

<b>Topic: GCSE 5.2: Urban Futures – What are the Challenges and Opportunities for Cities today?</b>		<b>Duration: 4 lessons</b>	<b>Composite: Unit test</b>
<b>Key vocabulary:</b>	<b>Core knowledge Components</b>	<b>Powerful knowledge components crucial to commit to long term memory</b>	<b>Links to previous and future topics</b>
pull, push, employment, sanitation, housing, services, opportunities, deprivation, inequality, affordable, favela, shanty, secondary, tertiary, education, health, infrastructure.	<p>2 - AC Cities have some different geographical processes taking place - Birmingham has a population of around 1 million people, it is a young diverse population. Urban decline - Birmingham used to have a large manufacturing industry. Due to competition from abroad, most of Birmingham's manufacturing industry has now gone. This has led to urban decline as manufacturing buildings were left empty and became derelict. Deprivation - with the closure of the manufacturing industry and high unemployment, parts of Birmingham experienced a spiral of social and economic decline leading to deprivation.</p> <p>Inequalities in housing - Birmingham's high population has resulted in pressures on housing. There is not enough good quality and affordable housing for people in the city. Education - the quality of education was particularly poor in inner city areas such as Spark Brook. Spark Brook is an area of deprivation with an ethnically diverse community where many children struggled to access and succeed in education. Health - in Spark Brook people with poorer English language skills found it difficult to access healthcare facilities. By comparison Sutton Four Oaks has a much higher standard of living.</p> <p>Birmingham has become more sustainable through the development of regeneration projects such as the new Library opened in 2013 with an aim to improve the education of the people of the city which would then improve jobs and then the standard of living. Projects also like HS3 plan to make the city more economically sustainable bring more jobs and opportunities to the people who live in and around the city.</p>	<p>*Birmingham is an AC World City - problems such as deprivation have occurred as a result of the closure of some industries. This has led to economic problems. These are trying to be tackled through regeneration with projects like the Birmingham Library and HS2.</p>	<p>3 – Distinctive landscapes – human impact on the environment. 4 – Climate Change – Increased urbanisation. 6 – Dynamic Development – Economic development 7 -UK in 21<sup>st</sup> Century – Multiculturalism/London, UK's changing economy.</p>

**Topic: GCSE 2.1: Climate Change - What Evidence is there to Suggest Climate Change is a Natural Process? Evidence**

**Composite: Unit test**

Key vocabulary:	Core knowledge Components	Powerful knowledge components crucial to commit to long term memory	Links to previous and future topics
<p>Geological time periods, quaternary, ice age, glacial, interglacial, temperature, evidence, reliability, ice cores, glacial retreat, global temperature increase, sea ice cover, severity, seasons.</p>	<ol style="list-style-type: none"> <li>1. The Earth is 4.5 billion years old – its history has been divided up into different time periods. We are presently in the Quaternary ice age period (started 2.6 million years ago). Although this period is considered to be an Ice Age, temperatures have fluctuated (increased and decreased). During temperature fluctuations, the colder periods are called glacial and these usually last around 100,000 years whilst the warmer periods in between are called interglacial and these usually last around 10,000 years. We are currently living in an interglacial period that began around 11,700 years ago. There has been a significant rise in temperature since 1880 – this is also the period where humans may have had the biggest effect on the temperature.</li> <li>2. There are many forms of evidence in terms of detailing how our climate has changed over time, some are more reliable than others. For example: - Scientists often use ice cores to detect changes in temperatures. When snow falls it traps air into the ice. When scientists take a sample of ice it reveals the atmospheric gas concentrations at the time the snow fell. These provide evidence of temperature differences going back 400,000 years. Scientists that study the ice cores say there is clear evidence that there has been a rapid increase in temperature in the past decades. Glacier retreat - Over the past 50 to 100 years, satellite images show that the world's on-land glaciers have been melting, which has caused them to retreat. This is a sign of increases in global temperatures; Sea ice positions Arctic sea ice cover has got 13.3% smaller every 10 years. Changing seasons - In recent years- spring arrives earlier and winters tend to be less severe. Temperature data - On-going temperature recordings across the World have been taken since 1880 using thermometer.</li> <li>3. On the other hand less reliable data includes diary entries and paintings as they are based on opinion and not scientific evidence.</li> <li>4. Quantitative data (numbers) are provided by measuring and recording, qualitative data is based upon personal experience/opinion. Quantitative data is more reliable/credible. The most reliable data is provided by ice cores as it goes back 400,000 years.</li> </ol>	<ul style="list-style-type: none"> <li>*Earth 4.5 billion years old.</li> <li>* Earths history can be broken down into different geological time periods – we are currently in the Quaternary ice age period that started 2.6 billion years ago.</li> <li>* Over time the temperature fluctuates.</li> <li>* These changes usually happen for around 100,000 years and the colder periods are called ice ages and the warmer periods interglacial.</li> <li>* Evidence for climate change varies in terms of reliability.</li> <li>*Scientific data tends to be more reliable than non-scientific sources. Data where ice core data has been analysed is more reliable than information from paintings.</li> </ul>	<ul style="list-style-type: none"> <li>*Unit 1 – Global hazards: Increasing temperature.</li> <li>*Unit 3 – Distinctive Landscapes – Landscapes shaped by glaciers in the UK.</li> <li>*Unit 4 - Ecosystems – Polar Environments.</li> <li>*Unit 7 – UK in the 21<sup>st</sup> Century: Physical Geography of the UK</li> </ul>

**Topic: GCSE 2.1: Climate Change - What Evidence is there to Suggest Climate Change is a Natural Process? Argument**

**Composite: Unit test**

Key vocabulary:	Core knowledge Components	Powerful knowledge components crucial to commit to long term memory	Links to previous and future topics
<p>Natural, man-made, Milankovitch Cycle, sun spots, volcanic eruption, greenhouse gases, methane, carbon dioxide, nitrous oxide, natural greenhouse effect, enhanced greenhouse effect, emissions</p>	<p>1. Natural causes - Humans were not around for many of the periods of climate change, in which case climate change must be at least partly natural.</p> <p><b>Milankovitch Cycles</b> - Climate change can be linked to how the Earth moves around (orbits) the sun. The three key ideas are <b>eccentricity</b> - the shape of the orbit changes from circular to oval so the Earth is closer/further away from the sun; <b>obliquity</b> (tilt) when Earth is tilted towards the sun it is warmer; tilted away from the sun it is cooler (think seasons!) and finally <b>precession</b> (wobble) as the Earth spins, it wobbles, which affects the severity of the temperature during seasons.</p> <p><b>Sun Spots</b> - Temporary dark spots on the sun's surface increase the amount of energy Earth receives from the sun and increases Earth's temperature.</p> <p><b>Volcanic Eruptions</b> - During a volcanic eruption dust, ash and carbon dioxide are released into the atmosphere. The dust blocks sunlight and results in cooler temperatures</p> <p>2. Earth is naturally kept warm by a layer of greenhouse gases (e.g. methane, carbon dioxide and nitrous oxide) which trap the sun's energy and reflect it back to Earth. Without this 'blanket' of gases, the average temperature would be -18, compared with the +15 it is (Natural Greenhouse Effect)</p> <p>3. Some human activities* cause/emit greenhouse gases, which add to the natural blanket. This means more heat from the sun is trapped and results in an increase in temperatures. This is called the enhanced greenhouse effect.</p> <p><b>*Transport:</b> road and air transport;</p> <p><b>*Agriculture:</b> deforestation (tree removal) to make way for farms; use of chemical pesticides and fertilisers</p> <p><b>*Dumping of waste at landfill sites</b> (decomposing waste produces methane)</p> <p><b>*Changing lifestyles:</b> as people have more £ to spend, they buy technology/gadgets that run off electricity</p>	<p>*Some of the natural causes are :-</p> <p>* Milankovitch Cycle – the way the Earth moves around the Sun.</p> <p>*Sun spots - dark spots on the Sun mean the Earth receives more energy from it.</p> <p>* Volcanic eruptions – Dust/ash etc can block the amount of sun getting to the Earth so can reduce temperatures.</p> <p>*Natural greenhouse effect – this is the layer of greenhouse gases (CO2, methane and nitrous oxide) that blanket the earth. These mean that the Earth is warmer.</p> <p>* Enhanced greenhouse effect -some gases that humans emit add to this blanket meaning the temperature is warmer.</p> <p>* There are many human activities that contribute to this including transport and agriculture.</p>	<p>*Unit 1 – Global hazards: Increasing temperature.</p> <p>*Unit 3 – Distinctive Landscapes – Landscapes shaped by glaciers in the UK.</p> <p>*Unit 4 - Ecosystems – Polar Environments.</p> <p>*Unit 7 – UK in the 21<sup>st</sup> Century: Physical Geography of the UK</p>

Topic: GCSE 2.1: Climate Change - What Evidence is there to Suggest Climate Change is a Natural Process? Consequences		Composite: Unit test	
Key vocabulary:	Core knowledge Components	Powerful knowledge components crucial to commit to long term memory	Links to previous and future topics
Retreating glacier, sea level rise, tropical crops, yields, energy consumption, global warming, droughts, floods, demand, energy,	<p>1 – There are many different forms of impact as a result of climate change these can be broken down into positive and negative impacts and SEE impacts.</p> <ul style="list-style-type: none"> <li>• retreating glaciers (ENV)</li> <li>• sea level rise will affect 80 million people (SOC) Climate Change Refugees from Tuvalu a country which is expected to disappear under the sea by 2050. 10,000 citizen migrating to New Zealand.</li> <li>• species in affected areas (eg Arctic) may become extinct (ENV)</li> </ul> <p>There are also some positive impacts of a warmer climate around the world:</p> <ul style="list-style-type: none"> <li>• energy consumption may decrease due to a warmer climate (ENV &amp; ECON)</li> <li>• longer growing season for agriculture (ENV)</li> <li>• frozen regions such as Canada may be able to grow crops (ENV)</li> </ul> <p>2 - Global warming can have negative impacts on the UK:</p> <ul style="list-style-type: none"> <li>• sea levels could rise, covering low lying areas, in particular east England (ENV)</li> <li>• Scottish ski resorts may have to close due to lack of snow (ECON)</li> <li>• droughts and floods become more likely as extreme weather increases (SOC, ENV, ECON) UK Drought 2012.</li> <li>• increased demand for water in hotter summers puts pressure on water supplies (ENV)</li> </ul> <p>Positive impacts from a warmer UK climate.</p> <ul style="list-style-type: none"> <li>• crops such as oranges, grapes and peaches can be grown in the UK (ENV)</li> <li>• winter heating costs will be reduced as winters will be milder (ECON)</li> <li>• accidents on the roads in winter will be less likely to occur (SOC)</li> </ul>	<p>* Many different forms of impact as a result of climate change some positive and some negative. Examples of positive impacts: *Reduced energy costs *Longer growing season for crops *New tourism destinations Examples of negative impacts: *Changing ecosystems *Tuvalu, may disappear under the sea.</p> <p>* The UK will also have a range of impacts again some positive and some negative: - Positive impacts *Different crops could be grown in the UK. *Warmer summers.</p> <p>Negative impacts *East of England threatened as a result of rising seas. *Possible closure of some Scottish ski resorts. *More droughts and floods.</p>	<p>*Unit 1 – Global hazards: Increasing temperature. *Unit 3 – Distinctive Landscapes – Landscapes shaped by glaciers in the UK. *Unit 4 - Ecosystems – Polar Environments. *Unit 7 – UK in the 21<sup>st</sup> Century: Physical Geography of the UK</p>

# Topic: GCSE 1.1 – How can the Weather be Hazardous? (A)

Duration: 7 weeks

Key vocabulary:

Core knowledge Components

Powerful knowledge components crucial to commit to long term memory

Links to previous and future topics

Global Circulation System, Hadley, Ferrel & Polar cells, equator, latitude, temperature, precipitation, climate, high pressure, low pressure, atmosphere, storm, tropical storm, El Nino and La Nina.

1- The Global Circulation System (GCS) is the movement of air across the planet. High pressure atmospheric conditions are largely responsible for milder temperatures, less precipitation and calmer winds whilst low pressure conditions are responsible for colder, wetter and windier weather.

2 Air circulates the Earth in three cells. Hadley - At the equator, the ground is intensely heated by the sun. This causes the air to rise which creates a low-pressure zone on the Earth's surface. The air continues to rise up to the upper atmosphere, and the following then happens: The air separates and starts to move both north and south towards the poles. When it reaches about 30° north and south, the air cools and sinks towards the ground.

The Ferrel cell occurs at higher latitudes (between 30 degrees and 60 degrees N and 30 degrees and 60 degrees S): Air on the surface is pulled towards the poles, forming the warm south-westerly winds in the northern hemisphere and north-westerly winds in the southern hemisphere. At around 60 degrees N and 60 degrees S, they meet cold air, which has drifted from the poles. The warmer air from the tropics is lighter than the dense, cold polar air and so it rises as the two air masses meet. Much of our wet and windy weather in the UK is determined by this. At the poles, air is cooled and sinks towards the ground forming high pressure, this known as the Polar high. It then flows towards the lower latitudes. At about 60 degrees N and S, the cold polar air mixes with warmer tropical air and rises upwards, creating a zone of low pressure called the subpolar low.

3 - Extreme weather is when a weather event is significantly different from the average or usual weather pattern.

4 - Tropical storms form between approximately 5° and 15° latitude. The air above the warm oceans that are at least 60m deep is heated. Once the ocean water reaches at least 27°C, the warm air rises quickly, causing an area of very low pressure.

5 - El Niño and La Niña are complex weather patterns resulting from variations in ocean temperatures in the east-central equatorial Pacific Ocean, between 120° west and 180° (the International Date Line). El Niño and La Niña episodes usually occur approximately every two to seven years.

\*Global Circulation System (GCS) refers to the way that air moves around the planet as a result of the heat at the equator.

\*There are three main cells (air movement patterns)

Hadley – warm around the equator due to intensity of the sun and then around 30 degrees north/south it gets wetter. The Ferrel is between 30 and 60 degrees north and south can cause some warmer winds and some unstable weather conditions. Polar – at around 60 degrees north and south are colder conditions and very unstable.

\*UK is around 10 degrees C colder than Australia on average.

\*Extreme heat in UK is around 30 degrees C whilst around 40 degrees C in Australia.

\*Key ingredients for a tropical storm to form are ocean depths 60metres deep, 27 degrees warm and low pressure. They occur between 5 degrees and 15 degrees north and south of the equator.

\*Tropical storms have different names in different parts of the world -hurricanes in the Atlantic Ocean, typhoons in the Pacific and cyclones in the Indian Ocean. Droughts can occur anywhere but the most severe are in central Africa, the Middle East, Australia, South America (east) and parts of North America.

\*El Nino and La Nina are complex weather patterns.

Unit 6: DD LIDC responses limited by development; LIDCs health care system less advanced; more PPD; aid - bi and multi-lateral

Unit 2: Climate Change - will affect distribution, frequency and magnitude of future climatic hazards and extreme weather

Unit 3: Distinctive Landscapes - steep sided valleys

Unit 7: UK in 21st century weather

# Topic: GCSE 1.1 – How can the Weather be Hazardous? (B)

## Case Studies

**Duration: 7 weeks**

Key vocabulary:	Core knowledge Components	Powerful knowledge	Links to previous and future topics
<p>weather conditions, causes, affects, impacts, consequences, responses, aid, Coriolis effect, social, environmental, economic, income, drought, evaporation, hosepipe ban</p>	<p>1 – <b>Case Study 1: Typhoon Haiyan (Non-UK Based Case Study)</b> was a tropical cyclone that affected the Philippines in South East Asia in November 2013. <b>Causes</b> – warm oceans above 27 degrees C, deep ocean water – 60 metres deep, the Coriolis effect - It was one of the strongest tropical cyclones ever recorded with winds of 313 km/h. In some areas, 281.9 mm of rainfall was recorded, much of which fell in under 12 hours. Waves of up to 7 m in height battered the coast. The Philippines is a fairly poor part of the world with minimal investment in prediction, planning and protection schemes. Some of the impacts are:  <b>Consequences</b> - The overall economic impact of Typhoon Haiyan is estimated at \$5.8 billion (£3.83 billion). Six million workers lost their sources of income. Major rice, corn and sugar-producing areas for the Philippines were destroyed affecting the country's international trade and farmers' incomes. Tacloban's city airport was severely damaged, affecting business and tourism. More than 7,000 people were killed. 1.9 million people were left homeless and more than 6,000,000 displaced. There were outbreaks of disease due to the lack of sanitation, food, water, shelter, and medication Widespread floods damaged and, in many cases, destroyed homes and businesses in coastal areas. The Philippine government estimated that about 71,000 hectares of farmland was affected The <b>responses</b> were as follows: - It broadcast warnings two days before Typhoon Haiyan hit, leading to the evacuation of approximately 750,000 residents. The UK government provided food, shelter, clean water, medicine and other supplies for up to 800,000 victims. The United Nations launched an international aid appeal in December 2013 for £480 million to finance the humanitarian relief effort for 2014. Rescue effort made more challenging as a result of the Philippines being a collection of islands.</p> <p>2 – <b>Case study 2: The UK suffered from a drought in 2012. (Non-UK Based Case Study)</b>  <b>The causes:</b> -Less rain – the area affected by the drought only received between 55% and 95% of normal rainfall between 2010 and 2012. Warmer temperatures – the weather was warmer than usual and as a result more water evaporated. Dry soils- this meant that it was challenging for the rain to soak into the ground. High water usage – Around 1.7 billion litres of water are used each day by the UK. Water is also wasted through leaking pipes. The <b>consequences</b> -Problems with farming – harvesting became an issue. Fire – areas of moorland caught fire in parts of Surrey, South Wales and Scottish Borders. Restrictions in homes – hosepipe bans affected 20 million people. The <b>responses:</b> - Permits offered to allow water companies to extract water from rivers. Hosepipe bans Education – attempts to reduce water consumption.</p>	<p>*Non UK Case study: Typhoon Haiyan, Phillipines, Asia Nov 2013- extreme high winds and storms. Causes – warmer water 27 degrees C and above deep water (60 metres deep). Consequences – large waves, loss of money, loss of jobs, businesses including tourism affected. 7,000 people lost their lives Responses – some warnings, evacuation, different countries provided aid and NGOS emergency supplies.  *UK Case Study: Drought UK causes – reduced rainfall, warmer temperatures, dry soil, high water usage, leaking pipes. Consequences – fire, problems with crops, hosepipe bans. Responses – permits, education to reduce water consumption.</p>	<p>Unit 6: DD LIDC responses limited by development; LIDCs health care system less advanced; more PPD; aid - bi and multi-lateral  Unit 2: Climate Change - will affect distribution, frequency and magnitude of future climatic hazards and extreme weather  Unit 3: Distinctive Landscapes - steep sided valleys  Unit 7: UK in 21st century weather</p>

Topic: GCSE 1.2a – How do Plate Tectonics shape our World?		Duration: Half Term	
Key vocabulary:	Core knowledge Components	Powerful knowledge components crucial to commit to long term memory	Links to previous and future topics
Structure, Earth, inner core, outer core, mantle, crust, magma, semi molten, tectonic, plates, constructive, destructive, volcano, shield, composite, collision, volcanic, boundary, hotspot.	<p><b>1 – The structure of the Earth</b> - The Earth is made up of four distinct layers:</p> <p>The inner core is in the centre and is the hottest part of the Earth. It is solid and made up of iron and nickel with temperatures of up to 5,500°C.</p> <p>The outer core is the layer surrounding the inner core. It is a liquid layer, also made up of iron and nickel.</p> <p>The mantle is the widest section of the Earth. It has a diameter of approximately 2,900 km. The mantle is made up of semi-molten rock called magma.</p> <p>The crust is the outer layer of the earth. It is a thin layer between 0-60 km thick. The crust is the solid rock layer upon which we live. There are two different types of crust: continental crust, which carries land, and oceanic crust.</p> <p>The Earth's crust is broken up into pieces called plates. Heat rising and falling inside the mantle creates convection currents generated by radioactive decay in the core. The convection currents move the plates. Where convection currents diverge near the Earth's crust, plates move apart. Where convection currents converge, plates move towards each other. The movement of the plates, and the activity inside the Earth, is called plate tectonics</p> <p><b>2 - Plate boundaries:-</b> At constructive the plates move apart. – these can form earthquakes and volcanoes. When this happens the magma from the mantle rises up to make (or construct) new land in the form of a shield volcano.</p> <p>At a destructive the plates move towards each other. These can form earthquakes and volcanoes. A destructive plate margin involves an oceanic plate and a continental plate. The plates move towards one another and this movement can cause earthquakes. As the plates collide, the oceanic plate is forced beneath the continental plate. This is known as subduction. When the plate sinks into the mantle it melts to form magma. The pressure of the magma builds up beneath the Earth's surface. The magma escapes through weaknesses in the rock and rises up through a composite volcano</p> <p>If two continental plates collide, neither can sink and so the land buckles upwards to form fold mountains. This is called a collision margin. Earthquakes can occur at collision margin.</p> <p>At a conservative boundary the plates slide past each other. These can for earthquakes. At a conservative plate margin, the plates move past each other or are side by side moving at different speeds. As the plates move, friction occurs and plates become stuck. Pressure builds up because the plates are still trying to move. When the pressure is released, it sends out huge amounts of energy. A hot spot can be described as “A small area of the Earth’s crust where an unusually high heat flow is associated with volcanic activity. Of approximately 125 hot spots thought to have been active over the past 10 million years most are located well away from plate boundaries.</p> <p>Earthquakes caused at plate margins can have either a deep-focus or shallow-focus. The focus of an earthquake is the actual place in the crust where an earthquake is created</p>	<p>*Earth can be structured into 4 different layers. The inner core, outer core, mantle and crust.</p> <p>*The inner core is extremely hot and solid being made up of iron and nickel.</p> <p>*The outer core is a liquid layer made up of iron and nickel and still extremely hot.</p> <p>*The mantle is the thickest layer and made of liquid rock called magma.</p> <p>*Liquid rock under the surface is called magma and above lava.</p> <p>*The crust is a thinner solid layer that carries the land and water that humans spend their time around.</p> <p>*The crust is made up of tectonic plates which move as a result of convection currents.</p> <p>*The edge of plates are called plate boundaries or margins.</p> <p>*Dependent on the way in which these plates move there are different consequences.</p> <p>*Plates moving towards each other is called a destructive/convergent boundary – this can cause earthquakes and volcanoes.</p> <p>*Plates moving apart can be called a constructive or divergent boundary. This can cause earthquakes and volcanoes.</p> <p>*Where plates slide against each other this is called a conservative or transform boundary – this can cause earthquakes.</p> <p>*There are also some volcanoes that can be found away from plate boundaries – these are called hot spot volcanoes.</p>	<p>Unit 6: DD LIDC responses limited by development; LIDCs health care system less advanced; more PPD; aid - bi and multi-lateral</p> <p>Unit 2: Climate Change - will affect distribution, frequency and magnitude of future climatic hazards and extreme weather</p> <p>Unit 3: Distinctive Landscapes - steep sided valleys</p> <p>Unit 7: UK in 21st century weather</p>

Topic: GCSE 1.2b – How do Plate Tectonics shape our World? (Case Study & Technology)		Duration: Half Term	
Key vocabulary:	Core knowledge Components	Powerful knowledge components crucial to commit to long term memory	Links to previous and future topics
Convergent, collision, plate boundary, Indian, Eurasian, focus, epicentre, Kathmandu, aid, rescue, mitigate, long term, short term, disaster, government, charity, NGO, evacuation, shock absorbers, seismometers, planning, prediction, prevention.	<p><b>1 – Case Study: Nepal earthquake – 2015</b></p> <p><b>The causes: -</b>            On 25 April 2015 a 7.8 earthquake struck Nepal in Asia. The earthquake occurred on a convergent collision plate boundary between the Indian and Eurasian plates. The focus was only eight kilometres deep and the epicentre was just 60 kilometres north-west from the capital Kathmandu.</p> <p><b>The consequences: -</b>            Centuries-old buildings were destroyed at UNESCO World Heritage sites in the Kathmandu Valley. Thousands of houses were destroyed across many districts of the country. 9,000 dead and 19,000 injured. Hundreds of thousands of people were made homeless with entire villages flattened. 1.7 million children had been driven out into the open. Harvests were reduced or lost that season.</p> <p><b>The responses: -</b>            International aid was provided by India and China who in total committed over \$1 billion to help support Nepal. The UK offered help and support. Over 100 search and rescue responders, medical experts, and disaster and rescue experts were sent together with three Chinook helicopters for use by the Nepali government. Aid workers from charities such as the Red Cross came to help. Temporary housing was provided, including ‘Tent city’ in Kathmandu</p> <p><b>2 – Technology</b> can mitigate tectonic hazards - To reduce vulnerability, organisations such as the United States Geological Survey (USGS), governments and charities need to do the following. Monitoring tectonic activity using equipment may help predict and identify major events. In addition to this, setting up evacuation zones and hazard mapping are helpful techniques to reduce the impact of a hazard. Buildings can also be designed in a way to better survive earthquakes. Rubber shock absorbers in the foundations to absorb the earth tremors. Steel frames that can sway during earth movements. Open areas outside of the buildings where people can assemble during an evacuation. Low cost methods, such as wire mesh retrofitting, are used in rural areas and developing countries. These are affordable and appropriate to the resources and people living there. Lightweight roofs and safety glass designed to reduce damage and injury.</p> <p>Prediction involves using seismometers to monitor earth tremors. Experts know where earthquakes are likely to happen, however it's very difficult to predict when they will happen. Even looking at the time between earthquakes doesn't seem to work.</p>	<p>*April 2015 Earthquake took place in Nepal an LIDC in Asia.            *It was caused by two plates coming together - convergent collision between the Indian and Eurasian plates.            *It caused lots of damage including damage to important sacred buildings, 9000 deaths and 19,000 people being injured.            *Different countries provided support in the form of aid -1 billion dollars including the UK who sent 100 people to help search for people.            *Technology can help mitigate against tectonic hazards by sensing movement in the ground by seismometers, helping us design buildings to withstand earthquakes and helping us design places so people can be evacuated more quickly from places at threat of earthquakes and volcanoes.</p>	<p>Unit 6: DD LIDC responses limited by development; LIDCs health care system less advanced; more PPD; aid - bi and multi-lateral            Unit 2: Climate Change - will affect distribution, frequency and magnitude of future climatic hazards and extreme weather            Unit 3: Distinctive Landscapes - steep sided valleys            Unit 7: UK in 21st century weather</p>