



Life Cycle of a Plant

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Target Grade: 2nd grade

Time Required: 45 minutes to set up terrarium
4 to 6 weeks of observations

Standards:

S2L1. Obtain, evaluate, and communicate information about the life cycles of different living organisms. Plan and carry out an investigation of the life cycle of a plant by growing a plant from a seed and by recording changes over a period of time.

Lesson Objectives:

Students will:

- Obtain, evaluate, and communicate information about the life cycle of a plant
- Record the growth of their plant over a course of a few weeks
- Build their own terrarium and evaluate how the life cycle of a plant works.

Central Focus:

In this lesson, students will have the opportunity to build their own planetarium and observe how a plants life cycle works. Students will be given a data collection handout to keep track of how their plant is growing.

Background Information:

Prior to this lesson students should be taught the actual process of a plants life cycle such as, planting a seed in soil, the seed takes roots, water and sunlight are the plant's food, and the end result will be a growing plant.

Materials

- Empty liter plastic bottles
- Data Handout (attached)
- Plant the Tiny Seed by Christie Matheson
- Soil (Divided up into baggies for the students to pour in their terrariums.)
- Tillandsia bulb/seed



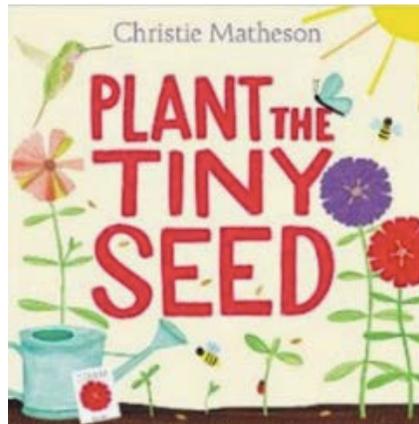
- Information on this plant can be found at <https://www.easytogrowbulbs.com/blogs/plant-care/tillandsia-how-to-care-for-air-plants>

Instruction

Introduction:

Step 1, **Hook:** Review with the students the process of a plant life cycle. Write down the steps on an anchor chart as the class discuss the information.

Step 2, **Interactive read aloud:** Begin reading the story “Plant the Tiny Seed,” by Christie Matheson. Stop at each new growth cycle and discuss with your class what is helping this plant grow.



Step 3, **Model Activity:** After reading and discussing the life cycle of a plant, pull out the supplies needed to build a terrarium. This will include an empty liter bottle (top half should be cut off prior to lesson for each students' bottle), soil, tillandsia bulb, and water in a spray bottle. Hold up the supplies and explain what each material is used for. Have the class watch as you put soil in the bottle and then plant the bulb. Be sure to explain each step as they watch you preform it.

Activity:

Step 4: Let the students gather their supplies and build their terrarium at their desks. If students finish early, have them draw their terrarium on a blank sheet of copy paper. On the back of the paper, instruct students to write a prediction about how fast they think their plant will grow and what they think their plant needs in order to survive.

Step 5 **closing:** Pass out the data handout to each student and instruct them to glue it inside their science interactive notebooks. As morning work each morning, students will



observe and record what they notice on their plant's growth. Over the course of a couple weeks students will have the opportunity to measure how their plant is growing.

Activity continued:

Every morning for the next few weeks have students record how their plants are growing. After 4 to 6 weeks students will analyze their plants and data, they will then design and draw a terrarium in their science notebooks that they think would help increase the growth of their plant. If time permits, let students build their new terrariums.

Differentiation

The teacher will model how to build a basic terrarium as a visual aid prior to independent practice. The anchor chart will help students see needed information. Higher leveled students should be sitting next to lower level students in order to help them when the teacher is not around.

Assessment

Formative:

The interactive notebook with the plant life cycle should be checked weekly to monitor the students growing understanding a plants lifecycle. At the end of this segment a class grade can be taken from the new design and description of the student's terrarium to check their understanding of what helps a aid in a plant's life cycle.

Example of a class terrarium



Date	Draw new growth	Did you water your plant?	CM or Inches grown

