Student Name:	
Class:	
Due Date:	

Introduction

Welcome to this worksheet on global warming and its effects on the Great Barrier Reef. This activity is designed to help you understand the causes and consequences of global warming and how it affects our planet. You will learn about the carbon cycle, rising sea levels, and geological changes, and how they impact the Great Barrier Reef.

Multiple Choice Questions

Choose the correct answer for each question:
 1. What is the main cause of global warming? a) Burning fossil fuels b) Deforestation c) Pollution d) All of the above Answer: d) All of the above
 2. What is the effect of rising sea temperatures on coral reefs? a) Coral bleaching b) Increased biodiversity c) Improved water quality d) None of the above Answer: a) Coral bleaching
 3. What is the carbon cycle? a) The process by which carbon is exchanged between the atmosphere, oceans, land, and living things b) The process by which carbon is created c) The process by which carbon is destroyed d) None of the above Answer: a) The process by which carbon is exchanged between the atmosphere, oceans, land, and living things

Short Answer Questions

Answer each question in complete sentences:
1. What is global warming, and how does it affect the Great Barrier Reef?
2. What is the importance of the Great Barrier Reef, and why is it essential to protect it?

Essay Question

Choose one of the following essay questions and write a short essay response:
1. What are the causes and effects of global warming on the Great Barrier Reef?2. How can individuals contribute to reducing their carbon footprint and mitigating the effects of global warming?

Word Search

Find the following words related to global warming and the Great Barrier Reef:	
 CORAL REEF CARBON CYCLE WARMING SEA LEVEL RISE 	

Matching Game

Match the following terms with their definitions:

- 1. Global warming
- 2. Carbon cycle
- 3. Coral bleaching
- 4. Sea-level rise
- 5. Sustainable practices

Definitions:

- a) The process by which carbon is exchanged between the atmosphere, oceans, land, and living things
- b) The gradual increase in the overall temperature of the Earth's atmosphere
- c) The process by which corals expel their algal symbionts and turn white
- d) The increase in the level of the world's oceans

• e) Actions and choices that reduce harm to the environment and conserve natural resources			

Label the following diagram of the	carbon cycle:		
Carbon Cycle Diagram			

Diagram

Case Study

Read the following case study and answer the questions:
The Great Barrier Reef is one of the most biologically diverse ecosystems on the planet. However, it is facing significant threats due to global warming. Rising sea temperatures are causing coral bleaching, and sea-level rise is threatening the reef's very existence.
 What is the main threat to the Great Barrier Reef? What is the effect of rising sea temperatures on the reef? What can be done to protect the reef?

Creative Activity

Create a poster or drawing that illustrates the impact of global warming on the Great Barrier Reef. Include the following elements:
 A picture of the Great Barrier Reef A diagram of the carbon cycle A graph showing the increase in global temperatures
A list of ways to reduce your carbon footprint

Reflection

Reflect on what you have learned about global warming and the Great Barrier Reef. How can you this knowledge in your daily life? What actions can you take to reduce your carbon footprint and the effects of global warming?	

Conclusion

Congratulations on completing this worksheet! You have learned about the causes and effects of global warming on the Great Barrier Reef and how you can contribute to reducing your carbon footprint. Remember, every small action counts, and together we can make a difference in protecting our planet.