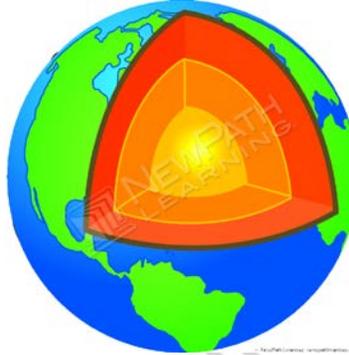


EARTH: INSIDE AND OUT

Earth from the Inside

Let's look at the Earth from the inside out...

The Earth is made up three main layers called the **crust, mantle, and core**.



The **innermost layer** of the Earth is the Earth's **core**. The Earth has an inner and outer core. The inner core is in the middle and is packed tightly so it is mostly solid. The outer core is very hot, dense (thick) liquid.



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The next layer is the **mantle**, which is made up of igneous and metamorphic rocks. The top layer is the Earth's **crust**. We live on the Earth's crust.

Lesson Checkpoint:
What are the three layers of the Earth?

What is Soil?

When we walk upon the Earth's crust, we are walking on soil. **Soil** is the loose material that covers much of the Earth's surface that is made up of several different layers: topsoil, subsoil, and bedrock. The three main particles found in **soil** are **salt, silt, and clay**.

All **soil** contains pieces of weathered rock, humus, air, and water. Soil is extremely **important** because soil supports all life on Earth.



Lesson Checkpoint:
What are three main particles found in soil?

Earth's Surface

The **Earth's surface** changes constantly because of wind, water, temperature, and features, and features natural. **Landforms** are rocks breaking

many shapes
solid
of water.
process of



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Did you know there are two types of weathering? The two types of weathering are physical and chemical. **Physical weathering** only changes the SIZE of the rock. When water runs over rocks, the particles flowing in the water rub against each other breaking down rocks, **causing the rocks to become smaller**. This is an example of physical weathering.

Ice can cause physical weathering too. When **water** seeps into cracks in rocks and then freezes causing the rock to break apart because ice takes up more space than water. When water freezes, it expands taking up MORE space than water, causing the rock to break apart.

Plants growing in a **crack of a rock** cause physical weathering too. When the plant's roots grow larger, they can cause the surrounding rock to break apart.

The second type of weathering is called **chemical weathering**, which refers to **chemicals** causing rocks to change into different materials.



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Changes H
The Earth's su

esses:

- **Erosion** is
- **Deposition** is the laying down of pieces of Earth's surface.
- **Landslides** are rapid downhill movement of large amounts of rock and soil.

Lesson Checkpoint: What causes erosion?

Rapid Changes

Volcanoes cause rapid changes when they erupt on the Earth's crust.



An **active volcano** is a volcano that erupts often or show signs of future eruptions. **Ash** from **active volcanoes** can be spread around for many miles near the volcano and can kill trees and wildlife.

Dormant volcano and do not sh

Earthquakes earthquake is shake and vib

Faults are lar wave of energy, and travels through the Earth, most often as the result of an earthquake.

**PREVIEW**
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long time

An ground to faults.

ic wave is a

Lesson Checkpoint:
What is a dormant volcano?