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**How Do Plants Work? (Engage)**

Type: Lesson Plan

Grade Level: 1st

Subject: Life Science

Duration: 30-45 min

Standard: S1L1 Obtain, evaluate, and communicate information about the basic needs of plants and animals

Tag: plants, soil, roots, sun

Overview: Plants are essential to our survival, therefore it is important to know the parts of plants and their functions

Objective:

* Name the parts of the plants

Background: Plants are essential to our survival, therefore it is important to know the parts of plants and their functions

Materials:

* Paper
* Pencil
* Crayon
* Chart paper
* Markers

Procedure:

* Explain to students that they will be learning about parts of living things help that thing survive. Call a student to the front, point to their head and ask them why it is important, do the same for some other body parts.
* Ask the students what can be a plant (flower, bush, tree, vegetable)
* Have them to draw (color if you choose) a plant of their choice. (Put to the side)
* Display, stop after they name each part to allow the students a chance to see it.
* Ask the students to name the parts of the plants that they saw on the video.
* Call out (and write) the name of a part and have the students right the name by the part on the picture. If they did not draw, the part, have them leave it blank.

Assessment: Drawn picture of a plant

Vocabulary: plant, roots, stem, leaves, flower

**How do plants work? (Explore)**

Type: Lesson Plan

Grade Level: 1st

Subject: Life Science

Duration: 2-3 days

Standard: S1L1 Obtain, evaluate, and communicate information about the basic needs of plants and animals

Tag: plants, plant parts, root, stem, leaves, flowers, colors

Overview: Plants are essential to our survival, therefore it is important to know the parts of plants and their functions

Objective:

* Explain the function of each part of the plants

Background: Plants are essential to our survival, therefore it is important to know the parts of plants and their functions

Materials:

* 4 long stemmed white carnations
* 7 tall plastic cups
* Package of food coloring
* Knife
* Water

Procedure:

* Teacher cuts about 4” of the stem off underwater in plain water
* Cut the stems of 3 of the carnations down the middle and leave them in plain water (for now)
* Fill 5 of the cups with different colors of water. Fill the other 2 with uncolored water. Keep the cups next to each other
* Put a half of stem into a cup of different colored water. One flower will have a half stem in colored water and a half stem in plain water.
* Place the flower without a split stem in the last cup of uncolored water (control flower)
* Students will make predictions to what is going to happen
* Watch flowers over the next couple of days to see the changes happening.

Assessment: Ask students to draw conclusions on how the parts of the plant helped the flower to appear the way it looks.

Vocabulary: plant, roots, stem, leaves, flower, photosynthesis

How Do Plants Work?

1. How did the carnation look on the last day?

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1. How was the change able to happen?

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1. How does this activity show how plant parts function?

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**How do Plants Work? (Explain)**

Type: Lesson Plan

Grade Level: 1st

Subject: Life Science

Duration: 60 min (may need 2 session)

Standard: S1L1 Obtain, evaluate, and communicate information about the basic needs of plants and animals

Tag: plants, plant parts, root, stem, leaves, flowers, colors

Overview: Plants are essential to our survival, therefore it is important to know the parts of plants and their functions

Objective:

* Students will show understanding of information by created a picture vocabulary book.

Background: Plants are essential to our survival, therefore it is important to know the parts of plants and their functions

Materials: Construction paper, white paper, pencil, crayons, colored pencils

Procedure:

* Create a cover using construction paper
* Use white paper to draw a picture that shows each vocabulary word
* Write a personal definition for each word

Assessment:

* Completed vocabulary book

Vocabulary: nutrient, water, sunlight, root, stem, leaves, flower

**How Do Plants Work? (Extend)**

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| --- | --- |
| GOAL | Your goal is to create a device to ensure that the Rivercane survives |
| ROLE | You are a botanist |
| AUDIENCE | Wildlife preservationists  |
| SITUATION | You have encountered an endangered plant, Rivercane, living in conditions that it might not survive in. Create a device made out of natural/organic things that will ensure the survival of the plant- food, water, sunlight. |
| PRODUCT | You will need to create or design a device that will ensure the Rivercane will be able to get water, food, and sunlight. You may only use natural and/or organic items to make your device |
| STANDARDS | S1L1 Obtain, evaluate, and communicate information about the basic needs of plants and animals 1. Design a solution to ensure that a plant or animal has all of its needs met.
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