

Plants Plus

3rd Grade

Lesson Plan

For more information, please contact:

Janice Kerber

Director of Education

John D. MacArthur Beach State Park

T: (561) 776-7449 Ext 104

Email: janicekerber@macarthurbeach.org

[January 2012]

PLANTS PLUS (Pretest / Post-test)

- 1. Draw and label the parts of a plant. Write the functions or jobs for each part. (Draw the picture on the back)
- 2. What do plants need to survive?
- 3. How are plants beneficial to animals including people?
- 4. How are the plants located in your schoolyard different from the plants located in a dune and beach environment?
- Classify the following plants as
 F (flowering), T (tree), Sh (Shrub), V (vine), or G (grass)
 (Write the letter next to the picture)

















PLANTS PLUS (Pretest / Post-test)

1. Draw and label the parts of a plant. Write the functions or jobs for each part. (Draw the picture on the back)

See attached sheet for example.

2. What do plants need to survive?

Sun, water and carbon dioxide

3. How are plants beneficial to animals including people?

Plants provide animals with food, shelter and oxygen. Plants provide people with food and oxygen as well as numerous products such as furniture, construction materials, medicines, paper, cosmetics, perfumes, chewing gum, sugar and syrups, and much more.

4. How are the plants located in your schoolyard different from the plants located in a dune and beach environment?

The plants along the dune and beaches have to deal with the salt and sandy soil. Plants in the schoolyard grow in soils that have more nutrients and do not have to deal with the salt.

Classify the following plants as
 F (flowering), T (tree), Sh (Shrub), V (vine), or G (grass)
 (Write the letter next to the picture)







V



Т







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SH



Title

Plants Plus Mini-Lesson

Grade level

Third

Student Target

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|------------|-------------|---|--|--|
| SC.3.N.1.1 | | Raise questions about the natural world, investigate them individually and in teams | | |
| | | through free exploration and systematic investigations, and generate appropriate | | |
| | | explanations based on those explorations. | | |
| • | SC.3.N.1.3 | Keep records as appropriate, such as pictorial, written, or simple charts and graphs, | | |
| | | of investigations conducted. | | |
| • | SC.3.N.1.4 | Recognize the importance of communication among scientists. | | |
| • | SC.3.N.1.6 | Infer based on observation. | | |
| • | SC.3.N.3.2 | Recognize that scientists use models to help understand and explain how things | | |
| | | work. | | |
| • | SC.3.L.14.1 | Describe structures in plants and their roles in food production, support, water and | | |
| | | nutrient transport, and reproduction. | | |
| • | SC.3.L.15.2 | Classify flowering and nonflowering plants into major groups such as those that | | |
| | | produce seeds, or those like ferns and mosses that produce spores, according to | | |
| | | their physical characteristics. | | |
| 5 | SC.3.L.17.2 | Recognize that plants use energy from the Sun, air, and water to make their own | | |
| | | food. | | |

Materials

Teacher

• Choose from one of the following books:

From Seed to Plant, by Gail Gibbons

The Reason for a Flower, by Ruth Heller

The Magic School Bus - Plants Seeds, Scholastic

The Tiny Seed, by Eric Carle

The Reason for a Flower, by Ruth Heller

- Copies of the pretest from the packet
- Copies of the student page from the packet
- MacArthur Beach Packet

Student

- Clipboard or cardboard (something to write on during outdoor exploration)
- Crayon with no paper on it
- Pencil or colored pencils

Warm-up

- 1. Administer the pre-test provided in packet.
- 2. Read one of the books listed in teacher's materials.

Main Lesson

- 3. Using your document camera or overhead, draw and label the parts of a plant include the functions or jobs of each part. Have the students add this labeled illustration in their science journals. (See Answer Key Page 2 for example)
- 4. Distribute the student page to each child with one crayon (no paper on the crayon) and other writing tools.
- 5. Take the children on a plant hike around the school grounds. Using the chart, classify the plants by putting a tally mark in the box.
- 6. Each child should select their favorite plant and complete the bottom portion of the student sheet about their plant.

Reflection

- 7. Allow the children time to share information they gathered about their favorite plant.
- 8. Explain the similarities and difference of the plants found in your schoolyard.
- 9. What special features do the plants have to help them survive?

Assessment

Pretest

Participation in the activity

Attachments

- · Student Page attached
- Information packet about John D. MacArthur Beach State Park

Title

Plants Plus Regular Lesson

Grade level

Third

Student Target

| Benchmark | |
|-------------|--|
| SC.3.N.1.1 | Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations. |
| SC.3.N.1.3 | Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted. |
| SC.3.N.1.4 | Recognize the importance of communication among scientists. |
| SC.3.N.1.6 | Infer based on observation. |
| SC.3.N.3.2 | Recognize that scientists use models to help understand and explain how things work. |
| SC.3.L.14.1 | Describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction. |
| SC.3.L.15.2 | Classify flowering and nonflowering plants into major groups such as those that produce seeds, or those like ferns and mosses that produce spores, according to their physical characteristics. |
| SC.3.L.17.2 | Recognize that plants use energy from the Sun, air, and water to make their own food. |

Materials for Pre & Post Lessons

Teacher

- MacArthur Beach Packet
- The Giving Tree, by Shel Silverstein
- · Copies of the post-test and answer key

Pre-visit Warm-up Lesson (completed in classroom <u>before</u> visiting)

1. Review the information in the MacArthur Beach packet with your students.

Main Lesson (completed during visit with their staff)

- 1. Welcome, Introductions to park, overview of park, and safety talk.
- 2. Divide the students into 3 groups to rotate through 3 different activities:
 - A. **Plant Identification Activity**: Students will identify and classify plants. Students will discuss how these plants may be different than the plants in their schoolyard.
 - B. **Build a Tree Activity**: Students will learn the parts and functions of trees by being parts of the tree. They will understand how plants use the Sun, air and water to make their own food.
 - C. **Hike on Satin Leaf Trail**: Students will search for plants found in the Maritime Hammock using picture cards. Students will see how plants in the Hammock compete for their resources. Students will classify plants as trees, shrubs, grass, vine, or flowering plant.

Post-visit Reflection Lesson (completed in classroom <u>after</u> visiting)

- 1. Read, *The Giving Tree.* Discuss how the tree and the boy interacted. What did the tree provide for the boy? How are trees beneficial to animals including people? How are animals including people beneficial to trees?
- 2. Write about your experiences at John D. MacArthur Beach State Park.

Assessment

Complete the post-test included in your packet.

Attachments

Information packet about John D. MacArthur Beach State Park