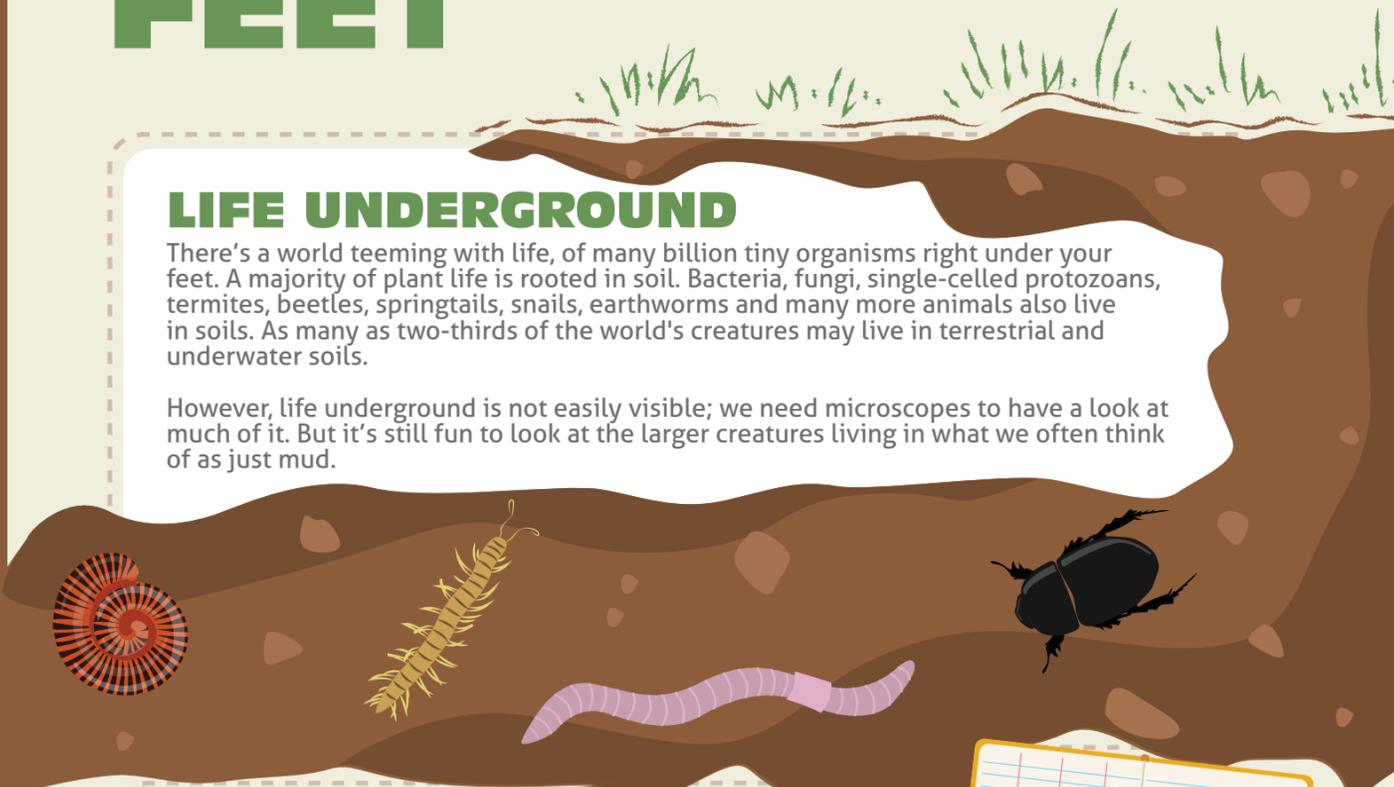


UNDER OUR FEET

LIFE UNDERGROUND

There's a world teeming with life, of many billion tiny organisms right under your feet. A majority of plant life is rooted in soil. Bacteria, fungi, single-celled protozoans, termites, beetles, springtails, snails, earthworms and many more animals also live in soils. As many as two-thirds of the world's creatures may live in terrestrial and underwater soils.

However, life underground is not easily visible; we need microscopes to have a look at much of it. But it's still fun to look at the larger creatures living in what we often think of as just mud.

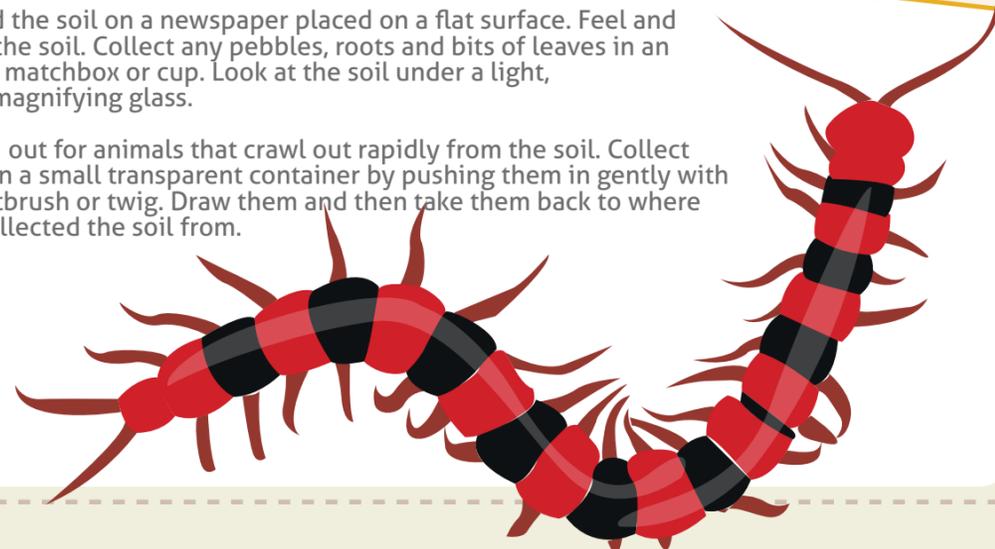


FOR THE FIELD DIARY

From a garden or under a tree or bush in a playground, dig up some soil. If the soil is very dry and hard, pour some water on it and then dig in. You won't need much – a big cupful will do.

Spread the soil on a newspaper placed on a flat surface. Feel and smell the soil. Collect any pebbles, roots and bits of leaves in an empty matchbox or cup. Look at the soil under a light, use a magnifying glass.

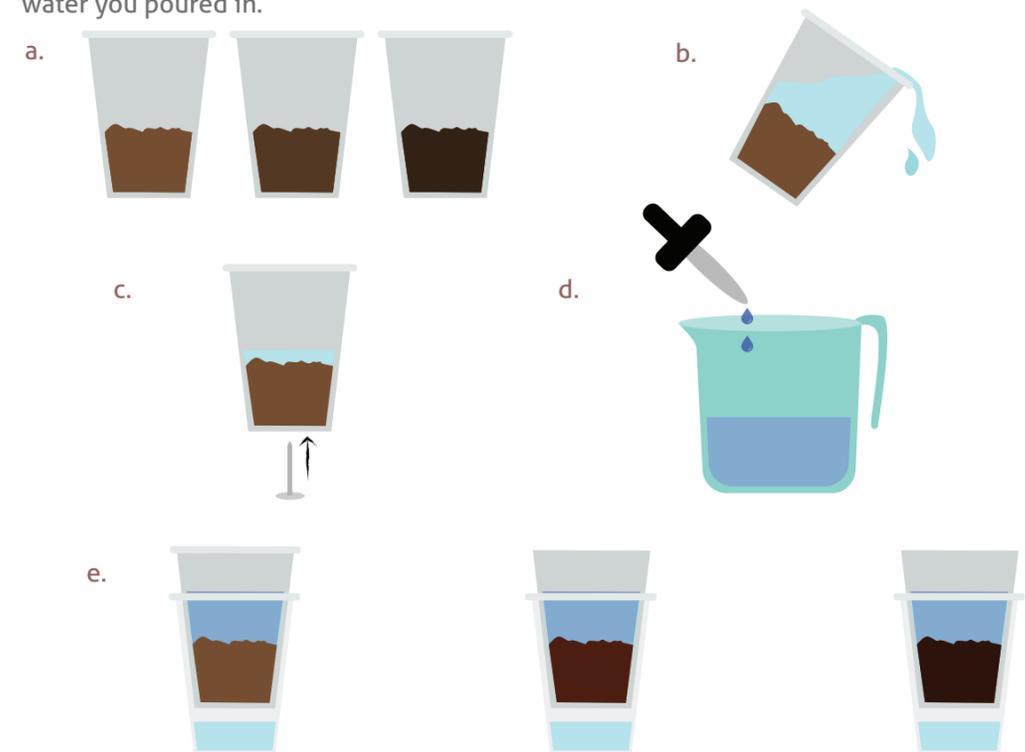
Watch out for animals that crawl out rapidly from the soil. Collect them in a small transparent container by pushing them in gently with a paintbrush or twig. Draw them and then take them back to where you collected the soil from.



SOILS AS FILTERS

The soil surrounding you is constantly working as a filter of ground water. You can see for yourself how this works:

- Take 3 paper cups and fill half of each with soil. In each cup, fill a different kind of soil – garden soil, sand, gravel or any other kind of soil.
- Next, fill the cups with water and pour the extra water out. Do this a few times to remove any debris on the top.
- Then pierce the bottom of the cup with the nib of a pen or pencil tip. Seat each of these paper cups in narrow glass tumblers in such a way that they don't go all the way into the glass.
- Take a large mug of water and add a few drops of blue colour (water colours/paints will do). Fill the cups with this coloured water. After a while, you will be able to collect the water you poured into the cup in the glass below.
- What is the colour of the water in each of the glasses? Compare it to the colour of the water you poured in.



CONTEST

Write to us at edu@ncf-india.org with the results of your experiment with coloured water and your drawings from your field diary for a chance to win a book on the creatures found in soils.

Visit NCF at www.edu.ncf-india.org You can also send in feedback to letters@planetbrainwave.com