

<p><b>Question(s)</b></p> <p>What do we mean by the term weather?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Short term, day to day changes in the earth's atmosphere</p>
<p><b>Question(s)</b></p> <p>What do we mean by the word climate?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Average weather conditions over 30 years</p>
<p><b>Question(s)</b></p> <p>What factors affect the UK climate?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p><b>Prevailing wind-</b> from the north it's cold, south it's warm, over seas it is wet, over land it's dry  <b>Ocean current</b> –keeps the UK warm  <b>Altitude</b> – it is 1°C colder for every 100m rise above sea level</p>
<p><b>Question(s)</b></p> <p>How do we know climate was different in the past?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Fossils of animals and plants that no longer live in the UK.  Landforms left by glaciers.  Ice core samples from ice sheets in Antarctica that contain air bubbles.</p>
<p><b>Question(s)</b></p> <p>What does the term inter glacial mean?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Warm periods</p>
<p><b>Question(s)</b></p> <p>What does the term glacial mean?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Cold periods, ice ages, ice sheets 400-3000m thick extended across the northern hemisphere.</p>

<p><b>Question(s)</b></p> <p>State what eruption theory says to explain why climate has changed in the past</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Large, explosive, volcanic eruptions change earth's climate. Ash blocks the sunlight lowering temperatures. E.g. Mt Pinatubo in 1991 Philippines, reduced global sunlight by 10%</p>
<p><b>Question(s)</b></p> <p>State what sunspot theory says to explain why climate has changed in the past</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Black areas in the sun's surface. Sometimes there are more and then they disappear. Spots mean greater activity and more solar energy being sent towards earth making it warmer</p>
<p><b>Question(s)</b></p> <p>State what orbital theory suggests about why climate has changed in the past</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Changes in the way the earth orbits the sun from circular to ellipse alters the amount of sunlight the earth receives.</p>
<p><b>Question(s)</b></p> <p>How is our atmosphere being changed by human activity?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Greenhouse gases from the burning of fossil fuels, deforestation, methane from cattle, nitrous oxide from aircraft engines and fertilizers, trap heat from leaving the atmosphere and re-radiate that heat back down to earth.</p>
<p><b>Question(s)</b></p> <p>What are the advantages and disadvantages of greenhouse gases?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>We need them to live as without them, earth would be too cold for us to live on. Too much can cause huge problems as a result of rising temperatures and melting icecaps.</p>
<p><b>Question(s)</b></p> <p>What does global warming mean?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>The warming of the earth's temperatures caused by the ENHANCED greenhouse effect.</p>

<p><b>Question(s)</b></p> <p>What will happen if global temperatures increase?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Sea levels will rise due to thermal expansion, glaciers and ice sheets melting</p>
<p><b>Question(s)</b></p> <p>What evidence is there for global warming?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>19/20 of the warmest years on record since 1980 Sea ice in the Arctic can be measured shrinking</p>
<p><b>Question(s)</b></p> <p>How will global warming affect the UK?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Potential for droughts, water shortages, more illness, Farmers may need to change crops to those that need less water. Loss of some kinds of plant and animal / insect species. Arrival of new plants and animal / insect species. Increase in tourism. Fewer winter deaths Greater coastal erosion e.g. holdernesss. More sea defences needed. Low lying areas flooded.</p>
<p><b>Question(s)</b></p> <p>What do you call the 3 atmospheric cells?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Hadley cell, Ferrel cell and Polar cell</p>
<p><b>Question(s)</b></p> <p>How does global atmospheric circulation work?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Air circulates in each hemisphere in three distinct cells which help transport energy and heat from the equator to the poles. The winds are driven by the energy from the sun at the surface as warm air rises and colder air sinks. The circulation cell closest to the equator is called the Hadley cell.</p>
<p><b>Question(s)</b></p> <p>What are tropical cyclones?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Hurricanes and typhoons (same thing different name) They are large, swirling storms with wind speeds of over 74mph</p>

<p><b>Question(s)</b></p> <p>How do hurricanes form?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <ul style="list-style-type: none"> <li>- Ocean temperatures above 27°C</li> <li>- Evaporation and warm moist air rising</li> <li>- Creates large storm clouds</li> <li>- Rotates because of coriolis effect</li> <li>- Air sucked into the centre to replace rising air creating the calm 'eye'</li> <li>- Winds strongest at the eye wall which is the thick band of clouds surrounding the eye.</li> <li>- Gets energy from drawing more warm moist air in</li> </ul>
<p><b>Question(s)</b></p> <p>How are hurricanes different north and south of the equator</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Moves clockwise in the northern hemisphere and counter clockwise in the southern hemisphere</p>
<p><b>Question(s)</b></p> <p>What are the impacts of tropical storms?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Storm surges – low pressure and strong winds cause coastal flooding</p> <p>Intense rainfall – can cause flooding</p> <p>High winds – destroy buildings and kill people</p> <p>Landslides – intense rain and wind causes mass movement of soil / land.</p>
<p><b>Question(s)</b></p> <p>What causes drought?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Sinking air – high air pressure – no condensation so no precipitation – often found 30°North and South of the equator.</p> <p>Deforestation – dries out the ground so no evaporation , condensation and no rainfall.</p>
<p><b>Question(s)</b></p> <p>How do people respond to drought?</p> <p><b>Y11 Weather hazards and climate change</b></p>	<p><b>Answer(s)</b></p> <p>Water restrictions</p> <p>Education and information on taking care of the land</p> <p>Monitoring of rivers</p> <p>Raising money – aid</p>