

**Student Name:** \_\_\_\_\_

**Class:** \_\_\_\_\_

**Due Date:** \_\_\_\_\_

## Introduction

Water pollution is a pressing global issue that affects not only the environment but also human health and the economy. As future leaders and citizens, it is essential for 14-year-old students to understand the causes and consequences of water pollution and to develop a sense of responsibility towards mitigating its effects. This homework sheet is designed to engage students in a comprehensive exploration of water pollution, focusing on its causes, effects, and potential solutions.

## Section 1: Multiple Choice Questions

### 1. What is the most common cause of water pollution?

1. a) Industrial waste
2. b) Agricultural runoff
3. c) Domestic waste
4. d) All of the above

**Answer: d) All of the above**

### 2. What is the impact of water pollution on human health?

1. a) It can cause waterborne diseases
2. b) It can affect the economy
3. c) It can harm aquatic life
4. d) All of the above

**Answer: d) All of the above**

### 3. What can individuals do to reduce water pollution?

1. a) Reduce their use of plastic
2. b) Use public transport
3. c) Dispose of waste properly
4. d) All of the above

**Answer: d) All of the above**

**1. What are the main causes of water pollution? Provide examples.**

**Answer:** The main causes of water pollution include industrial waste, agricultural runoff, and domestic waste. Examples include the release of chemicals and pollutants from factories, the use of fertilizers and pesticides in agriculture, and the disposal of waste in rivers and oceans.

**2. How does water pollution affect the environment? Provide examples.**

**Answer:** Water pollution can harm aquatic life, damage ecosystems, and affect the quality of water. Examples include the death of fish and other aquatic animals, the destruction of habitats, and the contamination of drinking water.

**3. What are some potential solutions to water pollution? Provide examples.**

**Answer:** Potential solutions to water pollution include reducing waste, using water-efficient appliances, and implementing policies and regulations to reduce pollution. Examples include reducing the use of plastic, using rainwater harvesting systems, and implementing laws to prevent the release of pollutants into water bodies.

**1. Discuss the impact of water pollution on human health and the environment.**

**Answer:** Water pollution can have severe impacts on human health and the environment. It can cause waterborne diseases, harm aquatic life, and damage ecosystems. The release of chemicals and pollutants into water bodies can contaminate drinking water, affecting human health. Additionally, water pollution can harm aquatic life, damaging ecosystems and affecting the quality of water.

**2. What are the causes and effects of water pollution? Provide examples.**

**Answer:** The causes of water pollution include industrial waste, agricultural runoff, and domestic waste. The effects of water pollution include harm to aquatic life, damage to ecosystems, and contamination of drinking water. Examples include the release of chemicals and pollutants from factories, the use of fertilizers and pesticides in agriculture, and the disposal of waste in rivers and oceans.

## Section 4: Activities

**1. Design a poster or infographic about water pollution, including its causes, effects, and potential solutions.**

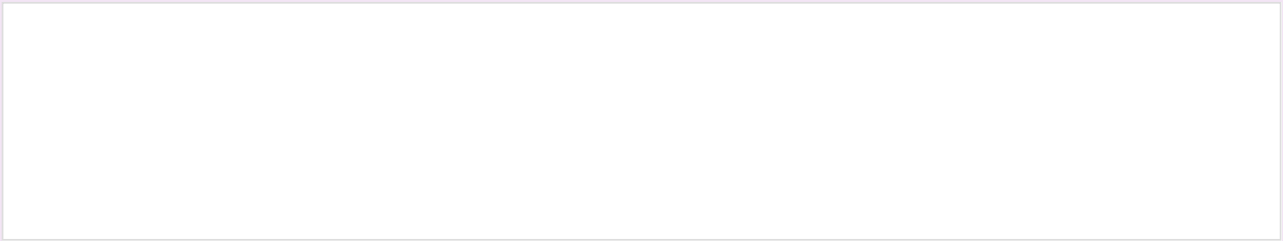
**2. Write a short story or poem about the impact of water pollution on a community or ecosystem.**

**3. Create a public service announcement about the importance of reducing water pollution.**

**Read the following case study and answer the questions that follow:**

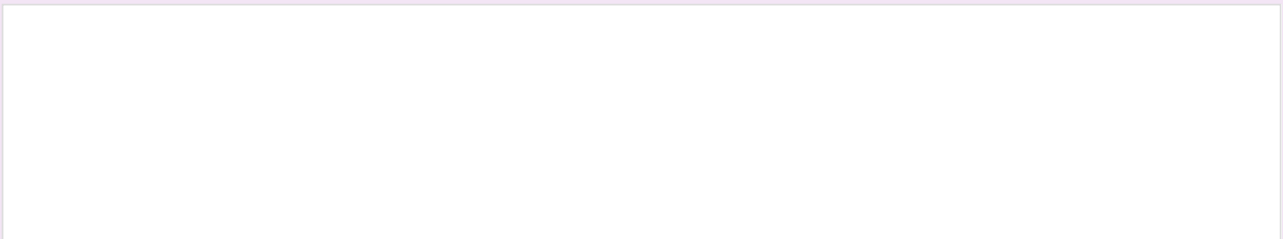
**Case Study:** The city of Flint, Michigan, faced a major water pollution crisis in 2014 when it was discovered that the city's water supply was contaminated with lead. The contamination occurred when the city switched its water source from Lake Huron to the Flint River, which was polluted with industrial waste and agricultural runoff.

**1. What were the causes of the water pollution crisis in Flint, Michigan?**



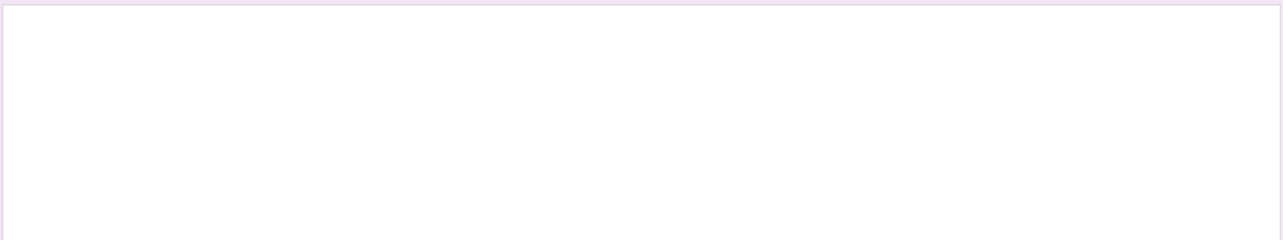
**Answer:** The causes of the water pollution crisis in Flint, Michigan, included the switch to a polluted water source and the lack of proper treatment and regulation.

**2. What were the effects of the water pollution crisis on the community?**



**Answer:** The effects of the water pollution crisis on the community included the contamination of drinking water, harm to human health, and damage to the economy.

**3. What are some potential solutions to the water pollution crisis in Flint, Michigan?**



**Answer:** Potential solutions to the water pollution crisis in Flint, Michigan, include the use of water-efficient appliances, the implementation of policies and regulations to reduce pollution, and the provision of safe and clean drinking water to the community.

## Conclusion

Water pollution is a pressing global issue that affects not only the environment but also human health and the economy. It is essential for 14-year-old students to understand the causes and consequences of water pollution and to develop a sense of responsibility towards mitigating its effects. This homework sheet is designed to engage students in a comprehensive exploration of water pollution, focusing on its causes, effects, and potential solutions. By completing the activities and questions in this sheet, students will gain a deeper understanding of the importance of reducing water pollution and promoting environmental sustainability.