



Geography HL4 - Climate Change

What is Climate Change?

Climate change means long-term changes in the Earth's average weather patterns over many years or even decades. These changes include rising temperatures, changing rainfall patterns, and an increase in extreme weather events such as heatwaves, storms, floods, and droughts. Climate change is different from normal weather changes because it happens over a long period of time.

The Earth's climate has changed naturally in the past due to volcanic eruptions and changes in the Sun's energy. However, scientists have found strong evidence that the climate is now changing much faster than before. This rapid change is mainly caused by human activities, especially since the Industrial Revolution, when factories and machines began burning large amounts of fossil fuels.

The Greenhouse Effect

The Earth is surrounded by a layer of gases called the atmosphere, which helps protect life on our planet. Some of these gases, including carbon dioxide (CO₂), methane (CH₄), and water vapour, are known as greenhouse gases. They trap heat from the Sun and stop it from escaping back into space, keeping the Earth warm enough for plants, animals, and humans to survive. This natural process is called the greenhouse effect.

Problems occur when too many greenhouse gases build up in the atmosphere. Human activities release extra greenhouse gases, which trap more heat than normal. This causes the Earth's average temperature to rise, a process known as global warming. Global warming is one of the main drivers of climate change.

Causes of Climate Change

The main cause of climate change today is human activity. One of the biggest causes is the burning of fossil fuels such as coal, oil, and natural gas. These fuels are used to produce electricity, power cars and planes, and heat homes. When fossil fuels are burned, large amounts of carbon dioxide are released into the atmosphere.

Another important cause is deforestation, which means cutting down forests. Trees absorb carbon dioxide from the air and store it. When forests are cut down or burned, this stored carbon is released back into the atmosphere. With fewer trees to absorb carbon dioxide, greenhouse gases build up more quickly, increasing global warming.

Effects of Climate Change

Climate change has many effects on the Earth and the living things that depend on it. Average global temperatures are rising, causing glaciers and ice caps to melt. As this ice melts, sea levels rise, which can lead to flooding in coastal areas and on small islands. Climate change also affects weather patterns. Some parts of the world experience longer and more severe droughts, while others have heavier rainfall and more frequent flooding. These changes can damage crops, reduce food supplies, destroy homes, and threaten plants and animals that cannot adapt quickly enough.



Task: Answer the following questions using the information on the other side

1. What does the term *climate change* mean?
2. How is climate change different from normal day-to-day weather changes?
3. What are some examples of extreme weather events linked to climate change?
4. How has the Earth's climate changed naturally in the past?
5. Why do scientists believe today's climate change is happening faster than before?
6. What human activities have mainly caused recent climate change?
7. What is the greenhouse effect, and why is it important for life on Earth?
8. Which gases are known as greenhouse gases?
9. How do human activities increase the greenhouse effect?
10. What is global warming, and how is it connected to climate change?
11. How does deforestation contribute to climate change?
12. What are three effects of climate change on the environment or living things?

The British Parliament in the Nineteenth Century

Parliament is the main law-making body of the United Kingdom. It debates new laws, approves taxes, and holds the government to account. In the nineteenth century, as today, Parliament had two parts: the House of Commons and the House of Lords. The House of Commons was made up of Members of Parliament (MPs), who represented local areas called constituencies. The House of Lords consisted mainly of nobles and church leaders who were not elected.

At the start of the 1800s, Parliament did not represent most people. Only a small number of men could vote, usually those who owned a certain amount of property or land. Many large industrial towns, such as Manchester, had no MPs at all, while tiny villages with few residents still sent MPs to Parliament. Elections were also unfair: voting was public, which made bribery and intimidation common.

These problems led to growing pressure to reform. Britain was changing quickly during the Industrial Revolution. Factories and cities expanded, and a new working class emerged. Many people believed Parliament should better reflect this changing society.

The first major change came with the **Great Reform Act of 1832**. This law reduced the number of “rotten boroughs” and gave representation to new industrial towns. It also widened the vote to include more middle-class men, though most working-class people were still excluded. By this point around 1 man in 6 could vote.

In the 1830s and 1840s, a mass movement called the **Chartists** demanded further reform. They called for **universal male suffrage**, secret ballots, and fairer constituencies. Although their petitions were rejected, the Chartists helped keep the issue of democracy in the public eye.

Further reforms followed later in the century. The **Second Reform Act of 1867** extended the vote to many urban working-class men. The **Ballot Act of 1872** introduced secret voting, making elections fairer and safer. The **Third Reform Act of 1884** extended voting rights to rural workers, meaning that by the end of the century most adult men ($\frac{2}{3}$) could vote, though women still could not.

As voting rights expanded, new political ideas and groups developed. **Trade unions**, which protected workers' rights, became legal in 1871 and grew in influence. The **Fabian Society**, founded in 1884, argued for gradual social reform rather than revolution. Together with trade unions and socialist thinkers, they helped form a **nascent labour movement**, which aimed to represent working people in Parliament. This eventually led to the creation of the Labour Party in the early twentieth century.

By the late nineteenth century, attention increasingly turned to women's rights. Women were active in politics but still excluded from voting. Groups campaigning for **women's suffrage** began to form, laying the foundations for the powerful suffrage movements of the early twentieth century. These campaigns marked the next major step in the long struggle to make Parliament truly representative of the British people.

Answer the following questions in full sentences:

1) What is Parliament?

2) What is an MP?

3) What is a constituency?

4) Why were elections unfair before 1832?

5) What is suffrage?

6) Name two political groups that made Britain more democratic in the 19th century?

7) After the **third reform act**, who could vote?

8) Who still did not have the vote by 1884?

9) Why is Democracy important?