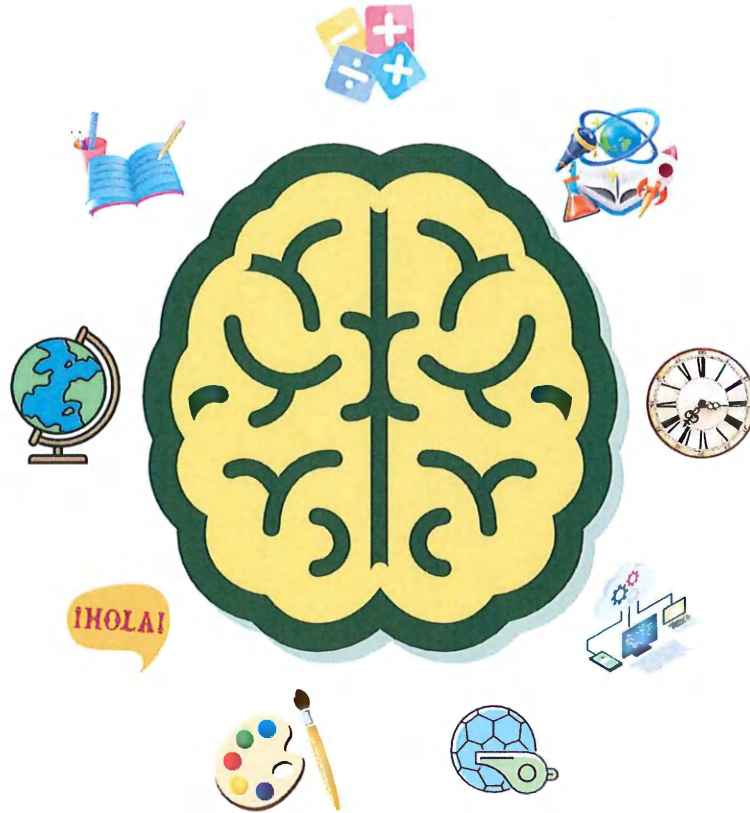




HOUSTONE
SCHOOL

YEAR 9 100% BOOK 3 SUMMER 2024





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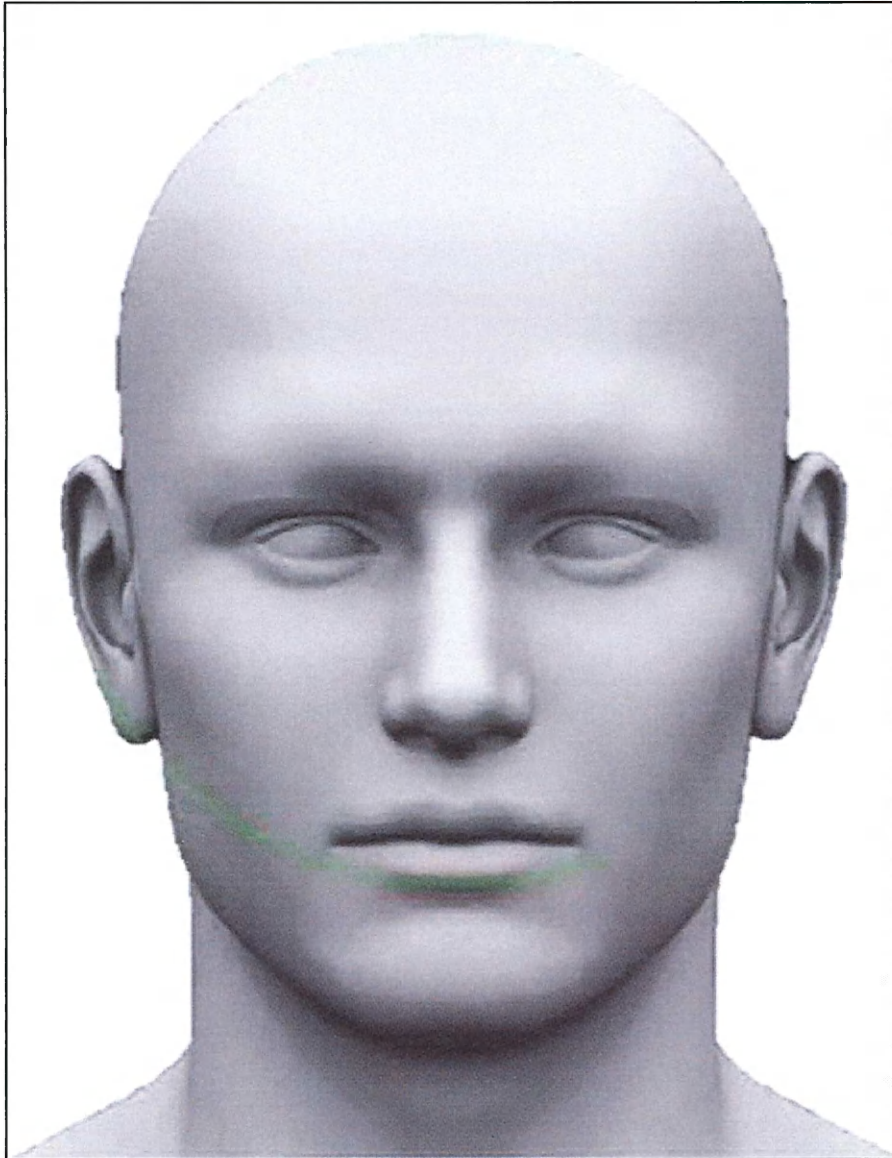
TUTOR GROUP: _____

ASPIRATION ENDEAVOUR RESPECT

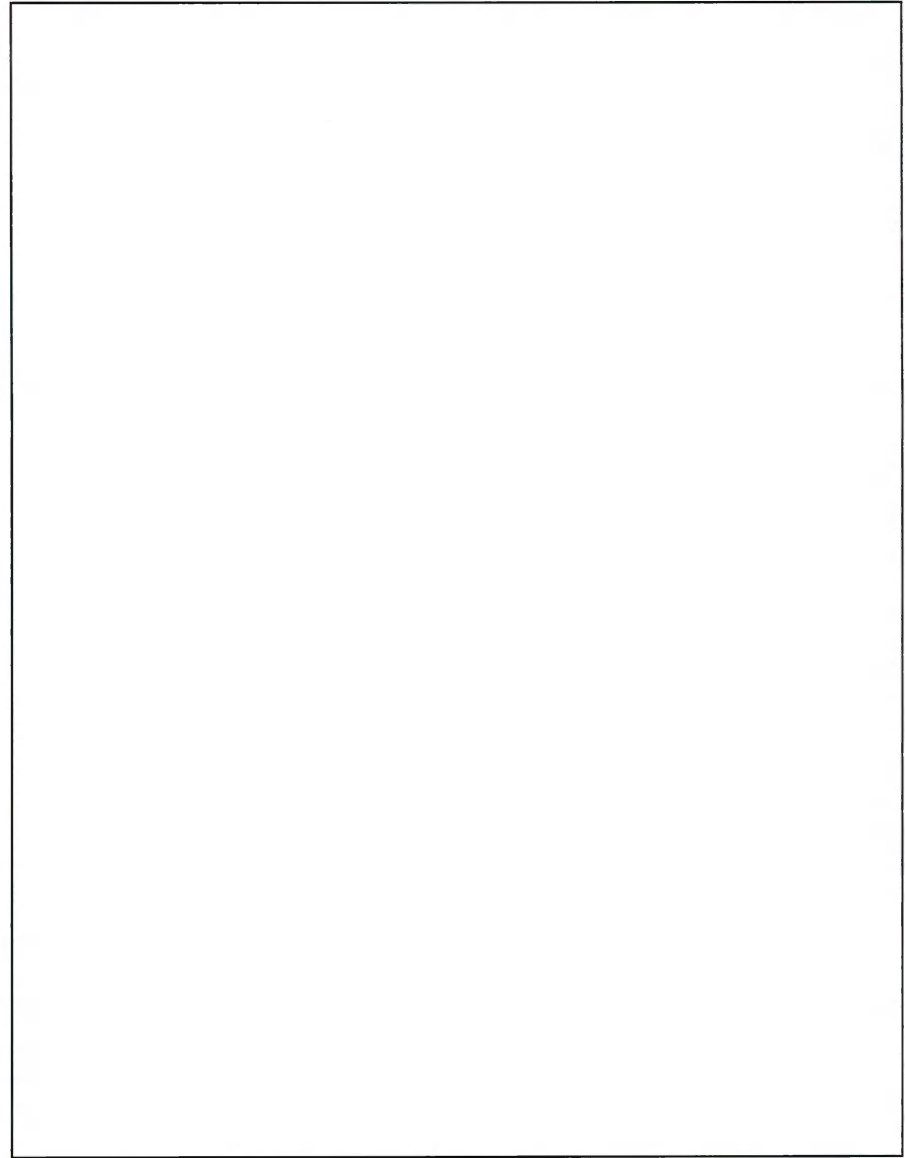
Art: Summer Term

Key Terms	
1. Modernism	A 20 th century movement that rejected traditional European culture. Artists looked to other cultures to innovate their artwork.
2. Primitive	Literally means “in the early stage of evolutionary development”. An offensive term used by Western artists in the 20 th century to describe artefacts from other cultures.
3. Cultural Appropriation	Taking an idea from a culture that is not your own and using it ignorantly or disrespectfully.
4. Shape Language	A concept used in art and animation to communicate meaning. Shapes can tell a story, show personality, and illicit an emotional response in the viewer.
5. Design Brief	A document that outlines the core details and expectations of a design project
6. Demographic	The characteristics of a population that have been categorized by distinct criteria such as age or gender
7. Concept sketch	Quick, freehand drawings that are used by designers a simple way of exploring initial ideas for designs
8. Illustration	A visual explanation of a concept designed for integration in print and digitally published media such as, books, animations, video games and films.
9. Audience	The people who are most likely to use, buy, or benefit from your designs
10. Triadic	A triadic colour scheme uses three colours that are evenly spaced around the colour wheel.
11. Flat	A design style that uses simple, two-dimensional elements and bright colours
<p data-bbox="132 1462 371 1496">12. Jamie Hewlett</p> 	<p data-bbox="595 1462 1425 1608">British artist, comic book creator, illustrator, creative director, music video director, and songwriter. He is the co-creator of the comic book Tank Girl with Alan Martin and co-creator of the virtual band Gorillaz</p>
<p data-bbox="132 1792 312 1825">13. Mia Saine</p> 	<p data-bbox="595 1792 1457 1899">Mia Saine is a queer African-American illustrator and designer from Memphis, Tennessee. Mia enjoys sharing real narratives about marginalized people while creating flat, vibrant illustrations.</p>

Task One: Use the portrait drawing technique learned in lesson to plan and draw the face below in the box to the right. Your line drawing should be scaled to fill the box.

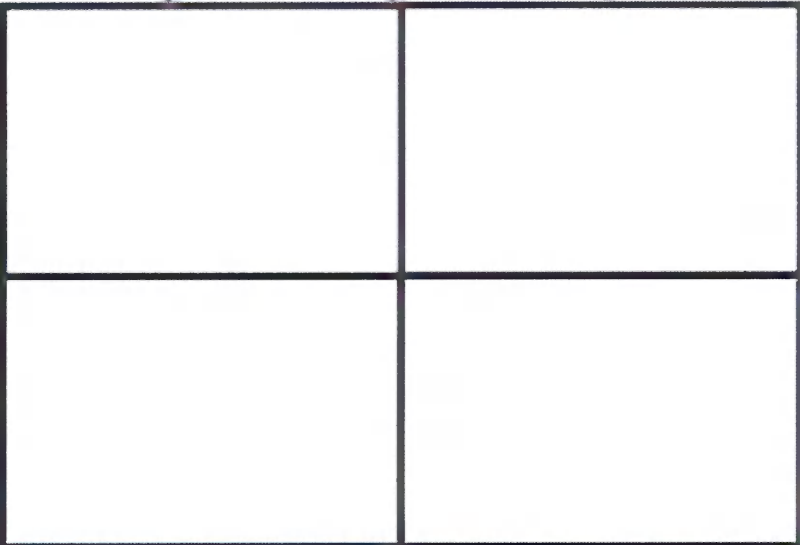
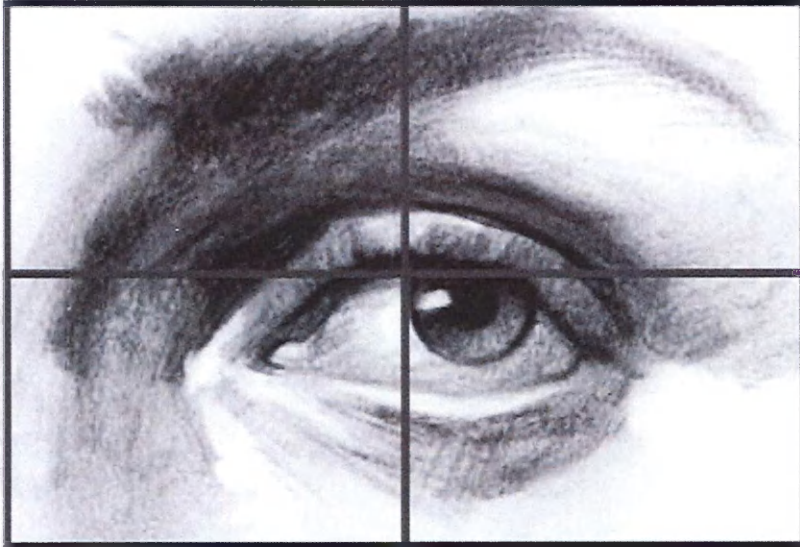


Success Criteria: - Correct placement and proportion of features
- Light sketchy outlines
- Observation of shapes/lines

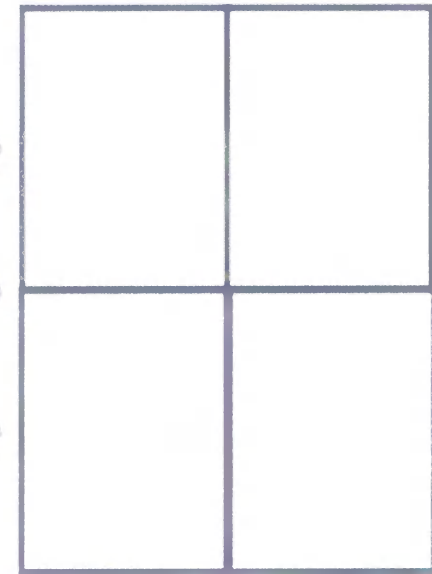
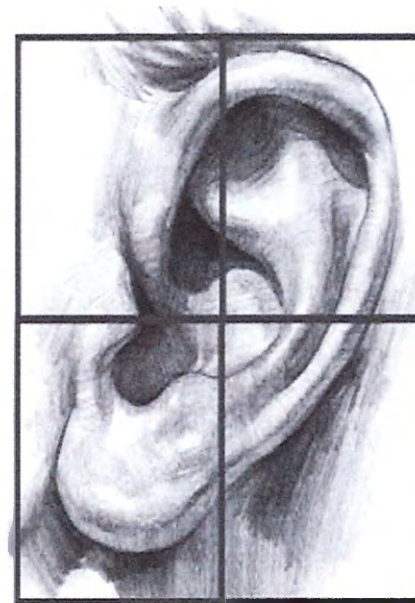


Task Two: Facial features shading practice

- Use the grid to help you plot the key shapes
- Use shading and tone to make the feature look 3D



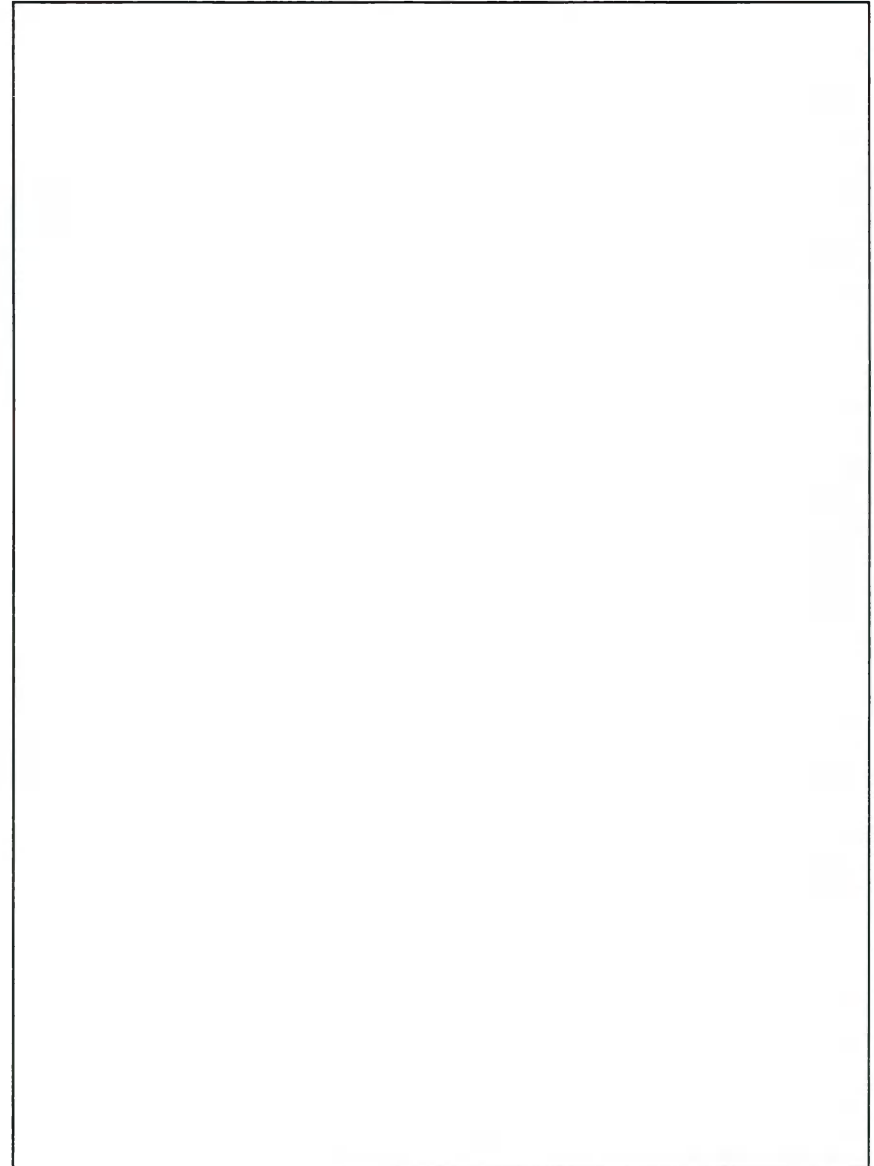
Top Tip: Avoid drawing lines at the side of the nose (the bridge). Instead, use smooth shading and notice how the tone changes from mid-tone to light



Top Tip: Changes in the direction of your hatching help suggest the change in contour for example, where the ear dips in or the cartilage folds around



Task Three: Choose ONE of the Ibibio masks below. You will create a tonal study of this in the space below. You should scale your drawing to fit the box.



COMPUTER SCIENCE 1

Y9 – Computer Systems

Questions:	Answers:
1. What is a computer system?	A computer system is a combination of hardware and software components that work together to process data and perform tasks.
2. What are the main components of a computer system?	The main components of a computer system include the central processing unit (CPU), memory (RAM), storage devices (hard drive, SSD), input devices (keyboard, mouse), output devices (monitor, printer), and motherboard.
3. Explain the function of the CPU.	The CPU (Central Processing Unit) is the brain of the computer. It executes instructions, performs calculations, and manages data movement within the computer system.
4. What is RAM, and what is its role in a computer system?	RAM (Random Access Memory) is temporary memory that stores data and instructions that the CPU needs to access quickly. It is volatile, meaning its contents are lost when the computer is powered off.
5. Differentiate between ROM and RAM.	ROM (Read-Only Memory) is non-volatile memory that stores firmware and instructions needed to boot up the computer. RAM is volatile memory used for temporary storage during processing.
6. Explain the purpose of storage devices in a computer system.	Storage devices are used to store data and programs permanently. They retain data even when the computer is turned off.
7. Define input and output devices.	Input devices allow users to input data into the computer, such as keyboards and mice. Output devices display or present information processed by the computer, such as monitors and printers.
8. What is a motherboard, and what role does it play in a computer system?	The motherboard is the main circuit board of a computer system. It provides connections for other components.
9. Explain the booting process of a computer.	The booting process involves loading the operating system into memory from storage when the computer is turned on.
10. What is an operating system (OS)?	An operating system is system software that manages computer hardware, software resources, and provides common services for computer programs.
11. Explain the concept of binary code.	Binary code is the representation of data using only two digits: 0 and 1. It is the fundamental language of computers.
12. What does BIOS stand for?	Basic Input/Output System
13. Give three examples of an input device.	(Your own answer)
14. Give three examples of an Output device.	(Your own answer)

COMPUTER SCIENCE 2

Y9 – Impacts on Technology

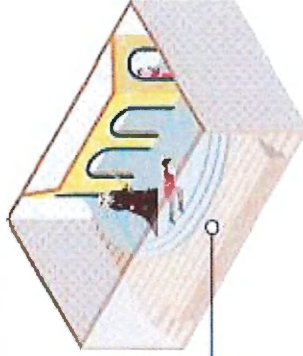
Questions:	Answers:
How does technology impact us?	Technology impacts us in various ways, including culturally, environmentally, ethically, legally, and in terms of privacy.
What is the significance of the General Data Protection Regulation (GDPR)?	GDPR is a data protection regulation that gives individuals control over their personal data and simplifies regulations for international businesses.
Define 'stakeholder'.	A stakeholder is any individual or group affected by or involved in a particular situation, decision, or action.
Explain the Freedom of Information Act.	The Freedom of Information Act allows individuals to access information held by public authorities, promoting transparency and accountability.
Define 'computer misuse'.	Computer misuse refers to unauthorized access, modification, or disruption of computer systems or data.
What is 'downtime'?	Downtime refers to periods when a system or service is unavailable or not functioning, leading to disruptions in operations.
What is the 'digital divide'?	The digital divide refers to the gap between individuals or communities with access to digital technologies and those without, leading to disparities in opportunities and resources.
Identify the implications of having personal data online.	Implications of having personal data online include privacy risks, potential exposure to cyber threats, and the possibility of data misuse.
Explain the social and environmental impacts of social media.	Technology contributes to environmental effects through energy consumption, electronic waste generation, and pollution from manufacturing processes.
What are the ethical issues surrounding the use of AI in society?	Ethical issues surrounding AI include concerns about bias, job displacement, privacy violations, and the potential for misuse in decision-making.
Explain the ethical impact of using algorithms to make decisions.	Using algorithms to make decisions raises ethical concerns related to fairness, transparency, accountability, and potential biases encoded in the algorithms.
What is the main objective of the Data Protection Act (2018)?	The main objective of the Data Protection Act (2018) is to regulate the processing of personal data and provide individuals with rights over their data.
What is the purpose of Creative Commons licensing?	Creative Commons licensing allows creators to retain copyright over their work while granting others permissions to use it under specific conditions.
Identify a situation that would be classified as an offence under the Computer Misuse Act.	Unauthorised access to a computer system or data, or the creation and distribution of malicious software, would be classified as offences under the Computer Misuse Act.

Year 9 Drama 100% Sheets Theatre Practitioners

Constantin Stanislavski



Style: Naturalism



The fourth wall

Bertolt Brecht

Style: Epic Theatre



<u>Key Term</u>	<u>Definition</u>
The 4 th Wall	the imaginary “wall” that exists between actors on stage and the audience.
Breaking the 4 th Wall	Acknowledging the audience’s existence through speaking and interacting with them
Naturalism	a theatrical movement that tried to create a copy of reality on stage.
Epic Theatre	a type of political theatre that addresses contemporary issues
Direct Address	Brechtian technique – when an actor speaks directly to the audience
The ‘v’ effect	alienating the audience (making them separate from the action)
Given Circumstances	refers to the specific details, conditions, and situations surrounding a character in a play or a film. They include aspects such as a character’s: background, relationships, beliefs, desires and motivations
Magic ‘If’	where the actor puts themselves into the character’s situation. This then stimulates the motivation to enable the actor to play the role.
Gestus	is a clear character gesture or movement used by the actor that captures a moment or attitude.
Multi-rolling	Technique where an actor plays more than one character in the same scene or play
Placards	A sign or additional piece of written information presented onstage. Using placards might be as simple as holding up a card or banner.

Knowledge Organiser – Romeo and Juliet

Term	Definition
1. Monarchy	A system of power where a king or queen has supreme power
2. Astrology	The study of the stars and planets, and how these can influence human behaviour
3. Sonnet	A fourteen-line love poem
4. Feud	A long-standing disagreement, usually resulting in violence
5. Masculinity	The characteristics and behaviour expected of men
6. Petrarchan love	A form of love made popular by Petrarch, in which the beloved is idolised, worshipped and elevated, though the love is itself is unrequited
7. Oxymoron	A technique in which words with opposite meanings are placed next to each other to emphasise the difference
8. Patriarchy	A society in which men hold positions of power
9. Foreboding	A feeling of dread or tension, that predicts something bad will happen
10. Soliloquy	A dramatic technique in which a character speaks his or her mind, but only the audience can hear them
11. Hyperbole	Over-exaggeration
12. Blasphemy	Speaking offensively or immorally about God
13. Celestial	Heavenly
14. Impulsive	Acting without thinking
15. Vow	A promise – usually religious (e.g a marriage vow)
16. Counsellor	An advisor or mentor
17. Dramatic irony	When the audience is aware of something that one or more of the characters are not
18. Nobility	Members of the upper classes/aristocracy
19. Hubris	Excessive pride
20. Hamartia	A fatal flaw or weakness
21. Aggression	Quickness to anger; the desire to use force or violence
22. Epiphany	A sudden realisation
23. Vengeance	The act of taking revenge
24. Fortune	Luck, chance or fate
25. Exile	Banishment from a particular location, usually a country

Character	Key details
26. Romeo Montague	The male protagonist and tragic hero of the play. An impulsive and reckless character.
27. Juliet Capulet	The female protagonist and tragic heroine of the play. A rational character who becomes increasingly reckless.
28. Lord and Lady Montague	Romeo's parents. Absent throughout much of the play.
29. Lord and Lady Capulet	Juliet's parents. Traditional and strict.
30. Nurse	Juliet's nursemaid, who Juliet confides in and trusts.
31. Friar Laurence	A Franciscan Friar who acts as Romeo's mentor and guide.
32. Benvolio	Romeo's friend. A peacekeeper.
33. Mercutio	Romeo's friend. Flamboyant and volatile.
34. Tybalt	Juliet's cousin. An aggressive character and a formidable duellist.
35. Paris	A wealthy Count who seeks to marry Juliet.
36. Prince Escalus	The Prince of Verona who is tasked with keeping the peace between the families.

Theme	Associations
37. Love	Passion, romance, desire, family, friendship, loyalty
38. Hatred	Violence, aggression, feuding, conflict, death, destruction
39. Fate	Luck, destiny, fortune, choice, inevitability, tragedy

Tourism- Knowledge map

Key terms:

Tourist- Is the movement of people to places outside their normal place of work and residence in a time frame between 24 hours and 1 year.

Tourism- Is a person who travels to a place for pleasure.

Domestic tourism- Where British people go on holiday in the UK.

International tourist-

National Park- They are areas of land protected by the government because of their beautiful countryside, wildlife and cultural heritage.

Butler model- a 6 stage model he called 'the tourism lifecycle model' that looks at the way tourist resorts grow and develop.

Multiplier effect- a term used to explain the process of tourists money being circulated through a countries economy.

Leakage- Where money 'leaks' from the economy and doesn't benefit the host country.

Ecotourism- environmentally friendly tourism.

Mass tourism- act of visiting a leisure destination with large amounts of people at one time.

Extreme tourism- Involves travel to dangerous places or participation in dangerous events.

Dark tourism- involves travelling to places associated with death and suffering.

Benefits of tourism

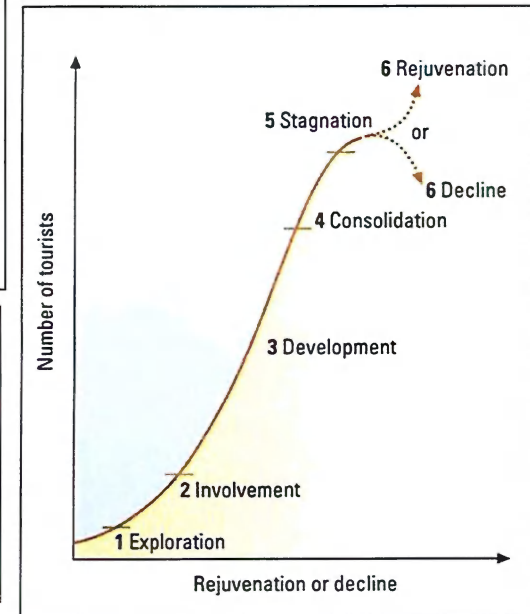
1. Generates money
2. Generates jobs
3. Increase in services and products available.
4. New businesses form
5. Local people learn new skills.
6. New and improved infrastructure.
7. Generates tax.

Costs of tourism

1. Environmental damage
2. Leakage
3. Tourists can be disrespectful to rules, people and culture.
4. Overcrowding
5. Seasonal jobs mean employment is unstable.

Behavioural expectation of eco-tourists

1. Protect the environment
2. Don't interfere with wildlife.
3. Protect resources
4. Support local communities.
5. Eat local food and drink
6. Respect local customs and traditions



Tourist destinations in the UK

1. Heritage coast
2. National Parks
3. City breaks
4. Countryside breaks
5. Seaside holidays
6. Purpose built-attractions

Year 9 History: Decolonisation

1. Empire	When one country rules over other countries	9. Pan-African Congress	200 leaders of independence movements across Britain's colonies met to discuss their demands.
2. Colonies	A country or area ruled by another country, making it part of an empire.	10. Nationalism	A desire for a country to be independent
3. Decolonisation	The process of a government withdrawing from a colony, making it independent.	11. 1922	Ireland partitioned (divided), creating an independent Republic of Ireland and Northern Ireland remained part of the UK
4. Non-violent direct action	A form of protest e.g Indian people made their own salt	12. 1947	British rule of India ended, India partitioned (divided) into mainly-Hindu India and mainly-Muslim Pakistan
5. Boycott	Refusing to buy goods from Britain	13. 1957	Ghana gained independence
6. Strikes	Refusing to work	14. 1962	Jamaica gained independence
7. Referendum	A vote by the people to decide on an issue or question	15. 1963	Kenya gained independence
8. Gandhi	An Indian political leader and lawyer who fought for Indian independence		

Year 9 History: President Kennedy and the Cold War

1. John F Kennedy	President of the USA 1961-63
2. Democratic Capitalism	freedom and rights, limited power of government, individuals can make money and become wealthy, or may be poor
3. Communism	government control to ensure equality; no rights or freedoms; wealth controlled by government so no very rich but everyone has basics
4. Ideology	belief about how the world should be e.g. how a country should be run
5. Cold War	constant threat of conflict and war between USA and allies, and USSR and allies; no actual war
6. Space Race	competition between USA and USSR to have the first and best technology for space exploration
7. Cuban Missile Crisis	crisis when the USSR put nuclear missiles on Cuba 'for defence' which could have hit most US cities
8. Civil Rights	right to vote, right to protection of the law, right to equal access to facilities, education etc
9. Vietnam War	attempted take-over of South Vietnam by North Vietnam (Communist) backed by China; Kennedy began sending military advisers and troops to support South Vietnam; the war escalated under President Johnson, leading to thousands of US casualties
10. Berlin Wall	the USSR allowed the East German government to build a wall to prevent East Germans crossing into West Berlin to leave Communism; in 1963 Kennedy made a speech highlighting how the wall was a symbol of the failure of communism

Hinduism Knowledge Organiser

Key vocabulary

1	ahimsa	Literally 'non-harming' or 'non-violence', a Hindu teaching that encourages peaceful resolution of conflict and kindness towards other living creatures
2	ascetic	Someone who lives a simple life away from society; usually to become closer to the supreme being or to achieve moksha (also known as a sadhu)
3	Aum	A sacred syllable or sound that is very important to Hindus when they chant
4	avatar	A god who descends to earth as a human or other animal in order to fight evil and re-establish goodness
5	caste system	A series of social classes that determine someone's job in society
6	darshan	'Seeing' God; a form of worship and devotion which the murti or a deity is revealed to worshippers
7	deity	A god or goddess
8	dharma	The moral law that Hindus must follow; the word can be translated as duty or righteousness
9	Diwali	The festival of lights; celebrated by nearly all Hindus
10	ecstasy	An extreme feeling of happiness and joy
11	karma	The forces that influence people's fortune and future reincarnation
12	Mahabharata	An epic story that is inspirational for Hindus
13	mandir	A Hindu term for a temple
14	mantra	An extract from a sacred text that is chanted repeatedly during worship
15	meditation	The practice of focusing the mind
16	moksha	Escaping from samsara and never dying or becoming reincarnated again; the term literally means 'release'
17	murti	An image of a god or goddess
18	pantheism	The belief that God is in everything
19	patriarchal society	A culture that is dominated or controlled by men
20	polytheistic	Referring to belief in many gods; someone who believes in many gods is a polytheist
21	puja	The Sanskrit word for worship
22	Ramayana	An epic story that is inspirational for Hindus
23	reincarnated	When a soul is reborn by passing into a new body
24	sacrifice	A method of worship that involves offering animals or food to the gods
25	samsara	The continual process of death and reincarnation; also, then entire universe as we know it
26	sanatana dharma	Eternal dharma or law; this never changes and is always good, regardless of time and place
27	Sanskrit	A language used in ancient India, which many Hindu texts are written in
28	Trimurti	A term used for the three main Hindu gods, Brahma, Vishnu and Shiva
29	upanayana	A traditional Hindu ceremony that children undergo when they are ready to be educated about the Vedas and other sacred texts
30	Vedas	A collection of sacred writings, literally meaning 'knowledge'
31	yoga	Controlling the mind and body to purify yourself and achieve moksha

Key facts

1. The roots of Hinduism can be traced back to India more than 4000 years ago. Today, it has nearly one billion followers worldwide.
2. Hinduism has no single founder and no specific leader or group of leaders. Its followers, known as Hindus, have many different beliefs.
3. The main texts in Hinduism are the four Vedas, which are believed to have been revealed by God.
4. Hindus believe in reincarnation. What determines a person's next life is karma; whether a person performs good or bad deeds in this life.
5. Hindu worship is called puja, and it may be done at a shrine in the home or in a temple. The image of a deity in a shrine or temple is called a murti. Hindus 'see' or worship these in a special way called darshan.
6. Making a pilgrimage to one of Hinduism's many holy sites is believed to create good karma. Key pilgrimage sites include Varanasi on the river Ganges and the city of Puri.
7. Hindus in different parts of the world celebrate different festivals, but almost all Hindus celebrate Diwali, the festival of lights. It means different things to different people: Diwali may be to honour the Supreme Deity, or to remember the events of the Ramayana or a legend from the Vedas.
8. The caste system is a social structure mentioned in some ancient Hindu texts. It divides society into four classes, which later developed into five, with the 'Untouchables', or Dalits, at the bottom. Mohandas Gandhi campaigned to stop discrimination against the Dalits, although they still face problems today.
9. Hindus believe it is important to avoid harming other creatures, summed up in the ancient idea of ahimsa, which means 'non-harming'.
10. In ancient times, Hindu men and women had different roles in society. Although there is more gender equality today, there are still not many female Hindu priests or temple leaders.
11. Hindus respect and value the earth because it provides people with everything they need to survive. For this reason, they work hard to protect it against environmental problems.
12. Ancient Hindu ideas have influenced popular culture through the centuries, for example in the form of practices such as yoga and meditation, theatre shows and films.

Key people and gods

1. Brahma One of the main three Hindu gods; the creator of the world
2. Brahman A supreme being in which most modern Hindus believe; the source of everything, including the gods
3. Ganesha The elephant-headed god of wisdom
4. Indra The Vedic god of sky, who sent thunderstorms to earth
5. Krishna One of the avatars of Vishnu; a charioteer who instructs Arjuna how to live a good life. A very popular deity.
6. Lakshmi The god Vishnu's wife; the goddess of wealth
7. Parvati The god Shiva's wife; the goddess of love and fertility
8. Rama King in the Ramayana whose wife Sita is abducted by Ravana; he defeats Ravana
9. Ravana The many-armed demon who abducted Sita
10. Shiva One of the main three Hindu gods; the destroyer of the world
11. Sita The wife of Rama in the Ramayana kidnapped by Ravana
12. Vishnu One of the three main Hindu gods; the preserver of the world

Sikhism Knowledge Organiser

Key vocabulary			
		karah parshad	A sweet food shared at the end of the Amrit ceremony
Adi Granth	A collection of hymns and writings of the early Sikh Gurus, compiled by Guru Arjan; it means 'first book'	Kartapur	A town in modern Pakistan where the first Sikh community was founded in 1522 by Guru Nanak
amrit	Sugar that is mixed into water using a sword; it is drunk at the Amrit ceremony	Kaur	'Princess' – the title given to a female Khalsa Sikh
Amrit ceremony	Ceremony to become part of the Sikh Khalsa	Khalsa	The community of Sikhs founded by the tenth Guru, Gobind Singh
Bhai	Title given to people respected by Sikhs; it literally means 'brother'	khanda	The symbol of Sikhism, made up of two double-edged swords, one sword in the middle and a circle
caste	A series of social classes that determine someone's job and status in society	langar	A word meaning 'free kitchen'; a communal eating area found in every Sikh place of worship
chapati	A type of flatbread commonly eaten in India and Pakistan	martyr	Someone who is killed for his or her beliefs
disciples	Followers of a religious leader	monotheist	Someone who believes in only one God
The Five Ks	Five articles of faith worn by the Khalsa: kesh (uncut hair), kangha (a wooden comb), kara (a steel bracelet), kachera (special cotton underwear) and kirpan (a short sword)	Mool Mantra	The first hymn written by Guru Nanak; it summarises Sikhs beliefs about God
granthi	People who read from, and look after, the Guru Granth Sahib; Sikhs do not have religious leaders or priests and anyone can read from the Guru Granth Sahib	Mughal Empire	The rulers of the area that is now India and Pakistan in the sixteenth and seventeenth centuries
gurdwara	The Sikh place of worship; it literally means 'doorway of the Guru'	naam japna	Repeating the name of God over and over as an act of worship
Gurmukhi	A language created by the Gurus and used to write the Guru Granth Sahib	Panj Pyare	'The blessed ones' – the first five men who volunteered to join the Khalsa
Guru	A religious teacher or guide who leads a follower from spiritual ignorance (Gu, 'darkness') into spiritual enlightenment (ru, 'light')	revelation	A message revealed by God to humans
Guru Granth Sahib	The Sikh holy book; the name means 'from the Guru's mouth'	Sikh	A follower of Sikhism; it comes from the Sanskrit word shishya, which means 'disciple' or 'learner'
initiated	Made a member of a particular group through a special ceremony	Singh	'Lion' – the title given to a male Khalsa Sikh
Janam Sakhis	Stories about the childhood and life of Guru Nanak	Waheguru	The most common name used by Sikhs to describe God meaning 'wonderful Lord/Guru'

Key facts	
1.	There are around 25 million Sikhs in the world today, most of them (19 million) living in India.
2.	Sikhism began with a man named Guru Nanak, who was born in a part of India known as the Punjab.
3.	When Nanak was 30 he received a revelation in which he understood that although there are many different religions there is only one God. God loves all people equally, whatever religion they follow.
4.	Stories about Nanak's childhood and life are collected in the Janam Sakhis.
5.	Nanak made four long journeys over a period of 20 years, spreading the word of his revelation. He visited and talked with Buddhists, Hindus and Muslims.
6.	The story of the miracle of milk and blood emphasises one of Guru Nanak's important teachings – that of working hard and honestly.
7.	Guru Nanak died in 1539. He was followed by nine Sikh Gurus, who developed the Sikh tradition.
8.	Guru Arjan is famous for building the holiest site in the world for Sikhs, the Harmandir Sahib, and for being the first Sikh martyr after his death at the hands of the Mughals.
9.	The Sikh symbol of the Khanda was established by Guru Hargobind, who put on two swords to indicate his spiritual authority (piri) and his worldly authority (miri).
10.	The ninth Guru was Tegh Bahadur, who challenged the Mughal Emperor Aurangzeb to convert him to Islam. When the emperor failed to do so, he had the Guru executed.
11.	The last of the human Gurus was Gobind Singh, who established the Khalsa, a brotherhood of Sikhs established to protect their people from persecution.
12.	Male Sikhs who join the Khalsa take the surname Singh ('lion') and female Khalsa Sikhs take the surname Kaur ('princess').
13.	Before he died, Gobind Singh said that the collection of Sikh holy scriptures, the Guru Granth Sahib, would be the eleventh and final – eternal – Guru.
14.	The Guru Granth Sahib is a collection of scriptures collected over 150 years that is highly revered by Sikhs, who look to it for guidance and leadership.
15.	It is written in a language called Gurmukhi and there are strict rules about how copies of it can be printed, transported and treated.
16.	The book is used during Sikh worship services and during special ceremonies. Sometimes readers called granthi will read the whole text from start to finish, which takes about 48 hours.
17.	The Mool Mantra is a text that describes Sikh beliefs about God, including that he is the creator, immortal, without fear or hate, and beyond birth and death.

Key people		The Ten Gurus			
Akbar	A Muslim Mughal emperor and ruler who was very impressed by the langar and had a good relationship with the Sikhs.	Guru Nanak (1469-1539)	The founder and first Guru of Sikhism	Guru Hargobind (1606-44)	The sixth Guru; a key military leader
Aurangzeb	A Mughal emperor during Tegh Bahadur's time as Guru; he had Tegh Bahadur killed	Guru Anghad (1539-52)	A devoted follower of Nanak who succeeded him as second Guru	Guru Har Rai (1644-61)	The seventh Guru
Jahangir	A son of Mughal Emperor Akbar who had Guru Arjan killed	Guru Amar Das (1552-74)	The third Guru	Guru Har Krishan (1661-64)	The eighth Guru, who died at the age of eight
Lalo	A hard-working carpenter of low caste who became one of the first Sikhs	Guru Ram Das (1574-81)	The fourth Guru	Guru Tegh Bahadur (1664-1675)	The ninth Guru; executed by the Mughal emperor
Malik Bhago	A rich and corrupt man who was angered by Guru Nanak eating with Lalo	Guru Arjan (1581-1606)	The fifth Guru, who created the Adi Granth (first Sikh scriptures) and founded the Golden Temple in Amritsar; he was martyred by the Mughal emperor	Guru Gobind Singh (1675-1708)	The tenth and final human Guru, who established the Khalsa

C1 – The Atom

1. What is an atom?	The smallest part of an element that can exist
2. What is Dalton's model of the atom?	Atoms as solid spheres that could not be divided into smaller parts
3. What is the plum pudding model of the atom?	Sphere of positive charge with negative electrons embedded in it
4. What did scientists discover in the alpha scattering experiment?	Some alpha particles were deflected, this showed that an atoms mass and positive charge must be concentrated in the centre (the nucleus)
5. Describe the nuclear model of the atom	Dense nucleus with electrons orbiting it
6. What did Niels Bohr discover?	Electrons orbit in fixed shells
7. What did James Chadwick discover?	Uncharged particle called the neutron
8. Where are protons and neutrons found?	Nucleus
9. What is the relative mass of each subatomic particle?	Protons = 1, Neutrons = 1, Electrons = very small
10. What is the relative charge of each subatomic particle?	Protons = +1, Neutrons = 0, Electrons = -1
11. How can you find out the number of protons in an atom?	Atomic number on periodic table
12. How can you calculate the number of neutrons in an atom?	Mass number – atomic number = neutrons
13. Why do atoms have no overall charge?	Equal numbers of positive protons and negative neutrons so their charges cancel out
14. How many electrons would you place in the first, second and third shells?	2,8,8
15. What is an element?	Substance made of one type of atom
16. What is a compound?	Substance made of two or more different atoms that are chemically bonded
17. What is a mixture?	Two or more substances not chemically bonded
18. What are isotopes?	Atoms of the same element with a different number of neutrons
19. What is the law of conservation of mass?	Atoms cannot be created or destroyed in a chemical reaction, just rearranged
20. What are the four physical processes that can be used to separate mixtures?	Filtration, crystallisation, simple or fractional distillation, chromatography

C2 – The Periodic Table

1. How is the modern periodic table ordered?	By atomic number
2. How were the early lists of elements ordered?	By atomic mass/atomic weight
3. Why did Mendeleev swap the order of some elements?	To group them by their chemical properties
4. Why did Mendeleev leave gaps in the periodic table?	Leave room for elements that had not yet been discovered
5. Why do elements in a group have similar chemical properties?	They have the same number of outer shell electrons
6. Where are metals and non-metals located on the periodic table?	Metals = left, non-metals = right
7. What name is given to Group 1 elements?	Alkali metals
8. Why are the alkali metals named this?	They are metals that react with water to form alkaline solutions
9. Give the general equation for the reaction of alkali metals with oxygen	Alkali metal + oxygen \rightarrow metal oxide
10. Give the general equation for the reaction of alkali metals with chlorine	Alkali metal + chlorine \rightarrow metal chloride
11. Give the general equation for the reaction of alkali metals with water	Alkali metal + water \rightarrow metal hydroxide + hydrogen
12. Why does the reactivity of the alkali metals increase down the group?	As you go down the group the reactivity increases because: <ul style="list-style-type: none"> • The size of the atoms increases • So the outer electron is further from the nucleus • So there are weaker forces of electrostatic attraction between nucleus and outer electron • So it is easier to lose the outer shell electron
13. What name is given to Group 7 elements?	Halogens
14. Give the formulae of the first 4 elements in Group 7	F ₂ , Cl ₂ , Br ₂ , I ₂
15. How do the melting points of the halogens change down the group?	Increases
16. Why does the reactivity of the halogens decrease down the group?	As you go down the group the reactivity increases because: <ul style="list-style-type: none"> • The size of the atoms increases • So the 'needed' electron is further from the nucleus • So there are weaker forces of electrostatic attraction between nucleus and outer electron • So it is harder to gain an electron
17. What is a displacement reaction?	When a more reactive element takes the place of a less reactive element in a compound
18. What name is given to Group 0 elements?	Noble gases
19. Why are the noble gases unreactive?	They have a full outer shell of electrons
20. How do the melting points of the noble gases change down the group?	Increases

P2 National and global energy resources

1. What is a non-renewable energy resource?	An energy source that will eventually run out, it is not replaced at the same rate as it is being used.
2. What is a renewable energy resource?	An energy source that will not run out, it is being (or can be) replaced at the same rate as it is used.
3. What are the main renewable and non-renewable resources available on Earth?	<ul style="list-style-type: none"> • Renewable: solar, tidal, wave, wind, geothermal, biofuel, hydroelectric • Non-renewable: coal, oil, gas, nuclear
4. What are the main advantages of using coal as an energy resource?	Enough availability to meet current demand, reliable, can control supply, to match demand, cheap to extract and use
5. What are the main disadvantages of using coal as an energy resource?	Will eventually run out, release CO ₂ , which contributes to climate change, releases sulfur dioxide which causes acid rain.
6. What are the main advantages of using nuclear fuel as an energy resource?	Lots of energy released from a small mass, reliable, can control supply to match demand, enough fuel available to meet current demand, no polluting gases.
7. What are the main disadvantages of using nuclear fuel as an energy resource?	Waste is dangerous and difficult and expensive to deal with, expensive initial set up, expensive to shut down and to run.
8. What are the main advantages of using solar energy?	Can be used in remote places, no polluting gases, no waste products, very low running costs.
9. What are the main disadvantages of using solar energy?	Only available during hours of daylight, cannot control supply, initial set up expensive, cannot be used on a large scale.
10. What are the main advantages of using tidal power?	No polluting gases, no waste products, reliable, can produce large amounts of electricity, low running costs, no fuel costs.
11. What are the main disadvantages of using tidal power?	Can harm aquatic habitats, initial setup expensive, cannot increase supply when needed, times the energy is available varies each day, hazards for boats.
12. What are the main advantages of using wave turbines?	No polluting gases produced, no waste products, low running cost, no fuel costs.
13. What are the main disadvantages of using wave turbines?	Unreliable, dependent on weather, cannot control supply, initial set up expensive, can harm aquatic habitats, hazard for boats, cannot be used on a large scale.
14. What are the main disadvantages of using wind turbines	Unreliable, dependent on weather, cannot control supply, take up a lot of space, can produce noise pollution.
15. What are the advantages and the disadvantages of using geothermal energy?	<ul style="list-style-type: none"> • Advantages: no polluting gases, low running cost • Disadvantages: initial set up expensive, only available in a few locations.
16. What are the main advantages and disadvantages of using biofuels?	<ul style="list-style-type: none"> • Advantages: can be 'carbon neutral', reliable • Disadvantages: expensive to produce. Use land/water that might be needed to grow food.
17. What are the main advantages and disadvantages of using hydroelectric power?	<ul style="list-style-type: none"> • Advantages: no polluting gases, no waste products, low running cost, no fuel cost, reliable, can be controlled to meet demand. • Disadvantages: initial set up expensive, dams can harm/ destroy aquatic habitats.

P3- Supplying electricity

1. Why is the current provided by a cell called a direct current (d.c.)?	Only flows in one direction
2. What is an alternating current (a.c.)?	Current that repeatedly reverses direction
3. What kind of current is supplied by mains electricity?	Alternating current
4. What is the frequency and voltage of mains electricity?	50Hz, 230 V
5. What colours are the live, neutral, and earth wires in a three-core cable?	Live=brown, neutral= blue, earth= green and yellow stripes
6. What is the function of the live wire in a three-core cable?	Carries the alternating potential difference from the supply
7. What is the function of the neutral wire in a three-core cable?	Completes the circuits
8. What is the function of the earth wire in a three-core cable?	Safety wire to stop the appliance becoming live
9. When is there a current in the earth wire?	When there is a fault
10. Why is the live wire dangerous?	Provides a large p.d. what would cause a large current to flow through a person if they touched it.
11. What is the National Grid?	Nationwide network of cables and transformers that link power stations to customers.
12. What are the step-up transformers used for in the National Grid?	Increase the p.d. from the power station to the transmission cables
13. What are step-down transformers used for in the National Grid?	Decrease the p.d. from the transmission cables to the mains supply in buildings so that it is safe to use.
14. How does having a large potential difference in the transmission cables help to make the National Grid an efficient way to transfer energy?	Large p.d. means a small current is needed to transfer the same amount
15. What two things does energy transfer to an appliance depend on?	Power of appliance, time it is switched on for.
16. What are the units for power, current, potential difference and resistance?	Watt (W), Amp (A), Volt (V) and Ohm (Ω).

Vocabulary 17 – PLANS

- 01 ¿Te gustaría ir al cine?
- 02 ¿Te gustaría ir a la bolera?
- 03 ¿Te gustaría venir a mi casa?
- 04 Me gustaría ir
- 05 a la cafetería
- 06 a la pista de hielo
- 07 al centro comercial
- 08 al museo
- 09 al parque
- 10 al polideportivo
- 11 ¿Dónde quedamos?
- 12 Al lado de la bolera
- 13 Delante de la cafetería
- 14 Detrás del centro comercial
- 15 Enfrente del polideportivo
- 16 En tu casa
- 17 ¿A qué hora?
- 18 A las seis y cuarto
- 19 A las seis y media
- 20 A las siete menos cuarto

- 01 Would you like to go to the cinema?
- 02 W. y. like to go to the bowling alley?
- 03 W. y. like to come to my house?
- 04 I would like to go
- 05 to the café
- 06 to the ice rink
- 07 to the shopping centre
- 08 to the museum
- 09 to the park
- 10 to the sports centre
- 11 Where do we meet up?
- 12 Next to the bowling alley
- 13 In front of the café
- 14 Behind the shopping centre
- 15 Opposite the sports centre
- 16 At your house
- 17 At what time?
- 18 At quarter past six
- 19 At half past six
- 20 At quarter to seven

Vocabulary 18 – EXCUSES

- 01 ¿Quieres salir?
- 02 Lo siento, no puedo
- 03 Tengo que
- 04 cuidar a mi hermano
- 05 hacer los deberes
- 06 lavarme el pelo
- 07 ordenar mi dormitorio
- 08 pasear al perro
- 09 salir con mis padres
- 10 No quiero
- 11 No tengo dinero
- 12 No tengo ganas
- 13 No podemos salir
- 14 No puede salir
- 15 De acuerdo
- 16 Vale
- 17 Sí, me gustaría mucho
- 18 ¡Ni hablar!
- 19 ¡Ni en sueños!
- 20 ¡Qué aburrido!

- 01 Do you want to go out?
- 02 I'm sorry, I can't
- 03 I have to
- 04 look after my brother
- 05 do my homework
- 06 wash my hair
- 07 tidy my room
- 08 walk the dog
- 09 go out with my parents
- 10 I don't want to
- 11 I don't have any money
- 12 I don't feel like it
- 13 We can't go out
- 14 He/She can't go out
- 15 All right
- 16 OK
- 17 Yes, I'd like that very much
- 18 No way!
- 19 Not in your dreams!
- 20 How boring!

Vocabulary 19 – ROUTINES

- 01 ¿Cómo te preparas...?
- 02 cuando sales de fiesta?
- 03 Me baño
- 04 Me ducho
- 05 Me lavo la cara
- 06 Me lavo los dientes
- 07 Me visto
- 08 Me maquillo
- 09 Me peino
- 10 Me aliso el pelo
- 11 Me pongo gomina
- 12 primero
- 13 luego
- 14 después
- 15 finalmente
- 16 a veces
- 17 siempre
- 18 Nos peinamos
- 19 Nos maquillamos
- 20 Nos ponemos gomina

- 01 How do you get ready...?
- 02 when you go to a party?
- 03 I have a bath
- 04 I have a shower
- 05 I wash my face
- 06 I brush my teeth
- 07 I get dressed
- 08 I put on make-up
- 09 I comb my hair
- 10 I straighten my hair
- 11 I put gel on my hair
- 12 first
- 13 then
- 14 afterwards
- 15 finally
- 16 sometimes
- 17 always
- 18 We comb our hair
- 19 We put on make-up
- 20 We put gel on our hair

Vocabulary 20 – CLOTHES

- 01 ¿Qué llevas normalmente?
- 02 Normalmente llevo
- 03 una camisa
- 04 una camiseta
- 05 una sudadera
- 06 una falda
- 07 una gorra
- 08 un jersey
- 09 un vestido
- 10 unos pantalones
- 11 unos vaqueros
- 12 unos zapatos
- 13 unas botas
- 14 unas zapatillas de deporte
- 15 ¿Vas a salir esta noche?
- 16 ¿Qué vas a llevar?
- 17 Voy a llevar esta camisa
- 18 Voy a llevar este vestido
- 19 Voy a llevar estos zapatos
- 20 Voy a llevar estas botas






- 01 What do you normally wear?
- 02 Normally I wear
- 03 a shirt
- 04 a t-shirt
- 05 a sweatshirt
- 06 a skirt
- 07 a cap
- 08 a jumper
- 09 a dress
- 10 some trousers
- 11 some jeans
- 12 some shoes
- 13 some boots
- 14 some trainers
- 15 Are you going to go out tonight?
- 16 What are you going to wear?
- 17 I'm going to wear this shirt
- 18 I'm going to wear this dress
- 19 I'm going to wear these shoes
- 20 I'm going to wear these boots

GRAMMAR

Reflexive verbs include a reflexive pronoun. They often describe an action you do to yourself – for example, *lavarse* (to wash oneself/ to get washed).

me lavo	I wash myself/get washed
te lavas	you (sg) wash yourself
se lava	he/she washes him/herself
nos lavamos	we wash ourselves
os laváis	you (pl) wash yourselves
se lavan	they wash themselves

¿A qué hora?

a las seis		a las siete menos cuarto	
a las seis y cuarto		a las siete menos diez	
a las seis y media			

The word for 'this' or 'these' changes according to whether the noun described is masculine or feminine and singular or plural.

singular		plural	
masculine	feminine	masculine	feminine
este	esta	estos	estas
este jersey	esta falda	estos zapatos	estas botas
this sweater	this skirt	these shoes	these boots

Vocabulary 21 – HOUSES		Vocabulary 22 – ACTIVITIES	
01 ¿Qué casa prefieres?	01 Which house do you prefer?	01 ¿Qué se puede hacer?	01 What can you do?
02 Prefiero...	02 I prefer...	02 Se puede / Se pueden	02 You can
03 Esta casa es...	03 This house is...	03 hacer actividades náuticas	03 do water sports
04 Este piso es...	04 This flat is...	04 hacer artes marciales	04 do martial arts
05 amplio/a	05 spacious	05 hacer senderismo	05 go hiking
06 antiguo/a	06 old	06 ir a la bolera	06 go bowling
07 bonito/a	07 nice / pretty	07 ir al cine	07 go to the cinema
08 cómodo/a	08 comfortable	08 ir de compras	08 go shopping
09 feo/a	09 ugly	09 ir de paseo en bicicleta	09 go on a bike ride
10 maravilloso/a	10 marvellous	10 ir a la playa	10 go to the beach
11 moderno/a	11 modern	11 ir al restaurante	11 go to the restaurant
12 pequeño/a	12 small	12 jugar al golf	12 play golf
13 enorme	13 enormous	13 jugar al voleibol	13 play volleyball
14 grande	14 big	14 jugar al tenis	14 play tennis
15 La casa está...	15 The house is...	15 ver la catedral	15 see the cathedral
16 cerca de la playa	16 near the beach	16 visitar un castillo	16 visit a castle
17 en el centro	17 in the centre	17 ver el parque más grande	17 see the biggest park
18 en la montaña	18 in the mountains	18 las playas más hermosas	18 the most beautiful beaches
19 más ... que	19 more ... than	19 las cuevas más famosas	19 the most famous caves
20 menos ... que	20 less ... than	20 el acuario más profundo	20 the deepest aquarium

Vocabulary 23 – DIRECTIONS		Vocabulary 24 – STORYTELLING	
01 ¿Dónde está?	01 Where is it?	01 Ayer	01 Yesterday
02 la catedral	02 the cathedral	02 El fin de semana pasado	02 Last weekend
03 la estación de tren	03 the railway station	03 El verano pasado	03 Last summer
04 el minigolf	04 the minigolf	04 El año pasado	04 Last year
05 el parque de atracciones	05 the theme park	05 Hace dos años	05 Two years ago
06 el parque acuático	06 the water park	06 Hoy	06 Today
07 la pista de karting	07 the go-kart track	07 Mañana	07 Tomorrow
08 el zoo	08 the zoo	08 Este fin de semana	08 This weekend
09 Sigue todo recto	09 Keep straight on	09 El verano que viene	09 Next summer
10 Dobla a la derecha	10 Turn right	10 El próximo año	10 Next year
11 Dobla a la izquierda	11 Turn left	11 Me gusta	11 I like
12 Toma...	12 Take...	12 Me gustaría	12 I would like
13 ...la primera a la derecha	13 ...the first on the right	13 Me gusta mucho	13 I really like
14 ...la segunda a la izquierda	14 ...the second on the left	14 Me gustaría mucho	14 I would really like
15 Cruza la plaza	15 Cross the square	15 Me encanta	15 I love
16 Está a la derecha	16 It is on the right	16 Me encantaría	16 I would love
17 Está a la izquierda	17 It is on the left	17 El primer día	17 On the first day
18 Estoy perdido	18 I am lost	18 Luego	18 Then
19 No sé dónde estoy	19 I don't know where I am	19 Más tarde	19 Later
20 ¿Qué voy a hacer?	20 What am I going to do?	20 Después	20 Afterwards

GRAMMAR

PAST (PRETERITE)		PRESENT		NEAR FUTURE	
Visité	I visited	Visito	I visit	Voy a visitar	I am going to visit
Comí	I ate	Como	I eat	Voy a comer	I am going to eat
Escribí	I wrote	Escribo	I write	Voy a escribir	I am going to write
Jugué	I played	Juego	I play	Voy a jugar	I am going to play
Hice	I did	Hago	I do	Voy a hacer	I am going to do
Tuve	I had	Tengo	I have	Va a tener	I am going to have

When you want to compare two things, you use the comparative form of the adjective.

más + adjective + que → more... than menos + adjective + que → less... than

The adjective agrees with the noun it describes.

El castillo es más bonito que la catedral. The castle is prettier than the cathedral.

La bolera es menos aburrida que el museo. The bowling alley is less boring than the museum.

Vocabulary 25 – HIGH FREQUENCY WORDS

01 y	01 and
02 pero	02 but
03 también	03 also
04 muy	04 very
05 bastante	05 quite
06 un poco	06 a bit
07 normalmente	07 normally
08 generalmente	08 generally
09 o	09 or
10 porque	10 because
11 tampoco	11 nor / neither
12 además	12 in addition
13 aquí	13 here
14 a la / al	14 to the
15 de la / del	15 of the
16 sin embargo	16 however
17 ¿Qué?	17 What?
18 ¿Quién?	18 Who?
19 ¿Dónde?	19 Where?
20 ¿Cuándo	20 When?

Vocabulary 26 – HIGH FREQUENCY ADJECTIVES I

01 aburrido/a	01 boring
02 alto/a	02 tall
03 amarillo/a	03 yellow
04 amplio/a	04 spacious
05 antiguo/a	05 old (things)
06 azul	06 blue
07 bajo/a	07 short (height)
08 blanco/a	08 white
09 bonito/a	09 beautiful
10 bueno/a	10 good
11 cómodo/a	11 comfortable
12 difícil	12 difficult
13 divertido/a	13 fun
14 emocionante	14 exciting
15 enorme	15 enormous
16 feo/a	16 ugly
17 fácil	17 easy
18 generoso/a	18 generous
19 genial	19 great
20 grande	20 big

Vocabulary 27 – HIGH FREQUENCY ADJECTIVES II

01 horrible	01 horrible
02 importante	02 important
03 informativo/a	03 informative
04 inteligente	04 intelligent
05 interesante	05 interesting
06 joven	06 young
07 listo/a	07 clever
08 maravilloso/a	08 marvellous
09 marrón	09 brown
10 moderno/a	10 modern
11 naranja	11 orange
12 negro/a	12 black
13 pequeño/a	13 small
14 práctico/a	14 practical
15 rojo/a	15 red
16 serio/a	16 serious
17 simpático/a	17 nice / kind
18 verde	18 green
19 viejo/a	19 old (people)
20 útil	20 useful

Vocabulary 28 – HIGH FREQUENCY VERBS

01 Hay	01 There is / There are
02 Creo que	02 I think that
03 Me llamo	03 My name is
04 Vivo	04 I live
05 Soy	05 I am
06 Tengo	06 I have
07 Hablo	07 I speak
08 Leo	08 I read
09 Escribo	09 I write
10 Escucho	10 I listen
11 Hago	11 I do
12 Juego	12 I play
13 Estudio	13 I study
14 Como	14 I eat
15 Bebo	15 I drink
16 Voy	16 I go
17 Quiero	17 I want
18 Llevo	18 I wear
19 Veo	19 I see / I watch
20 Prefiero	20 I prefer

GRAMMAR

The plural form of **un/una** (meaning 'a') is **unos/unas** (meaning 'some'):

	singular		plural	
masculine	un laboratorio	a laboratory	unos laboratorios	some laboratories
feminine	una clase	a classroom	unas clases	some classrooms

Remember, there are also four words for 'the' in Spanish:

	singular		plural	
masculine	el laboratorio	the laboratory	los laboratorios	the laboratories
feminine	la clase	the classroom	las clases	the classrooms

The word for 'this' or 'these' changes according to whether the noun described is masculine or feminine and singular or plural.

singular		plural	
masculine	feminine	masculine	feminine
este vestido	esta camiseta	estos zapatos	estas zapatillas
this dress	this T-shirt	these shoes	these trainers