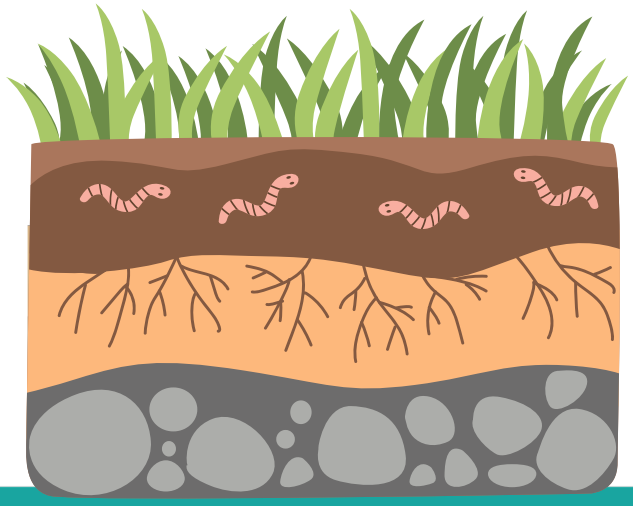


Soil: The Secret to Healthy Plants!



1. What is soil?

Soil is the loose top layer of Earth's land. It contains tiny pieces of rock, minerals, air, water and decayed plant and animal matter. Many plants grow their roots in soil.

Roots hold a plant in place and take in water and nutrients from soil.

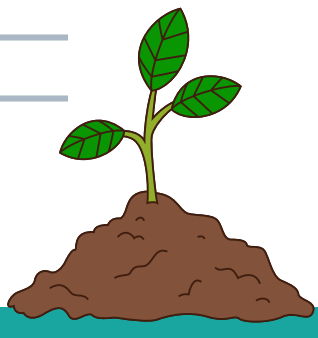
2. Why is soil important to plants?

Healthy soil supports roots, stores water, provides nutrients and lets air reach roots. Soil is also home to earthworms and other helpful organisms.

SUPPORT	WATER	NUTRIENTS	AIR
Anchors roots	Stores moisture	Feeds plants	Root breathing

Think & Answer

Name two things healthy soil provides to plants.



3. Three common soil types

SANDY SOIL
Large grains; feels gritty. Water drains quickly, so it dries fast. It holds fewer nutrients.

CLAY SOIL
Tiny particles; can feel sticky when wet. It holds water and may become hard when dry.

LOAMY SOIL
A mix of sand, clay and humus. It holds water but also drains; often good for growing plants.

4. Match soil to its description

Write Sandy, Clay or Loamy on each line.

a) Gritty soil that drains quickly: _____

b) Soil that may be sticky when wet: _____

c) Balanced soil mix often used for gardens: _____

Try this!

Which soil would you choose for a vegetable garden? Why?

_____

_____





PREPARING SOIL FOR PLANTING

Giveseedsandrootsagoodstart • Ages6–9



5. What is soil preparation?

Soil preparation means getting the ground ready before planting. Prepared soil gives seeds and roots a better place to grow.

1. CLEAR Remove rubbish, stones and unwanted weeds.

2. LOOSEN Loosen compacted soil so roots can spread. Ask an adult for help.

3. BREAK CLUMPS Break large lumps into smaller pieces.

4. ADD ORGANIC MATTER Mix in compost or well-rotted organic matter if available.

5. LEVEL & PLANT Smooth the ground, make holes or rows, and plant at the right depth.

Safety: Wear suitable footwear and use tools only with adult guidance.

Put the steps in order

Write 1–5 beside each step:

_____ Loosen the soil.

_____ Clear the area.

_____ Plant the seeds.

_____ Break clumps and improve the soil.

_____ Level the soil or make rows.





6. Plants and crops

A crop is a plant grown by people for food or another useful purpose. Plants can provide food, materials and decoration.

FOOD CROPS
Plants grown for food, such as cassava, corn, rice, pumpkin, tomatoes and lettuce.

FRUIT CROPS
Plants that produce fruits we eat, such as mango, banana, pawpaw and citrus.

ROOT & TUBER CROPS
Plants grown for edible parts below the soil, such as sweet potato, cassava and dasheen.

FIBRE / MATERIAL CROPS
Plants used to make materials. Cotton can be used to make cloth.

ORNAMENTAL PLANTS
Plants grown for beauty, such as hibiscus, ixora and sunflowers.

Sort these crops

Cassava • Cotton • Hibiscus • Mango • Corn

Food crop: _____ Material crop: _____

Fruit crop: _____ Ornamental plant: _____



SOIL & PLANTS: PRACTICE TIME!

Reviewwhatyoulearned • Ages6–9

A. Choose the correct answer

1. Soil helps roots by…

a) supporting them b) making toys c) hiding them

2. Which soil feels gritty and drains quickly?

a) Clay b) Sandy c) Loamy

3. Which soil is often a good garden mixture?

a) Loamy b) Pure rock c) Plastic



4. Soil preparation should begin by…

a) clearing the area b) planting in rubbish c) pouring paint

5. A crop is…

a) a plant grown for use b) a stone c) a tool

B. Fill in the blanks

6. Soil provides roots with water and _____.

7. _____ soil has tiny particles and can feel sticky when wet.

8. Compost adds _____ matter to soil.

9. Stones and weeds should be _____ before planting.

C. True or False?

10. Sandy soil usually drains water quickly. _____

11. Loosening soil can help roots spread. _____

12. Plants do not need nutrients from soil. _____



D. Short answers

13. Name one crop grown for food: