



Year 3

Remote Learning

Wider Curriculum Week 11

Science

Continuing from our learning about rocks, we are now moving on to soil!

Soil

Soil is the very top layer of the Earth. It is made of **organic matter** (living and also decaying plants and animals), water, air and pieces of rock. Very finely broken down pieces of rock also provide minerals in soil. Soil is formed in layers over many years (have a look at page 11 of the Rock and Soils fact sheets). There are three main layers: **top soil**, **sub soil** and then **base rock**.

The three main layers of soil

- **Top Soil** - this is darker, fertile soil. **Fertile** means that the soil provides nutrients to feed plants so they can grow. There are decaying plants and creatures here, we call this **humus**. Some animals and other creatures, such as earthworms make their homes here. This is also where we plant seeds, so plant roots will also be found here in the **top soil**.
- **Sub Soil** - there are small pieces of broken rock, stronger plant roots seeking water and nutrients, decaying plants and the remains of decayed animals (**humus**).
- **Base Rock** - the final layer of soil; there are no roots or **organic matter** here. This layer contains small and larger pieces of broken rocks, and then solid rock called **bedrock**.

Have a look at this video (concentrate on the three main layers)

<https://www.bing.com/videos/search?q=video+to+teach+children+about+the+layers+of+soil&docid=607995655997228123&mid=0D84A39D0A64889FD7F60D84A39D0A64889FD7F6&view=detail&FORM=VIRE>

Is there just one kind of soil?

No! There are different types of soils. Soils can be different because it depends on the types of rocks that made the soil, as well as the different plants, animals and other types of organisms that live in or near them (or that are decaying in them). Soils can even be different colours; have you ever noticed that? Not all soils are equal in terms of providing plants with the nutrients and water that they need to grow.

<https://www.bbc.co.uk/bitesize/clips/z7rb4wx>

Types of soils

Now have a look at the final page of the *Rocks and Soil Fact Sheets*. This will tell you about seven different types of soil!

<https://www.bbc.co.uk/bitesize/topics/zjty4wx/articles/ztvbk2p>

Activity

Worm Cafe Menu!

Have you ever been to a restaurant or got a take-away, and seen on the menu: 'Chef's Special'? This tells you which dishes are the *speciality* of the chef - the food they are particularly skilled at making, or that they have created themselves and so is particularly special because you might not find it anywhere else!

- Your task is to **create a 'Chef's Special' soil mixture for worms!** Think carefully about what you need to include to make this a particularly good soil for worms. Which combination of soils will you use, and why? Think about what different types of soils provide and how you could mix them together to create a new soil that is particularly good for worms. Why it is better than the ordinary soil choices available (the types of soil you looked at above). *Why should the worms choose this soil? I*
- **Create a Worm Cafe Menu!** Write a list of the different soils on offer at your worm cafe, including a short description of each soil. Use the *Types of Soil* section above to help you. You don't need to include all the soils.
- **Finally, include your speciality soil - the 'Chef's Special' you created for your worm cafe!** You must include a description of your special soil - the different soils that you have combined to make your 'Chef's Special' and why? Remember, it needs to be appealing to worms!
- Don't forget to come up with a name for your worm cafe! You could create a design for the cafe too if you want to!

A video to recap some of our learning about soil!

<https://www.turtlediary.com/video/soil.html>