ROCKS, SOIL AND WATER

What are Rocks?

Rocks are solid objects found in nature. Rocks are made up of minerals. Minerals are used by people every day. For example, a mineral called lead is used to make your pencil.

Rocks are nonliving things. They are NOT alive. Rocks come in different shapes and sizes.

When you go to the beach, that sand you walk on is made up of tiny pieces of broken rock.

Let’s check what we have learned so far:

What are rocks?

What is Soil?

Soil is the loose material that covers much of the Earth. Soil is also nonliving.

There are different layers of soil on the Earth. Soil can be made of clay, sand, and humus.

What is humus? Humus is made up of different things that were once alive.

Let’s check what we have learned so far:
What is humus?
How Does Earth Change?

The Earth goes through many changes each day, week, month, and year! Many things happen on Earth that cause changes – some changes you can see easily, other changes are small that you might not notice right away.

**Weathering**

Weathering happens, the rocks break apart from wind, water, or ice. When this happens, the rocks change. Weathering can change the size and shape of rocks.

Erosion also causes the Earth to change.

**Erosion** is when pieces of rocks and soil move because of the wind and water. When waves crash on the beach, the waves can wash away some of the sand which takes away some of the beach area. This is an example of erosion.

**Let’s check what we have learned so far:**

**What is weathering?**
Volcanoes

Volcanoes cause changes on Earth too.

A **volcano** is an opening in the Earth’s crust where hot, melted rock can quickly shoot out. This hot, melted rock comes from inside the Earth.

Earthquakes

Earthquakes cause changes on Earth too. The bigger the earthquake, the more changes it makes.

An **earthquake** is when the Earth’s crust moves suddenly which causes the ground to shake and vibrate very hard. The shaking and vibration can cause a lot of damage to the Earth’s surface and to the buildings on the Earth too.

*Let’s check what we have learned so far: What is a volcano?*
Bodies of Water on Earth

A lake is a large body of water that has land all around it.

A river is water that flows naturally in one direction. A river is larger than a brook or a creek.

An ocean is a very large body of water that is made up of saltwater. Oceans cover about ¾ of the Earth’s surface. That is a lot of ocean water!

Let’s check what we have learned so far:
What is a river?
The Water Cycle

All living things need **WATER** to survive and to grow.

The movement and recycling of the Earth’s water is called the water cycle. The water cycle is when water moves from the Earth to the air and back to the Earth again.
The Water Cycle Has Several Stages:

- **Evaporation** is when water (like the water in the ocean) changes from liquid into a gas – water vapor.
  - **Evaporation** happens when the sun warms a body of water (like an ocean or lake) and the heat changes some of the water into water vapor, which rises off the water and goes into the air.
- **Condensation** is when the water vapor in the air cools and changes back into a liquid.
- **Precipitation** is how the condensed water gets back to the earth! Rain, hail, sleet, and snow are all forms of precipitation.

**Water run-off** is the water that falls back to earth as precipitation, and runs off of hills and mountains into lakes, rivers, and oceans.

Some water ends up on land and soaks into the ground. This water is called **groundwater**.

**Let’s check what we have learned so far:**

**What is precipitation?**