

SOIL

10.17.2018

Subject

Basic Science

Prepared By

[Instructor Name]

Grade Level

2

Overview

This lesson plan covers teaching content for;

- 1.Importance of Soil to plants.
- 2.Importance of Soil to animals.

Teacher Guide

Day 1/Lesson 1- 15 Mins

1. Take an aquarium, terrarium, or other clear container.
2. Add soil and worms and have students observe.
3. Add water to the soil and keep it damp.
4. Add composting fruit and vegetable scraps.
5. Plant seeds in the soil of your worm farm and observe how they grow.

Day 3/Lesson 3- 15 Mins

1. Divide students into three groups.
2. Take them out and tell them to search for different kinds of soils.
3. One group will search for sand, and then

Guided Practice

Day 2/ Lesson 2- 15 mins

1. Go out to the garden and place students in different areas of the space.
2. Give each student a trowel and a piece of newspaper.
3. Have them dig a small soil sample and put it on their newspaper.
4. Have them examine it and sort it into different groups of things – things that were alive (grass, twig, root), bigger rocks, small rocks, leaves etc.
5. Have students circle and tally the things they found in their soil in their notebooks.
6. Encourage students to use their sense of touch, sight, and smell to explore the soil.
7. Come back together as a class and select several students to report on their soil sample findings!

Day 4/Lesson 4- 15 Mins

1. Divide students into four groups.
2. Assign each student a role. For example, Number One's might be the Recorders, Number Two's the Equipment Gatherers,

Materials Required

- Aquarium or clear container
- Worms
- Decomposing fruits and vegetables
- Soil
- Trowels
- Newspapers
- Bowls of soil

Additional Resources

- <https://www.soils4teachers.org/lessons>
- <https://www.nrcs.usda.gov/wps/portal>
- <https://betterlesson.com/lesson/59883>
- <https://www.crayola.com/lesson-plans/>
- <https://growing-minds.org/documents/>
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Additional Notes

Information/Instruction

- 1.Pass two bowls of soil around the class and ask students what they think the soil is.

Teacher Guide

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2. Tell them soil impacts our atmosphere releasing gasses such as carbon dioxide into the air.
 3. Many animals, fungi, and bacteria rely on soil as a place to live.

- Nutrient cycles - Soil plays an important role in recycling nutrients including the carbon and nitrogen cycles.
- Water - The soil helps to filter and clean our water.

4. If the soils are different, explain that soils can be and are different all over the world.
 5. Tell the students that as a medium for plant growth, Soil serves the following functions: to anchor roots, supplies water to plants, provides air for the breathing of plant roots, and furnishes minerals for plant nutrition.
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- another group will search for rocks and last group clay.
4. Display the kinds of soils after with discuss why the soils are different.
5. Have students write which soils are good for growing crops and why.

Guided Practice

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- Number Three's the Planters, Number Four's the Waterers, and Number Five's the Labelers.
 3. Distribute one pot with soil to each group. Ask each group to predict how well the plants will grow in the different soils.
 4. Have the Recorder record the group's prediction, along with their reasoning as to why they think that.
 5. Invite the Equipment Gatherers to collect the seeds, labels, markers, spoons etc. for their group.
 6. Walk the groups through the planting steps the class agreed upon as the Planters plant the seeds for each group.
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	Teacher Guide	Guided Practice
Assessment Activity 1.: Ask students to sort the soil based on color, hardness, or size.	Assessment Activity 1.Ask students to bring soil from home and compare them (with one another and with the garden soil).	
Summary		