

Teacher Notes

This activity will support your students' understanding of what factors are needed to make and keep soil healthy. By planting the sock, students will observe first hand the importance of the different organisms that live in the soil and how they contribute to the growth of plants and the maintenance of healthy and robust environments.

The aim is to see that the sock has mostly disappeared and has plenty of holes in it, which means that the soil is healthy because many of the organisms living in it have used the sock as an organic food source.

This activity can be used to support students' understanding of the following Australian Curriculum content descriptions.

Foundation:

Recognising the needs of living things in a range of situations such as pets at home, plants in the garden or plants and animals in bushland (ACSSU002)

Participate in guided investigations and make observations using the senses (AC SIS011)

Year 1:

Exploring different habitats in the local environment such as the beach, bush and backyard (ACSSU017)

Using the senses to explore the local environment to pose interesting questions and making predictions about what will happen (AC SIS024)

Use a range of methods to sort information, including drawings and provided tables and through discussion, compare observations with predictions (AC SIS027)

Year 2:

Identifying the Earth's resources including water, soil and minerals, and describing how they are used in the school (ACSSU032)

Considering what might happen to humans if there were a change in a familiar available resource, such as water (AC SIS038)

Participate in guided investigations to explore and answer questions (AC SIS040)

Teaching Suggestions:

- This activity may be used at the start of a unit of work or to support students' inquiry skills and understanding surrounding the topic of living things.
- You may wish to complete a KWL chart to determine what students already know about soil and what they would like to learn, reviewing what they have learnt at the end of the activity.
- It may be best to group students for this activity in pairs or groups of three.
- Ensure students are aware of the need to wear gloves when working with soil and that they wash their hands afterwards to keep themselves healthy.
- You may like to leave the sock buried for eight weeks or dig it up every two or three weeks and observe what is happening and whether or not it matches students' predictions.
- Students may like to take photos or videos of the sock and record their observations and results verbally as evidence of their learning and understanding.

Disclaimer:

We hope the information on our website and resources is useful. It is your responsibility to note that some ingredients and/or materials used might cause allergic reactions or health problems and to ensure that you are fully aware of the allergies and health conditions of those taking part. If you have any concerns about your own or somebody else's health or wellbeing, always speak to a qualified health professional. Remember, activities listed within the resource should always be supervised by an appropriate adult.

Soil Scientist

Become a soil scientist and discover more about what lives in the soil and why healthy soil is essential for living things and the environment.

You will need:

- Trowel
- Shovel
- A5 piece of card or paper (laminated this when complete for durability)
- Pen
- Tape
- Stick
- 100% cotton sock



Instructions:

1. Dig a small hole about 20cm deep. Remove the soil and place it to one side.
2. Use the trowel to fill the sock nearly to the top with the soil you have dug up.
3. Place the sock into the hole and cover it with the remaining soil.
4. Gently place the stick into the soil as a stake.
5. Take the piece of card and write your name or your group members' names onto it. Get your teacher to help laminate your sign so that it is weatherproof.
6. Attach your sign to the stick with tape to keep it secure.
7. Dig up your sock every two weeks for about eight weeks to see what has happened.
8. Record your prediction and observations on the Soil Scientist Observation Sheet. Did your prediction match what happened? What can the sock help us learn about soil and why soil is important?

Soil Scientist Observations

Try and use some of the Science words below in your prediction and share what you saw happen over time.

soil healthy unhealthy food ground animal
change stayed the same insects bugs worms plant

My Prediction

I predict that the sock will _____

