

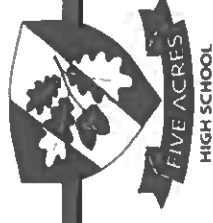
Year 10 Option Subjects

Knowledge Organiser

April - July 2023

AMBITION, CONFIDENCE, CREATIVITY,
RESPECT, DETERMINATION

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 GREENSHAW
LEARNING TRUST



Why do we have knowledge organisers?

Knowledge organisers are a collation of the basic essential knowledge for success in each subject area that will underpin your learning for the term.

They are designed to provide the information you will need to be committing to your long term memory through recall exercises in Low Stakes Quizzing.

How do we use knowledge organisers?

You should be using these KOs to create your homework quizzes so that you are practising retrieving information.

1. You can do this by testing yourself on the definition of key terms (both recalling the key term and then swapping to recall the definition), practice labelling diagrams, retrieves reasons and justifications for the main learning points.
2. They can also be used for 'memory dumps' where you try to recall as much of the information about a topic as possible and then use the KP to fill in the gaps.
3. They can also be used in class to assist with retrieval of the core knowledge needed for each subject.

You should have these with you at all times in school and out on your desk in all lessons.

If you lose your KO or it becomes too dishevelled, please purchase a new one from the Head of Year or the School Office.

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Viking Expansion: Raiders and Invaders

7 Raids in Britain, Ireland, Scotland, and France

From the 790s, the Vikings began to raid wealthy areas of western Europe:

- PHASE 1**
793-830 Vikings raided Lindisfarne in 793
Hit-and-run attacks on other coastal monasteries with 2/3 ships
- PHASE 2**
830-850 Larger raids with 30-100 ships
Raiders travelled up rivers to attack inland trading towns
- PHASE 3**
850-865 The Vikings began over-wintering in defendable areas
Large Viking army lands in England
- PHASE 4**
865- Vikings become invaders not raiders

Historians disagree about the causes of the Viking raids:

- Shortage of fertile land in the Homelands
- Wealthy European monasteries
- An opportunity for Jarls to gain glory
- Divided and weak western Europe
- Improvements in ship technology

The nature of the Viking raids was different in different parts of western Europe:

Britain		Scotland Islands		Ireland		France	
• Raids on monasteries in the 790s	• The Orkney and Shetland Islands offered good grazing land	• 795 to 830, Vikings raided monasteries	• From the 840s, sailed up the River Seine to attack Rouen and Paris	• In 841, Vikings established Dublin as a base for raiding	• French king built fortified bridges	• As a result, raids stopped by the 860s	
• Raiders looted gold and silver and ransomed monks and holy books	• Viking raiders seized the islands from the Picts around 800	• From 830, larger fleets over-wintered	• However, the Irish had expelled the Vikings by the 870s				
• Attacks on market towns in 830s							
• Vikings overwintered in Kent in 850-1							

8 Viking warfare

Viking raiders were feared warriors and sailors

Warriors	Tactics	Warships
Jarls led close-knit units of loyal bondi armed with:	In battle, Viking warriors formed a shield wall	By 800, the Vikings had developed ideal ships for raiding. They had:
• Double-edged swords	Viking berserkers whipped themselves into a frenzy before combat	✓ A sail for rapid ocean travel
• Battle axes	Raiders murdered monks who resisted, often performing the 'blood eagle' ritual	✓ Oars for rowing into the wind and up rivers
• Wooden shields		✓ A shallow draught for landing on beaches
		✓ Capacity for over 100 warriors on the largest ships

9 The 'Great Heathen Army' and the Danelaw

In 865, a Viking army invaded England, eventually gaining control of the Danelaw

The Viking 'Great Heathen Army' rampaged across England for 14 years

- Vikings demanded Danegeld from the Anglo-Saxons
 - By 878 the army had conquered East Anglia, Mercia, and Northumberland
- In 878, the Vikings were defeated by King Alfred of Wessex at the Battle of Edington.

Alfred and Guthrum, the Viking leader, agreed the Treaty of Wedmore:

- Vikings can settle the Danelaw (northeast England)
- Guthrum must be baptised as a Christian

VOCABULARY

Blood Eagle	A gruesome Viking execution method
Berserker	A particularly ferocious Viking warrior
Draught	The depth of a ship's hull
Fortified	Defended
Monasteries	Large, wealthy Christian religious centres
To over-winter	To stay in one place over the winter, rather than returning home
Ransom	To demand money to return something / someone

10 Settlement in western Europe

The nature of Viking settlement in western Europe varied from place to place

- 800 Scotland and the islands**
 - Vikings established rural settlements in the Shetland/Orkney Islands, north of Scotland, and Isle of Man, based in Pict villages
 - Place names ending in -ness and -wick suggest Vikings dominated these areas and may even have wiped out the Picts entirely
- 865 England**
 - The Danelaw was ruled by jarls based in fortified trading towns called burhs, such as Jorvik
 - Large numbers of Viking place names (-by, -thorpe) and words (egg, sky, slaughter) suggest significant settlement

- 911 Normandy**
 - In 911, the French king offered a Viking, **Rollo**, control of Normandy in return for Christian conversion and protection against raiders
 - Viking settlement was limited to coastal areas / rivers
 - The settlers **assimilated** into French society and became **Normans**
- 914 Ireland**
 - Viking settlement was limited to coastal towns, such as **Dublin**
 - Dublin** was a large trading base with wooden thatched houses
 - By the 11th Century, Vikings had **assimilated** into Irish society, for example converting to **Christianity**

VOCABULARY

Assembly	A meeting to make decisions
Assimilated	Became similar to
Intermarriage	Marriage between different groups
Latrine	A basic toilet
Livestock	Farm animals kept for meat and dairy
Picts	People who lived in Scotland and the islands before the Vikings

11 Jorvik

Archaeological evidence from Jorvik can tell us a lot about Viking settlement

- The Vikings captured Jorvik from the Anglo-Saxons in 866. By the 11th Century, 10,000 people lived there
- Homes in Jorvik were small, wooden structures with a latrine outside in the yard
- It's location on the River Ouse made Jorvik a trading centre for metals, silk, and ivory
- Vikings **minted** coins using Anglo-Saxons designs
- Burials in churchyards suggest **Christianity**, although coins often portrayed Thor and Odin
- Vikings lived alongside Anglo-Saxons in Jorvik and intermarriage was common

12 Iceland, Greenland, and North America

From the 9th Century, the Vikings established settlements across the North Atlantic

ICELAND (870-)	GREENLAND (983-)	NORTH AMERICA (1000-)
- Settlers in Iceland found little fertile land or wood for houses - Food came from fishing, hunting, and livestock - Iceland was ruled by the <i>Althing</i>, an assembly of chieftains which met once a year	- Greenland was discovered by Erik the Red - Greenland imported wood, metal, and grain from Iceland and Europe - In return, Greenlanders exported walrus ivory and polar bear furs	- Erik's son, Leif Eriksson, attempted to settle in North America - He called the region Vinland and traded with Native Americans - This and later settlements failed however

Viking Expansion: Viking Kings

13 Harald Bluetooth

Harald Bluetooth was a great warrior king who converted Denmark to Christianity

Christianity

- In 965, Harald was baptised as a Christian
- He forced the Danes to become Christian, although many still worshipped the old Viking Gods
- The grave site at Jelling contains evidence of Christian practices, including a wooden church and a the grave of Harald's father, **Gorm the Old**

Expanding his Kingdom

- Harald captured the region of Vik in Norway
- He moved the Danish capital to **Roskilde** to be nearer Norway
- He built bridges and roads to connect his Empire together
- He minted coins to improve trade

Defence

- To defend his kingdom, Harald built four large wooden forts
- He strengthened the **Danevirke**, a wall to defend against attack from German tribes
- Nevertheless, he was killed by his own son, **Swein**, who had risen in rebellion in 986

14 Svein Forkbeard

Svein Forkbeard consolidated his father's kingdom and raided and invaded England

Consolidating power

- Like his father, Svein was a Christian king but he **tolerated paganism**
- He minted coins and protected merchants to improve trade
- Raiding in England earned Svein **danegeld**
- In 1000, Svein defeated the King of Norway in battle and added a large part of Norway to his kingdom

Raiding England

- In 1002, King **Aethelred** ordered the execution of all Vikings living in England in the **St Brices Day Massacre**
- In retaliation, from 1003 to 1012 Svein raided England constantly, burning towns like **Norwich** and **Exeter**
- The English gave thousands of pounds of jewellery and coins in **Danegeld** to stop Svein's attacks

Invading England

- In 1013 Svein invaded England with a huge fleet
- **Aethelred** fled to Normandy and Svein was crowned king
- Svein died just 5 weeks later and **Aethelred** was welcomed back as king by the English earls

VOCABULARY

To be baptised	To officially become a Christian
Consolidated	Made more secure
Danes	People from Denmark
Jelling	A Viking grave site in Denmark
Minted coins	Produced coins
Tolerated	Put up with

15 Cnut the Great

Cnut became King of England and built a large Anglo-Scandinavian Empire

Seizing the English crown

- In 1015, Cnut sailed for England with 160 ships and 10,000 men
- In 1016 he fought a series of battles against **Ethelred's son, Edmund Ironside**
- After **Ironside's** death, Cnut became king of England

Ruling England

- Cnut defended England against further Viking attacks
- He executed English leaders and replaced them with Viking jarls, but there was no large scale settlement
- He increased taxes to pay for defence and worked hard to develop the Church

Anglo-Scandinavian Empire

- In 1017, Cnut married **Emma of Normandy**, creating an alliance with Normandy
- In 1018, Cnut became King of Denmark following the death of his brother, **Harald**
- In 1028, Cnut invaded Norway with a fleet of 50 ships and was named king

History around us GCSE Site study OCRb - Chepstow Castle Knowledge Organiser

1.2 The site of the castle: Chepstow is a Norman castle perched high above the banks of the river Wye in southeast Wales. Construction began at Chepstow in 1067, less than a year after William the Conqueror was crowned King of England. Earl William Fitz Osbern was chosen to build the castle as he was a loyal supporter of William. The site of the castle is in the Marches, the area of land between England and Wales.

Point	Physical feature	Explanation
Built on River Wye	River Wye -control River Wye -defensive feature	To allow William Conqueror to control the area of the River between England and Wales. For added defence as River used for bringing in food during sieges
Topography	26 metre Limestone cliff - strategic	Used as a lookout-height. Hard to attack, cliff edge gives added protection
Marches	Location of castle	Built between England and Wales by supporters of William the Conqueror to secure lands and allow easy attack of Wales
Defensive	Gatehouse/portcullis	Barbican built to protect the gatehouse
Defensive	Round Tower	Strong towers were added to curtain walls to watch out for enemies. Hard to undermine
Defensive /Protection	Thick walls	From 1200 a curtain wall which is high and thick stop enemies getting access to the bailey
Storage	Cellar	On Wye side so boats could bring in food. Vast area to store food and drink
Living/society	Kitchen	Preparation of food area. Near Wye for waste
Protection	Battlements	The parapet of a wall consisting of alternating low portions known as crenels and high portions called merlons
Protection	Arrow Slits	An arrow slit (often also referred to as a balistraria) is a narrow vertical aperture in a fortification through which an archer can launch arrows or a crossbowman can launch bolts
Defensive	Keep	The main building inside the castle is the keep, which was protected by thick walls and towers
Defensive	Castle doors (oldest surviving castle doors in Britain today)	Doors in the original gatehouse date from 1190 and are made using iron plates clad in oak to stop attackers from burning them down

1. 1 Timeline of key developments

1067 – 1090: The first Great Hall of Chepstow Castle is built.
 1067: Earl William Fitz Osbern begins the construction of Chepstow Castle in the Marches between England and Wales.
 1072: The tower keep of Chepstow Castle is built.
 1190: Sir William Marshal begins rebuilding Chepstow Castle. He has married Isabella De Clare
 July 1217: Henry III of England visits Chepstow Castle. It has a tower, new walls, arrow slits and an improved defensive entrance.
 1244: Anselm Marshall adds new parts to the castle in a rich red sandstone – quarried locally (cheaper than the yellow limestone used by his father. Old hall keep turned into a tower. Larger windows installed
 1272: Roger Bigod, 5th Earl of Norfolk, builds the western gatehouse at Chepstow Castle.
 1285: A new Great Hall is completed at Chepstow Castle.
 Dec 1285: Edward I of England visits Chepstow Castle.
 1287 – 1293: The Marten's Tower is added to Chepstow
 1300- Roger Bigod III: Builds more comfortable living areas in the castle. Strengthen the upper gatehouse in the barbican with a gate and portcullis. Built a wall around all of Chepstow. Roger needed to make sure the Welsh would not revolt and attack. He placed catapults on all four towers during the Welsh uprisings. Built a fine hall and kitchen, a cellar and grand apartments. Castle has separate buildings for the baron and top men in the household. Lodging areas for quests and servant quarters.
 1306: Roger Bigod III dies and the castle passes to King Edward I. The castle no longer has any military significance.
 1642 English Civil War: In the 17th C firearms became more common in warfare, Chepstow's battlements were modified to allow the use of cannons. For the same reason, circular windows were made in some of the walls which were thickened on the eastern side to withstand the firepower of would-be attackers. Chepstow was indeed finally attacked and breached during the English Civil War of the 1640s when the castle's commander, Sir Nicholas Kemeys, was killed.
 Modern times: Today, Chepstow Castle is open to the public and managed by Cadw as a tourist attraction/historical site.

1.4 People in the castle

1. Ownership of the castle – a, William FitzOsbern -1066-1071, b De Clare family 1071- 1189, c- William Marshal 1189-1219, d-1245 Bigod family, e-1306 pass to the Monarch Edward II
2. Lord and Lady-In charge of local area, administered law and order, Lady run the household/entertaining
3. Soldiers-for protection and to keep watch/patrol
4. Gardner-to grow food in baily areas ie herbs, spices and a kitchen garden. To keep plant clear of walls
5. Carpenter/stonemason -for castle building and maintenance and repairs
6. Fletcher – arrow maker – to provide weapons
7. An English medieval castle, if a large one, could have a household staff of at least 50 people, which included all manner of specialised and skilled workers such as cooks, grooms, carpenters, masons, falconers, and musicians, as well as a compliment of knights, bowmen, and crossbow operators.

1.5 Chepstow Castle after 1300: The Later Middle Ages

1. *Edward II* takes control in 1307 and passes the castle to his favourites, including Hugh Despenser. The castle was garrisoned with 12 knights and 60 footmen for protection from Welsh invasions. 2. *Welsh wars* -Owain Glyn Dwr was likely to attack the castle so it was garrisoned (had an army situated there) in 1415 but he never attacked Chepstow during the Welsh Wars as his army was stopped at Usk 3. *Tudor times* – Sir Charles Somerset who was related to Henry VIII became Earl of Worcester and made key change as custodian of Chepstow castle in the 1500's. He transformed the lower bailey area into a great court and added new windows and fireplaces in Marten's tower. He improved the kitchen area with a new oven and fireplace and made the castle more comfortable and easier for entertaining.

1.6 Changes during the English Civil War: The English Civil war began in 1642 between Charles I -Royalist and Oliver Cromwell- Parliamentarian. Chepstow was a strategic location as it controlled the entrance to South Wales and links to Bristol with the River Severn. In 1643 the parliamentarian army advanced into Monmouthshire but did not take Chepstow castle so they forced to retreat. In October 1645 Bristol fell to parliament and Chepstow castle (Royalist) had to surrender after their forces breached the castle defences by concentrating their cannon fire on the curtain wall to the west of Martens tower. Chepstow castle had a store of gunpowder, ammunition and cannons which was taken by parliament. At the end of the war Chepstow castle became a barracks and a prison for political dissidents of Oliver Cromwell. Following the war, the whole southern face of the castle was reinforced with earth and stone as a prevention against further cannon fire. The parapets were remodelled with musket loops. Modern warfare showed that Chepstow castle was no longer protection in times of war. Castles were now obsolete.

1.7 Typicality of Chepstow castle in Medieval times: The Great Hall (built of stone) and dramatic cliff-side at Chepstow are the castle's two most interesting features. The rest of the castle is a typical Norman structure - a large gatehouse with high curtain walls connecting a series of tall towers. It was the first stone castle built as other Norman castles were first built as motte and baileys. Chepstow was built in stages along the river Wye, the castle is constructed in a long, terraced fashion as opposed to a typical concentric layout. The largest castle in Wales, and the second-largest in Britain, Caerphilly Castle was locked within water defences when it was built by the English in the 13th century. Remains of wall-walk and battlements. South-west tower: an open-backed fighting platform on three levels to defend a vulnerable corner of the castle. Arrow loops provide extensive coverage along the curtain wall outside. Gatehouse with murder holes, a portcullis and a drawbridge.

1.8 Decline and Modern times: By 1690 Chepstow Castle was decommissioned and was left empty, falling into disrepair and ruin until it was sold by the Beaufort's in 1914. The final family to own Chepstow Castle was the Lysaghts who acquired the property in 1914, led by tycoon William Royse Lysaght who ordered extensive restoration and conservation work. Chepstow Castle became a popular destination for tourists navigating the Wye Tour, a famous excursion through various scenic buildings and monuments along the River Wye that was popular with British visitors. In 1984, Chepstow Castle came under the ownership of Cadw, the Welsh Government's historic environment division. Today, Chepstow Castle is open to the public as a historical museum and visitor's centre. It continues to be used as a filming location—music videos, feature films, and live performances. It is a historical tourist attraction.

Year 10 Geography The Changing Economic World			KPI5 Human factors affecting uneven development	
KPI 1 What is development?			Aid	Trade
Development is an improvement in living standards through better use of resources.				
Economic	This is progress in economic growth through levels of industrialisation and use of technology.		- Aid can help some countries develop key projects for infrastructure faster. - Aid can improve services such as schools, hospitals and roads. - Too much reliance on aid might stop other trade links becoming established.	- Countries that export more than they import have a trade surplus. This can improve the national economy. - Having good trade relationships. - Trading goods and services is more profitable than raw materials.
Social	This is an improvement in people's standard of living. For example, clean water and electricity.			
Environmental	This involves advances in the management and protection of the environment.			
KPI2 Measuring development			Education	Health
These are used to compare and understand a country's level of development.				
Economic indicators examples				
Employment type	The proportion of the population working in primary, secondary, tertiary and quaternary industries.		- Education creates a skilled workforce meaning more goods and services are produced. - Educated people earn more money, meaning they also pay more taxes. This money can help develop the country in the future.	- Lack of clean water and poor healthcare means a large number of people suffer from diseases. - People who are ill cannot work so there is little contribution to the economy. - More money on healthcare means less spent on development.
Gross Domestic Product per capita	This is the total value of goods and services produced in a country per person, per year.			
Gross National Income per capita	An average of gross national income per person, per year in US dollars.			
Social indicators examples			Politics	History
Infant mortality	The number of children who die before reaching 1 per 1000 babies born.			
Literacy rate	The percentage of population over the age of 15 who can read and write.			
Life expectancy	The average lifespan of someone born in that country.			
Mixed indicators				
Human Development Index (HDI)	A number that uses life expectancy, education level and income per person.		- Corruption in local and national governments. - The stability of the government can affect the country's ability to trade. - Ability of the country to invest into services and infrastructure.	- Colonialism has helped Europe develop, but slowed down development in many other countries. - Countries that went through industrialisation a while ago, have now develop further.
KPI3 Variations in the level of development			KPI4 - Causes of uneven development	
LICs	Poorest countries in the world. GNI per capita is low and most citizens have a low standard of living.		Development is globally uneven with most HICs located in Europe, North America and Oceania. Most NEEs are in Asia and South America, whilst most LICs are in Africa.	
NEEs	These countries are getting richer as their economy is progressing from the primary industry to the secondary industry. Greater exports leads to better wages.		KPI 4 Physical factors affecting uneven development	
HICs	These countries are wealthy with a high GNI per capita and standards of living. These countries can spend money on services.		Natural Resources	Natural Hazards
			- Fuel sources such as oil. - Minerals and metals for fuel. - Availability for timber. - Access to safe water.	- Risk of tectonic hazards. - Benefits from volcanic material - Frequent hazards undermines redevelopment.
			Climate	Location/Terrain
			- Reliability of rainfall to benefit farming. - Extreme climates limit industry and affects health. - Climate can attract tourists.	- Landlocked countries may find trade difficulties. - Mountainous terrain makes farming difficult.
KPI 6 Consequences of Uneven Development			KPI 6 Consequences of Uneven Development	
Levels of development are different in different countries. This uneven development has consequences for countries, especially in wealth, health and migration.			People in more developed countries have higher incomes than less developed countries.	
Wealth			Better healthcare means that people in more developed countries live longer than those in less developed countries.	
Health			If nearby countries have higher levels of development or are secure, people will move to seek better opportunities and standard of living.	
Migration				

Year 10 Geography

The Changing Economic World

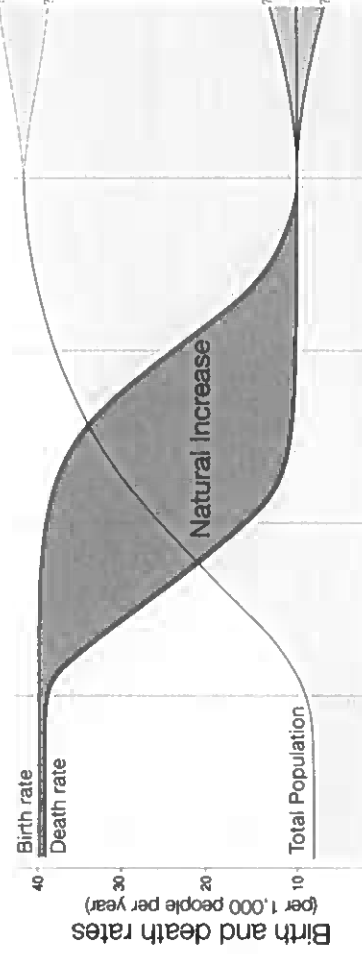
KPI 7 The Demographic Transition Model

The demographic transition model (DTM) shows population change over time. It studies how birth rate and death rate affect the total population of a country.	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
	High DR, High BR Steady	BR Low Declining DR Very High	Rapidly falling DR Low BR High	Low DR Low BR Zero	Slowly Falling DR Low BR Negative
	e.g. Tribes	e.g. Kenya	e.g. India	e.g. UK	e.g. Japan

The five stages of the demographic transition

The demographic transition is a model that describes why rapid population growth is a temporary phenomenon.

Our World in Data



	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Birth rate	High	High	Falls	Low	Yet to be seen (Possibly falling further, possibly rising again)
Death rate	High	Falls rapidly	Falls more slowly	Low	Low
Natural increase	Stable or slow increase	Rapid increase	Increase slows down	Falling and then stable	Little change
Population Pyramid	Men Women	Men Women	Men Women	Men Women	Men Women

This is a visualisation from OurWorldinData.org where you find data and research on how the world is changing

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KPI 8 Reducing the Global Development Gap

Microfinance Loans	Foreign-direct investment
This involves people in LICs receiving smalls loans from traditional banks. + Loans enable people to begin their own businesses - Its not clear they can reduce poverty at a large scale.	This is when one country buys property or infrastructure in another country. + Leads to better access to finance, technology & expertise. - Investment can come with strings attached that country's will need to comply with.
Aid	Debt Relief
This is given by one country to another as money or resources. + Improve literacy rates, building dams, improving agriculture. - Can be wasted by corrupt governments or they can become too reliant on aid.	This is when a country's debt is cancelled or interest rates are lowered. + Means more money can be spent on development. - Locals might not always get a say. Some aid can be tied under condition from donor country.
Fair trade	Technology
This is a movement where farmers get a fair price for the goods produced. + Paid fairly so they can develop schools & health centres. - Only a tiny proportion of the extra money reaches producers.	Includes tools, machines and affordable equipment that improve quality of life. + Renewable energy is less expensive and polluting. - Requires initial investment and skills in operating technology

KPI 9 Case Study: Reducing the Development Gap In The Gambia

Location and Background	Multiplier effect
Gambia is an LIC located on west coast of Africa. Location makes it an attractive place for visitors to explore the tropical blue seas, skies and palm filled sandy beaches in the winter.	-In 20% of GDP comes from tourism -Gambia has few natural resource deposits and relies heavily on remittances from workers overseas and tourist receipts -150,000 people visit per year
Development Problems	
- Tourists do not always spend much money outside their resorts. - Ebola and terrorist threats have had a detrimental effect on tourist numbers - Tourism is seasonal many a winter sun destination	-Jobs from tourism have meant more money has been spent in shops and other businesses. -Government has invested in infrastructure to support tourism. -Poverty rates declines from 58% to 48% Health improvements.

Year 10 Geography

The Changing Economic World

Case Study: Economic Development in India		Case Study: Economic Change in the UK	
KPI10 Location & Importance		KPI 15 UK in the Wider World	
- Following the Second World War, weakened British forces retreated from India and in 1947, India declared independence and formed its own country. - Importance: Large coastline with deep harbours. Connected to Europe via the Suez Canal.		Importance: The UK has one of the largest economies in the world. The UK has global transport links i.e. Heathrow and the Eurostar.	
KPI 11 Impacts of India's development		KPI 16 Causes of Economic Change	
Political	Many factory jobs are for unskilled, young women on minimum pay. India's middle class is growing with more managerial and well-paid jobs, e.g. in IT.	The quaternary industry has increased, whilst secondary has decreased. Numbers in primary and tertiary industry has stayed the steady. Big increase in professional and technical jobs.	
Social		KPI 17 Towards Post-Industrial	
The quality of life has not improved for all Indians. In 2004, 62% of Indian's paid a bribe to get a job done. However, life expectancy has improved from 57 years in 1990 to 68 years in 2015.		The quaternary industry has increased, whilst secondary has decreased. Numbers in primary and tertiary industry has stayed the steady. Big increase in professional and technical jobs.	
KPI12 - Environmental Problems of Industrial Development		KPI 18 Cambridge Science Park	
India has massively increased its greenhouse gas emissions as manufacturing has grown. In Bangalore problems are caused by industrial growth as harmful pollutants have entered the city's 200 lakes. Mining and oil extraction also cause problems because in Mumbai in 2010 6,000 barrels of oil leaked endangering local birds.		A major quaternary industry on the outskirts. Good transport access to the A14 and M11. A good location for sourcing highly educated workers from Cambridge University. Staff benefit from attractive working conditions. Attracts clusters of related high-tech businesses.	
KPI13 The role of TNCs in India		KPI 19 Change to a Rural Landscape - South Cambridgeshire	
TNCs = Transnational corporation Advantages and Disadvantages of TNC investment - Coca-Cola offer training and education. Coca-Cola runs some community schemes in Africa and SE Asia. - Coca-Cola employs more than 25,000 people in India. Indirectly, Coca-Cola has created an estimated 150,000 jobs in related industries. - Coca-Cola draws around 510,000 litres of water each day from boreholes and open wells leading to water shortages in many areas.		Cambridge growing - Current population is 155,000 but will increase to 175,000 by 2026.	
KPI 14 Aid & Debt relief in India		Social	
The 2008/09 oil spills devastated swamps and its ecosystems. Industry has caused toxic chemicals to be discharged in open sewers - risking human health. 80% of forest have been cut down. This also increases CO² emissions. Short term aid – the UK sent £10 million, a rescue team and 1,200 tents after the earthquake in 2001. Long term aid - up until 2015 India received £200 million from the UK to tackle poverty. 'Top down' aid - dams have been built to generate HEP which in turn improves the economy. 'Bottom up' aid – the charity WaterAid trains local people to maintain village handpumps.		Rising house prices have caused tensions in villages. Villages are unpopulated during the day causing loss of identity. Resentment towards poor migrant communities.	
		Economic	
		Lack of affordable housing for local first time buyers. Sales of farmland has increased rural unemployment. Influx of poor migrants puts pressures on local services.	
		KPI 20 Improvements to Transport	
		Road improvements: Building of a south west superhighway (A303) by spending £2bn to widen the road. Railway improvements: London Crossrail costing £16.8bn to improve journey times across London and bring an additional 1.5 million people within 45 minutes of central London. Airport improvements: Build a new runway at Heathrow airport at a cost of £18.6 bn. Predicted to bring more jobs and money to the UK. Many people are concerned about the noise from a new runway. Port improvements: Liverpool2 building cost £400 million and has doubled the ports capacity to 1.5 million containers each year.	
		KPI 21 UK North/South Divide	
		Evidence for a North South Divide: - Lower life expectancy in North, e.g. life expectancy in Manchester 2013 = 71.8 (male) and 77.8 (female). - Higher life expectancy in South, e.g. male life expectancy in East Dorset 2013 = 83.1, female life expectancy in Kensington and Chelsea = 84.7. Solutions: - Businesses such as the BBC have moved their businesses to cities in the North. - Enterprise Zones have been created to encourage new businesses. - The government has proposed improved transport links including a high speed railway link connecting major northern cities	

KPI1 - What are Natural Hazards? Natural hazards are physical events such as earthquakes and volcanoes that have the potential to do damage to humans and property. Hazards include tectonic hazards, tropical storms and forest fires.	What affects hazard risk? • Population growth • Global climate change • Deforestation • Wealth - LICs are particularly at risk as they do not have the money to protect themselves KPI2 Plate tectonics • The crust is split into major sections called tectonic plates. • There are 2 types of crust: Oceanic (thin and younger but dense) and Continental (old and thicker but less dense). • These plates move due to convection currents in the mantle and, where they meet, tectonic activity (volcanoes and earthquakes) occurs. • Plates either move towards each other (destructive margin) away from each other (constructive) or past each other (conservative).
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KPI3 – Causes of Earthquakes and Volcanoes	<table border="1"> <thead> <tr> <th>Volcanoes</th><th>Earthquakes</th></tr> </thead> <tbody> <tr> <td> • Constructive margins – Plate move apart and hot magma rises between the plates e.g. Iceland. Forms Shield volcanoes. • Destructive margins – an oceanic plate subducts under a continental plate. Friction causes oceanic plate to melt and pressure forces magma up to form composite volcanoes e.g. the west coast of South America. </td><td> • Constructive margins – usually small earthquakes as plates pull apart. • Destructive margins – violent earthquakes as pressure builds and is then released. • Conservative margins – plates slide past each other. They catch and then as pressure builds it is released e.g. San Andreas fault. </td></tr> </tbody> </table>	Volcanoes	Earthquakes	• Constructive margins – Plate move apart and hot magma rises between the plates e.g. Iceland. Forms Shield volcanoes. • Destructive margins – an oceanic plate subducts under a continental plate. Friction causes oceanic plate to melt and pressure forces magma up to form composite volcanoes e.g. the west coast of South America.	• Constructive margins – usually small earthquakes as plates pull apart. • Destructive margins – violent earthquakes as pressure builds and is then released. • Conservative margins – plates slide past each other. They catch and then as pressure builds it is released e.g. San Andreas fault.
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Year 10 Geography The Challenge of Natural Hazards					
KPI4 - Effects of Tectonic Hazards Primary effects happen immediately. Secondary effects happen as a result of the primary effects and are therefore often later.	<table border="1"> <thead> <tr> <th>Primary - Earthquakes</th><th>Secondary - Earthquakes</th></tr> </thead> <tbody> <tr> <td> - Property and buildings destroyed. - People injured or killed. - Ports, roads, railways damaged. - Pipes (water and gas) and electricity cables broken. </td><td> - Business reduced as money spent repairing property. - Blocked transport hinders emergency services. - Broken gas pipes cause fire. - Broken water pipes lead to a lack of fresh water. </td></tr> </tbody> </table>	Primary - Earthquakes	Secondary - Earthquakes	- Property and buildings destroyed. - People injured or killed. - Ports, roads, railways damaged. - Pipes (water and gas) and electricity cables broken.	- Business reduced as money spent repairing property. - Blocked transport hinders emergency services. - Broken gas pipes cause fire. - Broken water pipes lead to a lack of fresh water.
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KPI5 - Distribution of tectonic activity Along plate boundaries. On the edge of continents. Around the edge of the Pacific.					

KPI6 - Reducing the impact of tectonic hazards		
Monitoring Seismometers measure earth movement. Volcanoes give off gases.	Protection Reinforced buildings and making building foundations that absorb movement. Automatic shut offs for gas and electricity.	Prediction By observing monitoring data, this can allow evacuation before event. Planning Avoid building in at risk areas. Training for emergency services and planned evacuation routes and drills.

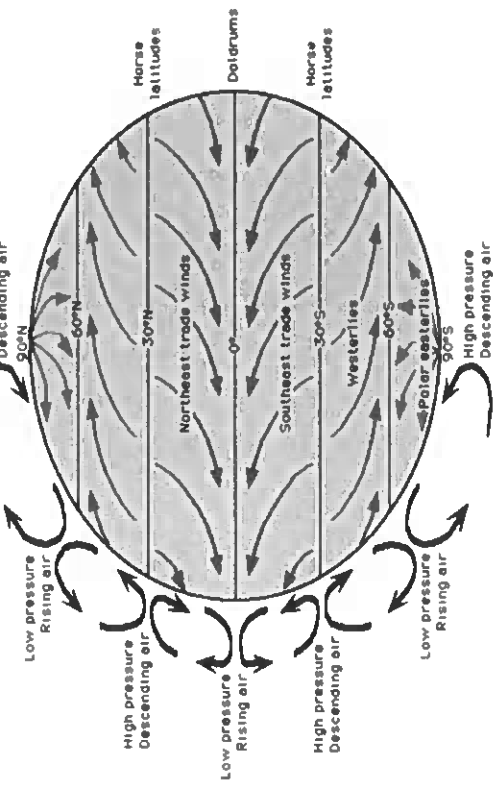
KPI8 - Global atmospheric circulation

At the equator, the sun's rays are most concentrated. This means it is hotter. This one fact causes global atmospheric circulation at different latitudes.

High pressure = dry
 Low pressure = wet

As the air heats it rises – causing low pressure. As it cools, it sinks, causing high pressure. Winds move from high pressure to low pressure. They curve because of the Coriolis effect (the turning of the Earth)

Surface Wind Bands

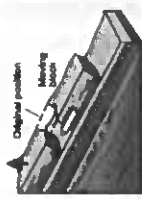
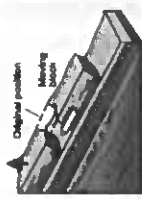
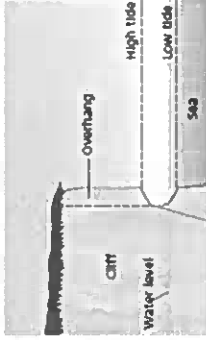
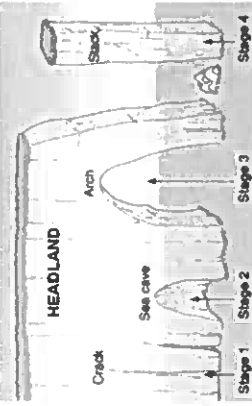
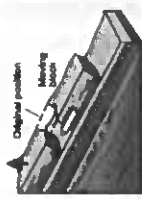


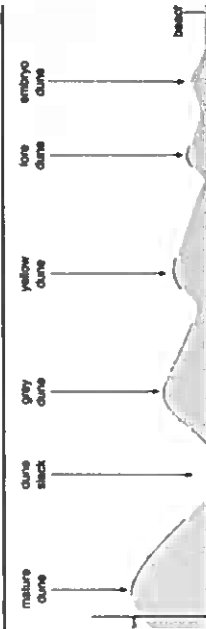
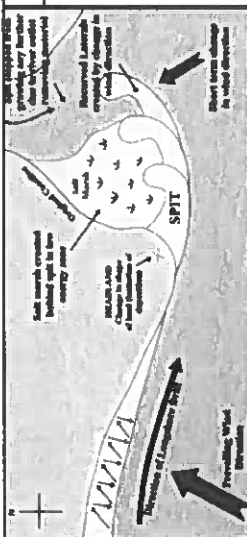
Adapted from Duxbury, Alan C. and Alison B. Duxbury. An introduction to the World's Oceans, 4/e. Copyright © 1994 by C. Brown Publishers, Dubuque, Iowa.

KPI7 - Comparing Earthquakes – Nepal and New Zealand	
Nepal. April 2015. Magnitude 7.8.	New Zealand Feb 2011 Magnitude 6.3
9000 deaths 20,000 injured	185 deaths Significant liquefaction 10,000 buildings demolished
Primary Effects	Secondary Effects
Primary effects happen immediately. Secondary effects happen as a result of the primary effects and are therefore often later.	Christchurch no longer able to host world cup rugby matches – loss of revenue Bottled water distributed
Immediate Responses	Long term responses
Red Cross- tents for 225,000 people. UN and WHO distributed medical supplies to the worst districts. Facebook launched a safety feature so people could indicate they were safe.	Rescue crews came from Japan, UK, Australia Chemical toilets given out to 30,000 residents
Rebuilding. World Heritage Sites reopen June 2015. Longer climbing season.	Roads and houses cleared of silt by August Canterbury Earthquake Recovery Authority was created to organise the rebuild.

Year 10 Geography – The Challenge of Natural Hazards									
KPI9 - Tropical Storms		KPI13 - Typhoon Haiyan, Philippines, November 2013		KPI14 - Climate Change – natural or human?					
Occur in low latitudes between 5° and 30° north and south of the equator (in the tropics). Ocean temperature needs to be above 27° C. Happen between summer and autumn.		Primary Effects At least 6300 killed 5m Storm Surge 90% buildings in Tacloban destroyed		Secondary Effects \$14 Billion of damage Water supply polluted 130,000 houses destroyed, Public Order – Looting Airports unusable for supplies		Evidence for climate change shows changes before humans were on the planet. So some of it must be natural. However, the rate of change since the 1970s is unprecedented.			
KPI10 - Sequence of a Tropical Storm		Immediate Responses 1,069 emergency shelters set up in public buildings. Disaster Emergency Committee helped UK government sent shelter kits for families		Long-term Responses UN appeal raised \$300 million. Typhoon warning systems have been improved. Oxfam replaced fishing boats		KPI15 - Evidence for Climate Change			
1. Air is heated above warm tropical oceans. 2. Air rises under low pressure conditions. 3. Strong winds form as rising air draws in more air and moisture causing torrential rain. 4. Air spins due to Coriolis effect around a calm eye of the storm. 5. Cold air sinks in the eye so it is clear and dry. 6. Heat is given off as it cools powering the storm. 7. On meeting land, it loses source of heat and moisture so loses power.						The Met Office has reliable climate evidence since 1914 – but we can tell what happened before that using several methods. - Ice and Sediment Cores: Ice sheets are made up of layers of snow, one per year. Gases trapped in layers of ice can be analysed. Ice cores from Antarctica show changes over the last 400 000 years. - Remains of organisms found in cores from the ocean floor can be traced back 5 million years. - Pollen Analysis: Pollen is preserved in sediment. Different species need different climatic conditions. - Tree Rings: A tree grows one new ring each year. Rings are thicker in warm, wet conditions. This gives us reliable evidence for the last 10 000 years - Temperature Records: Historical records date back to the 1850s. Historical records also tell us about harvest and weather reports.			
KPI11 - Extreme weather in the UK						KPI17 - Effects of Climate Change			
UK weather is getting more extreme due to climate change. Temperatures are more extreme and rain is more frequent and intense leading to more flooding events. Since 1980 average temperature has increased 1 degree and winter rainfall has increased.						KPI18 – Causes of Climate Change			
								</	

Year 10 Topic 4 UK Landscapes- Coasts

KPI1: Coastal Processes			KPI4: Coastal Erosion		KPI5: Coastal Transportation							
How are waves formed? Waves are formed by wind blowing over the sea. The size of wave is determined by the strength of the wind, the duration of the wind and the distance the wind blows over (fetch). 1. Water has a circular orbit 2. Friction with the seabed changes the circular orbital motion 3. The top of the wave moves faster than the base, creating an elliptical orbit. 4. Wave begins to break as swash Constructive waves are low with long wavelengths. The swash is stronger than the backwash. They build beaches.			Erosion is the removal of material and sculpting of landforms Transportation is the movement of material • Hydraulic Action: When sheer force of water wears away rock • Abrasion: When rocks wear away the cliff-face/river banks • Attrition: When rocks wear each other away • Solution: When dissolved materials wear rock away or are transported • Traction: When rock is moved by rolling along sea/river bed • Saltation: When rock is moved by bouncing along sea/river bed • Suspension: When rock is carried within the river/sea and is off the sea/river bed • Deposition: The dropping of rock		Land Shoreline Surf Zone Sea updrift Direction of prevailing wind Direction of longshore drift SWASH BACKWASH							
Weathering is the decomposition or disintegration of rock in its original place (erosion involves moving rock) <table><tr><th>Chemical</th><th>Mechanical</th></tr><tr><td> • Carbonation. Carbon dioxide dissolved in rainwater forms a weak acid. Reacts with limestone and chalk to form a solution • Hydrolysis – acidic rainwater reacts with minerals in granite • Oxidation – oxygen in rain reacts with iron </td><td> • Freeze thaw. • Salt weathering – salt in sea water expands to form cracks. </td></tr></table>			Chemical	Mechanical	• Carbonation. Carbon dioxide dissolved in rainwater forms a weak acid. Reacts with limestone and chalk to form a solution • Hydrolysis – acidic rainwater reacts with minerals in granite • Oxidation – oxygen in rain reacts with iron	• Freeze thaw. • Salt weathering – salt in sea water expands to form cracks.	Longshore drift is the movement of material along a beach. Where waves approach head on, sediment is simply moved up and down a beach. But if waves approach at an angle, sediment will be moved along the beach.					
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• Carbonation. Carbon dioxide dissolved in rainwater forms a weak acid. Reacts with limestone and chalk to form a solution • Hydrolysis – acidic rainwater reacts with minerals in granite • Oxidation – oxygen in rain reacts with iron	• Freeze thaw. • Salt weathering – salt in sea water expands to form cracks.											
KPI3: Mass Movement Mass movement is the movement of material downslope under the influence of gravity. It is the falling, sliding or flowing of rock, sediment or soil most often along a slip plane (line of weakness). Different types of mass movement can include rockfall, landslides and rotational slumping. <table><tr><th>Rockfall</th><th>Landslide</th><th>Slumping</th></tr><tr><td> Individual fragments of rock fall off cliff usually due to freeze thaw </td><td> Rocks fall in a linear fashion along fault lines </td><td> Occurs on a curved surface lubricated by water </td></tr></table>			Rockfall	Landslide	Slumping	 Individual fragments of rock fall off cliff usually due to freeze thaw	 Rocks fall in a linear fashion along fault lines	 Occurs on a curved surface lubricated by water	Wave cut platforms 1. Waves approach the cliff face and erode the base between the high tide and low tide mark through hydraulic action. 2. Overtime a wave cut notch will form at the base of the cliff. 3. The notch will get larger through hydraulic action and abrasion until it forms an undercut. 4. Eventually the overlying cliff cannot support the weight anymore and will collapse 5. The cliff gradually retreats leaving behind a wave-cut platform. 		Caves, arches and stacks 1. There are lines of weakness in the headlands called <i>faults</i> which are vulnerable to erosion. 2. Hydraulic action and abrasion wears away the rock along the faults to form a crack. 3. Over time this crack will become wider due to hydraulic action and form a cave. 4. Hydraulic action and abrasion will eventually cause the cave to break through the headland to form an arch. 5. The arch is enlarged by erosion at the base and freeze-thaw weathering on the roof 6. Eventually the roof will be worn away and collapse to form an isolate pillar known as a stack. 7. The stack becomes eroded and collapses leaving a stump. 	
Rockfall	Landslide	Slumping										
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KPI6: Landforms of erosion												

Landforms of deposition																											
KPI 7: Sand dunes - Obstacles such as drift wood gets dropped on the beach - The wind blows the sediment up the beach and the sand gets trapped around the obstacles forming embryo dunes. - Colonising pioneer plants like marram grass grow on the dune and stabilise it with their roots to form <i>fore dunes</i> and <i>yellow dunes</i>. - Marram grass is adapted to the windy exposed conditions and has long roots to bind the sand together and stabilise the dunes. - In time, rotting vegetation adds organic matter to the sand making it more fertile. These dunes are called the grey dunes. - Wind can form depressions in the sand called <i>dune slacks</i> in which ponds may form.																											
KPI 8: Spits - Longshore drift moves material along the coastline in the direction of the prevailing wind. The angled swash brings material onshore, while the backwash removes the material in a straight line, perpendicular to the coastline. - This continues in a zig zag movement along the coast. - If the coast changes direction, material will continue to be deposited in the original direction in a shallow sea. - This build up of material is called a spit. - A spit needs a constant supply of material, or it will be removed by tides. - Over time, the spit grows and develops a hook (called a recurved end) if wind direction changes further out. - Waves cannot get past a spit, which creates a sheltered area where silt is deposited and mud flats or salt marshes form.																											
KPI 9: Bar - Longshore drift moves material along the coastline in the direction of the prevailing wind. The angled swash brings material onshore, while the backwash removes the material in a straight line, perpendicular to the coastline. - This continues in a zig zag movement along the coast. - The deposited material eventually joins up with the other side of the bay and a strip of deposited material blocks off the water in the bay. - The area behind the newly formed bar is known as a lagoon.																											
KPI 10: Management Strategies <table><tr><th colspan="2">Hard Engineering</th></tr><tr><th>Strategy</th><th>Benefits</th></tr><tr><td>Sea wall – concrete structure at top of beach acts as a barrier to sea</td><td>V effective, can develop top for walking, stalls etc</td></tr><tr><td>Rock Armour – large boulders at foot of cliff to reduce force of waves</td><td>Relatively effective at reducing force of waves, relatively cheap</td></tr><tr><td>Gabions – wire cages filled with rocks. Permeable so improve cliff drainage</td><td>Flexible, cheaper £50 000 / 100 metres, quick to construct</td></tr><tr><td>Groynes – wooden or stone fences built at right angles to coast to stop longshore drift</td><td>Create wider beaches, cheap</td></tr></table> <table><tr><th colspan="2">Soft Engineering</th></tr><tr><th>Strategy</th><th>Benefits</th></tr><tr><td>Beach nourishment / reprofiling. Adding sand to a beach or changing its shape e.g. high ridges</td><td> - Looks natural - Creates amenity for tourism - Cheap </td></tr><tr><td>Dune Regeneration</td><td> - Considered natural - Creates area for picnics etc - May increase biodiversity </td></tr></table> <table><tr><th colspan="2">Managed Retreat</th></tr><tr><th>Strategy</th><th>Benefits</th></tr><tr><td>Doing nothing. Allow sea to move into area</td><td> - Long term solution with low maintenance - A natural buffer - New ecosystem created - Biodiversity improves, eg bird watching - More attractive </td></tr></table>		Hard Engineering		Strategy	Benefits	Sea wall – concrete structure at top of beach acts as a barrier to sea	V effective, can develop top for walking, stalls etc	Rock Armour – large boulders at foot of cliff to reduce force of waves	Relatively effective at reducing force of waves, relatively cheap	Gabions – wire cages filled with rocks. Permeable so improve cliff drainage	Flexible, cheaper £50 000 / 100 metres, quick to construct	Groynes – wooden or stone fences built at right angles to coast to stop longshore drift	Create wider beaches, cheap	Soft Engineering		Strategy	Benefits	Beach nourishment / reprofiling. Adding sand to a beach or changing its shape e.g. high ridges	- Looks natural - Creates amenity for tourism - Cheap	Dune Regeneration	- Considered natural - Creates area for picnics etc - May increase biodiversity	Managed Retreat		Strategy	Benefits	Doing nothing. Allow sea to move into area	- Long term solution with low maintenance - A natural buffer - New ecosystem created - Biodiversity improves, eg bird watching - More attractive
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KPI 11 – Example of Management Strategies Example: Lyme Regis is a small coastal town on the south coast of England. Part of the World Heritage Site know as the Jurassic Coast. Popular tourist destination. Population of 4000 –this increases to 15,000 in summer. What is the problem? - Town built on unstable cliffs. - Coastline is eroding more rapidly than anywhere in Europe due to powerful waves from the South West. - Many properties been damaged or destroyed. - Sea walls have been breached many times. Management strategies 1990s – new sea wall and promenade. Emergency work to stabilize cliffs by putting hundred of large nails to hold cliffs together. 2005-07 Construction of sea wall, large sand and shingle beach created. Extension of rock armour 2013/015 New sea wall in front of old wall. Extensive nailing, piling and drainage to stabilize the cliffs.		Positives - New beaches have increased visitor numbers and sea front businesses are thriving - New defenses have stood up to recent storms - Harbor is now better protected which benefits fishermen and boat owners Negatives - Increased visitors have led to conflicts with locals who think litter and traffic have increased - New sea wall may interfere with coastal processes affecting stretches of coast further along																									

Year 10 French- Au collège (School)

1	My school is called Five Acres	Mon collège s'appelle Five Acres
2	And it is a small school for 11 to 16-year olds	et c'est une petite école de 11 à 16 ans
3	Near to Gloucester in the southwest of England	près de Gloucester dans le sud-ouest de l'Angleterre
4	Before, when I was younger, my primary school was called Berry Hill	Avant, quand j'étais plus jeune, mon école primaire s'appelait Berry Hill
5	I loved it because the teachers were kind	je l'adorais car les profs étaient sympas
6	And we played instead of doing a lot of work!	et on jouait au lieu de faire beaucoup de travail!
7	My favourite subject is PE because it is easy.	Ma matière préférée c'est l'EPS parce que c'est facile.
8	Furthermore, I am good at sport.	En plus, je suis fort en sport.
9	The day begins at eight thirty and finishes at 3 o'clock	La journée commence à huit heures et demie et finit à trois heures

10	At my school you must wear a uniform	A mon école, il faut porter un uniforme
11	For me, it is reasonable because fashion doesn't have a place in school.	Pour moi, c'est raisonnable parce que la mode n'a pas de place à l'école
12	However, it is forbidden to use a mobile phone	Cependant, il est interdit d'utiliser un portable
13	And I think that it is really unfair	et je pense que c'est vraiment injuste
14	Because I use my phone to do my homework	car j'utilise mon portable pour faire mes devoirs.
15	Yesterday morning I studied maths and English	Hier matin j'ai étudié les maths et l'anglais.
16	I ate lunch in the canteen.	J'ai mangé le déjeuner à la cantine.
17	Next year I am going to participate in a school exchange	L'année prochaine je vais participer à un échange scolaire
18	where I am going to go to France to practice French	où je vais aller en France pour pratiquer le français

19	It will be interesting because I can speak foreign languages	Ce sera intéressant parce que je peux parler les langues étrangères
20	I have the chance to improve my French	J'ai l'occasion d'améliorer mon français
21	Also I will see the French culture	Aussi je verrai la culture française

Opinions	
malgré le fait que -In spite of the fact that je dois avouer que - I must admit that j'attends ça avec impatience - I'm excited for it/that (I await it with impatience) j'en ai marre - I'm tired of it soit...soit... - either...or... je suis mal à l'aise avec - I am uncomfortable with	
Subjunctive	
bien que je sois (paresseux/se) - even though I am (lazy) il faut que je fasse.. - I have to do.. c'est dommage qu'il soit - it's a shame that it's	

je doute qu'il soit important de + infinitive- I doubt that it's important to...	Si clauses + conditional
si j'avais l'occasion- if I had the opportunity (I would...)	
si j'étais riche- If I were rich (I would...)	
si j'avais le temps - If I had the time (I would...)	
si je pouvais - If I could (I would...)	
Past Tense	
j'aurais aimé + infinitive- I would have liked (to...)	Connectives
j'avais décidé que- I had decided that	
j'avais toujours rêvé de + infinitive- I had always dreamed of...	
je me suis rendu(e) compte que- I realised that	
j'étais ravi(e) que- I was delighted that...	
j'étais en train de + infinitive- I was in the middle of (doing...)	
néanmoins- nevertheless	
du coup- thus/therefore	
au lieu de- instead of	
après avoir fait cela- After having done that...	

YEAR 10- SPANISH- CUSTOMS AND FESTIVALS

16	Last year I celebrated Christmas with my friends	El año pasado celebré la navidad con mis amigos
17	I got lots of presents and danced a lot	Recibí muchos regalos y bailé mucho
18	We ate chinese food, which was delicious	Comimos comida china, que estaba rica
19	Last year I went to a music Festival in Spain	El año pasado fui a un festival de música en España
20	I danced, sang and ate so much	bailé, canté y comí muchísimo
21	In the future I would like to go to Coachella	En el futuro me gustaría ir a la Coachella
22	In order to see my favourite singers	Para ver a mis cantantes favoritos

EN EL RESTAURANTE	
I would like to book a table for 5 people	Me gustaría reservar una mesa para cinco personas
As a starter I am going to have seafood	De primero voy a tomar mariscos
Could I have the bill, please?	La cuenta, por favor?
The food is cold	la comida está fría
I need a knife	necesito un cuchillo
the plate is dirty	el plato está sucio

This is how your MFL low stake quiz should look:

Questions	Answers - Test yourself
1. Live in a town which calls itself (in English) 'York'	J'habite dans une ville qui s'appelle York
2	J'habite dans une ville qui s'appelle York
3	J'habite dans une ville qui s'appelle York
4. and which (in English) is the 'cradle of the world'	et qui se trouve dans le sud-ouest de l'Angleterre
5	et qui se trouve dans le sud-ouest de l'Angleterre
6	et qui se trouve dans le sud-ouest de l'Angleterre
7	et qui se trouve dans le sud-ouest de l'Angleterre
8. it's a small town near the Bristol	C'est une petite ville près de Bristol
9	C'est une petite ville près de Bristol
10	C'est une petite ville près de Bristol

YEAR 10- SPANISH- CUSTOMS AND FESTIVALS

1	For breakfast I have toasts and eggs	Desayuno tostadas y huevos
2	And I drink orange juice or milk	Y bebo zumo de naranja o leche
3	For Lunch I have meat or fish	Como/almuerzo carne o pescado
4	Usually I get up at 7 , then I have a shower	Generalmente me levanto a las siete, luego me ducho
5	I leave home early and come back late	Salgo de casa temprano y vuelvo tarde
6	I have fever and my throat hurts	Tengo fiebre y tengo dolor de garganta
7	for how long?	Desde hace cuánto tiempo?
8	for 5 days	Desde hace cinco días

9	you must rest and drink plenty of water	Tiene que descansar y beber mucha agua
10	also, take these tablets and this syrup	Además, tome estas pastillas y este jarabe
11	Mediterranean diet is very varied , healthy and tasty	La dieta mediterránea es muy variada, sana y sabrosa
12	I would like to try Ceviche from Perú	Me gustaría probar el Ceviche de Perú
13	I would like to go to “Los San Fermín”	Me gustaría ir a los “San Fermín”
14	people run in front of the bulls and wear a white clothes	La gente corre delante de los toros y llevan ropa blanca
15	they also throw fireworks and burn wooden figures	Además, lanzan fuegos artificiales y queman figuras de madera

Year 10 Full course RE AQA Religious Studies A – Theme B: Religion and Life

Key Words			
Abortion	The ending of a pregnancy	Liberal	A type of Christian who reads the Bible as stories, myths and metaphors
Big Bang Theory	Scientific theory of the creation of the universe through a large explosion	Literalist	A type of Christian who believes the Bible is literally true + the word of God
Dominion	The power humans have over God's creation	Natural Resources	Materials found in nature (e.g. coal, oil) which are exploited by humans
Euthanasia	The painless killing of a terminally ill patient	Purgatory	Where Catholics believe souls are purified after death + before heaven
Evolution	Scientific theory of the development of humans from apes	Quality of Life	How easy or difficult someone's life is – e.g. cancer causes a low quality of life
Heaven	Paradise where those judged good go after death to be forever with God	Sanctity of Life	The belief that all life is sacred as man is made in God's image
Hell	Damnation where those judged bad go after death to be forever without God	Stewardship	The responsibility God gave humans to look after the world
Judgement	After death Christians believe you are judged by God	Vegetarian	The choice not to eat animals

Key Ideas	
Ideas about Creation	<u>Christian Ideas</u> - Designed and made by God - The creation story in Genesis 1 says that God made the world in six days - Literalist Christians believe this is factually true and that God created Adam + Eve - Liberal Christians say the creation story in the Bible is just a story and may agree with scientific ideas about creation <i>"In the beginning God created the heavens and the earth" – Genesis 1:1</i>
	<u>Scientific Ideas</u> - The Big Bang Theory argues that the universe started as a dense collection of mass which massively expanded creating stars, galaxies and planets - The Theory of Evolution comes from Charles Darwin who observed that animals change over time and argued that humans were not designed by God but evolved from apes - These theories do not fit with a literalist Christian's view but could fit with a liberal view

Stewardship + Dominion	<u>Stewardship</u> - Stewardship means Christians have a duty to look after the environment on behalf of God and for future generations - This can be seen where Christians campaign for environmental charities or choose to reduce waste and recycle <i>"Rule over [...] every living creature" - Genesis 1:28</i>	<u>Dominion</u> - Dominion is the idea that God gave humans power and authority over the world - Some Christians believe this allows them to use natural resources (e.g. oil and coal) and animals to make their lives better - In Genesis God gives Adam and Eve the power to name the animals and rule over them
Abortion	- Abortion is the removal of a foetus from the womb in order to end a pregnancy. - In the UK (except Northern Ireland) it is legal during the first 24 weeks of pregnancy unless the mother's life is in danger or the foetus is severely deformed. ☒ The Catholic Church is strongly against abortion. They believe in sanctity of life , the idea that life is a sacred gift from God which only God can take away. They see the foetus as a living thing. ☑ The Church of England think abortion is sometimes acceptable as a pregnancy as a result of rape or where the child would be very ill would lead to a very poor quality of life	- Abortion is the removal of a foetus from the womb in order to end a pregnancy. - In the UK (except Northern Ireland) it is legal during the first 24 weeks of pregnancy unless the mother's life is in danger or the foetus is severely deformed.
Euthanasia	- Euthanasia is the painless killing of a patient with a terminal illness. - Voluntary euthanasia is where the patient asks for their life to be ended. - Non-voluntary euthanasia is where the patient is not capable of asking to die, perhaps in a coma. - All forms of euthanasia are currently illegal in the UK. ☒ The Catholic Church is strongly against euthanasia. They believe that only God can give and take life and that life is sacred (sanctity of life) ☑ Some liberal Christians think euthanasia can be an act of mercy which Jesus tells them is a good thing to do, this is especially the case when someone's quality of life is very poor.	- Euthanasia is the painless killing of a patient with a terminal illness. - Voluntary euthanasia is where the patient asks for their life to be ended. - Non-voluntary euthanasia is where the patient is not capable of asking to die, perhaps in a coma. - All forms of euthanasia are currently illegal in the UK.
The Afterlife	- Christians believe that when you die you will be judged and that those who are found to be good will go to heaven but those who have sinned and gone against God's wishes will go to hell . Roman Catholics believe that there is a middle stage called purgatory where souls go to be purified of sin before they go to heaven	- Christians believe that when you die you will be judged and that those who are found to be good will go to heaven but those who have sinned and gone against God's wishes will go to hell . Some Christians believe that Jesus will return on a future Day of Judgement when all souls will be judged

Full course Year 10 GCSE Paper One –Buddhist belief and teaching

Key terms:

Dhamma	The Buddha's teachings – how to reach the state of enlightenment
Dependent arising	The idea that everything is dependent on everything else
Anicca	One of the three marks of existence- impermanence
Anatta	One of the three marks of existence- no fixed self
Dukkha	Suffering or dissatisfaction – something Buddhists seek to overcome
Siddhartha Gautama	The religious teacher and founder of Buddhism
Buddha	An enlightened being
Jakaka 075	A book of popular tales about the life of the Buddha
Nibbana	A state of complete enlightenment which lies outside the cycle of samsara
Tanha	Craving – second noble truth
Enlightenment	A state of spiritual wisdom which arises from understanding the nature of reality
Ascetic	A lifestyle of strict self-denial – rejected by Siddhartha for the Middle Way
Three watches	Three realisations Siddhartha made in order to become enlightened
Samsara	The cycle of life, death and re-birth

KPI3: To examine what is meant by the three marks of existence.

The Three Marks of Existence are the fundamental Buddhist beliefs about the nature of human existence.

- Suffering (Dukkha):** Suffering is part of the human condition, a natural result of anatta and anicca. It can only be overcome by becoming enlightened.
- Impermanent (Anicca)** that everything is impermanent and continually changing. Failure to recognise this leads to clinging and suffering.
- Having no permanent self (Anatta).** The Buddha taught that there is no fixed part of a person that does not change. There is no permanent self.

KPI4: To understand why the four noble truths are important to Buddhist

I teach suffering, its origin, cessation and path. That's all I teach"

- The truth of suffering (**Dukkha**) Suffering comes in many forms.: old age, sickness and death.
- The truth of the origin of suffering. The three roots of evil/**three poisons** Greed and desire.

One of the main causes of suffering is tanha or craving

KPI5: To understand why the four noble truths are important to Buddhists.

- The **third** noble truth teaches that there is an end to suffering. It can be achieved by overcoming ignorance and craving.
- Nibbana** literally means the extinction- the extinction of the three poisons.
- The fourth noble truth '**magga**' is seen as the cure to end suffering.
- The fourth noble truth is the **eightfold path**, which consists of 8 aspects that Buddhist can practice and follow in order to achieve **enlightenment**.
The eightfold path is split into ethics, meditation, wisdom.

KPI1: Buddha's early life and four sights

Buddha means 'enlightened'. Siddhartha Gautama, was a prince born into a rich family. He had an easy life in **luxury**, living in what is now Nepal.

He was inspired to leave this life by the **Four Sights**.

The Four Sights Siddhartha saw on his trip outside the palace were:

- An old man – everyone ages
- An ill man – everyone becomes ill
- A dead man – all things die
- A holy man – the only answer to these problems

KPI2: Buddha's enlightenment and the three watches

After seeing the four sights, Siddhartha rejected his life of luxury and left the palace. Siddhartha lived for six years as an **ascetic** (someone who denies themselves worldly pleasures).

After this time, he realised that this was not the answer and came up with the idea of the '**Middle Way**' between luxury and asceticism.

Siddhartha meditated under a tree and was tempted by the demon **Mara**. Over three watches of the night he became **enlightened** and from then on known as the **Buddha**.

The three watches of the night

- All previous lives**
- The cycle of samsara (life, death and rebirth)**
- All beings suffer (Dukkha)**

Hospitality and Catering - Unit 2

AC1.1 Nutrition: Describe functions of nutrients in the human body.

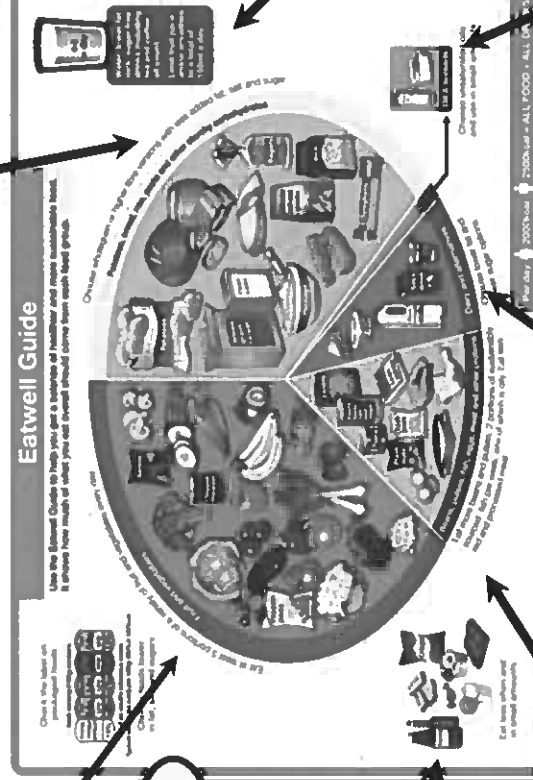
Fruits & Vegetables

- Eat 5 portions a day!
- Choose a variety
- Provides fibre for healthy digestion
- Provides vitamins and minerals for healthy body functions and immune system

Starchy Foods

- Provide slow release carbohydrate used by the body for energy
- Choose wholegrains for increased fibre (good digestion, reduced risk of heart disease)

38%



Fatty and Sugary Foods

- These are the danger foods!
- They are not part of a healthy diet
- Eat them only occasionally
- Eating too much fatty and sugary processed food is linked to increased risk of weight gain/obesity, diabetes, tooth decay and cardiovascular disease

0%

Beans, Pulses, Eggs, Meat, Fish

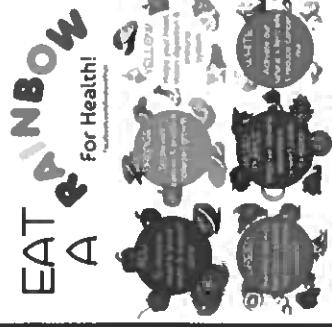
- Provide protein for growth, repair and maintenance of body cells
- Choose a combination of plant proteins
- Avoid eating too much processed meat like bacon and sausages as these are linked with increased risk of bowel and stomach cancer

12%

Dairy Foods

- Provide calcium for healthy bones, teeth and nails
- The body needs Vitamin D to absorb calcium effectively

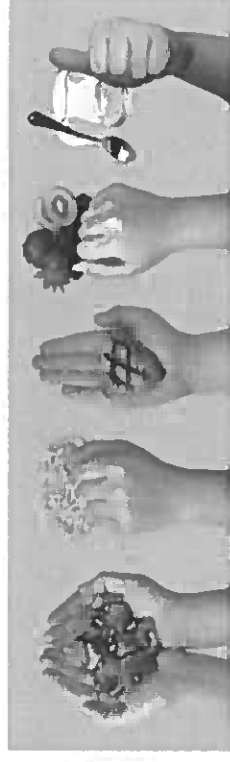
8%



Portion Control!

Healthy diets not only have the correct balance, but have the right portion sizes. Here is a 'handy' guide...

- Vegetables** = double cupped palm.
- Grains/Starches** = clenched fist.
- Protein** = palm of hand.
- Fruits** = clenched fist.
- Thumb** = fats.



Water Intake

A balanced diet must include water, it is required for nearly all brain and other bodily functions
See slide 2 for more details on water

Oils & Spreads

Provide fat soluble vitamins A, D, E & K
Are high in calories & energy so keep use to a minimum
It is recommended to choose unsaturated oils like olive oil

The Eatwell Guide is the UK Healthy Eating Model. It shows what we should eat as a balanced diet. The size of the sections represents the proportion of our diet that particular food group should make up. The Eatwell Guide was updated in 2016 to take into account scientific opinion and public opinion. The main change was that sugary and fatty foods are shown off the plate as they are not part of a healthy diet.

AC1.1 Nutrition: Describe functions of nutrients in the human body.

Water intake

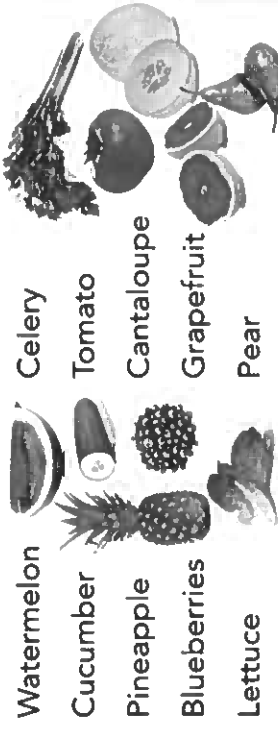
Click [here](#) to watch video on water

Water makes up just over 2/3 of the human body and is required for:

- Maintain body temperature
- Metabolise fat
- Aid digestion
- Lubricate organs
- Transport nutrients
- Flushes out waste and toxins



Foods Rich in Water

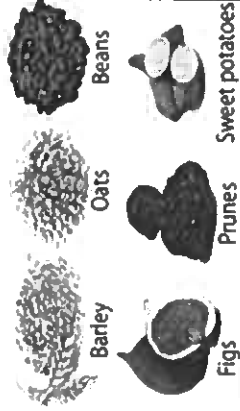


FIND OUT MORE HERE: <https://www.nhs.uk/live-well/eat-well/water-drinks-nutrition/>

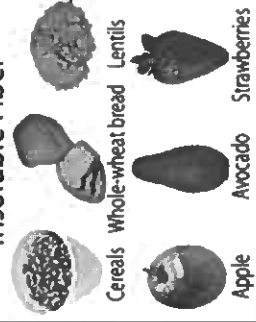
Keeping hydrated is important. It is recommended that 6-8 glasses of water or other fluid are consumed everyday to replace normal water loss, rather than to obtain any

broader health benefits

Soluble Fiber



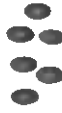
Insoluble Fiber



The Bristol Stool Chart

The Bristol stool chart shows how the shape of different stools (poos) on a continuum. Both dietary fibre and water play a HUGE role in keeping the digestive system functioning properly. Too little water and/or fibre can result in constipation (the Type 1 and 2 stools)

Bristol Stool Chart

Type 1

Separate hard lumps, like nuts (hard to pass)

Type 2

Sausage-shaped but lumpy

Type 3

Like a sausage but with cracks on the surface

Type 4

Like a sausage or snake, smooth and soft

Type 5

Soft blobs with clear-cut edges

Type 6

Fluffy pieces with ragged edges, a mushy stool

Type 7

Watery, no solid pieces. Entirely Liquid

Soluble fibre dissolves in water and the insoluble kind doesn't. **Insoluble** helps absorb water and bulk up stools. **Soluble** helps reduce blood cholesterol and sugar.

Fibre intake

What is it?

Fibre is found in fruits and vegetables, nuts, seeds, wholegrain cereal flours and products. It is not digestible and passes through the digestive system, forming the bulk of our stools (poo).

Dietary fibre has many health benefits:

- It can reduce your risk of heart disease, diabetes and some cancers, and also help weight control.
- Fibre is also important for digestive health - fibre bulks up stools and holds water in them, making them softer and easier to pass. It also makes waste move through the digestive tract more quickly, which is better for the gut and can help to prevent constipation.
- Some types of fibre can be fermented by gut bacteria, producing substances that appear to be good for gut health. Providing 'food' for gut bacteria can also help increase the number of healthy bacteria in the gut.

How FIBRE Much do we Need?

30g a day for adults

2-5 years 15g per day, 5-11 years 20g per day, 11-16 years 25g per day, 16-18 years 30g per day

To increase your fibre intake you could:

- Choose a high fibre breakfast cereal e.g. bran flakes, or porridge
- Choose whole grains like whole-wheat pasta, bulgur wheat or brown rice, wholemeal bread
- Go for potatoes with skins
- For snacks try fruit, vegetable sticks, rye crackers, oatcakes, unsalted nuts or seeds
- Include plenty of vegetables with meals – either as a side dish or added to sauces, stews or curries
- Add pulses like beans, lentils or chickpeas to stews, curries and salads
- Eat fruit!
- Add nuts and seeds to recipes

AC1.1: Reference Intake

The NHS recommends the following intake of each nutrient per day:

NHS		
Nutrient	Amount	Calories per gram
Energy (calories)	2,000kcal	
Carbohydrate of which sugars	At least 260g 90g	4kcal
Protein	50g	4kcal
Fat of which saturates	Less than 70g Less than 20g	9kcal
As you can see below we need much less of the micronutrient: Vitamins and minerals. There are slight differences between males and females.		
Nutrient	Males	Females
Vitamin A	0.7mcg	0.6mcg
Vitamin D	10mcg	
Vitamin E	4mg	3mg
Vitamin K	1mcg per kg of body weight	
Vitamin B	Thiamine: 1mg Riboflavin: 1.3mg Vitamin B12: 1.5mcg	Thiamine: 0.8mg Riboflavin: 1.1mg Vitamin B12: 1.5mcg
Vitamin C	40mg	
Sodium (Salt)	Less than 6g	
Iron	All (M) 8.7mg	(F) 19-50yrs 14.8mg / 50yrs+ 8.7mg
Calcium	700mg	

What are
Calories
click here

Adult reference intakes

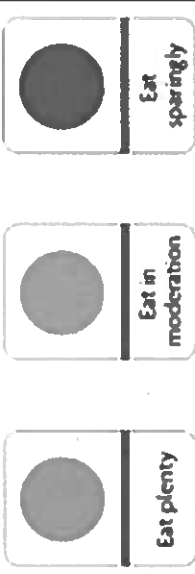
Unless the label says otherwise, RI values are based on an average-sized woman doing an average amount of physical activity. This is to reduce the risk of people with lower energy requirements eating too much, as well as to provide clear and consistent information on labels.

As part of a healthy balanced diet, an adult's reference intakes ("RIs") for a day are:

- Energy: 8,400 kJ/2,000kcal
- Total fat: 70g
- Saturates: 20g
- Carbohydrate: 260g
- Total sugars: 90g
- Protein: 50g
- Salt: 6g

Click here
to find out
more about
food labels

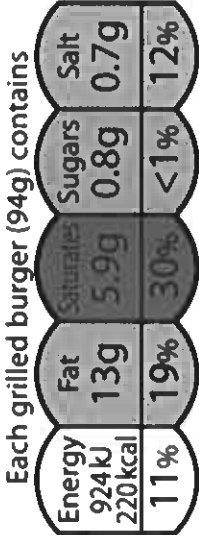
Red colour coding means the food or drink is high in this nutrient and we should try to have these foods less often or eat them in small amounts.
Amber means medium, and if a food contains mostly amber you can eat it most of the time.
Green means low, and the more green lights a label displays the healthier the choice.



Portion/Serving size is indicated on the label.
This is NOT always the whole pack!

Front of pack nutrition labelling is optional

Traffic light system indicates with colour how much of intake is needed.
Easy to see, quick to take in



Each grilled burger (94g) contains

of an adult's reference intake
Typical values (as sold) per 100g: Energy 966kJ / 230kcal

Energy intake as a percentage of RI

Current Healthy Eating Advice

Fat intake



Saturated fat

We are all eating too much unhealthy fat

How much is too much?

[Click here to find out more about Fat](#)

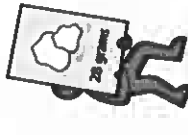
4-6 years



7-10 years



11+ years



How much is too much?

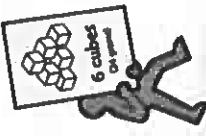
The maximum daily amounts of added sugar are:

[Click here to find out more about sugar](#)

4 to 6 years



7 to 10 years



11+ years



Salt intake

[Click here to find out more about salt](#)

AGE	Target Maximum Salt Intake (grams)
0 to 6 months	less than 1g daily
7 to 12 months	1g per day
1 to 3 years	2g per day
4 to 6 years	3g per day
7 to 10 years	5g per day
From age 11 onwards	6g per day (as for adults)

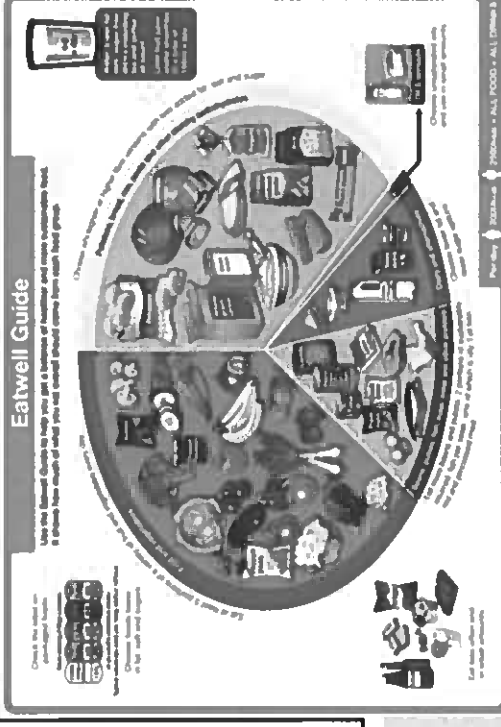
8 Tips for Healthy Eating

1. Eat more fibre
2. Eat more fruits and Vegetables
3. Eat more oily fish
4. Eat less salt
5. Eat less fat
6. Eat less sugar
7. Choose whole grains
8. Drink 6-8 glasses of water per day

What counts as 5 A Day?

For kids, the amount they should eat depends on their size and age. As a rough guide, one portion is the amount they can fit in the palm of their hand.

For adults, a portion is 80g fruit of vegetables or 30g of dried fruit.



2016 Update from Public Health England - The latest advice on Vitamin D intake



What is the new vitamin D advice?

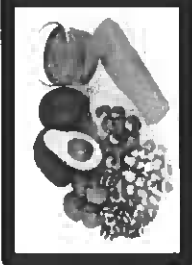
The new advice from PHE is that adults and children over the age of one should consider taking a daily supplement containing 10mcg of vitamin D, particularly during autumn and winter.

People who have a higher risk of vitamin D deficiency are being advised to take a supplement all year round.

SACN's review concluded that these at-risk groups include people whose skin has little or no exposure to the sun, like those in care homes, or people who cover their skin when they are outside.

People with dark skin, from African, African-Caribbean and South Asian backgrounds, may also not get enough vitamin D from sunlight in the summer. They should consider taking a supplement all year round as well.

Healthy Eating Guidelines in the UK are set by Public Health England

M A C R O N U T R I E N T S				
Nutrient	Source	Function	Effects too little (deficiency)	Effect of too much (access)
Carbohydrates Click here to see a video.	Starches – found in cereal grains such as rice, wheat, oats, plus starchy tubers (potatoes and sweet potatoes) and vegetables (carrots, beets, corn) Sugars – lactose found in milk and dairy, fructose found in honey, fruits and some vegetables (peppers, tomatoes etc.)	Two types: 1. Starchy (complex) provide energy when broken down – slow release energy to the body (whole grain provide slower release carbohydrates) 2. Sugary (simple) provide quick release energy to the body's cells.	Deficiency of carbohydrates is extremely rare in the UK. Long term lack of carbohydrates in the diet can cause Ketosis – a condition where the body switches to using protein as an energy source. Visible symptoms - lack of energy and weight loss. Non- visible symptoms - Not enough fibre from wholegrains foods leads to constipation and other intestinal problems.	If not used for energy it becomes stored as fat. Visible symptoms weight gain and obesity. Non- visible - eating too much non refined(white carbs) leads to tooth decay, raising blood sugar levels and type 2 diabetes.
Proteins Click here for video	High Biological Value (HBV) protein: Meat, fish, poultry, eggs, Low Biological Value (LBV) protein: Tofu, beans, nuts.	Protein is digested by the body into its component parts – called amino acids. There are 8 which are essential for adults and 12 for children. HBV protein foods contain all the essential amino acids.	Visible symptoms - • Wasting of muscle & muscle loss • Oedema – build up of fluids in the body • Slow growth in children Severe deficiency leads to kwashiorkor (bloating of the stomach) Non-visible symptoms - weaker immune system which needs protein to function properly.	Visible symptoms excess stored as fat, lead to weight gain and obesity. Non-visible symptoms - Puts a strain on how well the kidneys work.
Fats Click here for video Click here for more info	Butter, cheese, dairy foods including yogurt, crème fraîche, milk Oils, lard, suet, dripping. 	Fat is a term used to describe lipids – this can refer to solid fats and oils. Fat is broken down by the body and used for energy, Also used to provide warmth when stored under the skin. Is a dietary carrier of fat soluble vitamins A, D, E & K. Two types of fats: Unsaturated and saturated. 	Visible symptoms - Weight loss over time as the body uses stores of fat. Person feels cold as fat under skin acts as insulator. Non-visible symptoms - Bruising of the bones as they are not protected. Lack of fat in the diet can lead to deficiencies of fat soluble vitamins A, D, E & K.	Common issue in the UK Visible symptoms - Stored under the skin in adipose tissue cells, which leads to disease such as type 2 diabetes, obesity and heart disease and high bloody pressure. Non-visible symptoms - Internal organs store fat which prevents them working properly. Fat blocks arteries.

Unsaturated Fat:

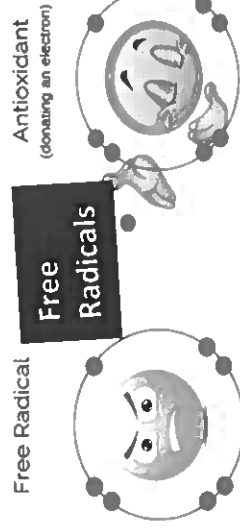
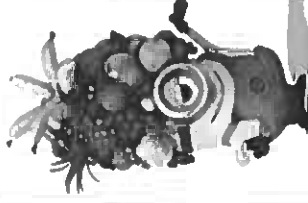
- **Liquid at room temperature.**
- **Mainly from non-animal (plant) sources.**
- **Can lower blood cholesterol.**

Saturated Fat:

- **Solid at room temperature.**
- **Mainly from animal sources. *With the exception of palm and coconut oil.**
- **Causes high blood cholesterol.**

Vitamins and Minerals are chemicals found naturally in food. With the exception of Vitamin D, which can be manufactured through the action of sunlight on the skin, vitamins cannot be made by the body, and must be provided by the diet. They are needed in minute (tiny) amounts to perform specific functions and fall into two different classes:

Water Soluble	Fat Soluble
C	A
B group	D
	E
	K



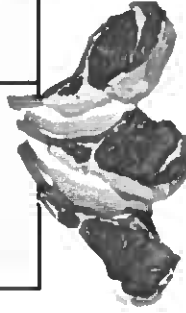
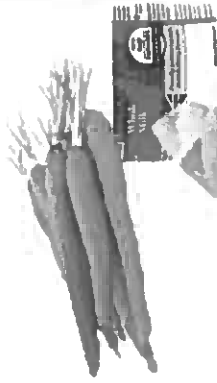
Essentially, damaged oxygen molecules with an extremely unstable atomic structure. They attack fats and proteins all over the body, especially those in membranes that line the blood vessels, the skin and other connective tissue. They can make you age a lot quicker! Anything we do to raise our metabolic rate (like exercise) accelerates the production of free radicals.

Water Soluble	Needed For	Found In	Deficiency/ Excess
C Antioxidant	Normal structure and function of connective tissue e.g. collagen. Helps healing process. Antioxidant (protects from free radicals). Helps absorb iron in the body. Improves immune system.	Main sources – from plants – fruits and vegetables. Milk and liver contain small amounts.	Deficiency - Scurvy, very rare symptoms include bleeding gums, wounds not healing properly, tiredness. Lack of vitamin C effects absorption of iron. Excess is eliminated from the body within 24 hours so not a problem.
B1 Thiamin	Normal function of the nervous system and heart	Whole grains, meat, flour and breakfast cereals.	Deficiency -Beri-beri (disorder of the nervous system). Excess-body excretes it.
B2 Riboflavin	Release of energy from food.	Milk, eggs, green vegetables, cereals.	Deficiency - Dry cracked skin around the mouth and nose. Excess-body excretes it.
B3 Niacin	Energy release, skin and membranes.	Milk, eggs, cheese, meat.	Deficiency -disease pellagra. Symptoms can include dermatitis, dementia and diarrhoea. Excess-body excretes it.
B9 Folate	Red blood cells and nervous system.	Green leafy vegetables.	Deficiency - can lead to anaemia. Symptoms can include insomnia, depression and forgetfulness. Excess-body excretes it.
B12 Colbalbumin	Cell division and blood formation. Normal structure of nerves.	Animal sources – milk, meat and eggs. Some algae and bacteria can produce B12.	Deficiency - Anemia (rare), may be found in vegetarians. Excess-body excretes it.

AC1.1 Nutrition: Describe functions of nutrients in the human body - MICRONUTRIENTS

AC1.3 Explain characteristics of unsatisfactory nutritional intake.

Fat Soluble	Needed For	Found In	Deficiency/ Excess
A Antioxidant	• Needed for structure and functioning of the skin and mucous membranes, • Cell differentiation • Helps with vision in dim light and colour vision • Keeping the immune system healthy.	Dairy Products Dark Green Veg Orange coloured fruit and veg Fish Oils and Liver	<u>Deficiency</u> -Poor vision, night blindness. <u>Excess</u> - stored in the liver and too much can be toxic.
D	Needed for the absorption of calcium and phosphorus from foods, to keep bones healthy.	Fish Oils Dairy Products Sun Light Absorption. Often added to cereal and margarine.	<u>Deficiency</u> -Rickets (soft deformed) Osteomalacia (weak bones) <u>Excess</u> : build up of calcium, poor appetite, vomiting
E Antioxidant	Helps maintain healthy skin and eyes and strengthen the body's natural defence against illness and infection.	Dairy Products Dark Green veg Nuts	<u>Deficiency</u> - Rare- Age quickly, Wrinkles Skin loses elasticity. <u>Excess</u> - In very large doses may interfere with absorption of vitamin A
K	Needed for clotting of blood and is also required for normal bone structure. Infants are given vitamin K at birth.	Dark Green Veg Fish, liver, fruit	<u>Deficiency</u> - Hemorrhages- ruptured blood vessels. <u>Excess</u> - Unknown



AC1.1 Nutrition: Describe functions of nutrients in the human body - MICRONUTRIENTS

Click [here](#) to watch a video on Vitamins and minerals

AC1.3 Explain characteristics of unsatisfactory nutritional intake.

M I N E R A L S				
Nutrient	Function	Source	Effects too little (deficiency)	Effect of too much (access)
Iron	Needed to make haemoglobin in red blood cells which transports oxygen around the body. Also removing waste substances from the body.	Haem iron found in meat, offal Non-haem iron found in wholegrain foods, leafy green vegetables, fortified breakfast cereals Iron is only absorbed in the presence of vitamin C.	Iron deficiency anaemia is the most common dietary deficiency in the UK. Visible Symptoms include tiredness, paleness, lethargy. Weak and splitting nails.	Side effects of taking high doses (over 20mg) of iron include constipation, vomiting. Very high doses of iron can be fatal , particularly if taken by children, so always keep iron supplements out of the reach of children
Calcium	Needed by the body to build strong bones and teeth. Essential for blood clotting process and blood pressure. Essential for nerve signal transmission and muscle contraction. The skeleton contains about 99% of the body's calcium	Dairy foods including milk, yogurt, cheese, butter Dark leafy green vegetables, Fish with edible bones including sardines and pilchards Non-dairy milks fortified with added calcium	Visible symptoms Lack of calcium in children can cause rickets Osteoporosis (brittle bones) in adults later on in life when bone density is less. Rickets wear children's bones are weak and soft causing them to be deformed. - To find out more click here Non-visible symptoms - Bones and teeth weaken, - Nerves and muscles don't work properly. - Blood will not clot and form a scrap after an injury.	Hypercalcemia is a condition in which you have too high a concentration of calcium in your blood .
Sodium	Controls the amount of water in the body Makes nerves and muscles work properly	Salted foods, yeast extract, stock cubes, gravies, seasonings, snack foods, canned fish, bacon, ham, fast foods, ready meals, baking powder and takeaway foods.	Visible symptoms: - Unlikely, but can be caused by excessive sweating or vomiting and diarrhoea - Muscle cramps, weakness	- Water retention and swelling - High blood pressure - Heart problems - Headaches - Guideline is 6g for adults 4g for teenagers

AC1.2 Special Diets: Compare the nutritional needs of different groups of people.

Nutrition through life differs mainly due to the need for energy and protein for growth and development – in younger age groups, growth and development occurs, in older age groups only maintenance of the body is required, therefore protein and energy requirements are reduced.

GENDER affects nutritional requirements after puberty – before puberty male and female requirements are the same. Puberty causes girls to begin menstruation, increasing their iron needs, which remain higher than men until the menopause which occurs around 50 years of age. Generally males are physically larger than females and therefore need to consumer more energy and protein on a daily basis.

PHYSICAL ACTIVITY LEVEL affects a person's' energy requirements. The more active a person is, the more energy they need. It is recommended that extra energy requirements come from extra starchy carbohydrate in the diet,. Increased PAL could be from having an active job or from playing lots of sport.

Babies and Toddlers • Milk only for first 4-6 months • Weaning occurs from 6 months – introduce a wide variety of textures and colours • Avoid nuts (choking hazard), salt and sugar. Preschool children • Balanced diet needed – in line with Eatwell Guide from 12 months • High needs for energy and protein due to rapid growth and constant movement • Full fat dairy products should be consumed • Salt and sugar should be avoided	Children • Balanced diet needed – in line with Eatwell Guide from 12 months • High needs for energy and protein due to rapid growth and constant movement • 5-a-day is recommended. • Energy requirements increase because they grow quickly and become active. • Good supply of protein, calcium, iron, vitamin A and D, as part of a healthy, balanced diet • Calcium and vit D for healthy tooth development, and strong bones. • Limit sugary carbohydrates such as sweets -tooth decay. • Fat: small amounts for energy and insulation. • Young children small stomachs, small and frequent meals. No room for junk food • Children cannot cut food and chew as easily so need easy to eat foods • Avoid nuts- choking and allergy risks. • Children need plenty of fluid and they should be encouraged to drink regularly, especially if they are very active.
Teenagers Increased needs for iron in teenage girls due to menstruation Calcium intake & vitamin D are really important to ensure Peak Bone Mass is reached – setting up bone health for life. Boys need extra iron initially for growth and muscles but this need decreases after age 19. Boys need more protein and energy than girls due to their later growth spurt <i>Many UK teenagers are lacking in calcium, iron and vitamin A.</i>	Adults Requirements do not change much between the ages of 19 to 50, except during pregnancy and lactation. Well balanced diet modelled on the Eatwell Guide essential. <i>Many UK adults eat too much fat, too much salt and not enough fruit and vegetables.</i> Elderly Older adults need protein to repair worn out body cells. They need a good supply of calcium and Vitamin D in order to maintain healthy bones and teeth and iron to keep blood healthy. In winter time, they may need a little more fat in their diet to provide body warmth. Fresh fruit and Vegetables are important for a good supply of vitamins and minerals. Old people may have digestive problems or may have difficulty cutting food (because of arthritis) or chewing food (because of false teeth). Examples of food suitable for the elderly = Soft foods – boiled potatoes, stew, soup, casseroles, one pot meals. A good supply of fibre is needed to prevent constipation in the elderly who may be less active Older adults may have a weaker sense of thirst. If necessary they should be helped and encouraged to drink regularly.
Pregnancy & Lactation Because the body becomes more efficient at absorption during pregnancy, normal nutritional requirements apply until the last third of pregnancy, when some extra energy and calcium is required. Pregnant and lactating ladies should eat a varied diet rich in fresh fruit and vegetables and wholegrains (in line with the Eatwell Guide). There are some foods to avoid: • Unpasteurised milk products and undercooked meats/cured meat products – they may contain listeria which is harmful to unborn babies • Pate, liver and liver products – due to high vitamin A content (Vitamin A is harmful to unborn babies if eaten in large quantities) • Swordfish, marlin and shark as they are high in mercury which can be harmful to unborn baby	

AC1.2 Special Diets: Compare the nutritional needs of different groups of people.

Medical Diets	Religious Diets	Ethical Diets
Nut & other allergies Must avoid particular allergen, otherwise an allergic reaction may occur. Serious allergic reactions can result in anaphylaxis and even death. The 14 common allergens which must be declared on menus and food packaging are: Celery, Gluten, Crustaceans, Eggs, Fish, Lupin, Milk, Molluscs, Mustard, Nuts, Peanuts, Sesame, Soya, Sulphites.	Halal (Muslim) Halal is Arabic for permissible. Halal food is that which adheres to Islamic law, as defined in the Koran. Haram is the opposite to Halal and describes food which is not permitted under Islamic law. Haram items that Muslims will not consumer include pork and all pork products as well a alcohol.	Vegetarian Vegetarians do not eat any flesh – they do not eat meat, poultry or fish/shellfish. Vegetarians do eat dairy products and eggs (lacto-ovo vegetarian).
Lactose intolerance - Link to website here People who are lactose intolerant do not make the digestive enzyme which is needed to digest lactose (a milk sugar found in dairy products). If they consume lactose, they will experience digestive discomfort including cramps, excess wind and diarrhoea. Lactose intolerant people can consumer lactose free milk and dairy products or dairy alternatives. They must be careful to ensure they get enough calcium in their diet.	Kosher (Judaism) Judaism instructs its followers to observe a kosher diet, this means no pork. Kosher food also does not mix dairy products and meat in the same meal/course. For example, a burger must be served without cheese.  	Vegan Vegans avoid consuming any animal products – including milk and dairy products, Protein is a nutrient which can be lacking in a badly planned vegan diet – vegans can eat wholegrain cereals, nuts, beans, lentils and tofu. Calcium may be lacking in a vegan diet – some vegans replace dairy with calcium fortified alternatives such as soya milk or almond milk.
Coeliac - Link to website here Coeliac disease sufferers react to the presence of gluten, a protein found in wheat flour and wheat flour products. They must avoid consuming gluten. Gluten is present in any wheat flour – alternatives such as	Hindu Followers of the Hindu religion do not eat Beef, as they believe it is a sacred animal.	Pescatarian Pescatarians do not eat meat, but will eat fish and shellfish.
Coronary Heart Disease - Find out more click here People who are diagnosed or at risk of Coronary Heart Disease are currently recommended to adopt a low sugar, low saturated fat, high fibre and fruit and vegetable Mediterranean style diet.	Buddhist Buddhists are usually vegetarian and do not consume meat or fish.	Flexitarian This is a new concept – followers of a flexitarian diet choose vegetarian or vegan diet meal choices for some parts of the week, in order to reduce their carbon foot print. Meat-Free Mondays campaign spearheaded this movement.



coeliacuk
live well gluten free



Dairy free



vegan



British Heart Foundation



ART - Identity

<u>Formal Elements</u>	<u>Colour Theory</u>	<u>Tips, Tools & Techniques</u>	<u>Keywords & Concepts</u>
Line A mark that connects two or more points. These can be straight, curved, short or long. Tone The lightness or darkness or something. For darker tones use a higher grade B pencil. Colour Colour is what you see when light reflects of something. Texture How something looks or feel e.g. fluffy, rough, smooth etc. Visual Texture - implied sense of texture that the artist creates through the use of various artistic elements such as line , shading, and color. Physical Texture - texture you can actually feel with your hand Pattern A symbol, shape or colour that repeats. Man-made patterns are designed by humans, natural patterns are formed by nature. Shape/Form Shape is 2D e.g. rectangles. Form is 3D e.g. cubes, spheres etc.	Primary Colours Colours that can't be mixed/ made from other colours e.g. red, yellow and blue. Secondary Colours Colours that can be made by mixing two primary colours. Red + Blue = Purple Yellow + Blue = Green Yellow + Red = Orange Tertiary Colours Colours that can be made by mixing a primary and secondary colour together e.g. Blue + Green = Turquoise. Complementary Colours Colours that are opposite each other on the colour wheel. Blue & Orange Red & Green Purple & Yellow Analogue/ Harmonious Colours Colours that are next to each other on the colour wheel e.g. Red, red-orange and orange. Tints/ Shades Tint - Adding white to a colour to make it lighter. Shades - Adding black to a colour to make it darker.	Grid-Method A method of drawing to recreate, enlarge or reduce an image ensuring accurate proportions. Blender Stick A paper stump that allows you to blend tones. Blending The smooth transition between tones. Tints Adding white to a colour to make it lighter. Tones Adding black to a colour to make it darker. Shading Techniques Hatching, cross-hatching, stippling and scumbling.	Proportion In portraits = the size and relation of face features on the face. It is where key features are placed in your drawing to show correct distance between each face feature. Portraiture The art of drawing or taking a photo of a person. Expression Expression means showing an emotion e.g. happy, sad, moody, shocked. Facial Features Eyes, Nose, Mouth Characterisation The distinct features of a person eg things in your portrait that show a trueness to the person's character. Juxtaposition Two things that are placed together to create a contrasting effect. Symbolism Using images to suggest specific ideas or feelings e.g. a skull often suggests death. Identity The fact of being who you are.

Performing Arts Comp 2

Example of Pass standard self-evaluation—DESCRIBE

(Say what you did)

At the moment, I am good at creating characters as I start acting as soon as I get a script. I use a variety of vocal skills including pace, accent and projection to create these characters. My movement skills need some work, for example - I think I need to focus on improving my gestures.

Example of Merit standard self-evaluation—DISCUSS

(Say what you did and why you did it)

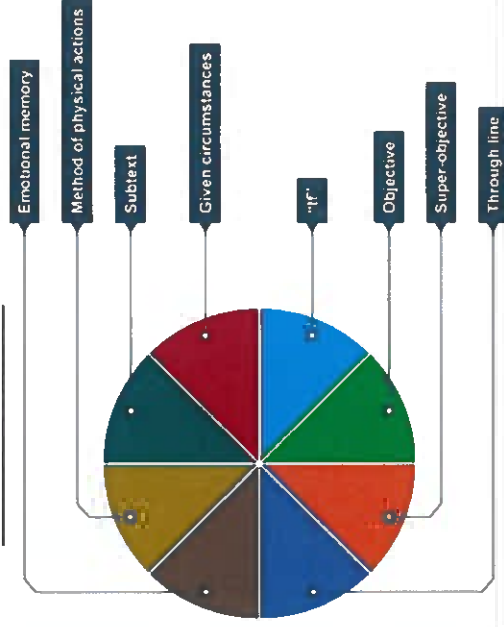
At the moment, I am good at creating characters from scratch as I begin improvising and rehearsing as soon as I get a script. I use a variety of vocal skills including pace, accent and projection to create these characters, for example - when playing an older character recently, I spoke in an exaggerated tone and the raised the volume of my voice. My movement skills need some work, for example - I think I need to focus on improving my gestures as last time, I didn't use enough. My posture also needed work as my back was too straight.

Example of Distinction standard self-evaluation—EVALUATE

(Say what you did, why you did it and what the effect on the audience would be)

At the moment, I would say that my improvisation skills are good as I feel comfortable enough to create characters almost immediately after reading a script. I use a variety of vocal skills including pace, accent and projection to create these characters, for example - when playing an older character recently, I spoke in an exaggerated elderly tone to express an element of humour to an audience and raised the volume of my voice to have the effect of this older person not having good hearing and wanted people to speak up. I feel that my movement skills need improvements however, if I am to become a better actor. For example, I think I need to focus on improving my gestures as last time, they weren't expressive enough and it made my character less believable. Also, my posture needed to be more hunched over as my back was too straight and I think I could've moved in a more staggered manner to express to the audience how unstable this character was on their feet. All in all, I feel that I have a pretty good understanding of how to vocally convey characters but need some work on how to physically portray them.

Stanislavski's Method



Skills	Aspects of skills
Facial Expressions	Eye contact, eye brows, straight, emotions, gritting teeth, tense, relaxed, wrinkled, creased, staring, twitching.
Voice	Tone, pitch, pace, emotion, volume, projection, dialogue, dialect, accent, intonation, whistling, SFX, interjection.
Body language	Posture, blocking, positioning, front on, side on, emotions, age, open or closed.
Gestures	Hands, arms, speed, clicking, rubbing, waving, mannerisms
Movement	Speed, pace, acceleration, gait, mannerisms, special awareness, stage presence.

LEARNING AIMS

- A Develop skills and techniques for performance
- B Apply skills and techniques in rehearsal and performance
- C Review own development and performance

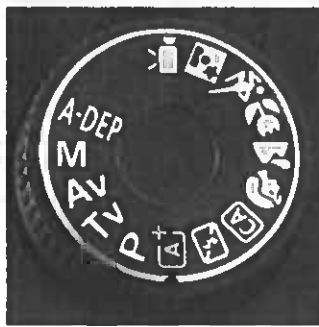
L2 Distinction—Analyse own development and application of skills and techniques, using considered examples to identify strengths and set targets for improvement.

Terminology	Definition
Interpretation	Finding the meaning/action within a script
Stage directions	Guidelines/hints for actors within a script
Blocking	Where actors are positioned on stage
Proxemics	How close actors are on stage
Semiotics	Study of words and symbols
Characterisation	Skills used to create a character
Given circumstances	Stanislavski technique - looking at the script, what do we definitely know to be fact?
Status	The amount of power/dominance each character has over others
Levels	How high or low your body is positioned
Long term targets	What do you want to achieve by the end of this unit?
Short term targets	What do you want to achieve within the next few rehearsals?
Physical skills	Everything you can do with your face, hands, movement and body.
Vocal skills	Everything you can do with your voice—be specific with terms.
Interpretive skills	How well you interpret a script or a character. How do you become the character?

Notice the difference in wording between pass, merit and distinction. The best way to get a distinction is to keep on top of your logbook, write in detail—often.

QUALITY AND QUANTITY!

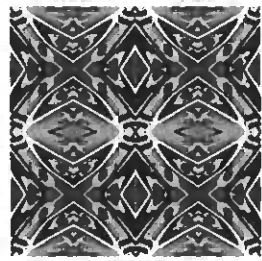
See Mr Thomas for assistance with learning lines.

AO1- Assessment objective 1 – Develop ideas through investigations, demonstrating critical understanding of sources. Artist Research!! Evidence can include: Artist research, contextual research, analysis of artist artwork, thumbnail sketches showing composition. Grading criteria for level 9: Demonstrate independent critical investigation and in-depth understanding of sources to develop ideas convincingly.	AO2- Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes. Experimenting!! Evidence can include: Photoshoots, investigating different techniques, annotating of your contact sheet, post production editing. Grading criteria for level 9: Effectively apply a wide range of creative and technical skills, experimentation and innovation to develop and refine work	AO3-Record ideas, observations and insights relevant to intentions as work progresses. Annotations!! Evidence can include: Photoshoot plans, thumbnail sketches, storyboards, visual analysis of photography. Grading criteria for level 9: Record and use perceptive insights and observations with well-considered influences on ideas	Ao4-Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language. Final Response!! Evidence can include: A personal and purposeful response to an artist/ context. response should be informed by the study of artists/ techniques. Grading criteria for level 9: Demonstrate advanced use of visual language, technique, media and contexts to realise personal ideas
<u>Photography techniques</u> <u>Composition: How objects are arranged in the frame/ photo.</u> Rule of thirds—Using a grid to off centre the focal point. Symmetry and Balance—using mirroring or contrasting numerous small object against one bigger object. Diagonals and Triangles—creating a sense of depth. Leading Lines—to guide the viewers eye to the focal point and around the photo. Negative Space—to frame the focal point. Minimalism—‘Less is more’. Simplistic colours and layout. Frame within a Frame—creates depth and draws the eye into the photo.			
<u>Camera settings</u> A-DEP Automatic Depth of Field M Manual AV Aperture – Priority TV Shutter – Priority P Programmed Automatic [A] Scene Intelligent Auto [] No Flash  [] Filming [] Night Portrait [] Sports [] Macro [] Landscape [] Portrait [CA] Creative Auto			

Edward Weston

Edward Weston was a 20th century photographer born in the 1880s. He mainly photographed natural objects during the 1920s such as a gnarled tree and a pepper.

Weston intended to make simple and everyday objects unusual.



Using a PhotoBox.

You can create a PhotoBox to place your object into, which gives you an plain and even background to your photographs.

Repeat pattern

Repeat patterns are patterns where a group of elements repeat themselves as the pattern extends.

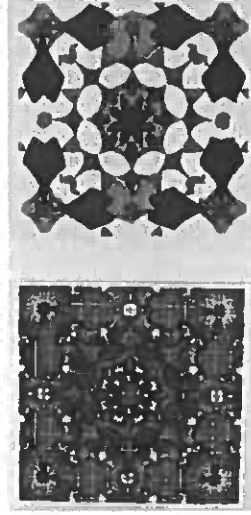
Oil pastel misprinting

1. Cover the back of the picture with oil pastel,
2. Turn picture around and tape on top of the surface created.
3. Using a sharp pencil draw over each part of the tree as if you were tracing it.



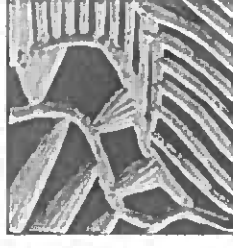
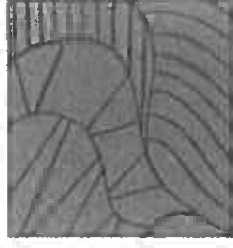
Stencilling

1. Create a successful pattern by ensuring that the shapes interact and overlap.
2. Start to remove sections of your pattern.
3. When each layer has the correct sections removed, use it as a stencil to apply coloured ink.



Lino printing

1. Get a piece of lino and chose a bit of your repeated pattern that you want to print.
2. On your piece of lino, draw a section of your repeated pattern using a pencil.
3. Using a carving tool, remove the top few layers of lino so the pattern is really visible.
You're now ready to print!



Micaela Lattanzio

Micaela Lattanzio is a photographer and artist who explores the fragmentation of female identity through the deconstruction and the reworking of female portraits.

Fragmentation

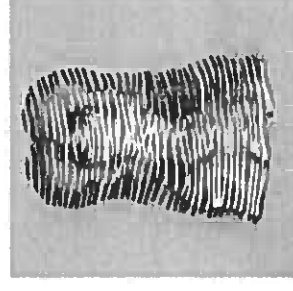
The process or state of breaking or being broken into fragments.

Combining photos.

Weaving photos together by collaging and overlapping them.

Collage

A piece of art made by sticking various different materials such as photographs and pieces of paper or fabric on to a backing. Or merging and overlapping fragments of an image together digitally.



BTEC Music - Year 10 - Musical Products & Styles

Musical Styles - World Music/Jazz & Blues

Delta Blues - a style of blues originating in the Mississippi Delta, typically featuring slide guitar. The form is dominated by fiery slide guitar and passionate vocalising, with the deepest of feelings being applied directly to the music. Its lyrics are passionate as well, and in some instances remain the highest flowering of blues songwriting as stark poetry. The form continues to the present time with new performers working in the older solo artist traditions and style. In its earliest form, the style became the first black guitar-dominated music to make it onto phonograph records back in the late '20s.

Samba Music - The initial birth of samba music took place sometime in the early 19th century, with its roots stemming from African drumming traditions. Enslaved African people brought over to Brazil retained the influence of their own musical elements such as polyrhythms and syncopated patterns. It's now an integral part of Rio De Janeiro's famous yearly Carnival festival, at which many samba schools compete against one another.

Examples of Stylistic Features

Instrumentation: instrumental techniques, type of ensemble, alternative instrumentation, sonic features, electronic sounds.

Texture: solo, duet, homophonic, polyphonic, unison.

Timbre: sonic features, electronic sounds, FX.

Tonality: major scale, minor scales, blues scale, pentatonic scale, modes, ragas, exotic scales.

Scales and modes: major scale, minor scales, blues scale, pentatonic scale, modes, ragas, exotic scales.

Harmony: major and minor triads, power chords, 7th chords, sus chords, extended chords, suspensions, inversions, chord sequences, arpeggios, broken chords.

Rhythmic techniques: metre, tempo/bpm, syncopation, swing, one drop/skanking, polyrhythms, hemiola, phasing.

Structure: verse/ chorus, 12-bar blues, through-composed, bridge, intro, outro, ABACAD.

Melodic techniques: conjunct, disjunct, chromatic, diatonic, phrasing, repetition, sequence, ornamentation, motifs, round/canon, riffs, hooks, head, improvisation.

Production: microphone use, recording styles, sampling, FX, looping, controllerism, turntablism, quantisation, sequencing, automation.

BTEC Music - Year 10 - Musical Products & Styles

Key Terminology

Melody - a sequence of single notes that is musically satisfying; a tune.

Harmony - the combination of simultaneously sounded musical notes to produce a pleasing effect.

Tonality - the character of a piece of music as determined by the key in which it is played.

Rhythm - a strong, regular repeated pattern of movement or sound.

Structure - refers to the arrangement and order of the parts or sections of the music.

Instrumentation - the particular instruments used in a piece of music.

Texture - refers to the effect of the different layers of sound in a piece of music, and the relationship between them.

Timbre - the character or quality of a musical sound.

Production - the process by which music is created, captured, manipulated, and preserved so that it can be distributed and enjoyed.

Musical Styles - Popular

Reggae - a style of popular music which uses syncopation (off-beat rhythms), originating in Jamaica. Reggae became widely known in the 1970s through the work of Bob Marley; its lyrics are much influenced by Rastafarian ideas. Reggae songs were largely based on increasingly politicised lyrics that addressed social and economic injustice - This is due to the Rastafarianism influence which advocated for equal rights and justice. Besides Marley and the Wailers, groups who popularised the fusion of Rastafari and reggae were Big Youth, Black Uhuru, Burning Spear (principally Winston Rodney), and Culture.

Britpop - British pop music of the mid 1990s that was typically influenced by the Beatles and other British groups of the 1960s and perceived as a reaction against American grunge music. Various bands were involved in Britpop such as, Pulp, from Sheffield, which was fronted by veteran rocker Jarvis Cocker and had its biggest hit with the single "Common People", but it was essentially about Oasis and Blur. What the two bands had in common was a belief in the classic guitar-based pop song with a sing-along chorus and a love of fashionable sportswear.

Year 10 Economics Knowledge Organiser - Term 3

1.1 - INTEREST RATES - Interest rates determine the amount of interest payments that savers will receive on their deposits. An increase in interest rates will make saving more attractive and should encourage saving. But in interest rates will reduce the rewards of saving and will tend to discourage saving.

Example of interest rate changes
 £20,000 Loan at interest rate of 7%
 Annual interest rate payment will be $0.07 \times 20,000 = £1,400$
 If interest rates rise to 9%
 Annual interest rate payment will rise to $0.09 \times 20,000 = £1,800$
 The rise in interest rates will cost households an extra £400 a year. This will discourage borrowing.
 Example of saving rate changes
 £7,000 savings at 4%
 Annual interest payments received will be $0.04 \times 7,000 = £280$
 If interest rates rise to 6%
 Annual interest payments received will be $0.06 \times 7,000 = £420$
 With higher interest rates, it is more attractive to save money in a bank

Interest rates are not the only factor which determine demand for loans and saving

If a firm experiences a rise in demand it will want to invest in increasing capacity - even if interest rates rise. In a recession, low interest rates may be insufficient to encourage borrowing. Some firms may want to borrow, but banks may refuse to give a loan because they don't have confidence in their ability to repay.

DIFFERENT TYPES OF TAX

- Direct tax** - tax taken from your wage before it is paid to you, e.g. income tax.
- Indirect tax** - tax paid for by a company, e.g. VAT. Therefore you the cost of goods will be higher so the firm can pay the indirect tax on your behalf.

Examples of interest rates

Credit card = 22%

Unsecured loan = 8%

Mortgage loan = 5%

Base rate = 2%

Saving account 2.5%

10 year gov't gilt 1.6%

Current account 0.5%

Cost of borrowing

Return on saving

Interest rate

www.economicshelp.org

PURPOSE OF TAX

- Raise revenue for the government to spend on public services.
- Redistribute income. Progressive taxes like the higher rate of income tax take a higher % of income from high earners.
- Discourage consumption of certain goods. Higher taxes on petrol and tobacco discourage consumption of these goods.

IMPACTS OF TAX

- Progressive** - a progressive tax takes a higher % of income from high earners, e.g. Higher rate (45%) of income tax on incomes over £100,000.
- Proportional** - Takes the same % from everyone regardless of income.
- Regressive** - A regressive tax takes a higher % from low-income earners, e.g. Excise duty (cigarette tax, alcohol tax)

IMPACT OF TAXES INCREASING

- Increase revenue for government
- Makes the tax system more progressive. People on higher incomes will pay a higher % of their income in tax.
- Could create disincentives to work. Higher income tax may create a disincentive for people to work overtime or even take a job: it could encourage people to live abroad and avoid paying higher tax.
- Could encourage tax avoidance - people work abroad or hide income.

GOVERNMENT SPENDING

Government spend tax revenue on a range of services, such as health care, education and national defence.
Real government spending - Spending levels adjusted for inflation.

EXAMPLES OF TAX

Income tax. This is a direct tax on people's income. The basic rate is 22%.

- National Insurance.** Similar to income tax this is a % of income, the money is targeted for social security payments (pensions, unemployment benefits)
- VAT (Value Added Tax).** This is an indirect tax. It is included in the price of most goods and services in the economy. It is currently 20%.
- Excise duties.** These are specific taxes on goods such as alcohol, cigarettes and petrol.
- Corporation Tax.** This is a tax on company profits.
- Stamp Duty.** This is a tax on buying a house.
- Council Tax.** Local authorities collect this tax. It is related to the value of your home so has some relation to your wealth.

Year 10 Economics Knowledge Organiser - Term 3

INCREASE IN GOVERNMENT SPENDING

An increase in real government spending could imply:

- More investment in education and infrastructure. The government can use tax revenues to overcome market failure in areas such as transport, education, and health.
- Provide public goods. Some goods like defence and law and order would not be provided at all in a free market.
- Provide important public services. In a free market there would be under-provision of health care and education. The government provide these services directly at the point of use.
- Investment in infrastructure. The government can invest in public transport and roads to help provide a stronger infrastructure of the economy.
- Redistribute. The government can spend money to redistribute income amongst people on low incomes. For example, universal credit and unemployment benefits. This can help promote a more equal society and improve economic welfare.
- Fiscal policy. In a recession, government spending may be effective in stimulating the economy, e.g. government borrowing can offset a rise in private sector saving, and increase AD.

GOVERNMENT SPENDING

- Providing benefits to those on low incomes/unemployed may create a disincentive to work. Because if you gain more income, you may lose benefits.
- The government sector may be more inefficient than the private sector because there is not a profit incentive to cut costs.
- The government may have poor information about the best project to spend on. For example, the government choose 'eye-catching' investment schemes like HS2.

ECONOMIC GROWTH vs INFLATION

- If there is an increase in the rate of economic growth it could lead to inflation.
- With higher demand, firms will get closer to producing at full capacity. If there is excess demand, they will respond by putting up prices.
- With higher economic growth, firms will employ more workers leading to lower unemployment. However, lower unemployment and a shortage of workers may push up wages. Higher wages can cause inflation.
- However, if economic growth is sustainable and there is an increase in productive capacity, then inflation may not occur.

ECONOMIC GROWTH vs SUSTAINABILITY

- An increase in national output causes greater consumption of goods and services. It can lead to higher pollution and a loss of non-renewable resources.
- Growth can conflict with environmental sustainability.
- However, if growth comes from improved technology (e.g. renewable energy), then it is possible to have growth without any significant environmental costs.

IMPACT OF GROWTH

1. Lower unemployment. Higher output means firms need more workers leading to higher employment levels and lower unemployment.
2. Lower government borrowing. With higher economic growth, the government will see an increase in tax receipts.
3. Higher living standards - wages and profits generally rise during a period of economic growth.

GOVERNMENT MACROECONOMIC OBJECTIVES - The main macroeconomic objectives of the government include:

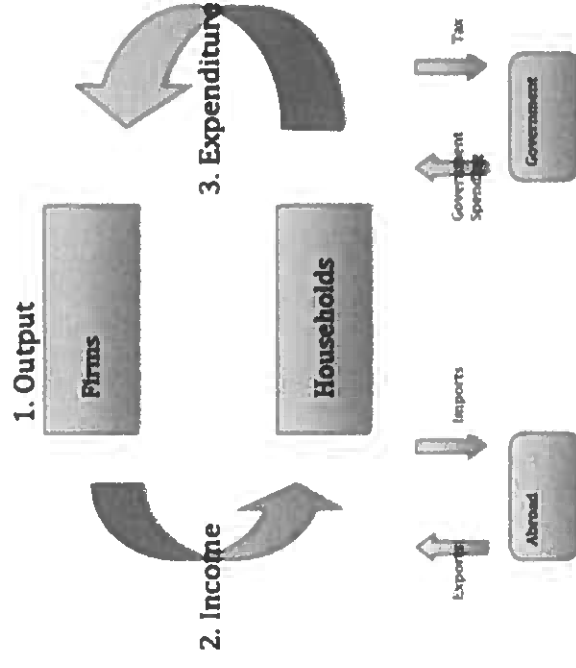
1. Sustainable economic growth (increasing national income per person)
2. Low unemployment - (full employment)
3. Low inflation. (Price stability)
4. Fair distribution of income (a degree of equality)
5. Satisfactory Balance of Payments (balancing exports and imports)
6. Supporting a stable exchange rate
7. Low government borrowing
8. Considering the environment and the sustainability of economic growth

ECONOMIC GROWTH

- Economic growth means an increase in real GDP. An increase in GDP means an increase in the volume of goods and services produced in an economy.
- The rate of economic growth measures the annual % change in real GDP

GROSS DOMESTIC PRODUCT

- Nominal GDP This is a measure of national income, output and expenditure.
- This is the monetary value of all goods and services produced in the economy.
- Real GDP This is national income measured in constant prices. It means we take into account inflation.
- Real GDP per Capita = This is the real GDP / population.



Year 10 Economics Knowledge Organiser - Term 3

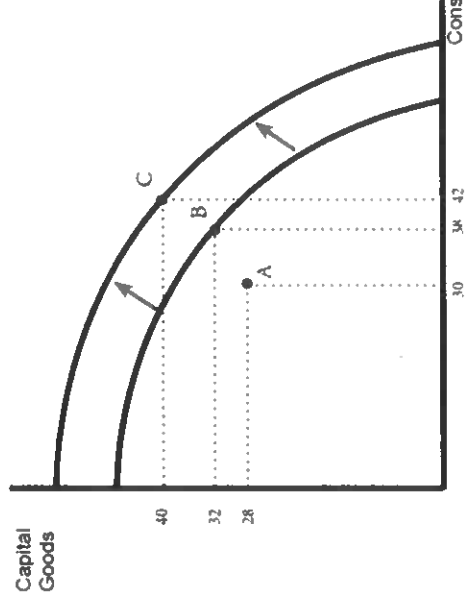
CIRCULAR FLOW OF INCOME

- The circular flow of income shows how money flows from households to firms (to buy goods).
- Then firms pay households wages to produce goods. It shows three ways to calculate GDP.
- Total National income (wages, dividends)
- Total National expenditure (consumption and investment)
- Total National output (value of goods and services produced)
- GDP per capita measures the national income / divided by the population.

PRODUCTION POSSIBILITY FRONTIER

- A production possibility frontier (PPF) - shows the potential output an economy can produce.
- Economic growth means an increase in productive capacity.
- In the long term, economic growth requires an increase in productive capacity
- PPF Curve shifting to the right. Increase in Aggregate Supply.

production possibility frontier shifting to the right



BENEFITS OF GROWTH

- Higher Incomes. Consumers will be able to enjoy more goods and services.
- Lower unemployment: With higher output firms will employ more workers.
- A sustained period of economic growth will lead to lower unemployment.
- Lower Government Borrowing. Economic growth creates higher tax revenues and there is less need to spend money on unemployment benefits.
- This reduces government borrowing.
- Improved public services. With higher tax receipts more can be spent on public services, such as health care and education.
- Firms make more profit. Firms will make higher profit; this may encourage more investment, which leads to a virtuous circle of higher growth.

COSTS OF GROWTH

- Inflation. If economic growth is too fast then economic growth will be unsustainable and inflationary. There will be a negative output gap and firms will respond by putting up prices. However, if growth is moderate, it will not cause inflation.
- Boom and Bust Economic Cycles. If economic growth is unsustainable then high inflationary growth may be followed by a recession (fall in output). For example, the late 1980s boom and recession of 1991.
- Balance of Payments Deficit. Economic growth may cause higher consumer spending on imports therefore causing a deficit on the current account. However, if growth is export-led, this will not occur.
- Environmental Costs. Increased economic growth will lead to increased output and therefore will cause increased pollution and congestion which reduces living standards. Economic growth can conflict with environmental sustainability.
- Increased Inequality: Higher rates of economic growth have often resulted in increased inequality. This is because the wealthy may benefit more from economic growth.

CAUSES OF GROWTH

Economic growth is caused by two main factors:

- An increase in demand
- An increase in supply (productive capacity)

CAUSES OF HIGHER DEMAND

- A rise in wages gives consumers more disposable income; therefore there will be an increase in domestic spending and demand.
- Lower interest rates make it cheaper to borrow causing a rise in spending and investment.
- Rising wealth. For example, a rise in house prices helps increase consumer confidence and consumer wealth; this causes higher spending as people are more optimistic about the future.
- Lower income tax. A cut in income tax increases disposable income, encouraging people to spend more.
- A fall in value of exchange rate, which makes exports cheaper leading to a rise in demand for UK exports.

CAUSES OF INCREASE SUPPLY (CAPACITY)

- Increased capital e.g. investment in new factories or investment in infrastructures such as roads and telephones.
- Increase in working population. An increase in the number of people available to work. This could be due to net immigration, a later retirement age or more women entering labour market.
- Increase in labour productivity. This could occur through better education and training. This means workers can produce more goods in the same period of time.
- Producing more raw materials (e.g. discovering natural resources, such as oil deposits or precious metals)
- Technological improvements to improve the productivity of capital e.g. microchips and the internet have both contributed to economic growth.
- Benefits from increased economies of scale, e.g. increased trade, enables firms to expand production and gain greater efficiency from increased size.

POLICIES TO INCREASE GROWTH

- Demand side policies (Fiscal and monetary policy) - e.g. increase government spending (Fiscal policy) or cut interest rates (monetary policy)
- Supply side policies - increase productivity in the economy, e.g. government spending on education, privatisation.

The effects of exercise on body systems

Short Term Effects of exercise-

Understand the short term effects of exercise

The short term effects of exercise on the muscles:

- 1- Working muscles produce heat therefore **increasing muscle temperature**.
- 2- Increased muscle fatigue due to **lactic acid** production.
- 3- Blood is **re-distributed** to working muscles in an attempt to provide more oxygen to these working areas (Blood / Vascular shunting).

Short term effects of exercise – Cardiovascular system

1. Increase in **heart rate** (beats per minute)
2. Increase in **stroke volume** (the volume of blood that is pumped out of the heart by each ventricle during one contraction)
3. Increase in **cardiac output** (the volume of blood ejected from the left ventricle in one minute. The cardiac output is equal to the stroke volume x heart rate).

Short term effects of exercise – Cardiovascular system

1. Increase in **respiratory rate** (rate of breathing)
2. Increase in **minute ventilation** (the volume of air either inspired or expired in one minute)
3. Increase in **tidal volume** (the volume of air either inspired or expired per breath)

Long Term Effects of exercise-

Understand the long term effects of exercise

Increased bone density- Regular training will increase bone density & strengthen bone matter helping to reduce the risk of Osteoporosis

Hypertrophy of muscle- Training results in skeletal muscle being damaged as the tiny muscle fibers are pulled apart causing trauma. With **REST** and time to **RECOVER** these muscle fibers are re-built **stronger** (increase **muscular strength**) than before.

Muscular endurance- Following endurance (stamina) training, muscular endurance increases. Slow twitch fibres will get larger by about 20%. This means that there is greater potential for energy production.

Resistance to Fatigue- Endurance training will also increase the capacity to carry oxygen and the athlete becomes aerobically fitter.

Hypertrophy of the Heart- With most

training programmes the size of the heart will increase. This increase in size is known as cardiac hypertrophy. The wall of the left ventricle becomes thicker, thus increasing the strength of contractions in the heart.

Decreased resting heart rate and

Increased Stroke Volume- The increased size of the heart means it takes less beats in a minute to supply the body with enough oxygen at rest and Can pump more blood with each pulse (increased **STROKE VOLUME**).

Cardiac Output-

As more blood is pumped from the heart per beat (Increased stroke volume). Cardiac output will also therefore increase during high or maximal levels of exercise.

Rate of recovery-

Training will result in heart rate recovering quicker after exercise.

Aerobic Capacity-

There is a slight increase in vital capacity, which means more air can be inspired, and also a slight increase in tidal volume, which means again more oxygen can enter the lungs. The exchange of gases at the alveoli (pulmonary diffusion) becomes more efficient and therefore the body can work harder and longer due to the increased surface area of alveoli.

Respiratory muscles-

There is greater intercostal muscle strength, allowing more air to be breathed in and out, and a reduction in resting respiratory rate, which makes the body more efficient.

Tidal volume and minute volume during exercise-

There will also be an increase in Minute Volume, the amount of air inspired or expired in one minute. There is a slight increase in tidal volume, which means again more oxygen can enter the lungs.

Capillarisation-

There is an increase in capillary density (capillarisation), which increases the efficiency of oxygen uptake for energy.

Other long term effects on the CV system- Blood vessels become more efficient with the vascular shunt mechanism.

Blood pressure, if previously high, decreases at rest- this is because the cardiovascular system has become more efficient.

There is an increase in the number of red blood cells. This will mean that haemoglobin content is higher and therefore more oxygen can be delivered to muscles.

There is a decrease in blood viscosity that again makes oxygen carriage more effective and can reduce blood pressure.

Applying the short-term effects of exercise to examples from physical activity-

- When sculling a rower will experience a rise in muscle temperature.
- Over the first few metres in a race a BMX cyclist's heart rate will increase.
- A volleyball player performing shuttles in training will have a raised stroke volume.
- A water polo player will have a higher cardiac output when swimming over the ball during a competition.
- A 400m athlete (when running) will experience a redistribution of blood away from the body's organs and to the working muscles (vascular shunt).
- During a competitive rally, a table tennis players respiratory rate will increase.
- A wheelchair rugby players tidal volume increases as they intercept the ball.
- A handball players minute ventilation increases as they run into space during competition.
- As a figure skater progresses through their routine, their levels of lactic acid production will increase.

Applying the long-term effects of exercise to examples from physical activity-

- A tennis player will experience an increase in bone density.
- An amateur boxer will have hypertrophy of muscle.
- A skier will experience an increase in muscular strength.
- A cross-country runner will have an increase in muscular endurance.
- A swimmer will have more resistance to fatigue.
- A marathon runner will have hypertrophy of the heart.
- An inline roller hockey player will have a lower resting heart rate and resting stroke volume.
- A netball player will have an increased cardiac output.
- A footballer will increase their rate of recovery.
- An ice hockey players aerobic capacity will increase.

Components of Fitness-

Know the following components of fitness-

Cardiovascular Endurance/Stamina

-Definition- Cardiovascular endurance is the ability to continuously exercise without tiring.

-Practical examples where it is important

Running/aerobics/swimming/fast walking/cross country skiing

-Know Suitable Tests

Cooper 12 minute run/walk test, Multi-stage fitness test

Muscular Endurance

-Definition- Muscular endurance is the ability of the muscle or muscle groups in the body to repeatedly contract or keep going with without rest.

-Practical examples where it is important

Cross-country running, long distance cycling, long distance swimming, rugby/football/hockey full games

-Know Suitable Tests

Press up test, sit up test.

Speed

-Definition- Speed is the ability to move all or part of the body quickly.

-Practical examples where it is important

Athletics e.g. 200m sprint

Swimming e.g. 50m freestyle

Squash- running to the front of the court to retrieve drop shot

-Know Suitable Tests

30m Sprint test

Strength

-Definition- Strength is the amount of force a muscle can exert against a resistance.

-Practical examples where it is important

Sprinting- strong arm action, rugby-driving forward in scrum, cycling, strong leg action

-Know Suitable Tests

Grip strength dynamometer test
1 Repetition Maximum (RM)

Power

-Definition- Power is the ability to perform strength based movements quickly

-Practical examples where it is important

Triple jump in Athletics, throwing in Athletics, tackling in rugby

-Know Suitable Tests

Standing broad jump

Standing vertical jump

Flexibility

-Definition- Flexibility is the amount or range of movement that you have around a joint.

-Practical examples where it is important

Gymnastics-achieve splits, dance- make a lunge in performance, hockey- stretch to make tackle, table tennis- perform smash

-Know Suitable Tests

Sit and reach test

Agility

-Definition- Agility is how quickly you can change direction under control and maintaining speed, balance and power.

-Practical examples where it is important

Trampolining and gymnastics- perform a sequence, netball- pass when leaping in air, volleyball- jump quickly to block

-Know Suitable Tests

Illinois agility test

Balance

-Definition- Balance is the ability to maintain equilibrium, whether stationary or moving.

-Practical examples where it is important

Gymnastics- to perform a somersault on beam, hockey- maintain balance when taking penalty flick, dance- hold arabesque position.

-Know Suitable Tests

Stork stand test

Co-ordination

-Definition- Co-ordination is the ability to move different limbs at different times or do more than one task effectively at the same time.

-Practical examples where it is important

Dance, tennis and other racket sports, gymnastics, team games like football/netball.

-Know Suitable Tests

'Wall throw test'.

Reaction Time

-Definition- Reaction Time is the time is take for you to initiate an action or movement in response to a stimuli.

-Practical examples where it is important

Sprint start in athletics, receiving a serve in tennis, football- goalkeeper saving a penalty.

-Know Suitable Tests

Reaction time ruler test

Principles of Training-

Know the following definitions of principles of training and be able to apply them to personal exercise/training programmes:

Specificity- The training must be matched to the needs of the sporting activity and individual.

Example – A sprinter would carry out more anaerobic training because the event is mostly anaerobic in nature.

Overload- The body must work harder than normal so there is some stress and discomfort.

Adaptation and progress will follow Overload because the body will respond to the stress.

Example – in weight training the lifter will eventually attempt heavier weights or increase reps in order to create Overload.

Progression- Not only do we need to include Overload in our training, it must also become gradually more difficult. **Example** a Weight Lifter will be able to increase the weight they can lift over time as they increase their intensity, duration and frequency of training.

Reversibility- Any adaptation that takes place as a result of training will be lost if you stop training.

Example - a track athletes VO2max and Strength will decrease if they injure themselves and are unable to train for a period in time.

Optimising Training-

Know the definition of the elements of FITT and be able to apply these elements to personal exercise/training programmes.

Frequency: The Number of Training Sessions Each Week

Example: an elite athlete may train every day whereas a lower level club player may train once a week.

Intensity: How Hard you Train

Example: a Sprinter might work really hard using HIIT training for a short period of time whereas a long distance athlete will work at a lower intensity but over a longer period.

Time: How Long you Train for

Type: Which method of Training you use.

Know different types of training, definitions and examples of:

Continuous training- A method of training that seeks to maintain or improve Cardiovascular Endurance.

Example- long distance running, cycling or swimming

Fartlek training- Also known as 'SPEED PLAY' (Swedish) often used to maintain or improve aerobic endurance **Example-**deal for team sports as it replicates the efforts of a player / athlete in a game like situation (run, walk, jog, sprint, rest, repeat).

Interval training- A type of training which features distinct periods of work followed by periods of rest.

Example- ideal for team sports- sprint 30m, rest, repeat 5 times.

Circuit Training (Interval Training)- A

method of training that incorporates different stations to stress / overload different muscle groups.

Example- Skipping – Press Ups – Squats – Dips – Crunches – Rest – Repeat

Weight Training (Interval Training)- A form of training that involves the use of resistance to overload muscle groups and force adaptations that grow muscle tissue.

Plyometrics (Interval Training)- A form of training that involves rapid and repeated stretching and contracting of muscles designed to increase strength and power.

Example- Any sport that involves sprinting, throwing and jumping will benefit from this type of training such as Basketball, netball or rugby.

High Intensity Interval Training (HIIT)- A

Cardiorespiratory training technique that alternates brief speed and recovery intervals to increase the overall intensity of a work out.

Understand the key components of a warm up and be able to apply examples-

Component 1: Pulse Raising exercises - to slowly raise heart rate and gradually increase body temperature e.g. jogging / cycling

Component 2: Mobility exercises that take joints through their full range of movement e.g. high knees / arm swings

Component 3: Stretching can include static or dynamic type stretches e.g. lunges, walking hamstring stretch.

Component 4: Dynamic Movements that show a change in speed and direction e.g. shuttle runs

Component 5: Skill Rehearsal or practising the common movement patterns and skills that will be used in the activity e.g. dribbling drills for football, shooting in basketball.

Know the physical benefits of a warm up-
-Warms up the muscles & prepares the body for physical activity
-Increases Heart Rate (release of adrenaline)
-Increases blood flow and oxygen to working muscles
-Decreases the likelihood of injury and muscle soreness (DOES NOT PREVENT INJURY)
-Increase in Body Temperature (increased energy production)
-Increases Flexibility of muscles and joints
-Increases Pliability of ligaments and tendons
-Increases speed of muscle contraction

Understand the key components of a cool down and be able to apply examples-

Component 1: Low Intensity Exercises.

Aimed to gradually lower Heart Rate and reduce the body's core temperature.

Examples - light jogging

Component 2: Stretching. Includes steady and static stretches which are held for longer than in the Warm Up, example 15 seconds.

Examples - hamstring stretch & triceps stretch

Know the physical benefits of a cool down-

The Cool Down is essential to an effective training session. Cool downs allow Oxygen to flush through muscle tissue and get rid of Lactic Acid.

The Cool Down is crucial in...

-Helping the body's transition back to resting state

-Gradually lowering heart rate

-Gradually lowering temperature

-Circulating blood and oxygen

-Gradually reducing breathing (respiratory) rate

-Increasing the removal of waste products such as lactic acid

-Reducing the risk of muscle soreness and stiffness

-Reducing the risk of damage to joints
-Aiding recovery by stretching muscles

Prevention of injury

Understand how the risk of an injury in physical activity and sport can be minimised and be able to apply examples-

Personal Protective Equipment-

Risks arising from some hazards can be limited by using Personal Protective Equipment. Many sports advise using protective equipment others require it's use in through legislation.

Example- shin pads in football, gum shield in Rugby.

Correct clothing/footwear-

Wearing the correct clothing and footwear for a sport/activity is very important. Clothing can protect from the weather (sun, heat, cold, rain, ice). Some activities/sports may have rules preventing the wearing of certain clothes that could be dangerous to self or others.

Example- ski salopettes.

Correct footwear is one of the most important and common safety features. Footwear can help give you stability on the various surfaces you perform on. Footwear can protect your feet. Footwear might also support the ankle joints etc.

Example- Football boots, ski boots

Appropriate level of competition-

Fitness Level:

- Ensure you are fit to take part in your chosen activity
- Ensure you have an appropriate skill level before taking part in your chosen activity

Weight Categories:

- E.g. Boxing / Martial Arts competitors are matched according to weight as well as ability.
- E.G Boxing: a 7ft 20 stone pro boxer can not safely take on a 5ft 8 stone opponent.

Mixed or Single Sex:

- In most sports men play with and against men and women against women (football / rugby – contact sports!)
- Based on fair competition as men naturally have more muscle than women, this can also be seen as a safety consideration.

Age:

- Children's competitions are based on age as children differ greatly in body size and physical development with each year.

Lifting and carrying equipment safely-

Serious injuries can be caused before the activity even starts by carrying heavy or awkward sporting equipment incorrectly. Bend at the knees NOT the back!

Use of warm up and cool down-

Warming up gradually prepares the body for physical activity and cooling down disperses lactic acid and returns the body to a resting state preventing soreness and aches.

5 Methods of Reducing Risk in Sport

1. **Personal protective equipment**
2. **Correct clothing/footwear**
3. **Appropriate level of competition**
4. **Lifting and carrying equipment safely**
5. **Warm up and cool down**

Acronym

P - POTTED

C - CRABS

A - ARE

L - LOVELY

W - WARM

Know potential hazards in a range of physical activity and sport settings and be able to apply examples.

Sports Hall-

- Doors opening inwards
- Slippery floor – too polished
- Hard floor
- Apparatus stored at the sides
- Equipment left out/ not stored correctly
- Wooden floor – splinters
- Windows allow glare from sun
- Other participants

Fitness Centre-

- Broken equipment
- Open windows
- Free weights- trip/incorrect use
- Hard floor
- Other participants

Playing field-

- Litter- broken bottle/dog excrement
- Goal posts

- Poorly maintained fencing

- Uneven pitch surface (mole hills)

- Other participants

Artificial Outdoor Areas-

- Slippery surface of pitch
- Litter- broken bottle/dog excrement
- Poorly maintained fencing
- Other participants

Swimming Pool-

- Water
- Chemicals in the water
- Hard and slippery surface of surrounding area
- Other participants

Subject: Retail Business Unit 1 AC1.1-AC3.1

AC.1.1 Describe principles of customer service.

Outline the 8 stages of customer service.
Describe what might happen at each stage.
Describe why each stage is important when providing customer service.

- Stage 1 – Greeting the customer.
- Stage 2 – Interaction with consumers.
- Stage 3 – Building a rapport with customers.
- Stage 4 – Identifying customer needs.
- Stage 5 – Services & facilities for customers.
- Stage 6 – Encouraging feedback.
- Stage 7 – Respond to feedback.
- Stage 8 – Meeting legal requirements

AC.1.2 Describe situations when customer interact with retail businesses.

You must link each interaction to the coursework business - You may use the internet to research your chosen brand, and use this research to show evidence of your understanding.

Sales
Queries
Advice
Provision of product information
After sales
Complaints
Compliments.

Provide a definition and general overview for each interaction above.

How do consumers and employees interact in that situation - related this to your chosen business. Consider the questions customers will be asking and employees responses and vice-versa.

AC.1.3 How does customer service differ across retail channels.

Provide a brief overview of the different retail channels used by the focus business of your coursework.

What is multi-channel?

Does the business have a multi-channel approach? If so, what?

You must then describe for each of the 8 principles

- 1 - Describe what this principle would look like in a store.
- 2 - Describe what this principle would look like online.
- 3 - Use a description to compare the principles across the different retail channels (online and instore) focussing on the key differences.

AC.2.1 Describe needs of different types of retail customers.

Consumer types:

New, Existing, Individual, Groups, those with additional needs, those of a different culture/ethnicity.

Consumer needs:

Information, Health & Safety, Accessibility, Availability, Communication, Advice.

Create a table '7x7' using the above headings (the template is available on the drive).

Once you have done this fill out the table considering the different consumer types and their needs. Some needs will be more applicable to certain consumer types than others. Write in as much detail as you can. If a need is not applicable to a consumer type, explain why.

AC.2.2 Explain how retail businesses meet expectations of different types of customers.

Consumer types:

New, Existing, Individual, Group, those with additional needs, those of a different culture/ethnicity.

Quality of service – Refers to the difference between the customers normative expectation for the service (brand or product of the business) against the consumers expectations to provide an overall performance and whether it was below, met, or was above expectation.

Cost of service - This involves the cost of products and services. ALL - Reasonable price relative to quality of product.

Customer relationship - Relationship between customer and brand/company that is used to create customer loyalty. Important for companies to compete with their competitors. This involves the cost of products and services. ALL - Reasonable price relative to quality of product. (Nike & Adidas).
Brand image - advertising messages, staff welfare, celebrity endorsement and brand-customer communication and is used to create sales.

Create a table '5x7' using the above headings (the template is available on the drive).

Once you have done this fill out the table considering the expectations of a range of consumer types when shopping in the business you have selected.

AC3.1 Design a Research Tool

You need to create two research tools (customers service survey and mystery shopper). You also need to collect a secondary data from three sources.

Primary research = Primary research is research you conduct yourself (or hire someone to do for you.) It involves going directly to a source – usually customers and prospective customers in your target market – to ask questions and gather information.

*Consider the following when creating your research tools:

In-store cleanliness and appearance – the appearance and cleanliness of the car park, entrance, signage, aisles, toilets.

Employee behaviour questions – Did staff acknowledge you and greet you? Recommend products/services? Helpful? Directions to desired products? Uniforms and appearance.

Purchasing – availability of items, ways of paying/checking out, queues and waiting times, sufficient staffing?

Customer Satisfaction Survey: Asking customers what is important to them and how they feel about your service.

Mystery Shopper: Measuring compliance with company standards

MAKE SURE: you have open/ closed questions and have included questions that will allow you to capture quantitative and qualitative data.

Secondary Research = Secondary research is a type of research that has already been compiled, gathered, organized and published by others. It includes reports and studies by government agencies, trade associations or other businesses in your industry.

Third part review site: Third-party reviews

are customer reviews published on a third-party website such as a directory listing or social media platform not affiliated with the business being reviewed. Examples are Yelp, TripAdvisor, and other feedback gathering platforms.

AC3.2 Process Information

Validity and reliability are concepts used to evaluate the quality of research.

Validity = The quality of being factually sound.

Reliability = Able to be trusted.

What forms of research have you completed?

Primary - Customer survey, Mystery shopper, store visit, focus group.

Secondary - Online research - social media feeds. Looking at advertisements for business, researched online store.

How valid are these forms of research?

Primary is more reliable I have completed the research myself. Stood over/observed survey being completed, meeting research is reliable.

Ensure to ask a wide range of people to get answers from a wider demographic. By doing this not restrict results to one type of person. During our survey gave opportunity for customer to give positives and negatives. Increase reliability by carrying out survey on different location.

Secondary research might not be reliable because it could be biased. Business paying for celebrities to endorse the company. Sample size?

You need to analyse the various graphs / information presentation techniques you have used to present your primary and secondary research to

You should consider the following three key questions:

- Why did you ask that question?

I asked this question because...

- What did the data tell you?

The results to this question were...

- What could this mean for the business?

This means that...

*Make sure you do something new with the data.

AC3.3 Present information

Presentation of results.

Include:

- Copy of customer satisfaction questionnaire questions (blank).
- all result tables from your consumer satisfaction questionnaire (google forms create these for you).
- Copy of blank and completed mystery shopper survey.
- Copies (screen captures) of reviews extracted from review websites.
- You also need to make sure you have included any qualitative question responses you collected

Make sure your data presentation includes a wide range of presentation techniques. Below are some presentation ideas you may consider using.

- Pie chart
- Graphs
- Line and Bar charts
- Tally charts
- Scatter plot
- Venn diagram
- Tables

Note: You can use a method of presentation not listed above providing it allows for ease of analysis.

AC3.4 Draw conclusions from research.

The collection of (AC3.1), presentation (AC3.3) and processing (AC3.2) of data will have allows you to identify some key findings

It is crucial that you draw on and reference your research findings and make a number of meaningful conclusions.

You need to consider:

- The businesses strengths (supported with evidence you have collected) and the impact this is likely having on consumers and the business.
- The businesses weaknesses (supported with evidence you have collected) and the impact this is likely having on consumers and the business.

THEN: Consider how the business could address its weaknesses by making a number of recommendations and explain the potential impact these could have on customer service and the business as a whole.

Finally, Consider your research and coursework document. Is there anything you would do differently? Is so, what? and how would this affect the validity and reliability of your coursework.

AC1.1 - Describe principles of customer service.

Stage 1 - Greeting.

Stage 2 - Interaction.

Stage 3 - Building a rapport with customers.

Stage 4 - Identifying customer needs.

Stage 5 - Services & facilities for customers.

Stage 6 - Encouraging feedback.

Stage 7 - Respond to feedback.

Stage 8 - Meeting legal requirements.

AC1.2 Describe situations when customer interact with retail businesses.

Sales, queries, advice, provision of product information, after sales, complaints, compliments. Include examples from your chosen company.

AC1.3 - How customer service differs across retail channels.

Compare how the eight principles of customer service are different for instore and online retail for your chosen business.

AC2.1 Describe needs of different types of retail customers.

Information, Health & Safety, Accessibility, Availability, Communication, Advice. Include examples from your chosen company.

- New, Existing, Individual, Group, those with additional needs, different cultures/ethnicities.

AC2.2 Explain how retail businesses meet expectations of different types of customers.

New, Existing, Individual, Group, those with additional needs, those of a different culture/ethnicity. Include examples from your chosen company.

- Quality of service, cost of service, customer relationship, brand image.

AC3.1 Design research tools.

Include your customer survey and your mystery shopper. As well as your secondary research from three review websites.

AC3.2 & AC3.3 Process & present information.

Complete an analysis of the answers to your primary and secondary research

AC3.4 Draw conclusions from research.

Conclude your research, outline key findings and suggest areas that your chosen business could improve on and the impact these changes would have on the business.

Year 10 Integrated Media summer term Unit 2		
Lesson 1	What is meant by 'audience categorisation'. Audience categorisation is the act of defining multiple 'buckets' or 'shares' of consumers. Explain the connection and difference between audience categorisation and the balancing of organisational and audience goals. Creating content that is tailored to the personal needs and motivations of an audience is one thing, but being able to do so whilst balancing the needs of the organisation is another thing entirely.	Keywords Audience Audience categorisation Audience goals Demographic Geographic Profiling Psychographic Interest-based Quantitative Qualitative Customer funnel Trending
Lesson 2	List three ways of categorising an audience. demographic, geography, and profiling options Explain how demographic, geographic, and profiling categorisations will impact the selection of media and the way that an offer is communicated to an audience. Demographic targeting is a type of marketing segmentation technique that allows an organisation (and creative team) to focus their efforts on a distinct pocket of the market - rather than the entire thing - and so maximise their approach to communicating with this group. An audience can also be segmented based on geography. This is particularly useful as organisations look to target offerings at those who live in, shop at, or visit a particular location. In marketing, profiling refers to a form of segmentation that focuses on distinguishing between those who make the purchasing decisions and those who influence the purchasing decision.	
Lesson 3	List two additional ways of categorising an audience. psychographic and interest-based Define two core methods for categorising an audience. • Psychographics Personality traits fit into audience profiling and segmentation because they further enable a creator to understand the mentality of the individual (or group) they're selling to, and so enable them to produce content that will engage the user in a more effective manner.	

	• Interest-based Taking an interest-based approach means that an organisation and creator considers the hobbies, passions, pastimes, and media consumption habits of an individual they're seeking to target with their offering.
Lesson 4	Define what is meant by 'quantitative' data. This is information/data that can be measured or counted and that is given a numerical value - such as length, or amount. In this manner, this kind of data can also be structured in questions such as: • How many? • How often? • How much? Describe what Google Analytics and social media insights are and how they develop the audience categorisation process. Google Analytics is a web analytics tool that allows a researcher to understand: • Who visitors are (those who are accessing the website). • How visitors are accessing the website. • How they're navigating around the site. • What they're doing there. Another invaluable source to researchers and creators alike is the vast data they can collect from social media platforms.
Lesson 5	What is meant by 'qualitative' data? Information and data that is non-numeric and that instead focuses on the behavioural aspect of activity, this can include: • Interviews • Diaries • Field notes • Open-ended survey questions Describe a tool that provides this kind of data. • One-on-one interviews • Focus groups • Surveys

Lesson 6	Recall the different stages of the customer funnel and AIDA. Also known as a 'sales funnel' or 'purchase funnel', a customer funnel is a visual representation of the customer journey that tracks the sales/conversion process from the customer's awareness of a problem to them taking action to resolve this. Determine how each stage of decision-making might warrant different types or combinations of media. The customer funnel model supports a creator in recognising the needs and goals of a user and enhances a creator's ability to recognise the needs of their audience even further by presenting them with this cognitive, decision-making roadmap.
Lesson 7	Describe what is meant by 'trending' and 'trending tools'. Referring to those topics of conversation that are popular at that moment in time or that are widely discussed online - particularly on social media platforms or that are searched for using search engine tools such as Google. Identify at least one tool that provides this kind of data. Google Trends Pinterest Trends Answer the Public

Year 10 Integrated Media summer term Unit 3		
Lesson 1	Explain what hardware is in relation to the production of an interactive media product. Anything that you can touch is counted as hardware. Hardware therefore extends across all aspects of the production of interactive media, from the cameras used on-set, to the tripods and trolleys used to support this equipment, to the computer hardware that is used when specialists look to edit the footage captured. Explain the difference between software and hardware in relation to the production of an interactive media product. Think about the example of the computer again. Whereas the hardware is the equipment that makes up the computer, software can be understood as the programs that run on a computer in order for someone to use it. These are programs such as Microsoft Word or Adobe Photoshop.	Keywords Hardware Software Non-digital Camera Digital Analogue Resolution Audio Dynamic Condenser Motherboard Processor Graphics processing unit RAM HDD / SSD Sound card
Lesson 2	Describe what a non-digital camera is. Also known by 'analogue' photography as well as 'film' photography. Non-digital captures any and all photography that utilises chemical processes to capture an image – typically on a hard plate or, more regularly, on film. Recognise the advantages and disadvantages of non-digital cameras and the reason for their resurgence in the industry and for hobbyists. Explain the difference between film and other non-digital cameras. Before you can view the images that they have taken, a creator must first develop them. This can take hours to achieve, and it is only once this process is complete that they can determine whether the images were a success or not. A camera that uses analogue technology can be more complex than alternative camera designs - not featuring mechanisms such as automatic options (focus, exposure, and so on) often means that these cameras are not suited to beginners.	
Lesson 3/4	Describe what a digital camera is. A hardware device that takes photographs (and can sometimes record video footage) and stores these as data on a memory card.	

	Describe a DSLR camera. An acronym that is synonymous with digital cameras - a digital single-lens reflex camera. This essentially points to a piece of hardware designed to capture photos and/or video content that allows for interchangeable lenses on the same body.
Lesson 5	What is meant by 'resolution'? The resolution of a video is measured by the number of pixels found within the aspect ratio - the width and height of a video. Describe the core considerations for any creator who is planning on producing recorded content. Video resolution can be considered in a similar vein to a haircut - a creator can always decrease a video from a high resolution to a lower one, but there's not an option to increase lower resolution footage after it's been shot. State the fundamental features of the digital camera that are required when producing video content. • What is the objective of using the video? • How much detail does the content need to show? • What kind of video might the audience prefer?
Lesson 6/7	Describe what is meant by 'audio'. Sound, particular referencing that which has been recorded, processed, or transmitted. Understand the concept of dynamic and condenser mics. Dynamic: Doesn't need to be powered - simply plug this microphone into a speaker to use. Condenser: Needs to be powered. Capable of capturing incredibly detailed sound - often making them the choice for studio recordings (they work well for both vocals and acoustic instruments or groups).
Lesson 9	List the main components that make up a computer. • Motherboard • Processor • Graphics processing unit

	• RAM • HDD / SSD • Sound card	
Lesson 10	Explain what is meant by the term 'software'. Referencing applications, scripts and programs that can be run on a device - such as a smartphone, a tablet, or a computer or desktop. Describe the importance of keeping software up to date. It's important to recognise that software will require updates to maintain the 'quality' of the product. The quality and opportunities that a product provides its user with is something that should be considered before any creator invests in a software application, that being said, here are some software 'dimensions' that can be considered to determine 'quality'.	
Lesson 11	Describe what is meant by 'motion capture'. Technology that records the movement of people or objects, transferring this data to a computer program to enable photorealism (the rendering/production of images in an incredibly realistic manner) in a virtual environment. Describe the difference between active and passive markers in the context of motion capture. Passive optical system utilises markers that are coated in a material designed to reflect light. The camera then captures this light and the motion capture system estimates the 3D position of each marker. An active optical system uses markers that have an in-built light source (typically LED) - emitting light without the need for a light source to produce some form of reflection.	
Lesson 12/13	Define what image editing is. This refers to the process of modifying digital or analogue (sometimes referred to as 'traditional') photographic images using certain techniques, tools, and/or software. Describe the benefits of image editing. Quality: A lot of the time, photos taken by professional photographers are good, but aren't quite perfect for the purpose of their capture.	

	Creativity: Editing an image can be a truly creative art. With many technicians producing beautiful and imaginative creations by exploring traditional and unique editing techniques. Branding: For some businesses, images are how they tell the story of their product or service. This means that the images they produce also need to tell the story of their brand. Enhance sales: Editing images can also enhance the likelihood that customers will buy into a brand and their stock.	
Lesson 14, 15, 16	What is video editing is and its purpose? The process of manipulating and editing the arrangement of video shots - altering the structure of the footage in this way conveys different information, pace, and emotion to the audience for different purposes. Describe three reasons for editing a video. Unwanted footage: A common editing task, many video editors look to drastically improve the look and feel of their video content by simply getting rid of unnecessary visual waste. Graphics, text, and more: An incredibly impactful part of editing, the addition of things such as graphical text, special effects, and audio can elevate a piece of video content and give it the 'wow' factor that simply would be there without these elements. Tell a story: Ultimately, a successfully edited video will tell the story or serve the narrative/agenda it set out to.	
Lesson 17.	What is audio editing? The process of manipulating and editing sound recordings for both corrective and creative measures. Describe the core ways in which audio can be edited. Cutting: A basic form of audio editing that involves selecting a piece/section of the audio that is unwanted, before cutting or deleting it. Fading: This type/technique smooths out sudden changes in the volume of the audio recording. Mixing: This combines multiple audio files into a single file.	