

Y3 Soils

KS2 Science · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

What is soil made of?

Step 1 · Where do the gritty bits come from?

Tiny pieces of rock, broken off over a very long time

Step 2 · What else is mixed in?

Organic matter (humus): rotted leaves, roots and dead animals

Step 3 · What fills the gaps?

Air and water

Answer: Soil is made of tiny bits of rock, organic matter (humus), air and water.

Check: Soil also has living things in it, like worms, beetles and fungi.

2. Now try one with the steps

How do worms help the soil?

Step 1 · What do worms eat?

Step 2 · What do they leave behind?

Step 3 · What do their tunnels do?

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. Soil is partly made from tiny pieces of what?

2. What is the dark, rotted plant and animal material in soil called?

3. Name TWO other things found in the gaps in soil.

4. Name ONE living thing that lives in soil.

5. In the soil jar test, which layer settles at the bottom?

6. In the soil jar test, what floats on the top?

7. Which type of soil lets water through fastest: sandy or clay?

8. Drainage results: sandy soil 80 ml, loam 50 ml, clay soil 15 ml. How much water dripped through the loam?

9. How much more water dripped through sandy soil (80 ml) than clay soil (15 ml)?

10. Why do plants in sandy soil need watering more often?

11. Why does a garden with clay soil often get puddles after rain?

12. In a drainage test, Sofia used 100 ml of water on sandy soil and 50 ml on clay soil. Is this fair? Why?

13. Why do gardeners add compost to their soil?

14. Explain why soil is different in different places.

4. Before you hand it in

Soil is just dirt.

Soil = tiny bits of rock + organic matter (humus) + air + water.

All soil is the same.

Sandy, clay, chalky and loam soils behave differently.

Soil forms quickly.

It can take hundreds of years to make just a few centimetres of soil.

Water that drains away fastest is always best for plants.

Loam is best for most plants: it drains well but still holds some water.