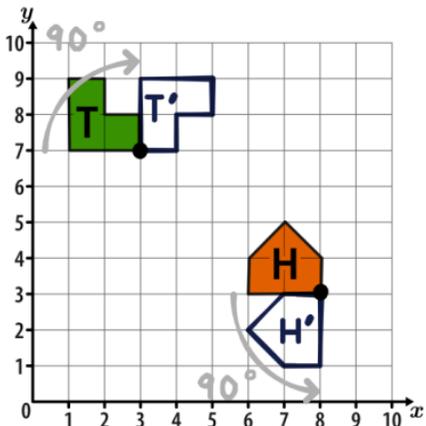


6

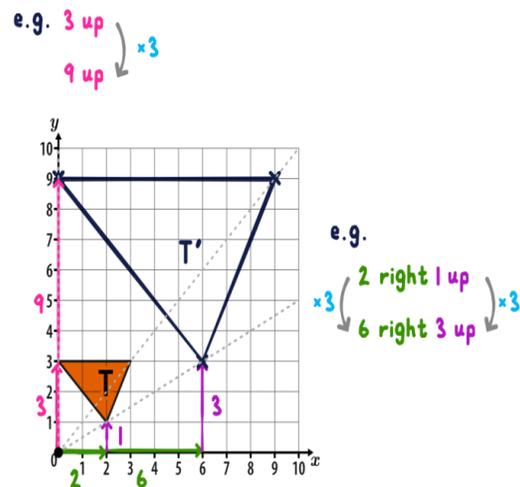
Transformations

Rotate shape T by 90° clockwise about the point (3, 7)

Rotate shape H by 90° anti-clockwise about the point (8, 3)



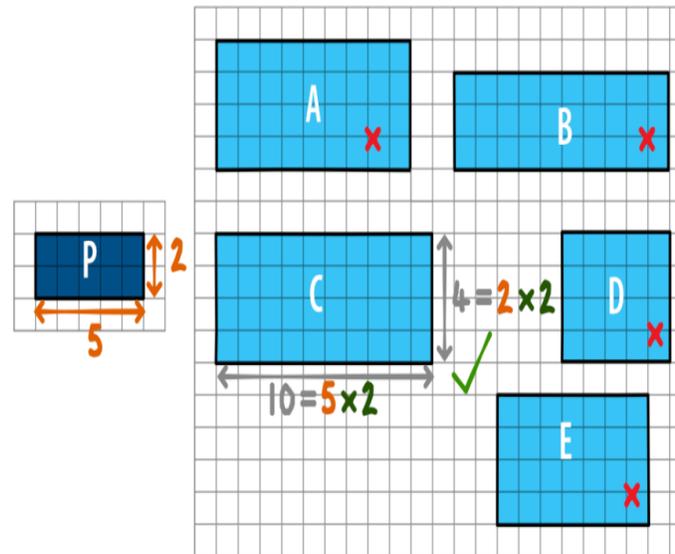
Enlarge triangle T with a scale factor of 3 and centre (0, 0)



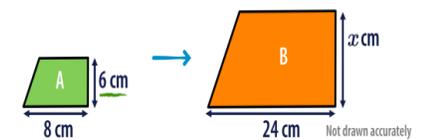
7

Similar Shapes

Which shape below is similar to shape P?



Shapes A and B are similar.
What is the value of x?



$$8 \times \text{scale factor} = 24$$

$$\text{scale factor} = 24 \div 8$$

$$\text{scale factor} = 3$$

$$x = \text{Corresponding side on A} \times \text{scale factor}$$

$$= 6 \times 3$$

$$= 18$$

Answer: 18 cm

This Learning Programme you will be learning how to talk about your future and what job you would like

Key Vocabulary

Infinitive verb	A verb which tells you the action but not who is doing the action, or what time the action is happening
Stem changing verbs	Verbs which have a vowel change in certain forms
Present tense	Used to talk about things happening now, or things that happen regularly
Near future tense	Used to talk about the future and what is going to happen
Preterite tense	It is the past tense and is used to talk about completed actions in the past.
Tengo derecho a	I have the right to
Poder	To be able to/can
Se debería	You should
Imperfect tense	Used to describe what something used to be like

Year 9 Spanish LP4 Knowledge Organiser

LP4.1 – Mis derechos – my rights

Mis derechos My rights

Tengo derecho...	I have the right...	dormir	sleep
al amor y a la familia	to love and to family	ir al insti(tuto)	go to school
al juego	to play	respirar	breathe
a la educación	to education	porque...	because...
a la libertad de expresión	to freedom of expression	soy un(a) chico/a	I am a boy/girl
a un medio ambiente sano	to a healthy environment	tengo que ganar dinero	I have to earn money
a vivir en armonía	to live in harmony	hay mucha violencia en mi ciudad	there is a lot of violence in my city
No puedo...	I cannot...	mi padre grita mucho	my dad shouts a lot
dar mi opinión	give my opinion	tengo que trabajar	I have to work
jugar con mis hermanos	play with my brothers and sisters	el aire está contaminado	the air is polluted
salir solo/a	go out alone	No es justo porque...	It isn't fair because...
		Es inaceptable porque...	It is unacceptable because...

Las nacionalidades Nationalities

Soy...	I am...	norteamericano/a	North American
boliviano/a	Bolivian	inglés/inglesa	English
colombiano/a	Colombian	español(a)	Spanish
mexicano/a	Mexican	paquistaní	Pakistani

LP4.2 – El comercio justo – fair trade

El comercio justo Fair trade

Tiene (diez) años.	He/She is (ten) years old.	(catorce) horas al día	(fourteen) hours a day
Vive / Viven...	He/She lives / They live...	(seis) días a la semana	(six) days a week
con su familia	with his/her/their family	para un patrón	for an employer
en una plantación	on a plantation	para una cooperativa	for a cooperative
Trabaja / Trabajan...	He/She works / They work...	Gana / Ganan	He/She earns / They earn
		(treinta) euros al mes.	(thirty) euros a month.

LP4.3 – Reciclamos – we recycle

¡Reciclamos! Let's recycle!

¿Qué se debería hacer para proteger el medio ambiente?	What should you/we do to protect the environment?	ducharse en vez de bañarse	have a shower instead of a bath
Para proteger el medio ambiente...	In order to protect the environment...	ir en bici(cleta)	go by bike
Se debería...	You/We should...	reciclar el papel / el plástico / el vidrio	recycle paper / plastic / glass
ahorrar energía en casa	save energy at home	usar transporte público	use public transport
apagar la luz	turn off the light	No se debería...	You/We shouldn't...
cerrar el grifo	turn off the tap	malgastar el agua	waste water
conservar el agua	save water	tirar la basura al suelo	throw rubbish on the ground
desenchufar los aparatos eléctricos	unplug electrical devices	usar bolsas de plástico	use plastic bags

Mi ciudad My town / city

¿Cómo era tu ciudad antes?	What was your town / city like before?
Antes...	Before...
era (bastante) aburrida	it used to be (quite) boring
era (muy) peligrosa	it used to be (very) dangerous
estaba sucia	it used to be dirty
había mucha basura	there used to be a lot of rubbish
había mucha contaminación	there used to be a lot of pollution
había mucha violencia	there used to be a lot of violence
no había medios de transporte público	there didn't use to be means of public transport

no había nada para los jóvenes	there didn't use to be anything for young people
¿Cómo es ahora?	What is it like now?
Ahora...	Now...
está limpia	it is clean
hay menos basura	there is less rubbish
hay menos contaminación	there is less pollution
hay parques y espacios públicos muy bonitos	there are very nice parks and public spaces
hay una red de transporte muy buena	there is a very good transport network
hay muchas cosas para los jóvenes	there are lots of things for young people
no tiene barrios peligrosos	it doesn't have dangerous neighbourhoods

LP4.4 – Mi ciudad – my city

Gramática

The imperfect tense describes what something used to be like.

present	imperfect
hay (there is/are)	había (there used to be)
tiene (it has)	tenía (it used to have)
está (it is)	estaba (it used to be)
es (it is)	era (it used to be)

Note: you use **estar** to refer to a location or a condition (e.g. clean, dirty).

LP4.5 – Queremos recaudar fondos – we want to raise funds

Palabras muy frecuentes High-frequency words

mi/mis	my	para	(in order) to, for
su/sus	his/her/their	hay	there is / there are
nuestro/a/os/as	our	había	there was / were / used to be
más... (que)	more... (than)	a partir de ahora	from now on
menos... (que)	less... (than)	además	in addition, furthermore

Extending your answers

Look at these two answers.

Hay mucha basura.

En mi región hay mucha basura. Mucha gente tira la basura al suelo, por ejemplo. La ciudad está muy sucia también. No me gusta nada. Se debería reciclar el papel y el vidrio.

Get into the habit of showing off what you know:

- Make a point.
- Give an example.
- Add something.
- Give an opinion.
- Say what should be done.

SKILLS

Using the four Cs

Remember to use clues (e.g. the questions in English, picture, title), **cognates**, **context** and **common sense** to help you answer the questions.

LP4.6 – Solidarios

LP4.7 – Repaso

Revision of vocabulary from the LP

This Learning Programme you will be learning about **Britpop**

Key Vocabulary

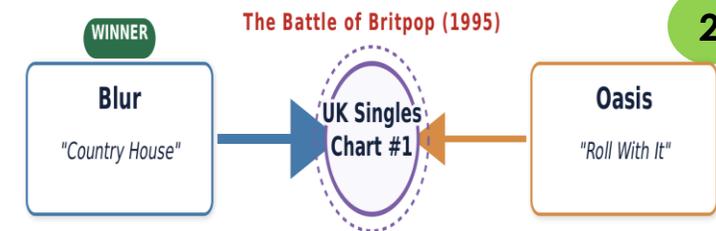
Britpop	a style of British rock and pop music from the 1990s, known for catchy melodies, guitar-based songs, and lyrics that focus on British life and culture.
Anthem	a song that is especially important to a group, country, or cause, often sung on special occasions.
Riff	A riff is a short, repeated musical phrase
Hook	A hook is the catchy part of a song that grabs your attention and is easy to remember.
Texture	Texture in music is how many sounds or instruments you hear at once, and how they fit together.
Timbre	Timbre is the unique sound quality of an instrument or voice
Identity	Identity in music is what makes a musician, genre, or piece of music unique — the sounds, styles, and choices that show who they are

What is Britpop ?

Britpop was a music and culture movement in the mid-1990s that celebrated British identity. It was famous for catchy electric guitar riffs, regional accents, and a massive media rivalry between bands. It was a bright, confident reaction against the heavier 'Grunge' music coming from America at the time.

The Battle of Britpop

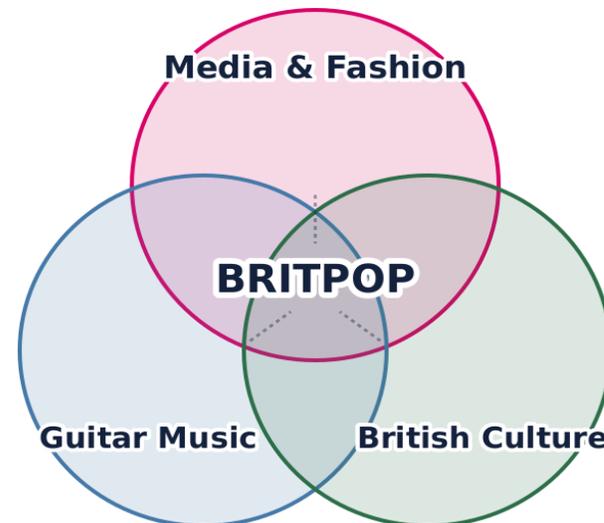
In 1995, Blur vs. Oasis: "The Battle of Britpop" — a media-fuelled clash of singles that captivated the UK. Blur won the chart battle, but Oasis won long-term fame. The rivalry boosted interest in Britpop and showed how music could become a national event.



Anthems

What actually makes a song an anthem? It isn't an accident. Britpop songwriters used specific techniques to ensure their songs would be remembered for decades:

- Universal Lyrics:** They wrote about things everyone experienced—living for the weekend, feeling ignored, or wanting to escape a boring town.
- Simplicity:** The chords were often simple, loud, and major key (happy sounding).
- The Sing-along Chorus:** The melody usually sits in a comfortable range for the average person to shout along to after a football match.



Why Britpop mattered ?

A Moment of Pride

Britpop gave 90s youth pride in British culture — fun, unpolitical, and full of energy.

Music as Identity

Like 70s punk, it captured the national mood: "We're here, we're British, and we've got a voice."

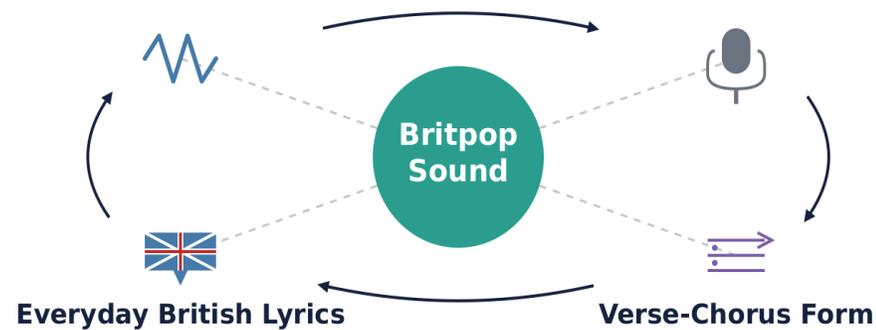
Legacy

Blur, Oasis, and Pulp still inspire bands today. Their songs echo at football matches, weddings, and festivals — timeless anthems that endure

4

Catchy Guitar Riffs

British Vocal Style



5

6

Music Theory for Britpop

Britpop is a style of 1990s British alternative rock.

1 Melody

 Simple, stepwise melodies that are easy to sing

2 Harmony

 Basic chord progressions, mainly major keys

4 Texture

 Thick, full textures with multiple layers of guitar and backing vocals

5 Structure

 Standard forms with a focus on big choruses

6 Tempo

 Moderate tempos around 80–120 bpm

7 Rhythm

 4/4 time with syncopated strumming and a strong backbeat

8 Timbre

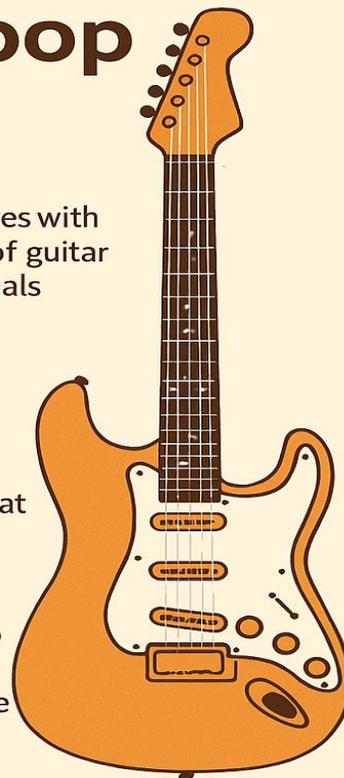
 Bright, clean guitar tones with mildly distorted riffs

9 Guitar Techniques

 Pitch bending, tremolo picking, hammer-ons

10 Stylistic Identity

 Lyrics relating to British culture and everyday life



7

Britpop Song Structure

Intro

Verse

Pre-Chorus

Chorus

Verse

Pre-Chorus

Middle 8 / Bridge

Final Chorus

Outro



This Learning Programme you will be developing your athletic abilities by learning how to perform at maximum levels and how accurately replicate techniques and skills in a range of different events.

Key Vocabulary

Flexibility	Flexibility is the ability to move muscles and joints through a full normal range of motion.
Endurance	Endurance in sports refers to the ability to sustain prolonged physical activity without getting exhausted.
Skill	A skill is the combined ability and knowledge which allow you to complete a task to a high standard.
Suppleness	Suppleness means being able to bend and move parts of the body easily.
Coordination	Coordination is moving two or more body parts simultaneously.
Agility	Agility is changing direction at speed
Speed	Speed is to move quickly across the ground or move limbs rapidly to grab or throw.
Reaction Time	Reaction time is the length of time taken for a person to respond to a given stimulus.
Power	Power is the ability to exert maximum force as quickly as possible.
Strength	Strength is the ability to produce as much force as possible in a single movement.
Stamina	Stamina in sport is the ability to exercise for a prolonged period.
Flexibility	Flexibility is the ability to move muscles and joints through a full normal range of motion.

1

Students will know how to investigate what they will be learning this learning programme and how they will be assessed. This will include, components of fitness and athletics events.

2

Students will describe how to be an effective timekeeper for long distance events and identify track markings and starting positions for 1500m, 800m and 400m. Finally, students will plan a long-distance race to test cardiovascular endurance.

3

Students will continue to develop their knowledge of an effective timekeeper for short distance events. They will also identify track markings and starting positions for 300m, 200m and 100m. Finally, they will plan a short distance race to test speed.

4

Student will describe the role of the javelin official and scoring systems and identify the rules and techniques for javelin. Students will develop officiating skills in javelin with support.

5

Student will describe the role of the shot put official and scoring systems and identify the rules and techniques for shot put. Students will develop officiating skills in shot put with support.

6

Students will evaluate how the roles of the officials and scoring systems are different in track and field events. Students will also review their own performance as an official in two athletics events. Finally, students will recommend valid improvements to performance in one athletic events.

7

Student will describe the role of the discus official and scoring systems and identify the rules and techniques for discus. Students will develop officiating skills in discus with support.

This Learning Programme you will be learning about the nature, causes and impacts of conflict. From personal relationships to international relations, you will consider how conflict is caused and peace is achieved.

Key Vocabulary

Nationalism	loyalty and devotion to a nation
Pacifism	Being against conflict
Holy war	A war that is fought for religious reasons, usually backed by a religious leader
Jihad	Means 'struggle'. Either struggling to follow your religion or struggling to defend your religion from those who attack it
Conflict	Disagreement which can lead to fighting or war
Ideology	A set of opinions or beliefs of a group or an individual
Deterrence	Something that discourages people from doing something.
Mutually assured destruction	Each side has enough nuclear weaponry to destroy the other side

1 What are the causes of conflict?

The causes of any war are complex. Wars are rarely about just one thing. They can be declared when a state or states act to:

- attack or invade another state, to gain territory or resources
- resist such an attack or invasion by an aggressor
- protect another state from attack by an aggressor
- impose domination or political change on another state, or to resist such domination
- challenge a threat to 'essential national interests' by another state
- counter perceived threats from a different ideology, religion or ethnic group
- defend the national honour when under threat



2 People are pacifists for one or some of these reasons:

- religious beliefs
- non-religious belief that life should not be taken
- beliefs that war costs money, destroys land and does not bring about peace.

Many believe that pacifism is more than believing war is wrong. They argue that it must include action to promote justice and human rights.

Absolute pacifism

An absolute pacifist believes that it is never right to take part in war, even in self-defence. They think that the value of human life is so high that nothing can justify killing a person deliberately.

Conditional pacifism

Conditional pacifists are against war and violence in principle, but they accept that there may be circumstances when war will be less bad than the alternative.

Selective pacifism

Oppose wars involving weapons of mass destruction - nuclear/chemical/biological weapons - either because these weapons can cause so much damage. Or that a war involving WMD really can't be won.

Active pacifism

Are heavily involved in political activity to promote peace. During a war, many pacifists will refuse to fight, but some might get involved in non-violent ways, such as by driving ambulances.

3 **Just War** is a war which is declared for right and noble reasons and fought in a certain way. A Just War is not a war that is 'good' as such – it is a war that some Catholics may feel to be necessary or 'just' in the circumstances, when all other solutions have been tried and have failed. It is a necessary evil and a last resort.

Christians agree a war is Just if it meets the following conditions:

- The reason for the war is good (e.g. self-defense)
- It is a last-resort,
- The war is being fought to bring peace
- There is a good chance of success
- Innocent people are not be hurt or killed on purpose

4

Holy War

Holy war is a war fought for a religious cause or God, often inspired by a religious leader. Fighters of holy wars may expect a place in paradise, or forgiveness for their sins. **For a war to be a holy war, religion has to be the driving force.** Holy wars usually have three elements:

- the achievement of a religious goal
- authorised by a religious leader
- a spiritual reward for those who take part



Lesser jihad is about defending Islam from threat. While the majority of Muslims see their religion as one of peace, sometimes Muslims have taken up arms against enemies when they or other Muslims have been persecuted. The Qur'an says: Permission [to fight] has been given to those who are being fought, because they were wronged. And indeed, Allah is competent to give them victory (Surah 22:39).

5

Weapons of Mass Destruction

A weapon of mass destruction is a nuclear, radiological, chemical, biological or other weapon that can kill and bring significant harm to a large number of humans. They can also cause great damage to human-made structures, natural structures, or the environment. WMDs are used as a deterrent in many countries. The idea is that other countries' leaders will see that a country they are targeting has WMDs and will not attack, in case that country retaliates with these weapons. Some arguments in favour of WMD include that they make war end more quickly, they are an effective deterrent, losses will only be felt by one side/the enemy, they cause as much destruction as possible, they are better than invading a country. However, there are many arguments against such as, they fail to meet the criteria of a Just War, innocent lives will be lost, they can cause long term ill-effects, and they go against the principle of sanctity of life.

6

The United Nations

The United Nations (UN) is a diplomatic and political international organisation with the intended purpose of:

- Maintaining international peace and security
- Developing friendly relations among nations
- Achieving international cooperation
- Serving as a centre for coordinating the actions of member nations



UNITED NATIONS



7

The problem of evil

The problem of evil questions why God lets bad things happen to the world. Various types of evil and suffering are evident in the world. If God is so loving and powerful, why does it exist at all?

There are two types of evil and suffering in the world:

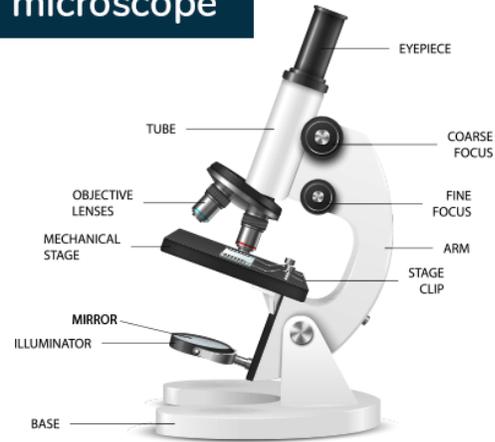
- Moral evil and suffering – this is suffering caused by the actions of humans e.g. acts of murder and war.
- Natural evil and suffering – this is suffering that is caused by nature and has nothing to do with the actions of humans e.g. earthquakes, floods, tsunamis, disease.

This Learning Programme you will be learning about animal and plant cells and other specialised cells. You will also learn about a variety of different chemical reactions.

Key Vocabulary

Nucleus	This is an organelle that contains genetic material (DNA) and regulates cellular activities.
Resolution	The ability to distinguish two separate points as separate and not blurred.
Diffusion	The movement of particles from high to low concentration.
Osmosis	The movement of water through a partially permeable membrane from a dilute to concentrated solution.
Exothermic	A chemical reaction that releases energy in the form of heat/light to the surroundings.
Endothermic	A chemical reaction that absorbs energy from its surroundings.
Catalyst	Increases the rate of chemical reaction without being consumed or changed in the process.

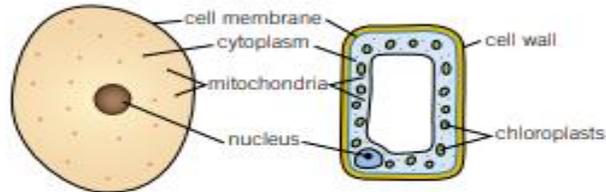
1 Diagram of microscope



2

Plant and animal cells

- To be able to **observe a cell** we need to use a **microscope**, this magnifies the cell to a point to which we can see it
- Plant and animal cells have small structures inside known as **organelles**, each of these performs a certain role which allows the cell to survive



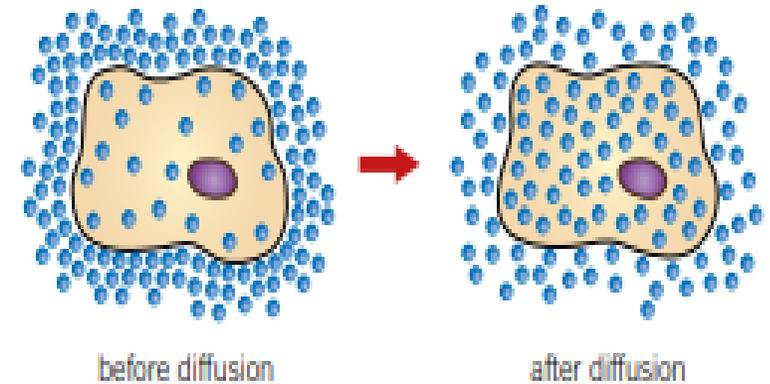
Specialised cells

- Specialised cells** are designed to carry out a particular function, because of this they have specific features and adaptations to allow them to carry this out
- Both plant and animal cells can be specialised, with these specialised cells working together to help the organism to survive

3

Movement into and out of cells

- The process in which substances move into and out of cells is known as **diffusion**
- This occurs across the **cell membrane**
- During diffusion particles move from an area of **high concentration**, to an area of low concentration

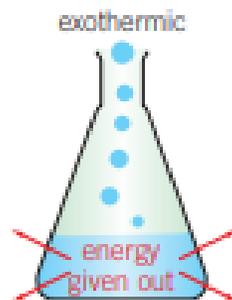


- Oxygen and nutrients enter the cell by diffusion, carbon dioxide and waste products leave

4 Exothermic and endothermic reactions 5

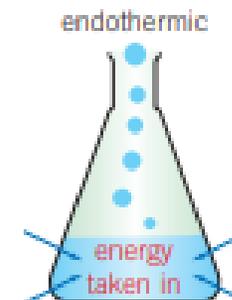
Exothermic reactions involve a transfer of energy from the reactants to the surroundings

- As energy is transferred to the surroundings this will show an increase in temperature
- Examples of exothermic reactions include combustion, freezing, and condensing



Endothermic reactions involve a transfer of energy from the surroundings to the reactants

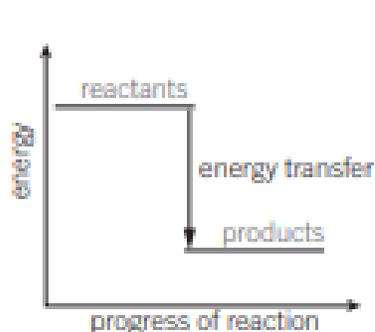
- As energy is taken into the reactants a decrease in temperature will be shown
- Examples of endothermic reactions include thermal decomposition, melting, and boiling



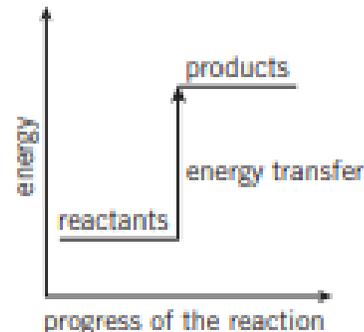
6 Energy level diagrams

Energy level diagrams show the values of energy between the reactants and the products in a reaction

- If the energy is greater in the reactants than the products then the reaction is exothermic as energy has been given out to the surroundings
- If the energy is lower in the reactants than the products then the reaction is endothermic as energy has been taken in from the surroundings



Exothermic



Endothermic

7 Bond energies

- Energy must be used to break **chemical bonds**, meaning that this reaction is endothermic
- Energy is given out when chemical bonds are made, meaning that this reaction is exothermic
- To see if a reaction is endothermic or exothermic, you must find the difference in the energy needed to break and to make the bonds in the reaction
- If the energy needed to break the bonds is less than the energy given out when making the bonds, the reaction is exothermic
- If the energy needed to break the bonds is more than the energy released when making the bonds, the reaction is endothermic

This Learning Program you will be learning about environmental factors that impact on cultural foods. You will look at food miles, importing food items and health & safety in the kitchen.



FAIRTRADE



Kitchen Safety Tips



Wash First

If sampling, remember to wash the spoon before it goes back in the food.



2 Hours

Don't leave out perishable foods for more than 2 hours.



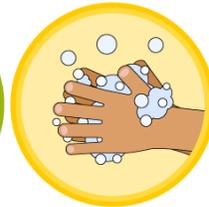
Counter Safety

Keep hot liquids and food away from counter and table edges where young children can reach.



Prevent Bacteria

Fully cook recipes with eggs, meat and poultry and thoroughly wash fresh produce.



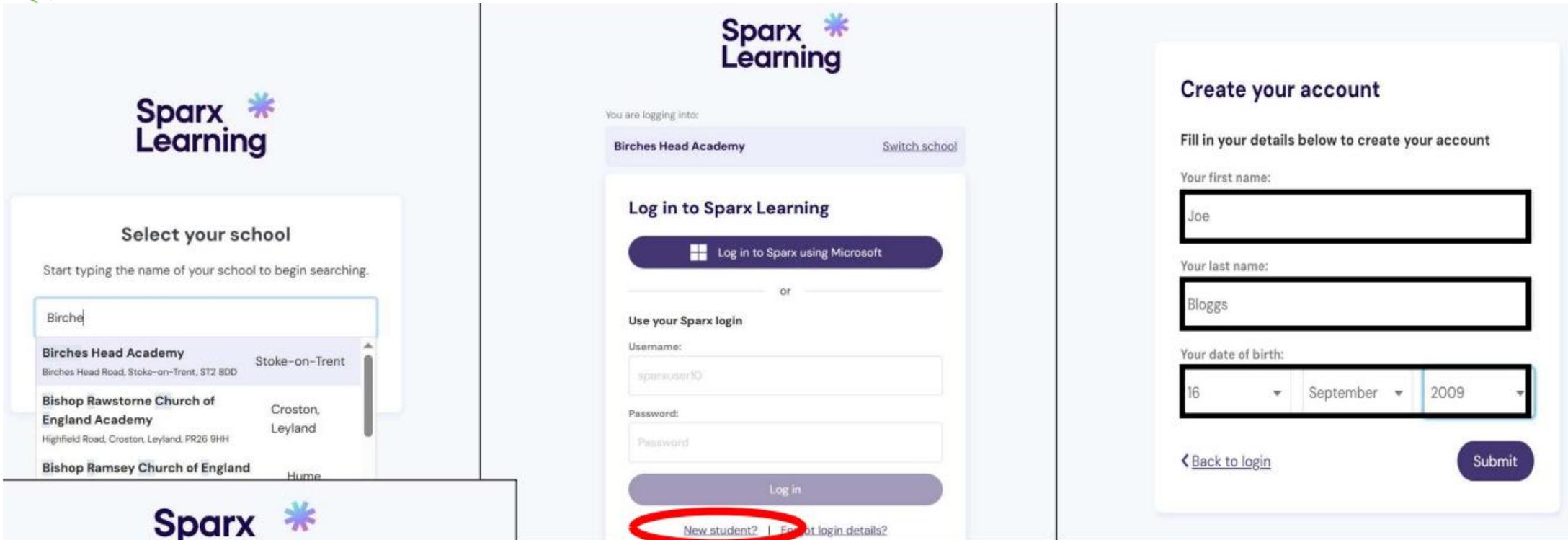
Wash Often

Wash your hands a lot, and remind kids to do the same.



1. food miles and the impact importing foods has – positives and negatives
2. Health and safety in the kitchen
3. Ingredient choice and impact on lifestyle
4. Preparation for practical

Keyword	Definition
Health & Safety	Rules and actions used in the kitchen to keep everyone safe, such as washing hands, using equipment correctly, and preventing cross-contamination.
Food Miles	The distance food travels from where it is grown or produced to your plate. Fewer food miles usually means it's better for the environment.
Carbon Footprint	The amount of carbon dioxide (CO ₂) released into the atmosphere because of something — such as growing, transporting, and cooking food.
Importing	Bringing food into the country from abroad, often because we can't grow it here or want it out of season.
World Foods	Foods, ingredients, and dishes from different countries and cultures around the world.
Lifestyle	The way a person lives, including their habits, diet, activity levels, and choices, which can affect what foods they need.
Preparation	Getting food ready to cook — for example, washing, chopping, measuring, mixing, or seasoning.



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Highfield Road, Croston, Leyland, PR26 9HH
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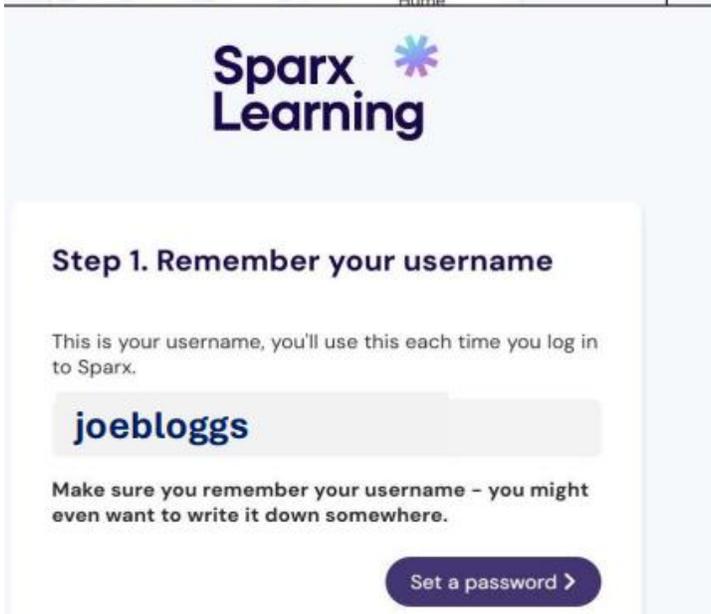
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16 September 2009

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This is your username, you'll use this each time you log in to Sparx.

joebloggs

Make sure you remember your username – you might even want to write it down somewhere.

[Set a password >](#)

1. Go to maths.sparx-learning.com/student
2. Select your school and click 'Continue'
3. Click 'New user' underneath the login fields
4. Follow the steps to create your account:
5. Enter your name and date of birth
6. Note down your username
7. Create a password (minimum 6 characters)

THE ORACY COMPASS



Are you thinking about the speed and volume of your voice?

Are you facing who you are speaking to?

Do you appear to be talking confidently?



Are you being respectful and responding appropriately?

Are you using expression to make your point?

Are you using gestures to show you are listening?

Are you taking turns to talk?

Are you inviting others to share their opinions?



'I would like to start by saying...'

'I agree and would like to add...'

'To challenge you X, I think...'



'Could you provide an example'

'Could you clarify what you mean by...'

'The main points raised today were...'

