



Read & STEAM

The Soil in Jackie's Garden



Lesson Summary

Students will learn about the components of soil through the book *The Soil in Jackie's Garden* and an edible soil activity

Grade Level

K-5

Length of Lesson

45 minutes

Materials

- Plastic spoons (enough for every student to have one)
- Clear plastic cups (enough for every student to have one)
- Chocolate pudding cups (enough for every student to have one)
- 1 large bag of Gummy worms
- 1 bag of pretzel sticks
- 8 crushed graham crackers
- One family sized package of crushed sandwich cookies
- Raisins
- 1 container green sprinkles
- 1 container rainbow sprinkles

Reading Guide

1. Introduce the story using these questions (2 min)

- a. Have you ever played or dug in the soil?
- b. What did you find in the soil?
- c. What do you think lives in the soil?
- d. "Today we will learn about the different parts of soil and how they help plants grow!"

2. Read *The Soil in Jackie's Garden*

by Peggy Thomas (10 min)

- a. Student engagement tool
 - i. Print out enough of the Soil Component Cards for each student to have one. When the book mentions what is on their card, they can hold it up in the air.

3. Reflect on the story with these questions (3 min)

- a. What is soil?
- b. What are the different parts of soil?
- c. What do these parts of soil do to help plants grow?

Vocabulary

Soil: the top layer of the Earth's surface where plants grow. It's made up of rock, decayed plants and animals (organic matter, water, air, and microorganisms).

Compost: decayed organic material used as a plant fertilizer

Nutrients: a substance that provides nourishment essential for growth and the maintenance of life

Additional Lesson Links

- Matrix Lessons
 - [Caring for the Land](#)
 - [Vermicomposting](#)
 - [What's Our Soil Worth?](#)
 - [Plant Growth Affects the Soil](#)
- Other Resources
 - [Indoor Gardening Curriculum](#)
 - [Construct a Compost Bottle](#)

Standards

NALO:
T1.K-2.b
T1.3-5.b
T2.K-2.e
T2.3-5.c

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Edible Soil Activity

1. Begin Edible Soil activity (25 min)

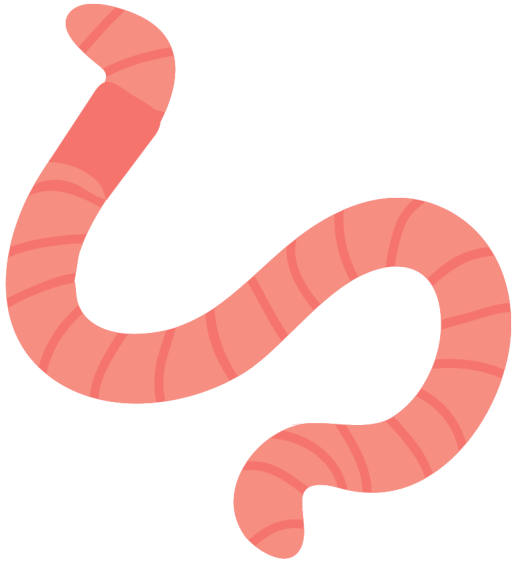
- a. Tell students: "Today we are going to make our own gardens- just like Jackie's!"
- b. Have all students wash their hands.
- c. Distribute the following materials to each student: pudding cup, clear plastic cup, spoon.
- d. Have them scoop their pudding into their clear cup to act as the base layer of soil.
- e. Lay out all of the ingredients that represent the different parts of soil:
 - i. Gummy worms: worms
 - ii. Pretzel sticks: roots
 - iii. Green sprinkles: plants
 - iv. Rainbow sprinkles: flowers
 - v. Crushed sandwich cookies: compost
 - vi. Crushed graham crackers: rocks
 - vii. Raisins: critters
- f. Guide students to build their garden by adding each ingredient one at a time to their cup.

2. Review the activity with these questions (5 min)

- a. What is in soil?
- b. How does each part of soil help plants grow?
- c. Why is soil important for us?
- d. Final message: "Soil has lots of parts, both living and non-living, that help plants grow!"

Soil Component Cards

Worms



Roots



Leaves



Flowers



Soil Component Cards

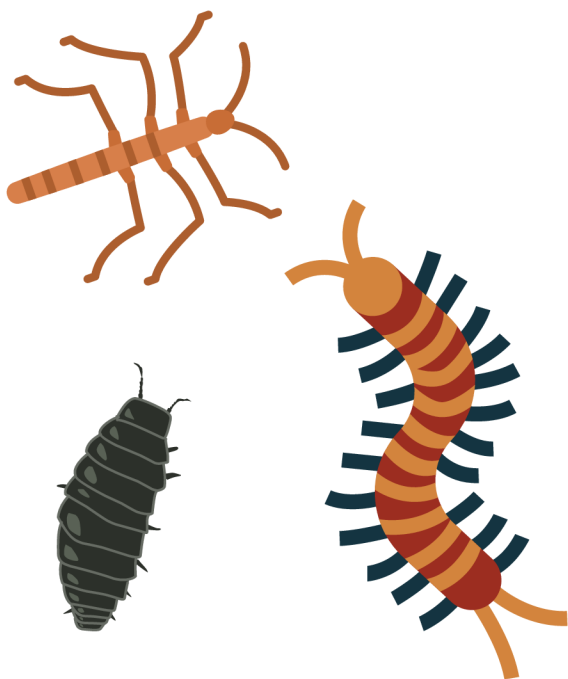
Compost



Rocks



Critters



Seeds

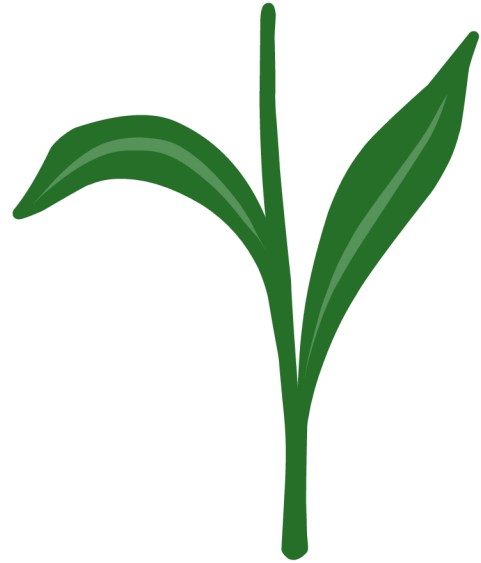


Soil Component Cards

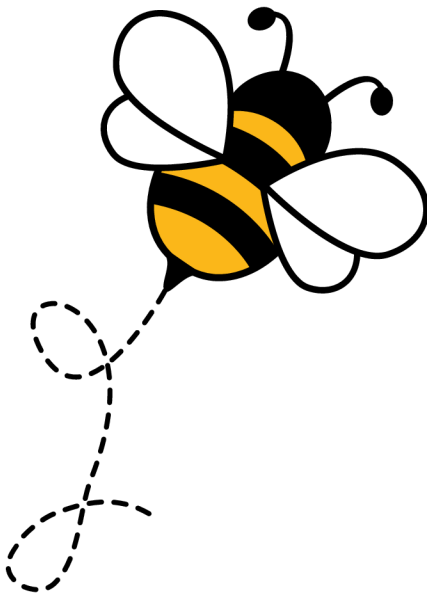
Water



Stems



Bees



Fruits

