

# Science and Health

## EFFECTS OF SOIL EROSION





## To the Learner



Have a nice day!

Water affects topsoil. It can move part of the topsoil to other places. The washing away of soil is erosion. In this module you will learn the different effects of erosion to plants, animals and people.



## Let's Learn This



Summarize how erosion affects plants, animals and people.



## Let's Try This



Write True if the statement is correct and False if it is not.

- \_\_\_\_\_ 1. Erosion washes away soil.
- \_\_\_\_\_ 2. Erosion makes the soil fertile.
- \_\_\_\_\_ 3. Erosion helps plants grow well.
- \_\_\_\_\_ 4. Erosion can cause floods.
- \_\_\_\_\_ 5. Erosion can hold soil together.
- \_\_\_\_\_ 6. Erosion can cause landslides.
- \_\_\_\_\_ 7. Erosion can change the size of the land.
- \_\_\_\_\_ 8. Erosion holds the plants in place.
- \_\_\_\_\_ 9. Erosion can uproot trees.
- \_\_\_\_\_ 10. Erosion affects land and plants.



## Let's Study This

Erosion of land has been going on for millions of years and will continue as long as there is soil and there are people, wind and water that will move it.

Erosion has great effects on plants, animals and people. Wind and water remove much of the topsoil which contains the humus. When the topsoil is carried away, the subsoil is exposed. Subsoil contains a small amount of humus or none at all. The subsoil is not favorable for growing plants. It is not fertile. It contains mostly of clay, pebbles and sand.

Erosion can cause landslides. Can you tell how dangerous landslides can be? It can kill people. It can damage people, plants and animals. It can also cause damage to properties.

Plants cannot grow on subsoil. If there are no plants, there will be no food and shelter for the people and animals.

Erosion can destroy roads and bridges. The roads become rugged. Traveling will be difficult and long. Repair of roads will cost the government much money.

Erosion affects the land. It can change the shape and size of land.



**Few plants grow on eroded soil. It bury also destroys the habitat of animals**



**Landslides can kill people and houses trees, and**



## Let's Do This

Put ✓ if the statement shows effect of erosion and x if it is not.

- \_\_\_\_\_ 1. Erosion can change the shape and size of land.
- \_\_\_\_\_ 2. Erosion can't kill people.
- \_\_\_\_\_ 3. Erosion can cause damage to properties.
- \_\_\_\_\_ 4. Erosion makes plant grow healthier.
- \_\_\_\_\_ 5. Erosion removes much of the topsoil.
- \_\_\_\_\_ 6. One agent of erosion is weathering.
- \_\_\_\_\_ 7. Erosion causes rocks and soil to be carried away to another place.
- \_\_\_\_\_ 8. Rocks are the loose part of the earth's crust.
- \_\_\_\_\_ 9. If there is a strong flow of water, more rocks and soil are carried to another place.
- \_\_\_\_\_ 10. The stronger the wind is, the more soil particles are blown away.



## Let's Remember This

- ✚ Erosion removes the topsoil which is fertile.
- ✚ Erosion has great effects on plants, animals and people.

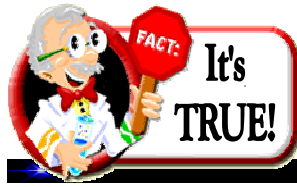




## Let's Test Ourselves



- Study the illustration. Describe how Soil erosion can affect the plants and animals including human beings living in the area.



## Science Fact File

The Gobi is the coldest desert in the world. It lies between China and Mongolia. It is near Siberia.

The Gobi stretches across part of Southern Mongolia and Northern China. It covers more than one million square kilometers. The Chinese built the Great Wall of China near the Gobi.

The center of the Gobi consists largely of dry, rocklike or sandy soil. Dry grasslands called steppes surrounded the central area. Unlike on the Sahara desert, sand dunes are not common in Gobi desert.



## Answer Key

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### Let's Try This

- |          |          |
|----------|----------|
| 1. true  | 6. true  |
| 2. false | 7. true  |
| 3. false | 8. false |
| 4. true  | 9. true  |
| 5. false | 10. true |

### Let's Do This

- |      |       |
|------|-------|
| 1. ✓ | 6. ✓  |
| 2. x | 7. ✓  |
| 3. ✓ | 8. x  |
| 4. x | 9. ✓  |
| 5. ✓ | 10. ✓ |

### Let's Test Ourselves

Possible Answer:

- Soil erosion can uproot plants
- It can kill animals and people in the area.