Plant Life Cycle

Teacher Information Page

Objectives:

Students will be able to identify basic parts of plants by observing one that they find outdoors and recording what they see.

Students will be able to observe the changes that are part of the simple life cycle of a plant by investigating different plants at several stations.

Background:
The plant life cycle consists of four stages; seed, sprout, small plant, and adult plant. When the seed gets planted into the soil with water and sun, then it will start to grow into a small sprout. When the sprout begins to grow a roots that go deep into the ground and a stem that stretches through the soil, then the plant will start to grow leaves towards the sun. The sun helps the plant to produce food which it will need when it becomes a small plant. When the plant becomes an adult, then you will either see it bloom into beautiful flowers, fruits, or vegetables and possibly attract some pollinators, birds, or other creatures. Birds and other animals can spread the seeds around from the plant and start the process all over again.

Galveston Bay Foundation helps establish living shorelines to provide erosion control benefits while enhancing the habitat for the wildlife. They place plants, rocks, and oyster shells to create these living shorelines and reduce wave energy and erosion while supporting plant growth, marsh creation and improving water quality.

Before the lesson:

Have the plant song ready to play for the students to grasp their attention about plants.

Create anchor charts with plant life cycle pictures, but no descriptions.

Print out Plant Life Cycle templates and put on clipboards to save some time.

Set up the stations before you lesson begins, so that everything is ready on the tables to begin exploring.

Print the copies of the plants that are found on the Texas Parks and Wildlife website for that week in order for students to take home and look for in their backyard or at the park.

Materials (per student):

- Plant Seeds
- Different Plants at Different Stages
- Computer
- Projector
- Anchor Chart
- Paper
- Markers
- Tablets
- Plant Template
- Pencils
- Magnifying Glasses
- Kid Friendly Tweezers

Texas Essential Knowledge and Skills (TEKS):

K: 2ACDE, 3C, 4A, 10D
1: 2AC, 4A

Citations:

https://www.youtube.com/watch?v=N-l-gsWOKzk
https://galvbay.org/work/habitat-restoration/
https://www.teacherspayteachers.com/Product/Science-Posters-and-Anchor-Charts-2875887
https://www.wildflower.org/whatsinseason/?wib_date=2020-05-13
Teacher Information Page

Procedure:

Play the “The Plant Song” for the kids to get engaged and listen to a catchy song about the plant life cycle.

“Today, we are going to learn about plants around Galveston Bay and the plant life cycle.” Ask the students questions about plants to see what they know and want to know.

“What do you know about plants?”
“What do they need to survive?”
“Where do they come from?”
“What helps them grow?”
“Why do we need them?”
“Are there any near your house or your school? What do they look like?”

Show the plant anchor chart to begin to start talking about the plant life cycle. Write in descriptions about each cycle after asking the students about what they think happens during each stage and which order they go in. (See example of anchor chart)

Set-up stations for students to explore the different stages.

1st stage will be different seeds on the table with kid friendly tweezers to pick up and magnifying glasses to look at different ones.

2nd stage will be looking at seeds that are starting to show germination and roots.

3rd stage will allow students to see small plants that have grow out of the ground.

4th stage will be the adult plants for viewing by students.

5th stage can be videos of different plants on tablets for students to view the full plant life cycle time lapses.

Bring the students back to a learning place to discuss what they observed and if they have any questions about the stations. Show pictures of plants that you would see around Galveston Bay depending on what week it is on the Texas Parks and Wildlife website.

https://www.wildflower.org/whatsinseason/?wib_date=2020-05-13

Go outside and find a field of different flowers and plants to let the students investigate. Give each student a clipboard and a pencil to draw a picture of the plant or flower of their choosing and circle which stage that they think the plant is currently in.
Name: __________________________

Find a Plant

Find any plant that you see outside and draw a picture of it.

What stage is the plant in? __________________________

Adult  Small plant  Seed  Sprout
Plant Life Cycle

Teacher Information Page

Extensions:

Have the students plant their own seed in a pot or a cup and revisit it each week to see/discuss the progress.

Teach the students about the basic needs of plants and the different parts of the plant and their functions.

Set up a volunteer opportunity with Galveston Bay Foundation to help plant marsh and create living shorelines.

Try a scavenger hunt to see if the students can find the plants on the Texas Parks and Wildlife page during that week at home.

Plan a field trip to a local park to view more native plants in the area.

Have students create their own plant life cycle song or poem in a group and present to the class.

Virtual Options:

Have students make their own anchor chart at home by watching the Plant Life Cycle Song and plugging in where they think the stages go and in what order.

https://www.teacherspayteachers.com/FreeDownload/All-About-Plants-Freebie-Parts-of-a-Plant-Plant-Life-Cycle-What-Plants-Need-3776481

Instead of having the stations, allow students to look up different videos and timelapses of a plant life cycle using these links.

https://www.youtube.com/watch?v=w77zPAtVTul&t=25s

https://www.youtube.com/watch?v=dKo5lvtnW&w=26s

https://www.youtube.com/watch?v=31us20fy6sw

https://www.youtube.com/watch?v=tkFPyue5X3

https://www.youtube.com/watch?v=ib5uiLMM2w