

Soil's Many Jobs

Read closely to find how soil helps living things.

3.6 "The student will investigate and understand that soil is important in ecosystems. Key ideas include soil, with its different components, is important to organisms; and soil provides support and nutrients necessary for plant growth."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline words or phrases that name soil components, and circle statements that tell how soil helps an organism or plant.

A Handful of Soil

- ① On a garden walk, Maya scooped up a small handful of soil. It was not just brown dust. She found tiny pieces of rock, bits of dead leaves, water, air, and living organisms such as worms. Soil is a mixture of these components. Different places may have soil with different amounts of sand, clay, and decayed plant material.
- ② Plants use soil as a place to grow. Roots push into the soil, which holds a plant upright during rain and wind. Spaces in soil hold water and air around the roots. Decayed leaves and other once-living material add nutrients to soil. Plants take in water and nutrients through their roots to help them grow.
- ③ Soil also supports many organisms besides plants. Ants make tunnels in it, earthworms move through it, and some small animals use soil for shelter. Earthworms eat dead material and leave wastes that can add nutrients to the soil. When people protect soil from washing away, they help keep a useful home and growing place for organisms.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What components did Maya find in the soil? Name four.

2 How does soil support a plant during rain and wind?

3 How do decayed leaves help plants grow?

4 Which two organisms are described using soil as a home, and how does each use it?

3 YOUR TURN _____ Your own words

Choose a plant growing in soil, such as a sunflower or bean plant. Write three sentences explaining which soil components are near its roots and how the soil helps the plant grow.

PART 1 • READ AND MARK

Underline words or phrases that name soil components, and circle statements that tell how soil helps an organism or plant. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What components did Maya find in the soil? Name four.	Any four: tiny rock pieces, dead leaves, water, air, or living organisms such as worms.
2	How does soil support a plant during rain and wind?	Plant roots push into the soil, and the soil holds the plant upright.
3	How do decayed leaves help plants grow?	Decayed leaves add nutrients to the soil. Plants take in nutrients through their roots.
4	Which two organisms are described using soil as a home, and how does each use it?	Ants make tunnels in soil, and earthworms move through soil. Small animals may also use soil for shelter.

PART 3 • YOUR TURN (SAMPLE ANSWER)

A sunflower's roots grow among rock pieces, water, air, and decayed leaves. The soil holds the sunflower upright when wind blows. Decayed leaves add nutrients, and the roots take in water and nutrients.

For question 1, accept any four components named in the passage. For the open response, accept a different plant and accurate statements showing soil components plus soil support, water, or nutrients.