



Knowledge organiser-Year 7

- Autumn 1-Geography of the UK and beyond.
- Autumn 2-Natural hazards
- Spring 1-Economic and social development
- Spring 2-Weather and climate
- Summer 1-Rivers
- Summer 2-Sustainability

The United Kingdom

- The world is made up of 7 continents (South America, North America, Europe, Africa, Asia, Oceania/Australasia, Antarctica and Antarctica).
- The United Kingdom is made up of four countries (England, Wales, Scotland and Northern Ireland). London is the capital city of the United Kingdom.
- The UK is located in the continent of Europe.
- Europe is the 3rd largest continent in population but only 6/7 for space.

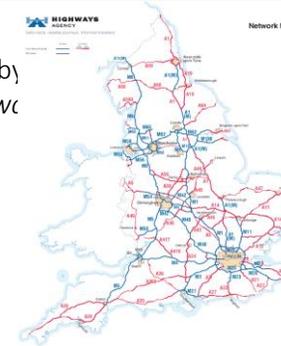
Types of settlement:

- Hamlet**-one or two farms with large space in-between.
- Village**: small settlement, with a population of up to a few thousand people. They are usually surrounded by rural fields and forest.
- Town**: Urban settlements with populations of up to over 10,000 people.
- City**: large urban settlements made up of different neighbourhoods. If a city has a population of over 10 million, it is known as a Megacity. The UK has many cities – the largest is London.
- Urban** - A built up area (e.g. town or city)
- Rural** - A sparsely populated area (such as a village or hamlet)

Human Geography of the UK

Human features have been created by humans (*towns cities roads and railw*

- London (city)
- Birmingham (city)
- M1
- M25



Each continent has different features:

- The continent with the biggest population and land mass is Asia.
- Asia's current population is 4.6bn.
- The climate in Asia can range from tundra to tropical.
- In the north of Asia, the climate is mainly tundra.
- In the South of Asia in countries such as India and Indonesia the weather is mainly tropical.
- North America is bigger in landmass and population compared to South America.
- The UK is in Europe which has a mainly deciduous climate.

Human Geography of Southampton.

- At risk of flooding due to urban development and climate change.
- Not enough houses to meet demand.
- Densely populated resulting in unemployment.
- Lots of cultural events e.g. Notting Hill Carnival.



Physical Geography of the UK

Physical features are natural features of the land that have not been created by humans (*rivers, lakes, mountains and oceans*). Physical features are shown on a relief map. Relief is the geographical word that tells us the lay of the land (slope steepness, altitude (height above sea level).

- Ben Nevis, Scarfell Pike, Showdown
- River Thames, River Trent



How and why might population size of continents change in the future?

- Climate change.** Land is flooded, leaving less space for more people. Mass migration.
- Natural disasters.** Areas are unsafe to live in, mass migration, overcrowding in other countries.
- Natural increase.** World population increases, less space for more people.
- Diseases like Corona Virus.** Some continents (LIC's/poor continents) suffer more.
- Increased wealth.** As some continents like Asia get wealthier they can build more cities.

Physical Geography of Southampton.

- Lowland area
- Area is easy to build on as it is flat.
- Main river is River Solent, flows from Dorset 78 miles East to the English Channel.
- Easily flooded due to being flat.
- Flood maps and parks have been designed to manage flooding.



How does the physical and human landscape affect where people in the UK live?

Physical factors:

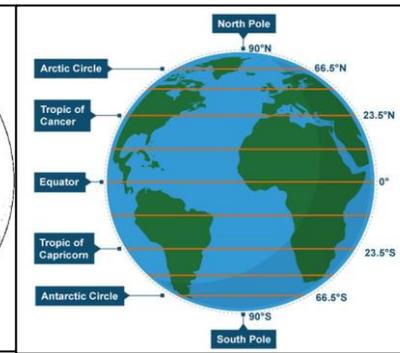
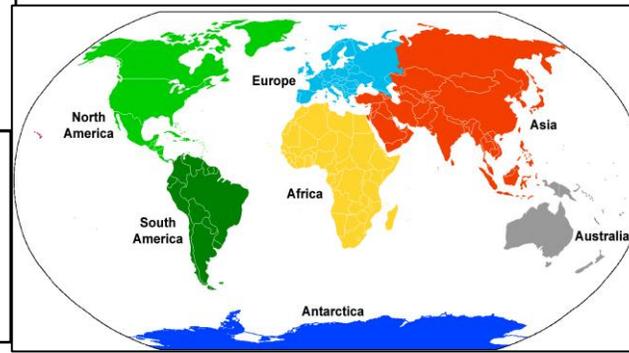
- Flat land is easier to build on/farm.
- The south has warmer drier climate, this is ideal for farming.

Human factors:

- In the South of England is the capital city London, this provides more job opportunities, social activities and entertainment.
- Best Universities in the UK are in the South, Cambridge and Oxford.

How to describe locations using physical and human features.

- Use compass points to state what the location is next to
- State the physical features in the area
- State the human features in the area.



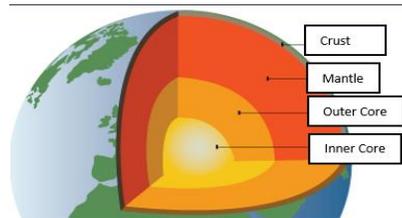
Better transport links, making it easier to travel and see people.

By 2040, 70% of the UK will live in urban areas. Do you think this is a good idea or do you think more people should live in rural areas?

- Isolation during pandemics like COVID vs. better access to technology and wi-fi-homeschooling during lockdown.
- Protecting areas for nature vs. overcrowding in cities and towns.

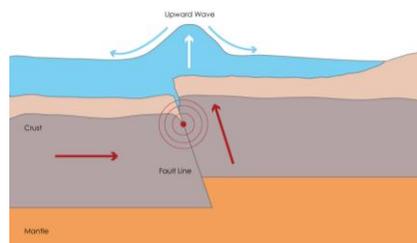
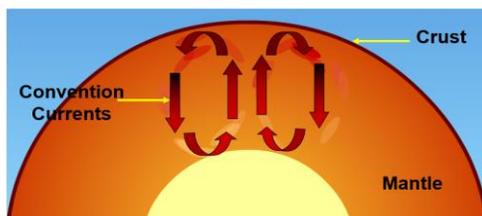
The Geography Knowledge – Tectonic Hazards

Tectonic Plates	The crust is split into several pieces (like a cracked egg shell). These pieces of rock are called tectonic plates. They float on the mantle.
Oceanic Crust	Crust found under the oceans (thin, young, more dense)
Continental Crust	Crust found under land (thick, old, less dense)
Continental Drift	Theory that said the earth's continents are very slowly moving in different directions.
Subducted	Goes underneath
Magma	Molten(melted) rock
Focus	The point where the pressure is released
Fault line	The line between the two plates



CONVECTION CURRENTS

- The mantle is made up of semi molten rock.
- Convection currents are circular currents in the mantle. The magma is heated up, it rises. Then cools as it hits the surface. It moves in a circular motion and drags the tectonic plate along.



DESTRUCTIVE PLATE BOUNDARY

Two plates move towards each other. One plate is **subducted** beneath the other.

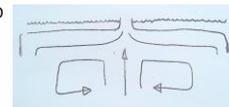
- As they move past each other, pressure builds up and up and up. This pressure is suddenly released = earthquake.
- As they move past each other friction and pressure cause the surrounding plate to melt = magma. This rises through the crust = volcano.



CONSTRUCTIVE PLATE BOUNDARY

Two plates move away from each other due to convection currents in the mantle.

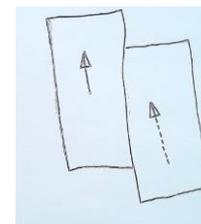
- This leaves a gap. Magma rises to fill this gap = volcanoes. This usually occurs under oceans. The magma creates new land = sea floor spreading
- As a magma rises, small earthquakes occur.



CONSERVATIVE PLATE BOUNDARY

Two plates move past each other, either in the same direction at different speeds or in opposite directions.

- As the two plates slide past each other, pressure builds up and up and up. This is suddenly released = earthquakes



Tsunami's occur when a large piece of Earth's crust can be thrust upward or slip from side to side. The movement of a large chunk of Earth displaces the water above it, meaning it takes up the space where the water used to be. The water has no where to go but up and out.

NEPAL EARTHQUAKE (LIC)

- Where:** Nepal, Asia.
- Plate Margin:** collision plate boundary of the Eurasian and Indian plates.
- When:** 25th April, 2015.
- Magnitude:** 7.8 on the Richter Scale.
- Epicentre:** East of Gorkha District, Barpak. 80Km NE of Kathmandu.

EFFECTS

- Primary effects** happen straight away or are a direct cause of the earthquake.
- Secondary effects** happened after the earthquake and are often as a result of a primary effect. See below:

PRIMARY EFFECTS

- 9,000 dead
- 22,000 injured
- 60,000 homes and buildings damaged or destroyed.
- 4 hospitals destroyed in Kathmandu
- 24,000 classrooms destroyed or damaged
- Transportation routes (roads, rail, ports, airports) destroyed by fallen buildings
- Service lines (water, gas, electricity) destroyed

SECONDARY EFFECTS

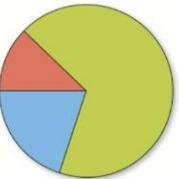
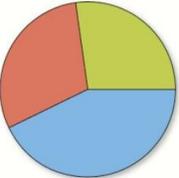
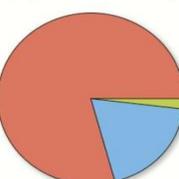
- Trauma and diseases from dead bodies.
- 2.8 million people displaced.
- Increase in unemployment and companies stop making money as cannot export goods
- High crime rates
- Aid supplies could not reach victims.
- Cost :\$10 billion

MT MERAPI VOLCANO (LIC)

- Where:** Indonesia. The border between Central Java and Yogyakarta provinces
- Plate Margin:** Stratovolcano, Destructive plate, indo-Australian subducted beneath the Eurasian plate.
- When:** 25th October-30th November 2010.
- Magnitude:** 4 VEI (volcanic explosivity index)
- Effects:** Volcanic bombs and heat clouds, with temperatures up to 800°C, spread over a distance of 10 km.
- Pyroclastic flows travelled 3 km down the heavily populated mountain sides.
- Volcanic ash fell up to 30 km away and travelled 6 km into the sky
- 353 people were killed
- 577 people were injured.

	HIC	LIC
Quality of infrastructure	The buildings, roads and bridges in HICs are much stronger. They also have earthquake proof buildings that do not fall down.	The buildings are built out of poor quality materials = fall down during earthquake.
Use of monitoring and predicting equipment	HICs use equipment to monitor the ground to predict when the earthquake will occur. They also have plans to help them prepare for when the earthquake occurs	Not all LICs can afford monitoring equipment to predict when the earthquake will occur or have sufficient plans to help them prepare for when it does.
Communication systems	HICs have good communication systems to help communicate with the population what to do following the earthquake.	LICs do not have good communication systems to communicate with the population what to do following the earthquake = do not know what to do.
GDP: wealth of country	Countries have more money to spend planning, predicting and protecting themselves from the earthquake, they can also rebuild the country quicker.	LICs, do not have the money to rebuild after a natural disaster. They also can't spend as much money on search and rescue or clean up operations.

KS3 Geography Knowledge: Social and Economic Development

Employment	The state of having work.	How has the UK's economy changed since 1600?		Employment structure in 1600	
Employment rate	The % of people within a population who have jobs.	1600s	Most people worked in agriculture (primary), with a few people making things in workshops (shoes, furniture) and providing services to rich families. Most of the jobs were located in rural areas.	 <p>Employment structure in 1600</p>	
The employment sectors:	Primary, secondary, tertiary, quaternary				
Primary sector jobs <i>Primary jobs are found....</i> <i>For example...</i>	The extraction of raw materials. Raw materials are anything that is naturally present in the earth. In rural areas where the raw materials are. Farmers, fishermen, miners, oil workers, forestry workers.	1850s	In the 1850s, less people work on farms and more people work in factories in towns and cities. This occurred due to the UK's Industrial Revolution. This was the growth of secondary manufacturing in factories. Less people worked on farms due to the new practices (horses and ploughs). More people worked in factories due to the rapid increase in jobs available in factories. These jobs paid more too.		 <p>Employment structure in 1850</p>
Secondary sector jobs <i>Secondary jobs are found...</i> <i>For example...</i>	The manufacturing of goods. Turning raw materials into higher value products often in factories. In urban areas where the factories are built. Metals become cars, crops become processed foods, cotton becomes clothes.				
Tertiary sector jobs <i>Tertiary jobs are found...</i> <i>For example...</i>	Tertiary sector: the provision of services for other people. In urban areas as they need a large population to sell their services to. Teachers, doctors, nurses, lawyers, policemen, dentists, bankers...	1970s	In the 1970s, less people work in factories (secondary) and more people work in services (tertiary). Less people work in factories due to de-industrialisation – when many of the factories moved abroad to poor countries due to cheap labour. This meant many factories in the UK closed down. Also jobs in the tertiary sector pay more.		
Quaternary sector jobs <i>Quaternary jobs are found..</i> <i>For example...</i>	Quaternary sector: research and information technology industries. In urban areas as they need to hire lots of highly skilled university graduates and most universities are located in cities. Scientists developing new medicines, financial planners using models to make financial decisions.	Today	Today most people in the UK work in services (tertiary), however the growth of computers has seen the beginning of quaternary industries in the UK. <i>In 2018, 1% of people worked in the primary sector, 18% in the secondary sector and 81% in the tertiary sector</i>		
Economy	People produce goods and services, which other people buy. The economy means the whole network of people producing and consuming goods.	Economies of the world: how do economies change in different countries?		 <p>Employment structure today</p>	
Growing economy	When the quantity of goods and services being produced increases.	Ethiopia	Most people in Ethiopia work in the primary sector, on farms and in mines. There are 58 million farmers in Ethiopia. Farming is important to Ethiopia because they need to grow and sell enough crops to improve their living standards (invest in education, healthcare, infrastructure).		
Shrinking economy	When the quantity of goods and services being produced decreases.	China	220 million people in China work in factories in the secondary sector. It makes more goods than any other country. China has started to develop, having recently gone through their industrial revolution (growth in manufacturing in factories). They still produce most of their own food, however the use of machines has reduced the number of workers on the farms. Due to the money they earn from manufacturing, China have developed their healthcare education and infrastructure.		
Development	The process of change for the better.				
LIC	Low Income Countries have a low income (less than \$1045 per year), poor quality housing, services, healthcare...etc. Their primary source of income is from agriculture. <i>Ethiopia, Somalia, Liberia.</i>				
NEE	Newly Emerging Economies are countries that have started to industrialise (move into the secondary sector – factories) and are developing. <i>China, India, Brazil.</i>	The UK	Most people in the UK work in tertiary industries. These people provide a service in hospitals, schools, offices, banks, shops...etc. We still have some secondary industries but they need fewer workers because we use machines, robots and computers. We have very few people working in primary industries as we get most primary goods from abroad.		
HIC	High Income Countries are developed countries that a high income (more than \$12,746), good access to services and strong infrastructure. They are mainly have tertiary & quaternary industries. <i>UK, USA, Japan, Italy, Germany.</i>				
Development indicator <i>For example...</i>	A measure of development Gross domestic product (GPD), birth rate, death rate, infant mortality rate, literacy rate,			TNC	A transnational corporation is a company that operate across multiple countries.
GDP	The total value of the goods and services a country produces in a year Essentially it's annual income.	Evidence Apple is a TNC	<ul style="list-style-type: none"> Its headquarters are in California (USA). Here quaternary sector engineers program the features you love such as <i>voice command, facial recognition...etc.</i> The materials that make up an iPhone include 60 different metals, plastic and glass. These are purchased from many countries. The iPhone is created in factories mostly in China. The iPhone is sold in many countries (such as USA, UK, France, Spain, Italy...etc.) 	<div style="border: 1px solid black; padding: 5px;"> <p>Key</p> <ul style="list-style-type: none"> primary sector secondary sector tertiary sector </div>	
GDP per capita	The total income divided by the total population. It gives the average salary within a country.				
It is important to use more than one indicator as....	<ul style="list-style-type: none"> Not all people earn the same amount of money. Thereforeper capita is not accurate. There might be an anomalous result. 				

KS3 Geography Chapter: Social and Economic Development

CAUSES OF THE DEVELOPMENT GAP		REDUCING THE GAP: AID	
Development gap	The difference in development between HICs and LICs.	Aid	Another word for help. Richer countries give poorer countries aid to help them make a better future for themselves.
Landlocked	Countries with no coastline = difficult to trade (import/export) with other countries = difficult to make money. For example, Mali, Africa, is landlocked and has a GPD per capita of just \$901.	Bilateral aid	Aid given from one government to another (the UK gives aid to Pakistan).
		Multilateral aid	Aid given through an international organisation (the World Bank, the UN)
Extreme climate	Many LICs have extreme climates (<i>extreme temperatures, too much or too little rain</i>). Extreme climate make it difficult for LICs to grow crops = lack of food to eat or sell = poverty and famine. Between 1978 and 1998, Ethiopia had 15 droughts.	NGOs	Non-Governmental Organisations are charities (e.g. Oxfam, WaterAid).
		The DfID is...	The Department for International Development is responsible for the UK's bilateral aid.
Natural Hazards	Many LICs suffer common natural hazards (<i>droughts, floods, storms, earthquakes</i>). The country is so busy responding to the natural hazard they do not have money to invest in healthcare, education, infrastructure = lack of development. For example Bangladesh suffers from annual floods which in August (2017) affected 6.9 million.	How does the UK provide aid?	In 2018, the UK invested £14.5 billion in aid projects, such as for disaster relief, education, healthcare, access to services. To countries such as Ethiopia, Pakistan, Somalia and Nigeria.
		Sustainable aid...	<ul style="list-style-type: none"> • Helps those that need it the most and helps in the long term. • Involves the locals and teaches people skills. Is cheap, using appropriate technology that can be easily maintained by locals.
Conflict & corruption	Many wars occur in LICs = money is spent on the military and weapons instead on improving healthcare, education, transportation or access to services.	Large scale aid projects.	Large scale projects are expensive and well-publicised schemes producing help to large areas. To help Ghana develop the Akosombo Dam was built on the River Volta. It was to built to generate hydro-electricity, which is clean renewable energy formed by fast flowing water.
			<ul style="list-style-type: none"> ✓ The dam produces clean renewable energy for locals to use and Ghana to sell = more money for healthcare, education, services ✓ The lake behind the dam gives water for irrigation = more crops to eat and sell. ✗ Money was borrowed from USA on the condition that an American company Valco could use electricity from the dam at a very cheap price = there is often little left for the locals = blackouts. ✗ It cost £130 million and took 8 years to make. Also 80,000 people were forced to move due to flooding caused by the lake behind the dam.
Lack of education	Lack of education = people do not have the skills to work in high paying jobs. As a result many people are unemployed or have low paying jobs = low GDP.	Small scale aid projects	Small scale projects are government or charity funded. They provide specific improvements for a small area and prioritise training of locals so that they can become self-sufficient. To help Ghana to develop, WaterAid built water pumps in remote villages.
Lack of healthcare	Waterborne diseases & tropical diseases (malaria) are common in LICs due to poor sanitation (sewage gets into drinking water) and mosquitoes. A lack of healthcare stops people getting better = cannot work/die from diseases/children miss school. In 2015, 89% of all malaria cases were in sub-Saharan Africa.		<ul style="list-style-type: none"> ✓ It was cheap (£1200 per water pump) and used appropriate technology locals could use. ✓ It involved the locals to decide where to build the pumps and trained locals how to use and fix it. ✓ Clean water = children can go to school, families have clean water to cook, drink and clean, there are less waterborne diseases. ✗ It is small scale so fewer people were helped.

QUALITY OF LIFE IN AN LIC: LAOS

Malawi is a long thin country, located in east Africa. It is about ½ the size of the UK with a population of 17 million. One of its main physical features is Lake Malawi, which is rich in fish = food and income for locals, however it is still very poor.

- GPD per capita = \$780.
- Life expectancy = 55 years
- Literacy rate = 61%

90% of its population work in farming, exporting tobacco, sugar, tea & cotton. These are low value goods which do not make much money. It is also poor as it is landlocked making it difficult to trade with other countries.

Quality of life:

- Poor quality clothing, lack of footwear
- School: class sizes of 97 children, no table and chairs, lack of equipment, students sit on the floor
- Home: no electricity, children sleep on mats on the mud floor.
- Future: education for girls is rare. Most girls get married at 18 and have babies.



QUALITY OF LIFE IN AN NEE: BANGLADESH

Bangladesh is located in southern Asia bordering India. Its population of 165 million, with 98% identifying as Bengali. It has a high a population density.

Bangladesh currently is going through its Industrial Revolution = growth of factories & manufacturing. It makes the 2nd most clothes in the world (after China). Most clothes shops in the UK get clothing made there. This earns Bangladesh over £14 billion a year and employs 4 million, helping Bangladesh to develop, improving healthcare, education & services.

- GPD per capita = \$1698.
- Life expectancy = 72 years
- Literacy rate = 73%

Quality of life in factories is not great:

- Low wages (£45 per month), long hours (14 hours a day, 7 days a week)
- Dangerous conditions: a number of factories have collapsed or caught fire. In 24th April, 2013, the Rana Plaza (a factory making clothes for Primark, Matalan) collapsed killing 1100 workers. Physical & emotional abuse is also common.



QUALITY OF LIFE IN AN HIC: SINGAPORE

Singapore is an island located in south east Asia. It is very small (½ the size of Greater London). Its population is 5.5 million, with a very high population density.

Singapore is one of the wealthiest countries in the world, with a large tertiary industry. Its employment structure is: 1% (primary), 16% (secondary), 83% (tertiary). Unfortunately, 15% of the population are poor: the wealth is not evenly distributed.

It earns money by importing cheap raw materials from LICs and turning these into more expensive products in factories. These are exported (sold) = profit. Its main source of income, however, is from its tertiary industries (*finance, insurance*).

- GPD per capita = \$57,700.
- Life expectancy = 84 years
- Literacy rate = 97%

Quality of life:

- Home: smart clothes, lots of delicious food, many families have a maid.
- Great education – extracurricular activities and lots of facilities/

