

GRADE 9

Strong reading skills are the foundation learning!

Is your child struggling with reading comprehension, fluency, or vocabulary?

Brighterly's expert reading tutors make lessons fun, personalized, and effective - whether your child is just starting out or ready to level up their literacy skills.

From phonics to reading confidence, we're here to help your child love reading - and get better at it every day.



Why Learn with Brighterly? ✨



Assessment-Based Learning



Custom Curriculum



Homework Support



Engaging Platform

The Future of Virtual Reality



Climate change refers to long-term changes in temperature, precipitation, and other atmospheric conditions on Earth. The primary cause of the current climate change is the increase in greenhouse gases in the atmosphere. Greenhouse gases, such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), trap heat from the sun and prevent it from escaping back into space. This natural process, known as the greenhouse effect, is necessary for life on Earth because it keeps the planet warm enough to support life. However, human activities, such as burning fossil fuels for energy, deforestation, and industrial processes, have significantly increased the concentration of greenhouse gases in the atmosphere, leading to an enhanced greenhouse effect. As a result, the Earth is warming at an unprecedented rate, causing disruptions to the planet's climate systems. The rise in temperature, known as global warming, is linked to a variety of environmental changes, including melting ice caps, rising sea levels, and more frequent extreme weather events.

The effects of climate change are far-reaching and have a significant impact on ecosystems and human societies. One of the most noticeable effects is the increase in the frequency and severity of extreme weather events. As the atmosphere warms, it can hold more moisture, leading to heavier rainfall and stronger storms. On the other hand, some regions experience longer droughts due to changes in weather patterns. Rising temperatures also cause glaciers and ice sheets to melt, contributing to rising sea levels, which threaten coastal communities and ecosystems. Warmer temperatures can also disrupt ecosystems by affecting plant and animal species that rely on specific climate conditions to survive. For example, some species may struggle to adapt to changing temperatures or migrate to new areas, leading to a loss of biodiversity. In addition, climate change is impacting agriculture by altering growing seasons, making it more difficult to produce enough food for the growing global population. These changes are interconnected and can lead to significant environmental, social, and economic challenges.

Despite the overwhelming evidence that human activities are driving climate change, there are still debates over the best ways to address the issue. Climate change is a global problem that requires international cooperation and action. Governments, businesses, and individuals all have roles to play in reducing greenhouse gas emissions and mitigating the impacts of climate change. One of the most important steps is transitioning to renewable energy sources, such as solar, wind, and hydroelectric power, which produce little to no greenhouse gas emissions. Additionally, efforts to protect and restore forests, which absorb carbon dioxide from the atmosphere, can help reduce the amount of greenhouse gases in the air. Another important strategy is increasing energy efficiency in industries, transportation, and households to reduce the overall demand for fossil fuels. While the challenge of combating climate change is daunting, scientists, policymakers, and activists around the world are working together to find solutions. Addressing climate change will require a collective effort, but it is essential for the future of the planet and future generations.

Part 1: Answer the following questions based on the passage.

Q1: What is the primary cause of the current climate change?

Q2: Who is responsible for the increase in greenhouse gas emissions contributing to climate change?

Q3: Where are some of the impacts of climate change most noticeable, according to the passage?

Q4: When did human activities significantly increase the concentration of greenhouse gases in the atmosphere?

Q5: Why are ecosystems and human societies significantly impacted by climate change?

Part 2:

 **Answer the following questions in complete sentences. Provide detailed responses that explain your reasoning or opinions.**

Q1: How do you think transitioning to renewable energy sources can help reduce the effects of climate change?

Q2: What role do you think individuals can play in combating climate change, and how can they contribute to global efforts?

Q3: Do you think the transition to renewable energy will be successful in reducing climate change? Why or why not?

Q4: How do you think transitioning to renewable energy sources can help reduce the effects of climate change?

Q5: What role do you think individuals can play in combating climate change, and how can they contribute to global efforts?

Q4: How do you think transitioning to renewable energy sources can help reduce the effects of climate change?

Q5: What role do you think individuals can play in combating climate change, and how can they contribute to global efforts?



✓ Right Answers

Part 1: Answer the following questions based on the passage.**Q1: What is the primary cause of the current climate change?**

The primary cause of the current climate change is the increase in greenhouse gases in the atmosphere, primarily due to human activities like burning fossil fuels, deforestation, and industrial processes.

Q2: Who is responsible for the increase in greenhouse gas emissions contributing to climate change?

Human activities, such as burning fossil fuels, deforestation, and industrial processes, are responsible for the increase in greenhouse gas emissions contributing to climate change.

Q3: Where are some of the impacts of climate change most noticeable, according to the passage?

Some of the impacts of climate change are most noticeable in the increase of extreme weather events, such as stronger storms and longer droughts, rising sea levels due to melting ice caps, and disruptions to ecosystems, including the loss of biodiversity.

Q4: When did human activities significantly increase the concentration of greenhouse gases in the atmosphere?

Human activities significantly increased the concentration of greenhouse gases in the atmosphere during the industrial era, particularly with the increased use of fossil fuels for energy.

Q5: Why are ecosystems and human societies significantly impacted by climate change?

Ecosystems and human societies are significantly impacted by climate change because of changes in weather patterns, rising sea levels, and disruptions to natural habitats, which affect biodiversity, agriculture, and the availability of resources.

Part 2:

 **Answer the following questions in complete sentences. Provide detailed responses that explain your reasoning or opinions.**

Q1: How do you think transitioning to renewable energy sources can help reduce the effects of climate change?

Transitioning to renewable energy sources like solar, wind, and hydroelectric power can help reduce the effects of climate change by significantly cutting down on the greenhouse gas emissions that are currently driving global warming. These energy sources produce little to no carbon emissions, helping to mitigate the harmful effects of fossil fuel consumption.

Q2: What role do you think individuals can play in combating climate change, and how can they contribute to global efforts?

Individuals can contribute to combating climate change by reducing their personal carbon footprints, such as using energy-efficient appliances, driving less, and supporting renewable energy initiatives. They can also advocate for policies that promote sustainability and raise awareness about the importance of reducing emissions, encouraging collective action on a global scale.

Q3: Do you think the transition to renewable energy will be successful in reducing climate change? Why or why not?

Governments and businesses can work together by implementing and supporting policies that incentivize the use of renewable energy, improve energy efficiency, and promote sustainability. Governments can create regulations and provide tax incentives for green technologies, while businesses can innovate, invest in clean energy solutions, and reduce their environmental impact.

Q4: How do you think transitioning to renewable energy sources can help reduce the effects of climate change?

The most significant environmental challenges caused by climate change include rising sea levels, extreme weather events, and the disruption of ecosystems and biodiversity. These should be prioritized based on their immediate impact on human populations, especially in coastal and vulnerable regions, as well as their long-term effects on the planet's ecological balance and food security.

Q5: What role do you think individuals can play in combating climate change, and how can they contribute to global efforts?

Strategies to adapt to the consequences of climate change include building resilient infrastructure in flood-prone areas, developing early warning systems for extreme weather, and implementing policies that protect ecosystems and natural barriers like mangroves. Additionally, relocating vulnerable populations and investing in climate-resistant crops for agriculture can help mitigate the impact of rising sea levels and extreme weather events.