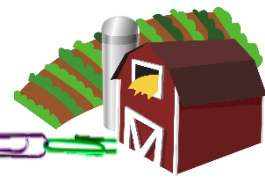


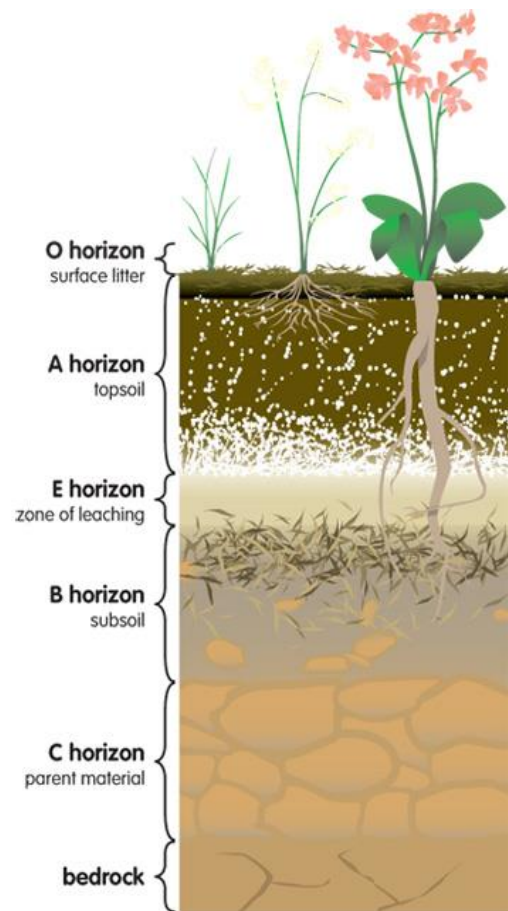


Links to Agriculture Digging Deep with Soil

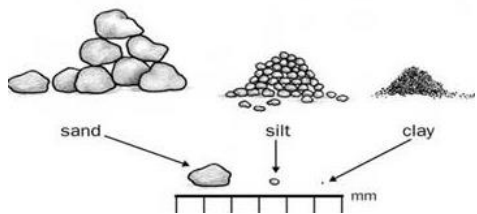


Many people believe that soil and dirt are the same thing, but they're not! **Dirt** is what you get under your fingernails, while soil is the loose upper layer of the Earth's surface. Plants rely on soil to grow. Those plants then provide shelter and food for both animals and people. We are all very dependent on the soil, especially farmers who rely on healthy soil to grow food for us and their animals.

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 it will feel different depending on what kind of pieces or particles it is made of. The three main particle sizes are **sand**, **silt** and **clay**. **Sand** is large and rough. **Silt** is smaller but still gritty. **Clay** is smooth and slippery.

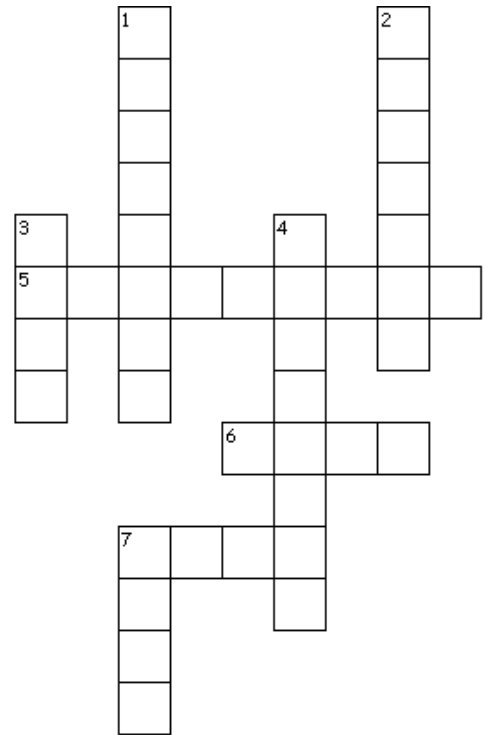
How Well Did You Read?

Across

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

Down

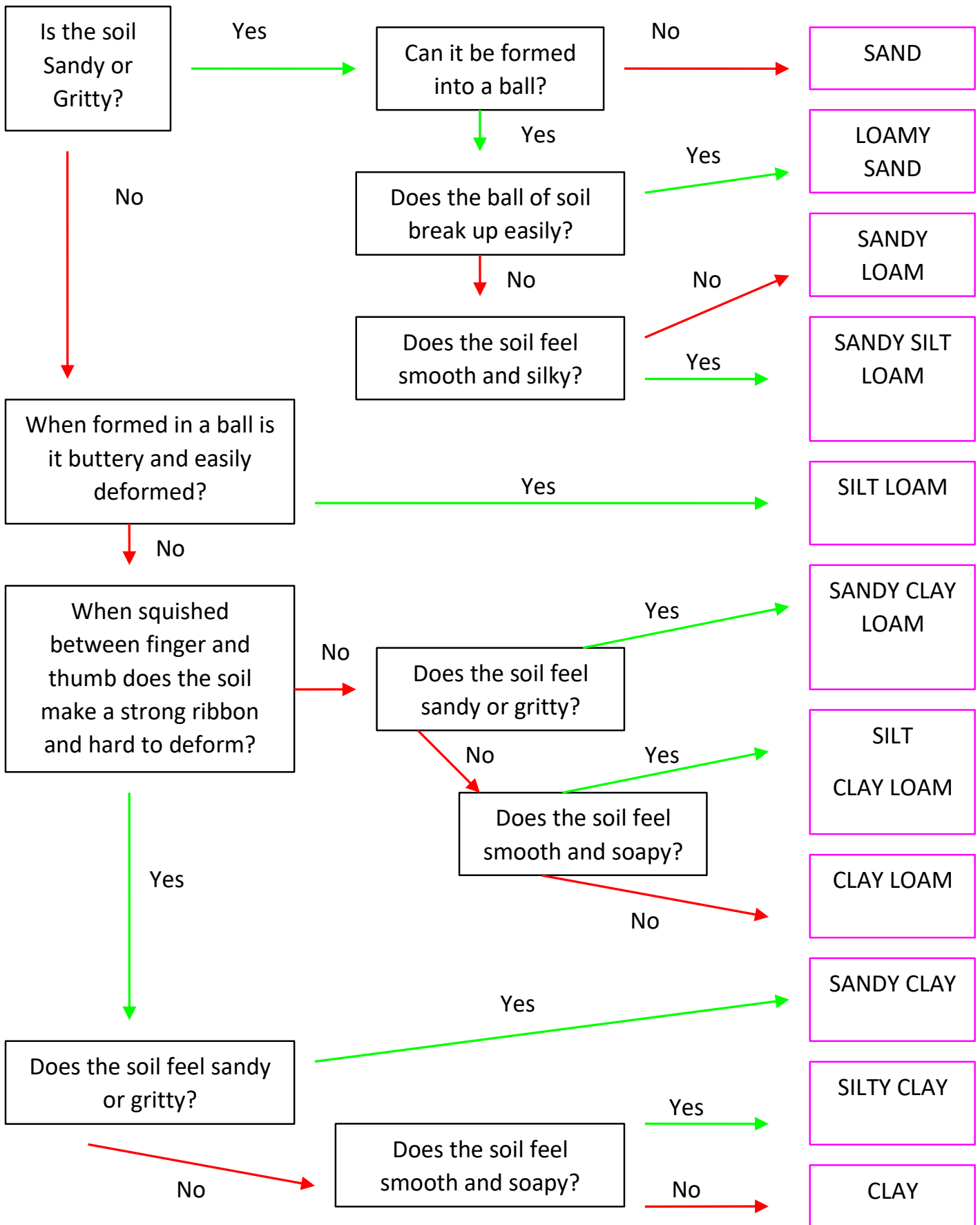
1. I am another name for the many layers in the soil
2. I am a type of matter that is composed of fallen leaves and dead plants and animals
3. I am the gritty medium particle size
4. I am the name for the many pieces of soil that come in different sizes. I am a ...
7. I am the largest of the soil particle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



My Backyard Soil

1. Take a sample of soil from your backyard.
2. Add a little water until you can roll it in a ball and it stays formed.
3. Next, gently squish the ball between your thumb and index finger. Try to make a ribbon like in the picture.
4. Answer the questions on the next page to find out what type of soil you have in your backyard!





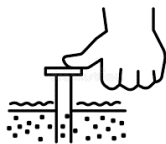
Soil Trivia

- Of all the planets, only Earth has soil.
- It takes between 200 and 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.



Did You Know...?

- Farmers plant cover crops to keep soil from washing away. Maryland farmers plant more cover crops than farmers in other states!
- Farmers plant trees along the edges of a field or stream to keep soil from eroding.
- Farmers rotate their crops to keep the soil healthy.
- Farmers test their soil so they know the exact amount and type of fertilizer needed. Farmers do not apply more fertilizer than they absolutely need.



Joke Time

1. Why did the farmer plant money in the garden?
2. What is a rock's favorite cereal?



Joke Answer:

1. She wanted to make the soil rich.
2. Cocoa Pebbles



For more agricultural education lessons and resources, visit:
www.maefonline.com