

HUMUS

The top layer of soil is made up of dead leaves and animal matter. This is called humus. This is the material that you walk on when you walk through the woods or a field. This is also sometimes called the organic layer because all of the material was once living. You might find a few stones and rocks here.

BEDROCK

The bedrock is the bottom layer of the soil system. In some places, it is just beneath the surface. Elsewhere, it might be thousands of feet underground. It is made up of a large solid mass of rock.

FACTS ABOUT SOIL

Soil takes a long time to make. It can take over a thousand years for an inch of soil to form. Areas with lots of bacteria and insects can form soil quicker. Insects such as woodlice and millipedes are detritivores. This means they eat rotting material and turn it into soil. Soil is vital to help reverse global warming and climate change. When dead organic matter is broken down and turned into soil, it locks the carbon away. This prevents it from building up as carbon dioxide in the atmosphere.

TOPSOIL

Topsoil contains most of the nutrients and water that plants need to survive. Topsoil gets its nutrients from the rotting organic matter in the humus layer or from silt from rivers. Only 10% of the land is soil, so we need to look after it. The topsoil layer is normally 5-10 inches deep. It is where most of the creatures that live underground live.

SUBSOIL

The subsoil is a very deep layer just below the topsoil. It is made up of clay, iron and organic matter that has sunk. There are also lots more rocks and stones in this layer. There aren't often a lot of nutrients this far down. Plant roots that reach this far will help to anchor the plant down and make it stronger.



RETRIEVAL FOCUS

1. Which layer of soil contains the most nutrients?
2. How deep is topsoil on average?
3. Where would you find clay?
4. Which layer is made of large rocks?
5. Give an example of a detritivore.

VIPERS QUESTIONS

V

Find and copy a word in the “Bedrock” section that means “under”.

S

How can soil help with climate change?

V

Write a definition for “detritivore”.

E

How has the author helped to make each layer clear?