Picking Apart Plants

Summary

The students will identify the parts of a plant and label them as a whole class. The students will construct their own model and discover real-life examples of plant parts they see and eat every day.

Materials

Book: *From Seed to Plant*, by Gail Gibbons, ISBN-10: 0823410250 OR isbn-13: 978-0823410255 Book: *Tops and Bottoms*, by Jane Stevens ISBN-10: 1874371873 OR isbn-13: 978-1874371878 A plant model Alene's Tacky glue or hot glue gun (for teacher use) Construction paper (blue or brown) Green pipe cleaner Colored tissue paper Green foam Sunflower seed (or other flower seed) Live plant (with many small flowers and leaves) Newspaper Labels or small white paper Markers

Background for Teachers

This lesson is to help children discover and use concrete examples in order to better understand the parts of a plant and what they do. This lesson is best taught as a unit, spending adequate time on each plant part to enable the students to have experiences with each. The teacher needs to read about the plant parts and what they do prior to the lesson in order to help the children understand the importance of each. The lesson begins with a direct teaching segment in which the teacher reads the book From Seed to Plant by Gail Gibbons. The students will then identify the parts of a plant and label them as a whole class. The students will construct their own model and discover real-life examples of plant parts they see and eat every day. They will be able to break apart a real plant and discover what each plant part looks like. Displaying many types of plants as well as pictures and model throughout the unit will help solidify the children's learning.

Instructional Procedures

Invitation to Learn:

Launch (Introduction): (10-15 minutes)

Begin this lesson by showing the students a model of a plant and discussing with them that just as your body has parts to help you live, grow and do certain things, a plant has parts to help it live and grow. Read From Seed to Plant aloud.

Instructional Procedures:

Explore: (30 min)

Take down the plant model and put each part up one at a time as you discuss with the students each part of the plant and what it does for the plant.

Have the students help you one at a time place the part of the plant on the board. As you do, ask the students to help you place the label near the plant part to show what each is called. When all of the parts have been labeled and discussed, have the students move to their tables or desks and give them supplies to make their own model.

Using the included blackline (pdf) as a guide, provide the materials for each child to create

his/her own model.

Have them glue the <u>labels</u> (pdf) (use blackline or have the students write their own words) where they belong.

Discuss: (10 min)

Students will return to the carpet, where the teacher has a real plant.

The teacher leads the discussion as the students recall each plant part and what it does for the plant.

Solidify: (10 min)

Discuss with the students why each plant part is important to the plant.

Quickly review that every plant contains these important parts, regardless of the leaf color, petal shape, or length of the stem. Some children may have difficulty understanding that even though plants look differently, most contain the same basic important structure.

Practice: (20 min)

Place newspaper and a real plant, preferably one with many small flowers and leaves, at a table for each small group.

Divide children into small groups and have them take apart the plant. As they do, they glue an example of each part in their <u>*Plant Parts Book*</u> (pdf).

Additional Lesson Activities:

Eating the Parts of a Plant

In this activity, the children will have already looked in detail at the parts of plants in a previous lesson. They will have learned what each plant part does to help the plant live and grow. The teacher can use this lesson to connect parts of the plant to food the children eat almost daily. The teacher will choose items for the children to eat that represent each of the plant parts. Some ideas include the following:

Roots -- carrots

Stems -- celery

Leaf -- lettuce

Flower -- broccoli

Seed -- peas

After giving the children a chance to eat the different plant parts, read the story *Tops and Bottoms* and do interactive class writing about the parts of the plants in the story that are edible and non-edible. Discuss with the children whether the edible parts are roots, stems, leaves, flowers, or seeds.

Extensions

Advanced learners may be able to see and discuss how water and nutrients travel through the plant. They may also do additional research to discover what enhances plant growth and what diminishes growth.

Formal assessment of non-typical learners could include verbal communication of plant parts and their function.

Writing integration: Students can write the plant part labels. They can also use their *Plant Parts Books* to glue in each part and to write about what it does.

Family Connections:

Assignments to do with parents:

Students can show their Plant Parts Book to their parents and read about the functions of each plant part.

Students can go on a nature walk with their families and look at various plants, paying special attention to the parts they have learned.

Assessment Plan

Informal assessment will consist of teacher observance of the answers to the guided questions.

- Plant Parts Book

Authors

Stephanie Wall