Y8	HT1	HT2	HT3	HT4	HT5	HT6
Topic(s)	Think Like a Geographer	The Local Area & Environmental Quality Survey	Environmental Quality Survey & Hydrology	Hydrology & Climate Change	Climate Change & Population	Population
Substantive Knowledge (Know That)	 Plates are constantly moving at a few centimetres each year. This is a result of convection currents. This is a non-stop process; however, the movement is slow. Ridge push -magma rises as the plates move apart. The magma cools to form new plate material. As it cools It becomes denser and slides down away from the ridge. This causes other plates to move away from each other. Slab pull – The denser plate sinks back into the mantle under the influence of gravity. It pulls the rest of the plate along behind it. A destructive plate boundary, also known as a convergent boundary, is a region where two tectonic plates are colliding with each other. At this boundary, one plate is usually subducted, or forced beneath the other plate, as the two plates move 	 Turbines use energy from the wind to generate electricity, either on land or out at sea. They are often in large wind farms. Energy from the sun is used to heat water and solar cookers, or to generate electricity using photovoltaic cells. Underground reservoirs of steam and hot water can be tapped into to generate electricity or to heat buildings directly. Water is trapped by a dam and allowed to fall through tunnels, where the pressure from the falling water turns turbines generating electricity. Wood, plants or animals burnt for power or used to produce biofuels. The wind is free and with modern technology it can be captured efficiently. This energy is renewable with no 	 The Development Gap Know that: Developing countries have a relatively low standard of living and an undeveloped industrial base. Developed countries have a relatively high standard of living and well-developed industrial base In the 1980s, the Brandt Line was developed as a way of showing how the world was geographically split into relatively richer and poorer nations. The concept of a gap between the Global North and the Global South in terms of development and wealth. Classifying countries. GDP per capita is the sum of gross value added by all resident producers in the economy plus any product taxes (less subsidies) not included in the valuation of 	 Meteorology Know that: The further north, the higher the latitude, the colder the climate, this is because the sun is at a lower angle in the sky, meaning its heat energy is spread over more of the Earth's surface. Temperatures decrease with altitude. There is a 1°C drop in temperature for every increase of 100 m in height. This is because the air is less dense so is less able to retain the heat it receives from the ground. Oceans heat up and cool down much more slowly than land. This means that coastal locations tend to be cooler in summer and warmer in winter than places inland at the same latitude and altitude. The prevailing wind is the most frequent wind 	 14 of the 33 most water stressed countries in the world are in the Middle East. The heaviest precipitation falls along the Mediterranean coast and in the mountainous regions. The south receives much less water than the north. The Tigris River runs through four countries: Iran, Iraq, Syria, and Turkey. It is an important waterway for travel and provides a vital water source for agriculture and for people. Oil and gas are formed from the dead remains of oceanic plants and fish that have been heated under pressure for millions of years. Five countries in the Middle East account for 46.4% of world's known oil reserves and 38% of natural gas 	

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 towards each other. The shape of a volcano may change as magma moves up the main vent and is trapped by a previous lava plug. This causes the volcano to bulge as the main vent becomes full of magma. Tiltmeters can measure the change in slopes, even if they are small changes. Tremors are often felt before a volcanic eruption, especially on a destructive boundary. This is due to the oceanic plate subducting beneath the continental plate. Seismometers measure the strength of tremors and record them on seismographs. Volcanic emissions (such as sulphur dioxide and carbon dioxide) may increase before an eruption. This provides a warning for authorities to make plans for evacuation and to place emergency services on-call. 	 greenhouse gases once built. The strength of the wind is not constant, so turbines do not produce the same amount of electricity all the time. Wind energy is available everywhere so no one country is totally dependent on external supplies, such as oil and gas. Large wind turbines are needed. Even the large turbines serve only 500 homes. The Middle East and North Africa (MENA)* is the most water-scarce region of the world. Home to 6.3 percent of the world's population, the region contains only 1.4 percent of the world's renewable fresh water. Distribution refers to the way something is spread out or arranged over an area. It may be even, uneven, clustered, linear. It may be useful to use 	 output, divided by mid-year population. Life expectancy is the average period that a person may expect to live. Infant mortality rate is the number of infant deaths for every 1,000 live births. In addition to giving us key information about maternal and infant health, the infant mortality rate is an important marker of the overall health of a society. Adult literacy is the percentage of the population aged 15 years and over who can both read and write with understanding a short simple statement on his/her everyday life. Development can be measured via GDP per capita, life expectancy, literacy rates and infant mortality rates. Birth rate is the number of live births per thousand of 	 direction a location experiences. In Britain the prevailing wind is from the southwest, which brings warm, moist air from the Atlantic Ocean. This contributes to the frequent rainfall. When prevailing winds blow over land areas it can contribute to creating dry climates. When the land warms up, it heats the air above it. This causes the air to expand and rise. As the air rises it cools and condenses. If this process continues then rain will fall. This type of rainfall is very common in tropical areas but also in areas such as South East England during warm sunny spells. Prevailing winds bring warm, moist air to the western British Isles. Air is forced to rise over high areas. Air cools and condenses. Clouds form and it rains. Air descends on 	 reserves. Oil and gas are fossil fuels and therefore non-renewable. Since its discovery, oil has brought great wealth to the Middle East. Its export to other regions of the world has created wealth globally, making the Middle East one of the most important economic regions in the world. In the long term, oil and gas reserves will eventually run out, as they are non-renewable energy sources. Bahrain and Oman are in the most precarious position, with reserves expected to run out within the next decade for Bahrain and within 25 years for Oman. In the medium term, revenues from oil are expected to decline in the face of reductions in global demand starting around 2040, 	
evacuation and to place emergency services	even, uneven,	• Birth rate is the	cools and condenses. Clouds form and it	the face of reductions	

 eruption, as the rising magma heats the water below the surface. PH monitoring detects any changes in the acidity of water near the volcano. As magma rises acidic gases can leak into the nearby soil. Volcanologists (people who study volcanoes) are skilled at predicting the likelihood of an eruption. Tectonic plates cause the plates to bend. This caused stress to build up within the area. Suddenly the stress is released like a spring, with the plates moving. This energy creates a massive earthquake and displaces the water to form a large wave. Large waves move away from the earthquake's epicentre, travelling up to 600 mph. The wave started to spread like a ripple from a stone dropped in water. As the wave approaches shallow coast, the wave slowed down due to friction, but increased in height to about 40m. The 2011 Japan tsunami produced waves up to 40 	 Anomalies are parts of a pattern that do not fit the trend. Trend, Evidence, Anomaly (TEA) can be used to describe most geographical data. Graphs are analysed by looking if there are any trends, sudden rises or falls, repeating patterns, or places where lines cross each other. Use Trend, evidence, anomaly (TEA). Calculate the range or give data to support your answer. 	 development: a long and healthy life, being knowledgeable and having a decent standard of living. The number of doctors per 10,000 people is a measure of quality of life or social well-being. Bilateral aid or tied aid – Aid given from one government to another. It normally includes deals and tied contracts. Multilateral aid – Aid given by NGOs (Non-Government Organisations) like the Red Cross or Oxfam Emergency or short-term aid - Normally given over a long period of time to help countries develop – it normally involves giving them food etc. Long term aid – Given over a long time period to help countries develop – it normally involves teaching and supporting people rather than giving them food, medicines etc. There are advantages and disadvantages to 	 mass meets a warm tropical air mass they do not mix - they form fronts. The colder air mass is heavier than the warmer air mass, therefore the lighter, warmer air rises over the top of the heavier, colder air. As the warm air is forced to rise it cools. Also, the warm air is in contact with the cold air along the fronts, and this also cools. Condensation occurs and clouds form. Rain occurs along the front. There are 5 main air masses that affect the UK, each bringing different weather. Maritime brings wet weather, continental brings dry, polar brings cold and tropical brings warm weather. Anticyclones form when air subsides, falls. As air subsides it gradually warms, this warming can stop clouds from forming. However, if there is some warm air located near the ground, some air may rise and form areas of patchy or high 	 energy efficiency. Today, Yemen is important globally as it holds 3 million barrels of proven oil reserves, ranking 29th in the world. Yemen is also strategically important because it sits on a strait linking the Red Sea with the Gulf of Aden, through which much of the world's oil shipments pass. Until 1990 Yemen was divided into two different countries – North Yemen and South Yemen. The north of the country is predominantly Shia Muslim, whilst the south is predominantly Sunni Muslim. They have slightly different beliefs about Islam. Different sides support different leaders for the country. These differences have cause conflict in the country with Iran and Saudi Arabia also becoming involved Iraq had huge debts, following the war with Iran. Saddam ordered 	
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the environment and forced 110,000 people to	 Fair Trade forbids child labour. 	to solar heating, the warm air above the	(Outside influence). This time Saddam was	
evacuate their homes	• Fair Trade farms	water rises quickly,	removed from power	
and businesses.	respect and protect the	causing an area of very	and killed.	
All farms abandoned	environment.	low pressure. As the air	Know that:	
within 12 miles of	• Fair Trade farmers use	rises quickly more	 The heaviest 	
Fukushima due to	sustainable farming	warm moist air is	precipitation falls	
radiation, and food	methods.	drawn upwards from	along the	
contaminated up to 200	• Fair Trade product	above the ocean	Mediterranean coast	
miles away leading to	quality will be	creating strong winds.	and in the	
shortage in food.	improved.	 Colder air is drawn 	mountainous regions.	
Access to some	• Tree Aid works with	down into the middle	The south receives	
communities were off	local authorities to	of the tropical air to fill	much less water than	
leaving people unable to	protect and restore	the void creating an	the north.	
access basic services,	forests.	eye of calm weather.	• The dromedary camel,	
requiring helicopters to	• Tree Aid is an example	 Rising cumulonimbus 	or Arabian camel, or	
get them to safety.	of a bottom-up project	clouds around the eye	one-humped camel	
Water was contaminated	as local people and	creates a vortex.	has adapted to live in	
by the debris, oil leaks	local authorities	 New Orleans is located 	the desert with long,	
and nuclear radiation.	coordinate the project.	on the south coast of	shaggy fur that keeps	
 Toyota and Nissan closed 		the USA in	them warm but which	
20 factories to check	A scatter plot is a type of	 Louisiana state. 	they can shed during	
safety, losing billions of	plot or mathematical	 Hurricane Katrina was 	hot months. Their	
pounds.	diagram using	a Cat 5 tropical storm	wide hooves keep	
 In coastal areas, farmers 	cartesian coordinates	that hit New Orleans in	them from sinking in	
cannot grow food for at	to display values for	2005.	sand. The energy-rich	
least five years due to	typically two variables	 Mandatory evacuation 	fat stored in their	
contamination of the	for a set of data.	of New Orleans took	humps enables them	
fields by the salt water	 A positive scatter plot 	place on the 28th	to survive long	
from the tsunami.	is a graph that shows	August.	periods without food.	
 300 hospitals were 	some data points that	 80% of the city got 	 Distribution refers to 	
damaged, and 11	trend up from left to	out, leaving 20% in the	the way something is	
destroyed	right in a linear fashion.	danger zone.	spread out or	
 Prediction involves using 	This means that as x	 The levees could not 	arranged over an area.	
seismometers to monitor	increases, so does y.	hold back the storm	It may be even,	
earth tremors. Experts	 If the points on the 	surge. They broke in	uneven, clustered,	
know where earthquakes	scatter plot seem to	53 places.	linear. It may be useful	
are likely to happen.	form a line that slants	• 300,000 homes were	to use compass	
However, it is very	down from left to right,	destroyed.	direction, scale and	
difficult to predict when	there is a negative	• 230,000 lost their jobs	place names.	
they will happen. Even	relationship or	• 1,300 killed		
looking at the timescale	negative correlation	 Superdome, evacuated 		
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 between earthquakes doesn't seem to work. However, tsunami early warning systems provid essential data on a tsunami following an earthquake and an effective tool at allowin people to evacuate. In tsunami-prone countries, hospitals, emergency services and residents practise for ar earthquake. Local communities have drills to practise, and signs on evacuation routes help people to get away from the high-risk areas quickly. This helps to reduce the impact and increases their chance of evacuation and survival Due to its location on tl Ring of Fire, Japan has the most tsunamis in th world. Following the 2011 tsunami, Japan had a massive rebuilding project, however when rebuilding towns, new strategies were include to prevent the same damage if a future tsunami struck again. 	e	between the variables. If the points on the scatter plot seem to be scattered randomly, there is no relationship or no correlation between the variables.	 orders and the national guards were immediate responses. Rebuilding and strengthening warning systems and defences were long-term responses. Distribution refers to the way something is spread out or arranged over an area. It may be even, uneven, clustered, linear. It may be useful to use compass direction, scale and place names. The enquiry process follows the format of: hypothesis or key question, theory, methodology, data collection, data presentation, data analysis and evaluation. An anemometer measures wind speed. Climates can vary on a micro-scale. Climates around the school grounds might vary. Biased sampling methods exaggerate results leading to less reliable data and less 		
damage if a future			results leading to less		

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	 creating platforms, building structures on stilts and to allow tsunami to go through them. Layer 3: Management, Evacuation plans, Early-warning systems. Distribution refers to the way something is spread out or arranged over an area. It may be even, uneven, clustered, linear. It may be useful to use compass direction, scale and place names. 			conclusions more valid.		
Disciplinary Knowledge (Know How)	 Plates interact with each other destructive plate margins. Tectonic hazards occur at the different plate margins. Volcanoes can be monitored and predicted. Tsunamis are formed. The 2011 tsunami in Japan affected the lives of people. The 2011 tsunami in Japan had primary and secondary effects. Primary effects lead to secondary effects. People predict, protect and prepare for earthquakes and tsunamis. Plans are made to protect people/places from tectonic hazards. Distributions, places and 	 Renewable energy extraction brings both opportunities and challenges. Physical and human factors cause water stress in the Middle East. The Ilisu dam brings both opportunities and challenges Distributions, places and journeys are described on maps. Numerical or graphical data is described using the TEA technique. 	 Countries are classified as either developed or developing. Development indicators are used to measure development and their limitations. Quality of life is explained through development indicators. Decisions are made as to the most appropriate methods to bridge the development gap. Fair Trade schemes bring opportunities and challenges to poor rural communities. Tree aid is improving the lives of people in Mali. Scatter graphs are drawn and analysed. Distributions, places 	 Climates vary around the world. Relief, convectional and frontal rainfall are formed. Different air masses bring different weather to the UK. Anticyclones are formed and how they affect weather. How depressions form and the type of weather they bring. Depressions affect people. Tropical storms are formed and where they are found. New Orleans was affected by Hurricane Katrina New Orleans responded to Hurricane Katrina. 	 Physical and human Geography interrelate in the Middle East. Water is distributed across the Middle East. Oil extraction and exportation is bringing opportunities and challenges to the Middle East. Development in Yemen has been hindered despite having significant reserves of oil. Several factors have led to conflict in the Middle East. Water is distributed across the Middle East. Camels have adapted to life in the desert. Distributions, places and journeys are 	

	journeys are described on maps.		and journeys are described on maps.	 Distributions, places and journeys are described on maps. Fieldwork investigations are undertaken. Data collection techniques impact results. Micro-climates impact atmospheric conditions on a very small scale. 	described on maps.	
Key Concepts	The processes that control plate movements	The importance of sustainable resource management	Global inequalities	Atmospheric processes and fieldwork skills	Geography of the Middle East	
Assessment	Mid-point and end of unit assessment	Mid-point and end of unit assessment	Mid-point and end of unit assessment	Mid-point and end of unit assessment	Mid-point and end of unit assessment	
Homework	Volcanoes Project. Write 2 pages of notes for the mid -point and end of unit assessments. Explain the causes, impacts and responses to the 2004 Boxing Day tsunami	Explain how the UK has changed its energy mix to be more sustainable. Write 2 pages of notes for the mid -point and end of unit assessments.	Explain how an Aid organisation is trying to improve the lives of people who are in need. Write 2 pages of notes for the mid -point and end of unit assessments.	Write a project about any storm to hit the UK. Include a map, name, date, causes, effects and responses. Write 2 pages of notes for the mid -point and end of unit assessments. Explain the differences between qualitative and quantitative research.	Middle East project. Include a map, culture, industry, ecosystems and urban landmarks. Write 2 pages of notes for the mid -point and end of unit assessments.	
Wider reading	Volcanoes & Earthquakes Paperback – Illustrated, 5 Sept. 2019 by Chiara Maria Petrone Earthquakes and Volcanoes (Collins Fascinating Facts,	Energy: Management, Supply and Conservation by Clive Beggs 2009 The Battle for Water: The Challenge of the 21st Century by Claude Piel	Understanding Global Poverty : Causes, Capabilities and Human Development byCosgrove, Serena, Curtis, Benjamin	Atmosphere, Weather and Climate by Roger Barry	The Middle East. by Martha London	

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	Plate Tectonics' by lain Stewart							
How to help at home	 Ensure your child completes all homework and revises prior to assessments. Key websites: 							
	- <u>https://www.bbc.co.uk/bitesize</u> - <u>https://www.nationalgeographic.com/</u> - <u>https://www.natgeokids.com/uk/category/discover/geography/</u>							
	 <u>https://www.coolgeography.co.uk/</u> <u>https://world-geography-games.com/</u> 							