



De La Salle School

Year 8

2026 / 27

Knowledge Organisers

Term 1



De La Salle School

Art

Knowledge Organisers



YEAR 8 KNOWLEDGE ORGANISER TERM 1 - CULTURAL ART



Artists use techniques and ideas from different cultures to create powerful artwork. Understanding these key words will help you explore and create with confidence!



KEY VOCABULARY		
	SYMMETRY	Each side is identical, like a reflection.
	TRIBAL	An adjective meaning relating to the characteristics of a tribe. Social structures, traditions and people connected by culture.
	COLLAGE	A technique using various papers or fabrics, arranged and glued to create a new composition.
	TONE/VALUE	The lightness and darkness of colour, black, white and grey.
	REDUCTION PRINT	Part of the print plate is removed before printing each layer.
	GEOMETRIC PATTERNS	A repeated pattern that is made up of basic mathematical shapes.
	SYMBOLISM	Art or artefact has a deeper meaning, symbols represent ideas or emotions.
	TONE	The lightness and darkness of colour, black, white and grey.
	REFINEMENT	Making small changes in order to improve.
	WARM COLOUR PALETTE	Warm colours such as red, orange, yellow, browns.

REMEMBER:
Looking at art from different cultures helps us understand the world and inspires our own ideas!

COLOUR WHEEL

Warm

Cool

WARM COLOURS

Red, orange, yellow and browns. These colours feel warm, bright and full of energy.

COOL COLOURS

Green, blue and purple. These colours feel cool, calm and relaxing.

VISUAL INSPIRATION – WHAT CAN YOU SEE?

SYMMETRY
Both sides are the same. This helps create balance in a design.

TRIBAL MASK
Tribal art often uses strong shapes and symbols to tell stories or show identity.

PATTERN & SHAPE
Geometric patterns use basic shapes repeated to create interesting designs.

CARD RELIEF MASK
Adding layers of card creates texture and makes your mask 3D and eye-catching.

PATTERNS & COLOUR
Bright colours and repeated patterns bring your artwork to life.

TOP TIPS FOR SUCCESS

LOOK carefully at shapes, patterns and details.

THINK about meanings and symbols.

EXPERIMENT with different materials, techniques and ideas.

PRACTISE makes progress – keep trying!

ENJOY the creative process and be proud of your work!

MNEMONIC TO REMEMBER:
“**See The Colours**
Make Patterns
Tell Stories!”

SCAN TO EXPLORE!

Drawing mask with symmetry

Reduction printing (mask)

Card Relief Mask

Examples of good quality of work, presentation and layout

Scan the QR codes to learn more and see great examples!

THINK LIKE AN ARTIST	
ANALYSIS	Examining, breaking down and interpreting an artwork to understand its meaning and how it was made. Exploring the form, content and context of a piece of work.
COMPARE	To examine and explore two or more artworks side-by-side to identify their differences and similarities.
DESCRIBE	To give a detailed verbal or written account of something, painting a picture with words.
EVALUATE	To reflect on the creative journey, exploring what has been successful and what we would change.



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Computing
Knowledge Organisers

EduBlocks

```
# Start code here
Num1 = 0
for i in range(4):
    Num1 = 6 + i
    if Num1 > 10:
        Num1 = Num1 - 2
        print(Num1)
    else:
        Num1 = Num1 - 4
        print(Num1)
```

- Num1 = 0 is a variable
- For i in range is iteration
- > Means greater than
- IF is an example of selection
- print is an example of an output
- The number 4 is an integer
- The three programming constructs are:
 - Sequence
 - Selection
 - Iteration

Glossary	
Sequence	A list of instructions that follow a logical order.
Selection	An outcome that depends on whether a certain condition is met.
Iteration	A process of repeating steps.
Variable	A value that can change.
Input	The process of entering or adding data into a system
Output	The process of retrieving or displaying data from a system
String	Characters inside speech marks.
Integer	A whole number
Syntax	Rules of the programming language
Algorithm	A list of instructions used to solve a problem.

Knowledge Organiser: Multi Media Product



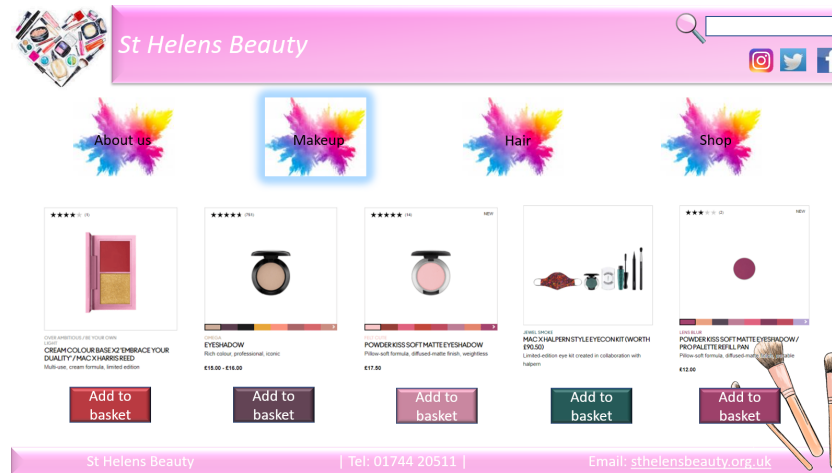
Content of a website

A website consist of many elements below:-

- Navigation buttons or hyperlinks.
- Animation
- Videos
- Images
- Text.
- Colour scheme
- Contact details
- Social media links.



The structure of a website.



Designing a Website

You can use a range of design tools to help design a website. These are:-

- **Mood board**— is a visual tool that communicates our concepts and ideas. It will include images, colours, font styles and pieces of text that will give you an idea of what the website will include.
- **Visualisation Diagram**— is a rough plan of what the website will look like, it will include details such as colours, font style, font size, size of elements (images/videos) and layout of the website. It will use annotations to share your ideas.
- **Wireframe**- is a plan of what the website will do (its functionality) e.g. main buttons/hyperlinks

The purpose of a website.

A website is a collection of webpages with the same common goal. This could be to:-

- Share Information
- Show off work.
- Sell items
- Connect with others.

Target Audience

A **target audience** is a group of customers a designer has decided to target their graphic or product at. Colours, images, text or attention to detail is used to grab their attention.

A target audience can be segmented into:-

- **Age**— this is by different age groups e.g. 3-5 or 16-24 etc..
- **Gender**— this is how a person identifies e.g. Male/Female/Non-Binary etc.
- **Ethnicity/Culture**— this is where a person or their family is from e.g. France/Britain/America
- **Income/Class**— this is how much a person earns or has to spend.





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Drama

Knowledge Organisers

De La Salle KS3 Drama Knowledge Organiser

Overview:

Year 7-

Term 1A- **Intro to drama**

Term 1B- **How to create drama**

Term 2- **The Twits**

Term 3- **TIE and Social Media**

Year 8-

Term 1A- **Oh! What a Lovely War**

Term 1B- **Developing Comedy**

Term 2A- **A Midsummer Night's Dream**

Terms 2B & 3A- **Our Day Out**

Term 3B- **Injustice & BAME**

Year 9-

Term 1A- **Musical Theatre**

Terms 1B & 2A- **Producing a portfolio**

Terms 2B & 3A- **Noughts and Crosses**

Term 3B- **Writing an analysis of live theatre**

Feedback & Progression:

You will be given feedback on how you are progressing in the following areas:

- Drama techniques
- Performing characters
- Staying in role,
- Subject specific terminology
- Live theatre analysis
- Writing about performing
- Rehearsing and collaborating
- Problem solving
- Writing about creative theatre.

These skills will be marked using:

- Self and peer assessment
- Success criteria (emerging, developing, securing, mastering)

Physical Skills:

Body language- non-verbal communication of the body to show emotion.

Proxemics- how the stage is used effectively to show something (relationship between characters).

Poise- the way a character moves.

Body Tension- how relaxed or tense an actor's muscles are.

Gesture- an action of the body.

Posture- how a person carries themselves when sitting or standing.

Facial expressions- how the face conveys emotions.

Energy levels- low level or high level.

Pace- how fast or slow an actor moves.

Vocal Skills:

Tone - how the voice conveys emotion.

Pitch – High or low voice.

Volume – How loudly or softly you speak.

Pace – Speed of delivering dialogue.

Diction – (informal / slang) the way in which you pronounce words clearly.

Accent – shows where the character is from. (regional/national)

Pause – to stop (used for effect).

Emphasis – a word or sound is exaggerated for effect.

Intonation – where the pitch goes up/down at the end of a sentence.

Timing – considered carefully for effect.

Drama Techniques

Freeze frame - a frozen scene on stage.

Thought track- a character 'steps out' of a scene and reveal something to the audience (that they are thinking).

Narration – the process of telling a story.

Split scene - two or more scenes which are performed on stage at the same time.

Breaking the fourth wall /Direct Address – characters speak to the audience by breaking the imaginary wall between them.

Blocking – the movements of an actor.

Improvise – to create without preparation.

Production Elements:

Costume

- How does it show context and era?
- How does it suit the style of theatre?
- How does it show status, social role, age, personality, views and beliefs?

Keywords: colour, pattern, accessories, texture, material, style, fit, length, decorative features, embroidery, footwear, headwear, makeup, hairstyle.

Set

- How does it show the play's theme?
- How does it communicate performance style?
- How does it show context and era?

Keywords: Stage type, backdrop, levels, materials, exits, entrances, props, furniture, walls, colours, detail, ramps, scale, scaffolding

Sound

- What atmosphere does the sound create?
- What does it symbolise?
- How does it highlight the moment?
- How does it help to aid transition from one scene to another?

Keywords: Music era, instruments, rhythm, location, live or recorded, onstage or off stage, volume, amplification, sound effects.

Lighting

- What atmosphere does the lighting create?
- What does it symbolise?
- How does it highlight the moment?

Keywords: Colour, low angle, high angle, spotlight, lighting to create shadows, warm light, cool light, dim light, bright light, fade, blackout, flashing light, intensity

Styles of Theatre and Practitioners:

Year 7-

- Mime
- Abstract
- Naturalism
- Steven Berkoff
- Total Theatre
- Theatre in Education
- Theatre for Children

Year 8-

- Agit-Prop
- Joan Littlewood
- Comedy
- Willy Russell
- Naturalism
- Tragic-Comedy
- Verbatim
- Docu-drama
- Mischief Theatre

Year 9-

- Musical Theatre
- Physical Theatre
- Symbolism
- Epic Theatre
- Abstract Theatre



Elements of Drama:

- Situation
- Role and relationship
- Dramatic tension
- Focus
- Place and time
- Language
- Movement
- Mood and Atmosphere
- Symbol

Stage Types:

- Proscenium Arch
- Thrust Stage
- Promenade Stage
- Traverse Stage
- Theatre in the Round
- End on Stage

Stage Directions:

Centre Stage (CS), **Stage Right** (SR), **Stage Left** (SL)

Up Stage (US), **Up Stage Left** (USL), **Up Stage Right** (USR),

Down Stage (DS), **Down Stage Left** (DSL), **Down Stage Right** (DSR).

De La Salle Year 7 Drama Supporting Links & Extra Study

Drama Techniques	Using stimuli to develop ideas - Responding to a stimulus - OCR - GCSE Drama Revision - OCR - BBC Bitesize Drama Skills - Devising (youtube.com)
Perform Characters	How performers use their body - Physical skills for interpreting a character - OCR - GCSE Drama Revision - OCR - BBC Bitesize How performers use their voice - Vocal interpretation of a character - OCR - GCSE Drama Revision - OCR - BBC Bitesize
Stay in Role	HOW TO STAY IN CHARACTER WHEN ACTING FULL VERSION ACTING TIPS WITH ELIANA GHEN (youtube.com)
Rehearse, Collaborate & Create	The 7 Keys to Creative Collaboration (youtube.com) Devising Theatre Skills (youtube.com)
Twits Techniques	Steven Berkoff - Selecting a practitioner - OCR - GCSE Drama Revision - OCR - BBC Bitesize
Twits Characters	https://www.youtube.com/watch?v=wrrTaknHtuE
Twits Stay in Role	HOW TO STAY IN CHARACTER WHEN ACTING FULL VERSION ACTING TIPS WITH ELIANA GHEN (youtube.com)
Twits Rehearse	The 7 Keys to Creative Collaboration (youtube.com)

Term 1A

Term 1B

Term 2

Term 3

De La Salle Year 8 Drama Supporting Links & Extra Study

Proxemics & Agit-Prop	https://www.youtube.com/watch?v=XPei7qoaApp
Voice, Movement & Gesture	https://www.bbc.co.uk/bitesize/guides/zd2vhbk/revision/1 https://www.bbc.co.uk/bitesize/guides/zjxbnrd/revision/1
Stay in Role	ttps://rpg.stackexchange.com/questions/17180/staying-in-character-and-taking-it-all-seriously
Rehearse & Collaborate	https://www.bbc.co.uk/bitesize/guides/zg9x34j/revision/10
Direct Address & Physical Comedy	https://www.youtube.com/watch?v=CJCZIUFEXYI
Perform Characters	https://www.youtube.com/watch?v=DOWO4gg-whg&t=340s
Written Work	Analysing and writing a play script - BBC Bitesize

Term 1A

Term 1B

Term 2A

**Terms 2B
& 3A**

Term 3B

De La Salle Year 9 Drama Supporting Links & Extra Study

Range of Techniques	How Are Symbolic Objects Used In Drama? - Literary Icons
Facial Expressions & Body Language	https://www.bbc.co.uk/bitesize/guides/zd2vhbk/revision/2
Stay in Role	https://www.stagemilk.com/how-to-stay-in-character/
Rehearse & Collaborate	Devising - GCSE Drama Revision - OCR - BBC Bitesize
Define & Analyse Techniques	Styles, genres and practitioners - GCSE Drama - BBC Bitesize
Character Ideas	Writing in role - Developing an idea - OCR - GCSE Drama Revision - OCR - BBC Bitesize
Research Creative Ideas	How to Do Research (youtube.com)
Demonstrate Knowledge	Exploring different theatrical genres and styles - Selecting a genre or performance style - OCR - GCSE Drama Revision - OCR - BBC Bitesize
Dramatic Techniques	Epic theatre and political theatre - Selecting a genre or performance style - OCR - GCSE Drama Revision - OCR - BBC Bitesize
Character POV & Emotion	Devices using the 'v' effect - Epic theatre and Brecht - GCSE Drama Revision - OCR - BBC Bitesize
Write for Drama	Brechtian techniques as stimuli for devised work - Epic theatre and Brecht - GCSE Drama Revision - OCR - BBC Bitesize

Term 1A

Terms 1B
& 2A

Terms 2B
& 3A

Term 3B



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English

Knowledge Organisers

 Year 8 English - Sherlock Holmes	Key Vocabulary		Key Concepts	
	<u>Tier 2</u>	<u>Definition</u>	Big Questions	Context
	Observation	Carefully noticing details	💰 Can greed make people evil? 👑 Is reputation more important than honesty? 🔍 How do we know what is true? 🧑 Can stereotypes ever be trusted? ⚖️ What does real justice look like? 🧠 Is intelligence the greatest form of power?	Victorian Society Victorian Crime and Justice Victorian London experienced Scientific evidence began playing a role in solving crimes. Many people viewed the Victorian justice system as ineffective. Women in Victorian Society Victorian women had fewer rights and opportunities than men. Irene Adler challenges traditional expectations. Helen Stoner highlights the struggles of women in Victorian society.
	Deduction	Reaching a conclusion using evidence and logic		
	Tenacious	Determined and persistent		
	Meticulous	Extremely careful and precise		
	Assertive	Confident in expressing thoughts and opinions		
	<u>Tier 3</u>	<u>Definition</u>	Responding Analytically – What / How / Why	Assessment Support
	Patriarchy	A society where men hold most power	What – what do I learn about this character / theme? How – how does the writer show me this? Find a relevant piece of evidence to support your ideas. Why – why does the writer choose to use this word / phrase / technique? What does it make me think / imagine / feel? What are the connotations of this?	✅ Write a clear thesis statement for your response that links to the text ✅ Explore what Doyle is showing about the character ✅ How Holmes solves mysteries using observation and deduction ✅ How Victorian society influences the story ✅ The methods Doyle uses to create mystery and suspense ✅ Context where it helps explain the theme
	Sidekick	A trusted assistant or companion		
Locked Room Mystery	A crime that appears impossible to commit			
Narrator	The person telling the story			
Respect Compassion Challenge Belong Faith		“You can perform miracles by touching the hearts of those entrusted to you”		

Key Plot, Themes and Characters– Visuals

A Scandal in Bohemia 🔍

The Speckled Band 🐍

- 👑 The King of Bohemia visits Holmes
- 📷 A photograph threatens the King's reputation
- 🕵️ Holmes investigates Irene Adler
- 🎭 Holmes uses disguises to gather information
- 🔥 A fake fire helps Holmes find the hiding place
- 🧠 Adler recognises Holmes's plan
- 👤 Adler disguises herself and escapes
- 💌 Holmes finds a letter explaining her actions
- 🏆 Adler keeps the photograph but promises not to use it
- 👏 Holmes gains a lasting respect for "the woman"

Theme Journey 🧠 Intelligence → 🎭 Deception → ⚖️ Reputation → 👏 Equality → 👏 Respect

Characters

🕵️ Sherlock Holmes

A brilliant consulting detective

Remember: 🧠 Intelligent | 🔍 Observant | 🎭 Master of disguise

👤 Dr Watson

Holmes's loyal friend, assistant and narrator.

Remember: 🤝 Loyal | 📖 Narrator | 👏 Admirer of Holmes

👩 Irene Adler

An intelligent, independent and resourceful woman who manages to outsmart Holmes.

Remember: 🧠 Clever | 🧑 Independent | 🎭 Deceptive

👑 **The King of Bohemia** -A wealthy and powerful ruler who asks Holmes for help.

Remember: 👑 Powerful | 😟 Worried about reputation

- 👤 Helen Stoner visits Sherlock Holmes
- ❓ She describes her sister Julia's mysterious death
- 🏠 Holmes investigates Stoke Moran Manor
- 🔍 He notices strange clues in Julia's bedroom
- 🚪 The room appears impossible to enter or leave
- 🌙 Holmes and Watson keep watch during the night
- 🐍 A snake emerges through the ventilator
- 🔪 Holmes drives the snake back
- 💀 The snake kills Dr Roylott instead
- 👏 The mystery is solved and Helen is safe

Theme Journey 😨 Fear → 🔍 Investigation → 🧩 Mystery → 🐍 D

Characters

🕵️ Sherlock Holmes

A brilliant consulting detective

👤 Dr Watson

Holmes's loyal friend, assistant and narrator.

😨 Helen Stoner

A vulnerable victim who fears her violent stepfather.

Remember: 😨 Vulnerable | 🆘 Victim | 💪 Courageous enough to

👤 Dr Grimesby Roylott

Helen's stepfather and the villain of the story.

Remember: 😡 Violent | 💰 Greedy | 🖤 Villain

👤 Julia Stoner

Helen's twin sister whose mysterious death begins the investigation.

Remember: ❓ Mystery victim | 🔑 Source of the puzzle

Respect

Compassion

Challenge

Belong

Faith

"You can perform miracles by touching the hearts of those entrusted to you"



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Geography

Knowledge Organisers

Measures of development

Economic Measures

Gross Domestic Product (GDP): The total value of goods and services a country produces in a year.

GDP per capita: GDP divided by the population – shows average income per person.

Gross National Income (GNI) per capita: Similar to GDP per capita but also includes money earned abroad.

Social Measures

Literacy Rate: The percentage of adults who can read and write.

Life Expectancy: The average number of years a person is expected to live.

Infant Mortality Rate: The number of babies who die per 1,000 live births before their first birthday.

Access to Clean Water: The percentage of people with safe, clean drinking water.

Key Migration Terms

Immigrant → A person who **moves into** a country to live there permanently.

Emigrant → A person who **leaves** their own country to live in another.

Economic Migrant → Someone who moves to another country mainly for **work opportunities or better living standards**.

Asylum Seeker → A person who has **fled their home country** because of danger (war, persecution, violence) and is **asking for protection** in another country.

Refugee → A person who has fled their home country because of danger (war, persecution, violence) and has been granted protection in another country.

Distribution, development and migration. Year 8 Unit 1

China 1 child policy

Background

Introduced: **1979**

Purpose: To slow down rapid population growth and reduce pressure on resources (food, water, housing, jobs).

Ended: **2015**, replaced first by the **Two Child Policy**, then in **2021** by the **Three Child Policy**.

Rules

Most couples were only allowed **one child**.

Exceptions:

Rural families could sometimes have a second child if the first was a girl.

Ethnic minorities often exempt.

Some wealthy families paid a fine ("social compensation fee") to have more children.

Impacts & Stats

Birth rate fell: from **44 per 1,000** in 1950s → to **12 per 1,000** by **2015**.

Estimated **400 million fewer births** because of the policy.

Fertility rate dropped from about **6 (1960s)** to **1.6 by 2015**.

Created an **ageing population**: by 2020, **12% of population over 65**.

Gender imbalance: by 2020, about **34 million more men than women** (due to cultural preference for boys + selective abortions).

Positives

Slowed population growth.

Helped economic growth (fewer dependents, more resources available per person).

Eased strain on food, water, housing, and jobs.

Negatives

Ageing population → fewer workers, more pressure on pensions and healthcare.

Gender imbalance → "bare branches" (men unable to find wives).

Reports of forced abortions and sterilisations.

"Little Emperor Syndrome" (children growing up spoiled with no siblings).

Key Terms

1. Population distribution - How people are spread across a country.
2. Birth rate - The number of babies born per 1000 people in a population.
3. Death rate - The number of deaths per 1000 people in a population.
4. Sparsely populated - Not many people.
5. Densely populated - Lots of people.
6. Life expectancy - The age you are expected to live until.
7. HIC - High income country.
8. LIC - Low income country.
9. Population Pyramid - A graph that shows the distribution of various age groups.

Types of economic activity

Primary activity → Jobs that involve extracting resources from the Earth.

Secondary activity → Jobs that involve manufacturing raw materials into goods.

Tertiary activity → Jobs that provide a service to customers.

Quaternary activity → Jobs that involve research and development in technology.

Urbanisation

Urbanisation = the **increase in the proportion of people** living in urban areas compared to rural (countryside) areas.

Causes of Urbanisation

Rural-to-urban migration

People move from countryside → city.

Push factors (reasons to leave the countryside): lack of healthcare, low wages, drought, crop failure.

Pull factors (reasons to move to cities): better schools, healthcare, electricity, entertainment.

Natural increase

Cities often have younger populations → high birth rates.

Vocabulary Key terms and definitions	
Biome	A major regional group of distinctive plant and animal communities best adapted to the region's physical natural environment, latitude, altitude and terrain factor.
Development	Use of resources, natural and human, to achieve higher standards of living
GDP	Gross Domestic Product – the total value of all goods and services produced in a country
Middle East	A geographical and cultural region located primarily in western Asia, but also in parts of northern Africa and south eastern Europe.
Peninsula	A long piece of land that sticks out from a larger area of land into the sea or a lake.
Plateau	An area of highland, usually consisting of relatively flat terrain.
Steppe	A large area of flat unforested grassland.

Further Research:

<https://www.bbc.com/education/topics/zvwtbsbk>
http://news.bbc.co.uk/go/pr/fr/-/1/hi/world/south_asia/country_profiles/1162108.stm

Knowledge Organiser

Topic: MIDDLE EAST

Challenges and Concepts

To understand the geopolitical location of the Middle East and who lives there; to investigate the influence of physical and human geographies on Afghan conflict; to explore and evaluate a range of future options for Afghanistan.

The Middle East is very diverse when it comes to religions. Three of the world’s major religions, Islam, Judaism and Christianity, originated in this region. The conflicts between these groups over land, resources and people are the cause of huge conflicts.

The Middle East has 5% of the world's oil but only 1% of its water, conflicts over these resources can be a source of tension in a region characterised by ethnic diversity.

The physical Geography of a region has a major impact on conflict.

- Inside bend of a river makes a natural defensive position on a hill, which could be easily defended in the event of an enemy attack.
- Desert landscapes provide a natural barrier due to the lack of landmarks making navigation difficult. Can present some tactical advantages, for example, the flat terrain allows for rapid movement of advance is fast and the lack of cover favours coalition forces with more advanced weapons with a greater range over insurgents.
- Marsh land - the land is difficult to traverse and is difficult to set up a base.
- Mountainous regions are difficult environments in which to fight conflict as temperatures are often extreme and conditions harsh.



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History

Knowledge Organisers

Year 8

The Industrial Revolution: How did the Industrial Revolution change the face of Britain?

Key term	Definition
1. Impact	A change caused by a person/event/decision.
2. Economy	How a country is making money.
3. Revolution	A big and sudden change.
4. Overlooker	Supervisors/managers in the factories.
5. Empire	When one country has control over other countries.
6. Viceroy	Someone the King or Queen chooses to be in charge of a country or area of a country.
7. British Raj	British rule over India.

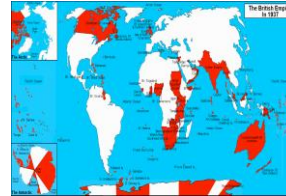
The Industrial Revolution: Factory life

1. Between 1750 and 1900, one of the biggest changes in Britain was that factories were being built across the country.
2. Samuel Greg built Quarry Bank Mill in 1784, which became a massive producer of cotton cloth.
3. Factory life was harsh; apprentices worked from 6am to 7pm doing dangerous jobs like cleaning under moving machinery.
4. Workers were supervised by overlookers who would punish mistakes by forcing overtime, cropping girls' hair short or locking runaways in rooms.

1750



1900



Impact of the railways:

1. Quicker and cheaper to transport people and goods.
2. Fresh food could be delivered all over the country.
3. People could go on holidays or days out to the seaside.
4. Development of seaside towns and tourist attractions.
5. People moved to other parts of the country for work.

British Empire

1. Britain built its empire for several reasons: trade, power, spreading religion, ambition, adventure, and establishing ports for long journeys.
2. Colonies provided Britain with valuable natural resources and agricultural goods, such as cotton, coal, gold, spices, furs, and tea.

Britain in India

1. The East India Company originally went to India to trade for spices, cotton, and indigo dye, but eventually used its armies to take over lands.
2. In 1857, Indian soldiers (Sepoys) launched a massive rebellion because British rulers disrespected traditional Indian values, demanded high taxes leading to famines, and forced soldiers to use rifle cartridges soaked in beef and pork fat.
3. After the rebellion, the British government passed the Government of India Act in 1858, ending the East India Company and putting Queen Victoria in charge, starting the 'British Raj'.
4. Queen Victoria was represented by a Viceroy (such as Lord Curzon) who ruled over 300 million Indians with only 5,000 British officials.

The Slave Trade: What was the impact of the transatlantic slave trade?

Key term	Definition
Source	Someone or something you can get information from.
Slavery	The activity of legally (or illegally) owning other people who are forced to work for you.
Middle Passage	The second part of the triangular trade, the journey from Africa to the Americas. Slaves were transported on ships to be sold in the Americas.
Auction	Slaves were sold at auctions when they reached the Americas. Buyers would bid on slaves, paying the most for strong and healthy looking young men.
Plantation	A large farm where crops such as coffee, sugar and tobacco are grown. This is where the slaves would work.
Abolition	The banning or end of something e.g. the abolition of the Slave Trade.
Resistance	Actions taken by slaves to fight against slavery. This could include refusing orders, working slowly or running away.

Life as a Slave

- Auctions:** When ships arrived in the Americas, surviving Africans were sold to the highest bidder at slave auctions. They were treated as property, stripped of their African names (and given names like Toby or Cassie), and branded with heated irons to permanently mark their skin with their owner's initials.
- Working on the Plantations:** Slaves were divided into different roles. **Field hands** worked long hours outside planting and harvesting crops, while **house slaves** worked indoors doing jobs like cooking and cleaning. Slaves faced brutal punishments, including being chained or whipped.

What was the Slave Trade?

- Stage 1 (Europe to Africa):** Ships sailed from European ports (like Bristol and Liverpool) carrying goods such as copper, cloth, guns, and alcohol. These goods were swapped or sold for captured African people.
- Stage 2 (The Middle Passage):** Captured slaves were tightly packed onto ships to maximize profits. The journey to the Americas took over 6 weeks. Many died during the voyage and were thrown into the sea.
- Stage 3 (The Americas to Europe):** Ships were cleaned and loaded with plantation goods produced by slave labour, such as cotton, tobacco, and rum, to be sold back in Europe.
- Why were Britain part of it?** During the Industrial Revolution, Britain desperately needed resources like cotton for its factories. The slave trade provided these raw materials cheaply because the slaves were not paid, making businessmen extremely rich.

The Abolition of the Slave Trade

On **March 25th, 1807**, the British Parliament voted to pass the Abolition of the Slave Trade Act.

- The Actions of Slaves:** Slaves in Britain took their owners to court for their freedom, and by the early 1800s, judges were increasingly setting them free.
- Money:** Sugar plantations were closing down because cheaper sugar could be bought from Cuba and Brazil. People also began to argue that paid, free workers would work harder than slaves.
- Religious Beliefs:** Christian groups, such as the Quakers, argued that slavery was a terrible sin against God.

Key Figures:

- Olaudah Equiano:** An ex-slave who bought his freedom. In 1789, he published a best-selling book about his life and the horrors of slavery, turning many British people against the trade.
- William Wilberforce:** An MP and committed Christian who organised huge petitions and made passionate speeches against slavery in Parliament.





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Maths

Knowledge Organisers



Percentages

Percentages of Amounts

No calculator: use 10%, 1% building blocks.

Find 10% of 340

$$10\% = \div 10$$

Answer: 34

Find 35% of 120

$$10\% = 12, 5\% = 6$$

$$30\% = 36, +5\% = 6$$

Answer: 42

Find 1% of 250, then 7%

$$1\% = 2.50$$

$$7\% = 2.50 \times 7$$

Answer: 17.50

Percentages of Amounts

With a calculator: use the decimal multiplier.

Find 68% of 145 (calculator)

$$0.68 \times 145$$

Answer: 98.6

Find 3.5% of 800

$$0.035 \times 800$$

Answer: 28

Find 120% of 60

$$1.20 \times 60$$

Answer: 72

Key Words

Percentage: a number out of 100

Multiplier: the decimal used to find a %

Percentage change: increase or decrease as a %

Original amount: the value before any change

Reverse percentage: working backwards to find the original

Percentage Change

Without a calculator: find the change, then add/subtract.

Increase £40 by 20%

$$10\% = 4, 20\% = 8$$

$$40 + 8$$

Answer: £48

Decrease 80 by 15%

$$10\% = 8, 5\% = 4$$

$$15\% = 12, 80 - 12$$

Answer: 68

Percentage Change

With a calculator: use a single multiplier.

Increase £64 by 8%

$$\text{Multiplier} = 1.08$$

$$64 \times 1.08$$

Answer: £69.12

Decrease 250 by 30%

$$\text{Multiplier} = 0.70$$

$$250 \times 0.70$$

Answer: 175

Reverse Percentages

Work backwards to find the original amount.

After a 20% increase, price = £96.
Original?

$$£96 = 1.20 \times \text{original}$$

$$96 \div 1.20$$

Answer: £80

After a 15% decrease, price = £51.
Original?

$$£51 = 0.85 \times \text{original}$$

$$51 \div 0.85$$

Answer: £60



Percentages

(continued)

Mixed Practice

Find 45% of 220

10%=22, 40%=88

5%=11, +5%

Answer: 99

Increase 90 by 60% (calculator)

Multiplier=1.6

90×1.6

Answer: 144

Decrease £150 by 24%

Multiplier=0.76

150×0.76

Answer: £114

Percentage Increase/Decrease (Find the %)

Price rises from £40 to £46. % increase?

Change=6

$6 \div 40 \times 100$

Answer: 15%

Price falls from 80 to 68. % decrease?

Change=12

$12 \div 80 \times 100$

Answer: 15%

Reverse % Practice

VAT (20%) added, total=£72. Price before VAT?

$£72 = 1.20 \times \text{original}$

$72 \div 1.20$

Answer: £60

After 10% discount, price=£45.

Original price?

$£45 = 0.90 \times \text{original}$

$45 \div 0.90$

Answer: £50

Try It Yourself!

1. Find 65% of 340 (calculator).

.....

2. Increase £220 by 15% (calculator).

.....

3. Find 15% of 60 without a calculator.

.....

4. Decrease 90 by 40% without a calculator.

.....

5. Price rises from £25 to £30. Find the % increase.

.....

6. A coat costs £84 after a 30% discount. Find the original price.

.....

7. Find 8% of £350.

.....

8. After a 25% increase, a price is £80. Find the original price.

.....



Operations with Money

Treat £ amounts like decimals — line up the decimal point.

$$£12.45 + £8.70$$

Line up decimal points
 $12.45 + 8.70$

Answer: £21.15

$$£50.00 - £23.65$$

Exchange where needed

Answer: £26.35

$$£4.25 \times 6$$

Ignore decimal: $425 \times 6 = 2550$
Place point back in

Answer: £25.50

Operations with Money

Dividing money: divide as normal, keep the decimal point.

$$£18.60 \div 4$$

$1860 \div 4 = 465$
Place point back in

Answer: £4.65

Split £27.50 between 5 people

$$27.50 \div 5$$

Answer: £5.50

Key Words

Unit price: cost of one item or one unit of measure

Value for money: the option that costs least per unit

Best buy: the option with the lowest unit price

Unitary method: find the cost of ONE, then scale

Value for Money

Find the cost per unit, then compare.

250g for £1.20 or 400g for £1.84 - which is better value?

250g: $1.20 \div 250 = 0.48\text{p/g}$
400g: $1.84 \div 400 = 0.46\text{p/g}$

Answer: 400g better

4 for £2.00 or 6 for £3.30 - which is better value?

4: 50p each
6: 55p each

Answer: 4-pack better

Value for Money

Always compare the SAME unit (e.g. price per 100g).

750ml for £2.25 or 1 litre for £2.80 - better value?

750ml: 0.3p/ml
1000ml: 0.28p/ml

Answer: 1 litre better

3 kg bag £5.40 or 5 kg bag £8.75 - better value?

3kg: £1.80/kg
5kg: £1.75/kg

Answer: 5kg bag better

Mixed Money Problems

Shopping bill: £3.49 + £2.10 + £5.99

Add all items

Answer: £11.58

Pay with £20 for a £13.65 bill. Change?

$$20.00 - 13.65$$

Answer: £6.35



Multi-Step Money Problems

3 coffees at £2.75 each. Total cost?

$$2.75 \times 3$$

Answer: £8.25

Buy 4 items at £6.20 each, pay with £30. Change?

$$6.20 \times 4 = 24.80$$

$$30 - 24.80$$

Answer: £5.20

Share a £45.60 bill equally between 4 friends

$$45.60 \div 4$$

Answer: £11.40 each

Best Value Practice

500g for £3.00 or 750g for £4.20 - better value?

$$500\text{g}: 0.6\text{p/g}$$

$$750\text{g}: 0.56\text{p/g}$$

Answer: 750g better

2 for £5 or 3 for £7.20 - better value?

$$2: £2.50 \text{ each}$$

$$3: £2.40 \text{ each}$$

Answer: 3-pack better

Money & Percentages

Money problems often use % discounts or increases.

£85 item, 20% off. Sale price?

$$20\% \text{ of } 85 = 17$$

$$85 - 17$$

Answer: £68

Bill of £64, add a 15% service charge

$$15\% \text{ of } 64 = 9.60$$

$$64 + 9.60$$

Answer: £73.60

Try It Yourself!

1. $£15.80 + £9.35$

.....

2. 300g for £1.50 or 500g for £2.40 — which is better value?

.....

3. $£40.00 - £17.85$

.....

4. 5 items at £3.60 each, pay with £20. Find the change.

.....

5. $£6.30 \times 7$

.....

6. A £120 item has 25% off. Find the sale price.

.....

7. Split a £36.40 bill between 4 people.

.....

8. 4 for £9.60 or 6 for £13.80 — which is better value?

.....



Index Laws (Positive Indices)

Multiplying: add powers. Dividing: subtract powers.

$$3^2 \times 3^4$$

Add powers: $2+4$

Answer: 3^6

$$x^5 \div x^2$$

Subtract powers: $5-2$

Answer: x^3

$$(2^3)^2$$

Multiply powers: 3×2

Answer: 2^6

Index Laws (Negative Indices)

A negative power means "1 over".

Write 2^{-3} as a fraction

Negative power $\rightarrow$ reciprocal

Answer: $\frac{1}{2^3} = \frac{1}{8}$

$$5^0 = ?$$

Anything to the power 0 is 1

Answer: 1

$$x^2 \times x^{-5}$$

Add powers: $2+(-5)$

Answer: x^{-3}

Key Words

Index (power): shows how many times to multiply

Base: the number being raised to a power

Index laws: rules for combining powers

Reciprocal: 1 divided by the value

Simplify: write in the simplest index form

Simplifying Expressions with Index Laws

Simplify $3x^2 \times 2x^3$

Multiply numbers: $3 \times 2 = 6$

Add powers: $x^2 \times x^3 = x^5$

Answer: $6x^5$

Simplify $12x^5 \div 4x^2$

Divide numbers: $12 \div 4 = 3$

Subtract powers: $x^5 \div x^2 = x^3$

Answer: $3x^3$

Simplifying Expressions with Index Laws

Simplify $(2x^2)^3$

Cube the number: $2^3 = 8$

Multiply powers: $x^2 \times x^2 = x^4$

Answer: $8x^4$

Simplify $x^4 \times x^{-2}$

Add powers: $4+(-2)$

Answer: x^2

Simplifying Algebraic Fractions

Cancel common factors on top and bottom.

Simplify $\frac{6x}{2}$

HCF(6,2)=2

Divide top & bottom by 2

Answer: $3x$

Simplify $\frac{x^2}{x}$

Cancel one x from top & bottom

Answer: x



More Index Practice

$$4^3 \times 4^2$$

Add powers: $3+2$

Answer: 4^5

$$x^6 \div x^4$$

Subtract powers: $6-4$

Answer: x^2

7^{-2} as a fraction

Reciprocal of 7^2

Answer: $\frac{1}{49}$

More Simplifying Practice

$$\text{Simplify } 5x^3 \times 4x$$

Multiply: $5 \times 4 = 20$

Add powers: $3+1=4$

Answer: $20x^4$

$$\text{Simplify } 20x^5 \div 5x^3$$

Divide: $20 \div 5 = 4$

Subtract powers: $5-3=2$

Answer: $4x^2$

Algebraic Fraction Practice

$$\text{Simplify } \frac{8x^2}{4x}$$

HCF of numbers = 4, cancel one x

Answer: $2x$

$$\text{Simplify } \frac{10x^3}{2x^2}$$

HCF of numbers = 2, cancel x^2

Answer: $5x$

Try It Yourself!

1. Simplify $2^4 \times 2^2$.

.....

2. Simplify $4x^4 \times 3x^5$.

.....

3. Simplify $x^5 \div x^2$.

.....

4. Simplify $15x^5 \div 3x^2$.

.....

5. Write 3^{-2} as a fraction.

.....

6. Simplify $\frac{12x}{4}$.

.....

7. Simplify $(3x^2)^3$.

.....

8. Simplify $\frac{x^2}{x^3}$.

.....



Equations

Equations of the Form $(x+a)/b=c$

$b=c$

Multiply first to clear the fraction.

Solve $\frac{x+3}{4} = 5$

Multiply by 4: $x+3=20$

Answer: $x = 17$

Solve $\frac{x-2}{3} = 6$

Multiply by 3: $x-2=18$

Answer: $x = 20$

Equations with Brackets

Expand the brackets first, then solve.

Solve $3(x+2) = 21$

Expand: $3x+6=21$

$3x=15$

Answer: $x = 5$

Solve $2(2x-1) = 14$

Expand: $4x-2=14$

$4x=16$

Answer: $x = 4$

Key Words

Equation: a statement with an = sign

Unknown: the letter we are solving for

Inverse operation: the operation that undoes another

Construct: to build an equation from a description

Denominator: bottom number of a fraction

Unknown on Both Sides

Collect the x terms on one side first.

Solve $5x + 3 = 2x + 18$

Subtract 2x: $3x+3=18$

$3x=15$

Answer: $x = 5$

Solve $7x - 4 = 3x + 20$

Subtract 3x: $4x-4=20$

$4x=24$

Answer: $x = 6$

Unknown in the Denominator

Multiply both sides by the denominator first.

Solve $\frac{12}{x} = 4$

Multiply by x: $12=4x$

Answer: $x = 3$

Solve $\frac{20}{x} + 1 = 5$

Subtract 1: $\frac{20}{x}=4$, multiply by x: $20=4x$

Answer: $x = 5$

Constructing & Solving Equations

Turn the words into an equation first.

A number plus 7, doubled, is 26.
Find the number.

$2(x+7)=26$

$x+7=13$

Answer: $x = 6$

Three consecutive numbers sum to 36. Find the smallest.

$x+(x+1)+(x+2)=36$

$3x+3=36$, $3x=33$

Answer: $x = 11$



More Practice: Brackets & Fractions

Solve $4(x-3) = 2x + 6$

Expand: $4x - 12 = 2x + 6$
 $2x = 18$

Answer: $x = 9$

Solve $\frac{x+5}{2} = 9$

Multiply by 2: $x+5=18$

Answer: $x = 13$

Solve $\frac{18}{x} = 3$

Multiply by x : $18=3x$

Answer: $x = 6$

More Practice: Both Sides

Solve $6x + 5 = 3x + 26$

Subtract $3x$: $3x+5=26$
 $3x=21$

Answer: $x = 7$

Solve $8x - 2 = 5x + 13$

Subtract $5x$: $3x-2=13$
 $3x=15$

Answer: $x = 5$

Constructing Equations Practice

A rectangle has length $x+4$ and width x . Perimeter=28. Find x .

$2(x+x+4)=28$
 $4x+8=28$, $4x=20$

Answer: $x = 5$

I think of a number, treble it, then add 5, giving 29. Find the number.

$3x+5=29$
 $3x=24$

Answer: $x = 8$

Try It Yourself!

1. Solve $\frac{x-1}{3} = 4$.

.....

2. Solve $5x - 3 = 2x + 15$.

.....

3. Solve $2(x+5) = 24$.

.....

4. Solve $\frac{16}{x} = 8$.

.....

5. Solve $3(2x-1) = 4x + 9$.

.....

6. A number doubled and plus 9 equals 31. Find the number.

.....

7. Solve $7x + 2 = 3x + 22$.

.....

8. Solve $\frac{x+2}{5} = 3$.

.....



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RE

Knowledge Organisers

Yr 8 Creation and Covenant

Keyword	Definition
The Fall	The event when Adam and Eve disobeyed God in the Garden of Eden, leading to sin entering the world.
Original Sin	The first sin committed by Adam and Eve, which every person is born with and is removed by Baptism.
Concupiscence	The strong feeling or desire to do things that are wrong or sinful.
Sinai Covenant	The agreement God made with the Israelites at Mount Sinai, giving them the Ten Commandments.
The Decalogue	Another name for the Ten Commandments, which are the important rules God gave to Moses.
Freedom	The ability to make choices and act on them, including the choice to do good or bad things.
Conscience	The inner voice that helps us know what is right and wrong and guides us to make good choices.
Baptism	A special ceremony where water is used to welcome a person into the Christian faith and wash away original sin.

Biblical Text – Genesis 3 – The Fall

Genesis 3 tells the story of the first sin, also known as the Fall of Man. Here's a simplified version:

Adam and Eve lived in the Garden of Eden, and God told them they

KNOWLEDGE ORGANISER

Conscientious Objector

A conscientious objector is someone who says no to fighting in a war because of their strong personal or religious beliefs. Catholics may refuse to fight because they believe in peace and following Jesus' teaching to love and protect others

The 10 commandments

1. Put God first and worship only Him.
2. Don't worship idols or false gods.
3. Respect God's name and don't use it in a wrong way
4. Keep the Sabbath day holy by resting and worshipping God.
5. Honor your parents and treat them with respect
6. Don't kill or hurt others.
7. Be faithful to your husband or wife.
8. Don't steal from others.
9. Don't lie or tell untruths about others.
10. Don't be jealous of what others have.

The Greatest Commandment

Catholics believe the Greatest Commandment, given by Jesus, is to love God with all your heart, soul, and mind, and to love your neighbour as yourself. This teaching shows that loving God and loving others are the most important rules to live by. By putting God first and treating others with kindness and respect, Catholics follow Jesus' example and fulfill the core of their faith.

Original Sin

Catholics believe Original Sin is the sin that all humans inherit from Adam and Eve when they disobeyed God in the Garden of Eden. This sin is passed down to all people at birth, and Baptism removes this sin, giving them a fresh start in God's grace. However, Mary, the mother of Jesus, was free from Original Sin from the moment she was conceived. This is called the Immaculate Conception, meaning that God gave her a special grace so she could be pure and prepared to be the mother of Jesus.

Love

Catholics believe "love your neighbour" is an important teaching. It's about treating others with compassion, kindness, and respect, and being open to helping those in need. This is often summarized as the Golden Rule: "Do unto others as you would have them do unto you." In action, this means loving God and loving others are the most important rules to live by. By putting God first and treating others with kindness and respect, Catholics follow Jesus' example and fulfill the core of their faith.

Catholics believe in the sacraments, which are special rituals that help us grow in our faith and live more fully in God's love. One of the most important sacraments is Baptism, which washes away original sin and gives us a new life in Christ. Another important sacrament is the Eucharist, which is the body and blood of Jesus. We receive the Eucharist at Mass, and it helps us to grow in our faith and love for God and others. The sacraments are a way for us to experience God's love and grace in our lives.

MAKING LINKS TO CATHOLIC SOCIAL TEACHING

Value of Love

The Fall shows how Adam and Eve's disobedience broke their love for God, while the Decalogue gives us loving rules to help us live in love with God and others.

The

Careers



Ethics and Justice Careers

- **Human Rights Lawyer** – Defends people’s rights and works for justice, inspired by teachings like “Love thy neighbour.”
- **Social Worker** – Supports individuals and families, helping them make good choices and live with dignity.
- **Peace and Conflict Mediator** – Helps resolve disputes peacefully, reflecting the Catholic value of conscience and non-violence.
- **Ethicist** – Advises on moral decisions in areas like medicine, technology, and law.

Faith and Personal Development Careers

- **Chaplain** – Offers spiritual support in schools, hospitals, or the military, helping people listen to their conscience.
- **Youth Worker** – Guides young people in making good choices and living with purpose.
- **RE Teacher** – Helps students explore faith, morality, and how to live responsibly.

Environment with a Justice Focus

- **Environmental Justice Advocate** – Works to protect vulnerable communities affected by pollution and climate change.
- **Community Outreach Coordinator** – Organises local projects like clean-ups or food banks, putting faith into action.

Homework

Week 1	Learn Keywords
Week 2	Write a Set of Comm World Today
Week3	Write a letter explain model is important
Week 4	Explain why Baptism
Week 5	Reseach Rosa Parks
Week 6	Revise for the End o
Week 7	Research 10 Prophe Testament

Enrichment



Read

“**You Are Mine**” by **Max Lucado** – A short, powerful story about identity, self-worth, and listening to your conscience. Available at local libraries read-aloud.



Listen

“**Made for Goodness**” (**Desmond Tutu reflections**) – Short clips or summaries available online, focusing on choosing good over evil and loving o



Watch

' **Blue Miracle**' (2021)

Yr 8 Prophecy and Promise

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Key Vocabulary	
Prophet	A person chosen by God to speak His messages to the people, often about future events or changes needed in their lives.
Priest	Someone who leads religious worship and offers prayers and sacrifices to connect people with God.
King	A leader who rules over a people or nation. In the Bible, kings were expected to lead with justice and to follow God's guidance.
Messianic	Related to the Messiah, or saviour, promised by God to bring salvation and hope.
Advent	A special season in the Christian calendar, lasting four weeks before Christmas, to prepare and wait for the birth of Jesus.
Amos	A prophet from the Old Testament who called people to be fair and just, warning them to follow God's ways.
Elijah	A prophet in the Old Testament known for his miracles and strong faith. He helped guide people back to God and is seen as a forerunner to the Messiah.
John the Baptist	A prophet who baptized people to prepare them for Jesus, calling for repentance and pointing to Jesus as the Messiah.

Traditions of Advent Around the World

Advent is celebrated with diverse traditions worldwide, each adding unique cultural expressions to the season. In Germany, families light candles on an Advent wreath, and children open doors on Advent calendars filled with treats. In Mexico, Las Posadas reenacts Mary and Joseph's search for shelter, culminating in festive gatherings with food and piñatas. In Sweden, Saint Lucia's Day, celebrated on December 13, includes processions led by a girl dressed as Saint Lucia, symbolizing light and hope. In the Philippines, Simbang Gabi features early morning Masses, reflecting devotion and anticipation for Christmas. Each tradition enriches the Advent season, inviting communities to celebrate Jesus' coming in their own meaningful ways.

The Messiah

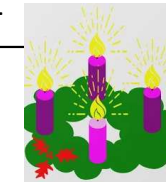
The term "Messiah" means "Anointed One" and represents a saviour who would deliver and redeem God's people. In Jewish tradition, the Messiah was expected to be a powerful leader who would establish justice and peace, leading the nation of Israel to a time of prosperity and freedom. Prophecies in books like Isaiah and Micah describe the Messiah as someone who would come from David's lineage, bring healing, and be a light to all nations. Christians believe that Jesus is the long-awaited Messiah, fulfilling these prophecies through his teachings, miracles, and sacrificial death, which offered redemption not just to Israel but to all humanity.

Advent

Advent is a four-week period in the Christian calendar that prepares for the celebration of Jesus' birth at Christmas and his anticipated return. The word "Advent" means "coming" in Latin, reflecting a time of waiting and preparation. Each week of Advent has a theme: Hope, Peace, Joy, and Love. Many churches light candles on an Advent wreath each Sunday, symbolizing these themes and the light of Christ coming into the world. Advent encourages Christians to reflect on their relationship with God, prepare their hearts, and look forward to the joy of Jesus' coming as Saviour.

Prophet

In the Bible, a prophet is someone chosen by God to speak His words and reveal His plans to people. Prophets acted as God's messengers, warning people to follow God's commandments and often calling for change in times of wrongdoing. Notable prophets like Isaiah, Jeremiah, and Elijah foretold major events, including the coming of the Messiah, and reminded people of God's love and justice. They often faced opposition, yet remained faithful to their calling, emphasizing themes of hope, repentance, and faith. Prophets played a key role in preparing people for the coming of Jesus, the ultimate messenger and fulfillment of God's promises.



Jesus the Messiah

Christians believe that Jesus is the fulfillment of the prophecies about the Messiah. His life and mission align with Old Testament promises, such as his birth in Bethlehem, his healing ministry, and his role as a humble servant who suffers for others. Jesus' teachings of love, forgiveness, and mercy offered a new way of understanding God's kingdom. Through his crucifixion and resurrection, Christians believe he brought about a new covenant between God and humanity, saving people from sin and death. By fulfilling both the role of a suffering servant and a triumphant king, Jesus embodies the ultimate vision of the Messiah.

John the Baptist

John the Baptist was a unique prophet who lived in the wilderness and preached repentance. He baptized people as a symbol of cleansing from sin and readiness to receive God's message. John's role was to prepare people for Jesus, the Messiah, and he recognized Jesus as "the Lamb of God" who would take away the sins of the world. Known for his humility, John told his followers that while he baptized with water, Jesus would baptize with the Holy Spirit. John's life and mission fulfilled the prophecy of one who would "prepare the way" for the Lord, making him a bridge between the Old and New Testaments.

MAKING LINKS TO CATHOLIC SOCIAL TEACHING

Value of Love	The third, pink candle of the Advent Wreath is often known to symbolise love and joy
Value of Ambition	Jesus new his role as the Messiah, despite the costs
Peace	Jesus is described as the bringer of Peace'





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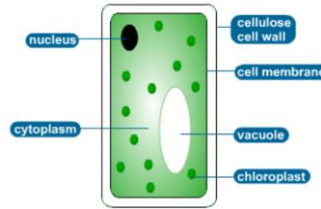
Science

Knowledge Organisers

Keyword	Definition
Photosynthesis	Process carried out where plants make their own food. Carbon Dioxide + Water → Glucose + Oxygen
Chlorophyll	Green pigment in chloroplasts of plant cells. It enables photosynthesis to take place.
Chloroplasts	Contain the green pigment chlorophyll; the site of photosynthesis.
Waxy Cuticle	Waxy layer, prevents water loss.
Upper Epidermis	Thin and transparent allowing light to pass through.
Palisade Mesophyll	Main region for photosynthesis. Lots of palisade cells containing lots of chloroplasts.
Spongy Mesophyll	Cells are more loosely packed. Contains air spaces between cells allowing gas exchange.
Lower Epidermis	Contains stomata to regulate the loss of water vapour (transpiration)
Stomata	Each stomata surrounded by a pair of guard cells. Guard cells control whether they're open or closed.
Petals	Brightly coloured to attract insects.
Stamen	The male part of the flower (each consist of an anther held up on a filament)
Stigma	The top of the female part of the flower which attracts pollen.
Anthers	Produce make sex cells (pollen grains)
Ovary	Produces the female sex cells (contained in the ovules)
Nectary	Produce a sugary solution called nectar, which attracts insects.

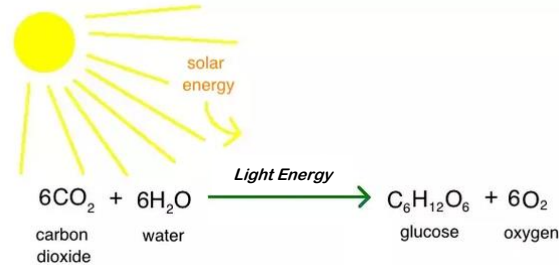
Green plants and algae do not eat food to get their energy, Instead they make their own food by a process called **photosynthesis**.
Photosynthesis takes place inside plant cells within the chloroplasts.

Below shows a diagram of a plant cell.

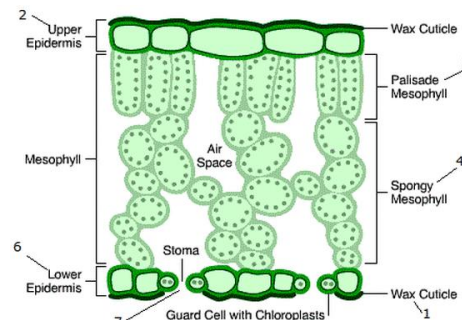


Chloroplasts contain a green pigment called **chlorophyll**. This absorbs light energy needed for photosynthesis to occur.

Plants use the raw materials; Carbon Dioxide and Water. With the presence of light energy from the sun, the raw materials are converted into Glucose and Oxygen.



The Leaf Structure



This plant is deficient in nitrate ions. There is poor grown and yellow leaves. Nitrate ions are needed to build proteins and to help the plant grow.



This plant is deficient in phosphate ions. Phosphate ions are needed to ensure good root growth.

The leaves are starting to turn purple.

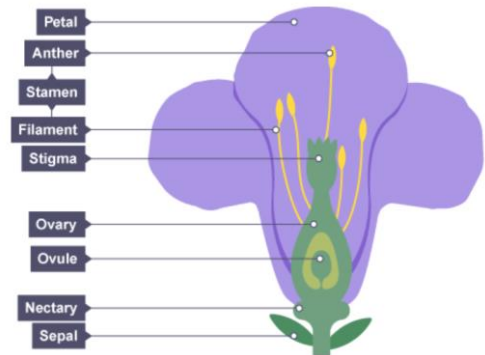


This plant is deficient in Magnesium ions. Yellow leaves start to form, so rate of photosynthesis is reduced. Magnesium ions are needed for photosynthesis.



This plant is deficient in Potassium ions. Potassium ions are needed for making flowers and fruit.

The leaves are turning yellow, with dead spots.



Pollination

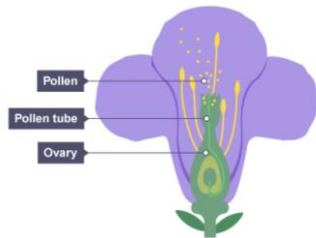
During plant reproduction, pollen grains need to move from the anther of one flower to the stigma of another flower. This is called pollination. Pollination can occur by either insects or the wind.



Feature	Insect-pollinated	Wind-pollinated
Petals	Large and brightly-coloured – to attract insects	Small, often dull green or brown – no need to attract insects
Scent and nectar	Usually scented and with nectar – to attract insects	No scent or nectar – no need to attract insects
Number of pollen grains	Moderate - insects transfer pollen grains efficiently	Large amounts – most pollen grains are not transferred to another flower
Pollen grains	Sticky or spiky - sticks to insects well	Smooth and light – easily carried by the wind without clumping together
Anthers	Inside flower, stiff and firmly attached - to brush against insects	Outside flower, loose on long filaments – to release pollen grains easily
Stigma	Inside flower, sticky - pollen grains stick to it when an insect brushes past	Outside flower, feathery – form a network to catch drifting pollen grains

Fertilisation

After pollination the pollen makes a pollen tube down the style to the ovary. The nucleus of the pollen cell travels down the tube to the ovum – when the cell join, this is fertilisation. The cell made when the pollen and ovum fuse will become the seed, which can become a new plant. Plants then form fruits, often from the ovary walls.



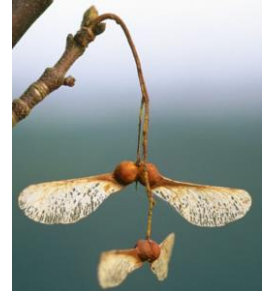
Further Reading:



Seed Dispersal

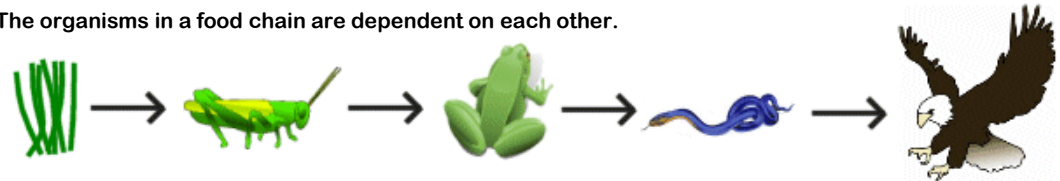
Plants compete with each other for factors including light, water, space, minerals in the soil. Seeds must be dispersed or spread away from each other and from the parent plant. This is to reduce competition between parent plant and new plants.

Method	Detail	Examples
Wind	Seeds have lightweight parts, wings or parachutes	Dandelion, sycamore
Animals (inside)	Brightly coloured and tasty fruits contain seeds with indigestible coats, so that the seeds pass through the animal's digestive system undamaged	Tomato, plum, raspberry, grape
Animals (outside)	Fruits have hooks that attach them to the fur of passing animals	Goose grass, burdock
Self-propelled	Have a pod that bursts open when ripe, throwing the seeds away from the plant	Pea pod



Food Webs & Interdependence

The organisms in a food chain are dependent on each other.

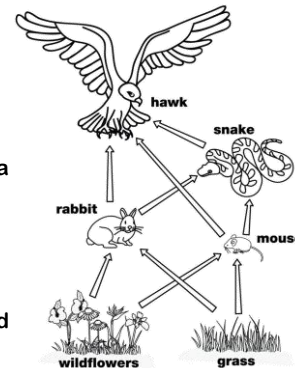


For example, grass is eaten by the caterpillar, which is eaten by the frog, which is eaten by the snake, which in turn is hunted by the bird.

The grass is the producer in this food chain, and producers are at the start of all food chains. The grass captures the energy from the sunlight to photosynthesise and make glucose. The glucose provides energy for the grass to grow. When the caterpillar eats the grass, some of the energy left in the grass is transferred to the caterpillar. This energy is passed down the food chain.

Changes in the number of one organism in an area – its population can affect other organisms in the same food chain.

The number of plants in an area can be affected by the amount of rain, sunlight, minerals and space available to grow. The number of animals can be affected by the availability of food habitats, mates, water and disease.



If the population of mice caught a disease, then there would be more competition between the Hawk and Snake to catch the Rabbit. This could then cause the number of Rabbits to decrease.

Keyword	Definition
Endothermic	Reactions that take in heat
Exothermic	Reactions that give out heat
Oxidation	Reaction of other elements with oxygen
Combustion	Burning fuel in oxygen
Thermal Decomposition	When a substance is broken down into 2 or more products by heat
Reactivity series	List of metals in order of reactivity
Displacement	A more reactive metal will displace a less reactive metal from its compound
Catalyst	A substance that increases the rate of a reaction but is not itself used up.
Polymer	Long chain molecules made up of many monomers.
Fuel	Contain hydrocarbons – compounds containing hydrogen and carbon atoms only.
Activation Energy	The minimum amount of energy that colliding particles must have for them to react

Further Reading:

<https://www.bbc.com/bitesize/guides/zqd2mp3/revision/3>
<https://www.bbc.com/bitesize/articles/zcwxcj6>
<https://www.bbc.com/bitesize/guides/zqd2mp3/revision/5>
<https://www.bbc.com/bitesize/guides/zqd2mp3/revision/6>

Catalysts

A catalyst is a substance that:

- Speeds up the rate of a chemical reaction
- Does not alter the products of the reaction
- Is unchanged chemically and in mass at the end of the reaction.

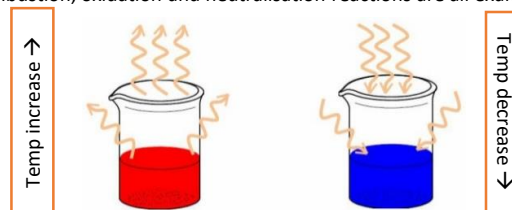
Catalysts provide an alternative reaction pathway that has a lower activation energy than the uncatalysed reaction.

Endothermic Reactions

In an endothermic reaction, thermal energy is taken in from the surroundings, therefore there is a temperature decrease. Thermal decomposition is an example.

Exothermic Reactions

In an exothermic reaction, thermal energy is given out to the surroundings, therefore there is a temperature increase. Combustion, oxidation and neutralisation reactions are all examples.



Combustion

Combustion is another name for burning. It is an example of an exothermic reaction. There are two types of combustion – complete combustion and incomplete combustion.

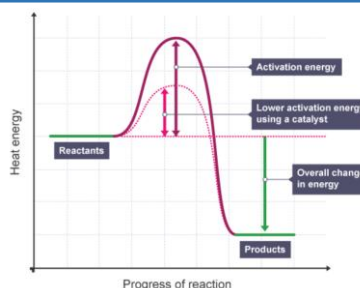
Complete Combustion

Coal, oil and gas are fuels. They contain hydrocarbons (compounds of hydrogen and carbon atoms only). When these fuels burn, it reacts with oxygen in the air to produce carbon dioxide and water vapour.



Incomplete Combustion

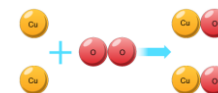
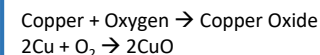
If there is not enough oxygen in the air for complete combustion, incomplete combustion will happen instead. This time either carbon monoxide is produced (a toxic gas which can lead to death) or carbon is produced (appears as soot and smoke which can cause breathing problems).



Oxidation Reactions

In an oxidation reaction, a substance gains oxygen. Metals and non-metals can take part in oxidation reactions.

Metals react with oxygen in the air to produce metal oxides. For example, copper reacts with oxygen to produce copper oxide when it is heated in the air.



Thermal Decomposition

Some compounds break down when heated, forming two or more products from one reactants.

Many metal carbonates can break down easily when it is heated:



Copper carbonate is green, copper oxide is black. We can test for carbon dioxide using limewater. Limewater is colourless, but turns cloudy when carbon dioxide is bubbled through it.

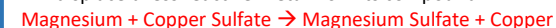
Reactivity Series

Some metals are very unreactive. This means they don't take part in chemical reactions. For example platinum. Some metals are very reactive and they take part in chemical reactions easily to form new substances.



Displacement Reactions

Displacement reactions involve a metal and a compound of a different metal. In displacement reactions, a more reactive metal will displace a less reactive metal from its compound.



Magnesium is more reactive than copper, so it displaces (pushes out) the copper within the compound.

