Test 4 Study Page • Summary

Name: _____ Grade: _____

The **biosphere**, which includes all living things and the outer layers of the earth, is divided into these three zones: the atmosphere, hydrosphere and lithosphere.

The **atmosphere** is made up of gases that are important to living things, like oxygen and carbon dioxide. In this zone, climatic changes occur and the planet's temperature is regulated.

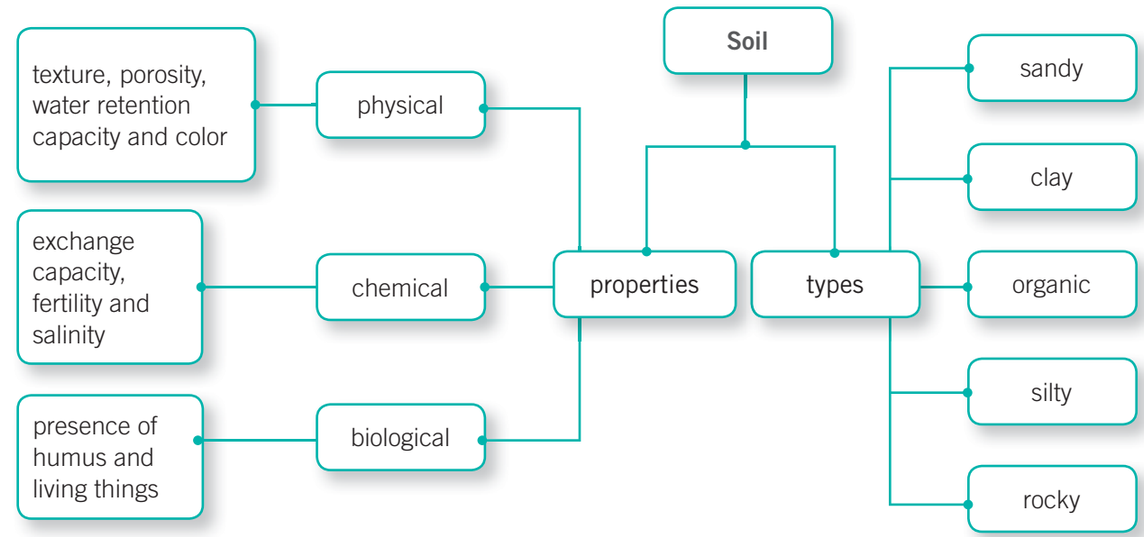
The **hydrosphere** consists of all the water on earth. It is key to life on the planet because water forms part of all living things and also the habitat for many.

The **lithosphere** consists of the earth's crust and by the upper part of the mantle. Humans extract resources like minerals, petroleum and gas from this layer. It is fundamental to life on earth because soil forms on its surface.

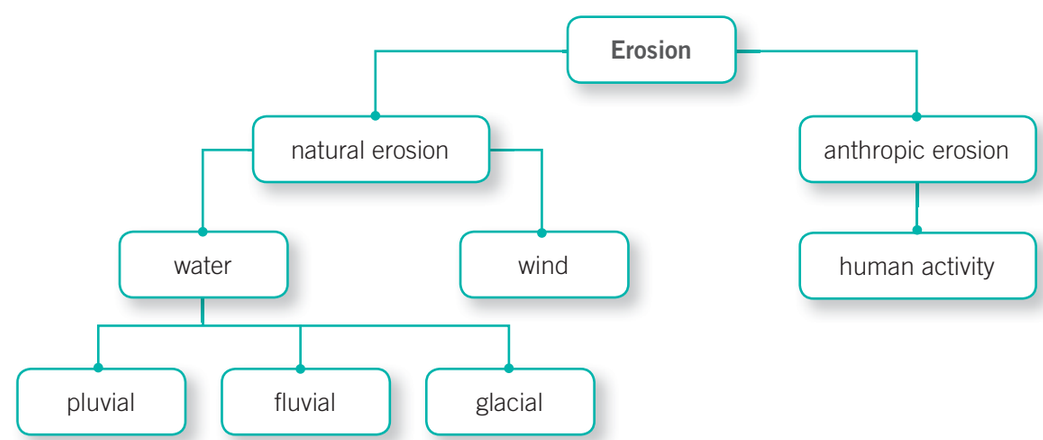
Human activity has caused the layers of the biosphere to undergo changes that have put the lives of all living things and the future of human development at risk. Read the table to review some of these situations.

Component of the Biosphere	Principal Problems	Protection Measures
Atmosphere	Air pollution, the greenhouse effect, decrease in the ozone layer and acid rain.	Limiting the emission of nitrogen and sulfur oxides, which cause acid rain, and of greenhouse gases like carbon dioxide and CFCs.
Hydrosphere	Water pollution, overexploitation and construction of dams.	Reducing unnecessary water use, not dumping contaminates and treating sewage water.
Lithosphere	Urban expansion, soil compaction and illegal dumping.	Planning urban development and creating sanitary landfills.

Soil is fundamental for plant growth and life on earth. It consists of a mixture of minerals, water, air and organic matter. It is formed by weathering, a process in which rocks break down because of climatic factors and the **activity of certain organisms**.



Erosion is the wearing away of soil by external agents like water, wind and human activity. The most extreme consequence of erosion is desertification, which occurs when an area that once had plant life becomes an arid desert.



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Test 4 Study Page • Review

Remove, answer, and glue in your notebook.

Section 1

1. Complete the table.

	Atmosphere	Hydrosphere	Lithosphere
Characteristics			
Importance for Organisms			
Importance for Human Progress			

Section 2

2. Complete the table.

	Causes	Consequences	Protection Measures
Greenhouse Effect			
Water Pollution			
Soil Destruction and Pollution			

Section 3

3. Answer the following questions related to soil.

a. How is soil formed? _____

_____

b. What chemical and physical properties make it fertile? _____

_____

_____

c. Why is it necessary to protect it from pollution? _____

_____

Section 4

4. Describe the characteristics of the following types of erosion.

a. Pluvial: _____

_____

b. Wind: _____

_____

5. Give two examples of things that cause anthropic erosion.

_____

_____

6. What are the consequences of erosion?

_____

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