

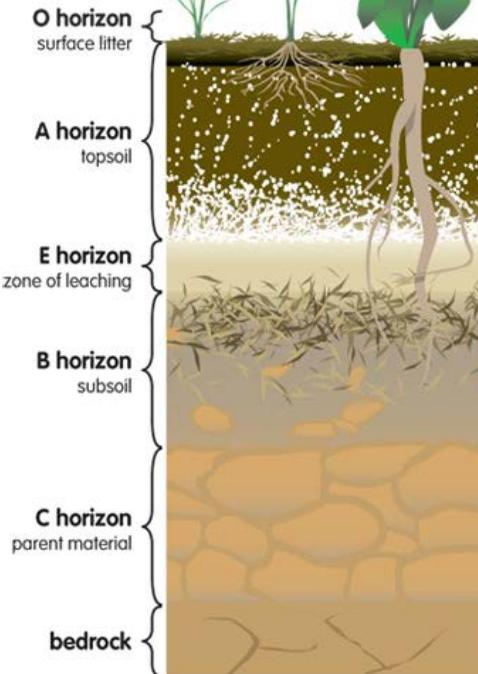
Soil



Many people believe that soil and dirt are the same thing, but they're not! Dirt is what you get under your fingernails, while soil is the thin living skin that covers the land. Plants rely on soil to grow. Those plants then provide shelter and food for both animals and people. We are all very dependent on the soil!

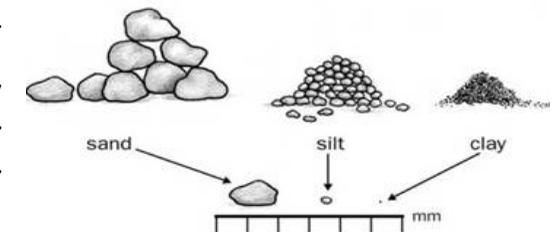
Soil is formed slowly as rock (the parent material) erodes into tiny pieces near the Earth's surface. Organic matter (fallen leaves, dead plants, and animals) decays and mixes with inorganic material (rock particles, minerals, and water) to form soil.

Soil can be divided into many layers also called **HORIZONS**. Each horizon is assigned a letter like 'O', 'A', 'E', 'B', or 'C'. Each horizon can have different colored soil, pieces or **PARTICLES** of different sizes, and different organisms living in



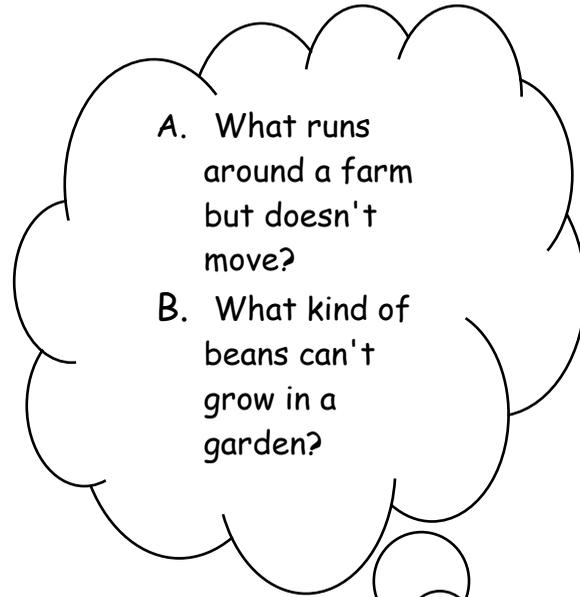
that soil layer.

If you take a handful of soil and squish it between your fingers (depending on what kind of pieces or **PARTICLES** it is made of), it will feel different. The 3 main particle sizes are **Sand**, **Silt** and **Clay**. **Sand** is large and rough. **Silt** is smaller but still gritty. **Clay** is smooth and slippery.



Soil Trivia

- Of all the planets only Earth has soil.
- It takes 200-1,000 years to make 1 inch of topsoil.
- Soil can come in a variety of colors - black, red, gray, brown, or yellow.
- One cup of soil holds about 6 billion organisms.



Joke Answers
A. A fence
B. Jelly beans

Farm Facts

1. A farmer plants cover crops to keep soil from washing away.
2. A farmer may plant trees along the edge of a field or stream to keep soil from eroding.
3. 35% of America's soil is still at a risk of eroding. (NRCS)
4. Farmers rotate their crops to prevent the soil from losing the same nutrient.
5. Farmers test their soil so they know the exact amount of fertilizer needed.



www.maeonline.com

In conjunction with:



www.aglab.pfb.com

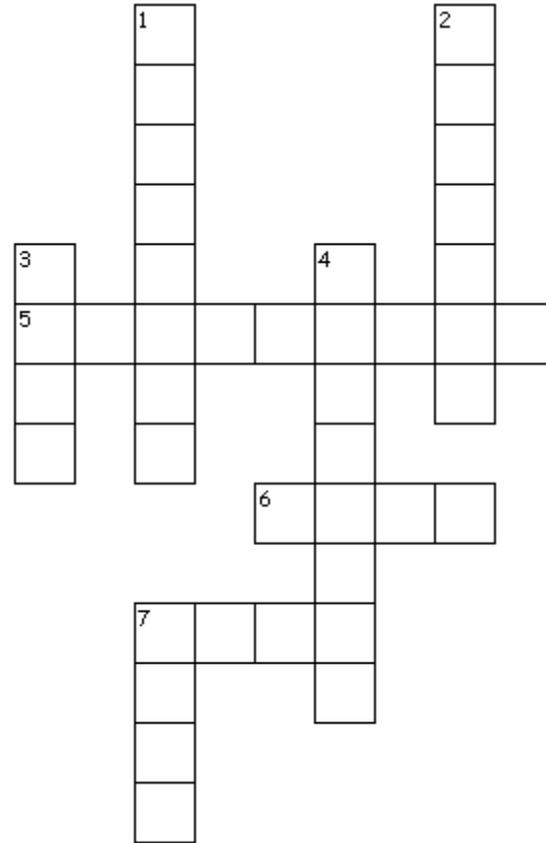
Use What You've Read!

Across

- I am a type of material that is composed of rocks, minerals, and water.
- I get under your fingernails
- I have many layers

Down

- I am another name for the many layers in the soil
- I am a type of matter that is composed of fallen leaves and dead plants and animals
- I am the gritty medium particle size
- I am the name for the many pieces of soil that come in different sizes. I am a ...
- I am the largest of the soil particle sizes



Try This At Home!

Directions

Take a sample of soil from your backyard.

Add a little water until you can roll it in a ball and it stays formed.

Next, gently squish the ball between your thumb and index finger. Try to make a ribbon like in the picture.

Answer the questions on the next page to find out what type of soil you have in your backyard!



What Soil is in Your Backyard???

