

Water Scarcity

Name: _____

Date: _____

Water is a fundamental resource for life on Earth. However, in many regions of the world, access to clean and safe water is not guaranteed, leading to a situation known as water scarcity. Water scarcity can be divided into two types: physical and economic water scarcity.

Physical water scarcity occurs when there is not enough water to meet all demands, including environmental ones. This is often caused by overuse of water resources, changes in climate, and pollution. It can be found in arid regions, like deserts, but also in areas with plentiful rainfall if the use of water is not managed correctly.

Economic water scarcity, on the other hand, is caused by a lack of investment in water infrastructure or a lack of human capacity to satisfy the demand for water. Even when water is plentiful, it may not be accessible if individuals and communities cannot afford the costs associated with water infrastructure, like pipes and treatment facilities.

Climate change can significantly exacerbate water scarcity. Rising temperatures can lead to more frequent and severe droughts, reducing the availability of fresh water. Changing rainfall patterns can also disrupt the supply of water, leading to periods of flooding followed by periods of drought.

Water scarcity can have severe impacts on human health, agriculture, and industry. It can lead to poor sanitation and hygiene, which in turn can cause diseases. Lack of water also means that agriculture, which consumes a significant portion of global freshwater, can be severely impacted. This can lead to food shortages and even famine in severe cases. Industry also depends on water for various processes, and water scarcity can limit industrial growth. Furthermore, water scarcity can lead to conflict as individuals, communities, and countries compete for limited resources.

There are various strategies for managing water scarcity. These include improving water infrastructure, implementing water conservation practices, developing new water sources such as desalination, and improving water management practices. Additionally, educating the public about the importance of water conservation and the effects of water scarcity can also help.

In conclusion, water scarcity is a pressing issue that affects many regions around the world. By understanding the causes and impacts of water scarcity, and by implementing effective water management strategies, it is possible to mitigate the effects of water scarcity and ensure access to clean and safe water for all.

1. What is physical water scarcity?
 - A. When there is not enough water to meet all demands.
 - B. When there is a lack of investment in water infrastructure.
 - C. When there is a lack of awareness about water conservation.
 - D. When there is an overabundance of water.
2. How can water scarcity impact agriculture?
 - A. It can lead to food shortages and famines.
 - B. It can increase the amount of food grown.
 - C. It can reduce the cost of agricultural products.
 - D. It has no effect on agriculture.
3. What does the word “exacerbate” mean in the text?
 - A. To make better
 - B. To cause droughts
 - C. To make worse
 - D. To inform people about
4. Why is it important to educate the public about water scarcity?
 - A. To increase water usage.
 - B. To increase water pollution.
 - C. To make people aware of the importance of water conservation and the effects of water scarcity.
 - D. It is not important to educate the public about water scarcity.

5. Discuss how water scarcity can lead to conflicts.
6. Explain why climate change can make water scarcity worse.
7. Perth uses desalination to produce some of our drinking water. Desalination is when salt is removed from seawater using electricity and special materials. How do desalination plants reduce water scarcity?
8. You have been asked to advise the local council on how to prevent water scarcity. What suggestions do you have to help conserve water, and why?