

Earth's Atmosphere, Water, and Pollution

The atmosphere is the layer of air that surrounds Earth and is held in place by gravity. This layer is very important because it allows us to breathe, keeps us warm, protects us from harmful radiation, and makes weather possible. Air is a mixture of gases, mostly nitrogen (about 78%) and oxygen (about 21%), with a small amount of carbon dioxide and other gases.

Most of Earth's water is found in the oceans, which contain lots of dissolved substances like salt. Fresh water, found in rivers, lakes, and underground, usually contains dissolved minerals and gases. Pure water (water with nothing else in it) is very rare in nature. Water is called the "universal solvent" because it can dissolve many substances.

Pollution happens when harmful substances are added to the environment by people. There are different types of pollution, including air, water, soil, noise, and light pollution. Pollution can hurt plants, animals, and people, but we can help by recycling, using less plastic, and reducing the use of cars.

Fill in the Blank

Fill in the blank with the correct words:

1. The _____ is the layer of air that surrounds Earth and is held in place by gravity.
2. The most abundant gas in Earth's atmosphere is _____.
3. _____ is needed for people and animals to breathe.
4. Most of Earth's water is found in the _____.
5. _____ happens when harmful substances are put into the environment by humans.

Word bank: pollution atmosphere nitrogen oxygen oceans

Multiple Choice Questions

Choose the correct answer from the choices for each question:

1. Which gas makes up most of Earth's atmosphere?

- a) Oxygen
 - b) Carbon dioxide
 - c) Nitrogen
 - d) Water vapor
2. Why is the atmosphere important for life on Earth?
- a) It helps us see better
 - b) It provides oxygen and protects us from radiation
 - c) It makes the ground hard
 - d) It creates mountains
3. What is a solution?
- a) A mixture where one substance is dissolved in another
 - b) A solid rock
 - c) A type of gas
 - d) Pure water with nothing else in it
4. Which of the following is an example of water pollution?
- a) Bright city lights
 - b) Oil spilling into the ocean
 - c) Loud traffic sounds
 - d) Planting trees in a park
5. What can people do to help reduce pollution?
- a) Throw trash in rivers
 - b) Use less plastic and recycle more
 - c) Burn more fuels
 - d) Leave batteries in the soil
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Open-Ended Questions

Answer the following questions in complete sentences:

1. Explain why the atmosphere is important for living things on Earth.
2. Describe what happens when water moves over rocks and through soil.
3. Name two types of pollution and explain how each one can hurt the environment.