

Lesson Title: Environments Day 5- Making a Terrarium

Standards Addressed:

LS1.A Structure and Function- All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air; plants also have different parts (roots, stems, leaves, flowers, fruit) that help them to survive and grow.

Objectives:

Students will be able to identify a terrarium

Students will be able to build and create a terrarium

Students will be able to gather and record data

Set Induction:

Students will come and sit on the carpet (red, yellow, green, blue). The teacher will ask: If you were to create a place where plants and animals could live together, what would it look like? What would it include?

Students will think-pair-share and then share out.

The teacher will explain that today we will be building places where plants and animals can live together. These places are called terrariums!

Content Outline:

Environment

- An environment is composed of all of the living and nonliving things that make up your environment
 - Ocean Environment: Large body of salt water, animals such as jellyfish, kelp etc live in the ocean
 - Many live in the top layer to get the sunlight they need
 - Rain Forest: Forest where there is lots of rain, plants don't need that much sunlight so they survive, tall trees etc
 - Desert Environment: Dry, Cactuses live there (they store water), animals hide during the day
 - Tundra: Super cold environment, plants grow together near the ground, animals have thick fur to stay warm.
 - Prairie- mostly dry, few kinds of trees and shrubs
- Living things live in environments that meet its needs

Food Chain

- This is the concept that all living things need energy from the sun
- This is the transfer of energy from one organism to the next
- Starts with the plant, the plant gets eaten by a cricket, the cricket gets eaten by a toad etc

Terrarium

- It has all of the things that plants and animals need to survive

- Made up of rocks, plants, soil etc

Instructional Strategies and Learning Activities:

Set Induction- 5 min

Mini Lesson/ Terrarium Brainstorm- 10 min

Build Terrariums- 30 min

Clean up/ Closure- 5 min

Mini Lesson/ Terrarium Brainstorm

Instructional Strategy: Mini Lesson/ Brainstorm

The teacher will explain that we will be building terrariums today.

Terrariums are places where plants and animals get everything they need. We've been talking about environments- terrariums are a kind of environment.

What do we think plants and animals need to survive?

Students will think-pair-share.

We will generate their thoughts into a brainstorm that might look like this:

What do we think plants and animals need to survive?

-sunlight

-soil

-water

-animals need plants

When animals need plants, this is called interdependence. This is a big word- let's say this word together! This means that everything in the environment wants to work together and needs everyone else to survive.

Friends, today we are going to building a terrarium. Here's how this is going to work.

We are going to build four terrariums. One for each table group.

Transition:

Students will return to their desks where the tables will be covered with newspapers and there will be one cut water bottle on their desks (one for each table).

The teacher will explain that we will be making a terrarium together. We will be doing this step by step. Two members of your group will put the rocks at the bottom of your bottle. It should cover the full bottom. Next, a member of your group will scoop out one spoonful of soil. This will continue (next person and then next person etc) until we have enough soil to cover the rocks. Finally, I will come around and give you a small plant. I need two people to carefully hold the plant and place it into the dirt. Pat it in.

Look at your recording sheet and draw me a picture! What do you see? Draw what animals you think would live in that terrarium.

Gallery Walk- We will be doing a walk around the classroom to look at all of our different terrariums.

Building a Terrarium

Instructional Strategy: Hands on

Students will come back to their desks and as a class we will work through the following steps. The teacher will model how to do each step.

Here are the steps again:

1. Two members of your group will put the rocks at the bottom of your bottle. It should cover the full bottom.
2. Next, a member of your group will scoop out one spoonful of soil. This will continue (next person and then next person etc) until we have enough soil to cover the rocks.
3. Finally, I will come around and give you a small plant. I need two people to carefully hold the plant and place it into the dirt. Pat it in
4. Look at your recording sheet and draw me a picture! What do you see? Draw what animals you think would live in that terrarium.
5. Gallery Walk- We will be doing a walk around the classroom to look at all of our different terrariums.

When we get to step 4, we will stop and the teacher will pass out the Recording Sheets and model how to fill it out.

The recording sheet will be a piece of paper that asks students to draw their terrarium and write what is in their terrarium. Students will turn this in as formative assessment.

For the Gallery Walk, students will walk in their table groups to the terrariums and discuss what they see. How is it the same and different to what your terrarium looks like?

Differentiations/ Accommodations:

Students who need more support will be able to work with me to build their terrarium.

Students who need more support with drawing their picture and writing about the terrarium can use sentence starters.

For students who are more advanced, they can write in complete sentences on their Terrarium Recording Sheets.

Closure:

Students will clean up:

1. One friend will pick up the terrarium and bring them to the counter top. Make sure your color is on it!
2. One friend will pick up the newspaper and recycle it.
3. One friend will sweep the desks and pick up any scraps.