Inspiring Greatness

ISD

INDEPENDENCE SCHOOL DISTRICT

High School Science Virtual Learning

Earth Science

Human Impact on Water Resources

May 22, 2020

High School Earth Science
Lesson: May 22, 2020

Objective/Learning Target:
Students will be able to describe the impact of humans on water resources.

1. What is air pollution?

2. What are the two classifications of man made pollutants?

1. Chemicals in the air that may have adverse health effects.

2. Man made pollutants are classified as either stationary or mobile.

Lesson Activity:

Directions:

1. Read the article and watch the video that are linked below. Take careful notes on how humans affect water resources.
2. Write a letter to your local government official on the impacts that humans have on water resources. The goal of your letter is to inform your local government official of the different impacts that humans have on water resources and what different things can be done to improve upon this.
    a. It should be between 4-6 paragraphs in order to cover the above guidelines.

Link(s):

Video

Article

Practice

You will use the information from the activity on slide 5 to answer the following questions.

Practice Questions

1. What is water pollution?
2. What is point source pollution?
3. What is nonpoint source pollution?
4. What is groundwater pollution?
5. What is our major water pollutant?

Answer Key

Once you have completed the practice questions check with the work.

1. Water pollution is anything that decreases the water quality of lakes, streams, rivers, or other bodies of water.
2. Point source pollution is pollution that it comes from a single place.
3. Nonpoint source pollution is harder to identify and harder to address. It is pollution that comes from many places, all at once
4. Groundwater pollution is pollution that comes in contact with the water table.
5. Wastewater seems to be our major water pollutant.

More Practice

You will use the information from the activity on slide 5 to answer the following questions.

More Practice Questions

1. How is wastewater treated/broken down?
2. How do we measure how polluted the waste water is?
3. What is one result of a high biochemical oxygen demand?
4. Other than wastewater what are two other types of water pollutants?
5. What laws are trying to help limit point source and nonpoint source pollution?

Answer Key

Once you have completed the practice questions check with the work.

1. Most waste water is broken down by bacteria which require oxygen to break it down.
2. We look at the biochemical oxygen demand which is how much oxygen are these bacteria requiring to breakdown the waste water.
3. A high BOD can lead to dead zones as there is not enough oxygen to sustain life.
4. Two other categories of water pollutants, other than waste water, are chemical pollutants and non chemical pollutants..
5. In the United States, the Clean Air Act and the Clean Water Act have helped to limit both point-source and nonpoint-source pollution.

Additional Resources

This video goes further to explain water pollution and how humans have impacted resources we gather from waterways: Video

Want more information on water pollution, the types, and the possible solutions? This article outlines that information: Article

Within this article, they explore more on water pollution and how it affects various forms of wildlife: Article