



Lesson Title: “Sense” able Plants

Grade: 3-4

Duration of Lesson: 4 -30 minute classes

Brief: From this lesson students will understand that plants have unique smells, tastes, sounds, textures, and looks and that agriculture provides plants for us to use as food, fiber, fuel, medicine, etc.



**Croton
Dianthus**

Sight &
Sound



Lambs Ear

Feel &
Sight



Cotton

Feel &
Sight



Grass

Sound &
Feel



Echinacea

Feel &
Smell



Chives

Taste &
Smell



Feel &
Smell

Materials:

Several plants with different characteristics that appeal to the 5 senses. **See appendix A**
Some examples are also given above. Herbs work well for smell and taste.

6” x 6” pieces of cardstock or very heavyweight paper

Oil pastels or cattle markers

Bulletin board area for displaying student’s artwork

Key Terms

agriculture, flowers, foliage, forests ,herbs, grasses, touch, taste, smell, sight, sound, texture, color, pungent, odor, aroma, prickly, soft, furry, and any other words that describe plant characteristics

Standards / Objectives

Montana State Standards:

Art: Content Standard 1: Students create, perform/exhibit, and respond in the Arts. Content Standard 2—Students apply and describe the concepts, structures, and processes in the Arts. Content Standard 3—Students develop and refine arts skills and techniques to express ideas, pose and solve problems, and discover meaning. Content Standard 5—Students understand the role of the Arts in society, diverse cultures, and historical periods. Content Standard 6—Students make connections among the Arts, other subject areas, life, and work. Science: Content Standard 3: Students, through the inquiry process, demonstrate knowledge of characteristics, structures and function of living things, the process and diversity of life, and how living organisms interact with each other and their environment. Content Standard 6: Students understand historical developments in science and technology, Benchmarks 2 & 3. Communication Arts: Reading Content Standard 2.

Understanding(s) /Big Ideas:

Students will understand the link between agriculture and plants. Each plant has its own special characteristics, through the five senses students will inquire into the special attributes of each plant.

Essential Question(s):

What are the five senses? Can plants be grouped by characteristics like smell, taste, touch, sight, and sound?

Students will know:

Vocabulary terms related to plant textures.

Students will be able to: group plants by smell, taste, feel, sound, and sight. Students will be able to use distinctive adjectives to describe plants.

Performance / Observations

Performance Task(s):

Observe and analyze each plant for information leading to the name of the plant. Use adjectives to describe plant texture and characteristics.

Other Evidence:

Students will create artwork based upon their observations and adjectives that describe plants.

Learning / Inquiry Activities

Introduction: Plants are the basis for our food and fiber. Plants also provide flowers, fuel, fungi, forests, and medicine for us. Agriculture (also called farming or husbandry) is the cultivation of animals, plants, fungi and other life forms for food, fiber, and other products used to sustain life. Plants are necessary to sustain life, from animal feed to medicine, we all depend upon plants for survival.

When you see a farmer working his field with a tractor he is performing some type of plant care. The food that we eat, from pancakes to hotdogs, are all in some way linked to plants and agriculture.

Learning / Inquiry Activities:

1. Make a list on the board with the title of each sense: sight, smell, sound, feel, and taste. Let students know that they will be trying to identify each of the plants through observation with the five senses. Ask students to wash their hands, and make sure any plants used for tasting have been cleaned to the standards in your schools food safety policy.
2. Introduce each type of plant to the students by letting them see the plant as you hold it up in front of the class, as they see each plant ask them to try and identify it. If they are correct write the name of the plant down under the “sight” heading on the board and remove that plant from the group of plants. Write the #1 after the name of each plant on the sight list.
3. Next pass each plant around and ask students to smell the plant, they should not touch the plant. If they can identify the plant write the name of the plant down under the “smell” heading on the board and write the #2 after each plant on this list.
4. Next pass each plant around and ask students to gently shake the plant to sense sound. If they can identify the plant write the name of the plant down under the “sound” heading on the board and write the #3 after each plant on this list.
5. Next pass each plant around and ask students to feel the plant, cautioning them to feel carefully if you have brought in any plants that are prickly. If they can identify the plant write the name of the plant down under the “touch” heading on the board and write the #4 after each plant on this list.
6. Next pass only the **herb** plants around. Ask students to pinch the leaves and smell their fingers, they may taste the oils from the plant which are on their finger. If they can identify the plant write the name of the plant down under the “taste” heading on the board and write the #5 after each plant on this list.

Evaluate the information on the board by discussing how many of the senses it took to identify each of the plants. For instance, if students did not know what the herb varieties were until they could taste the plant then it took a try at each of the 5 senses to identify the plant. Most plants do not make much sound, was sound helpful for any of the plants? Ask students what role agriculture played in the production of each of these plants. Flowers, foliage plants, and food alike are products of the agriculture industry.

From their observations, ask students to make a list of any words which describe the plants. Students should use describing adjectives and discuss their choices of adjectives to discriminate between words. Using these words, ask students to create a drawing on the 6x6 cards of several parts of the plants. Students should mix up drawing shapes of leaves, stems, flowers, buds, blooms, etc. The drawings should provide visual information into the texture of each

plant part.

Ask students to complete their works with cattle markers or oil pastels. Piece together the works of art and make a “5 Senses Garden” bulletin board.

Extensions for this lesson: Try other types of art mediums for this project, like scratchboard or acrylic paints. Or, make one large drawing and cut it into pieces for each student to apply art mediums. Reattach all the pieces and display.

Sight



Sunflowers, pea pods, daisies, and roses are easy to identify by sight.

Smell



Chives



scented geraniums



celery leaves



mint

Sound

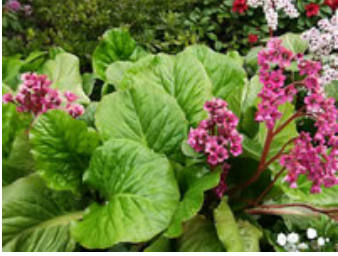


Ornamental grasses make noise when gently shaken back and forth



The Croton plant has a waxy substance on the leaves. First rub the leaf between your thumb and forefinger. Now rub the two fingers together briskly, a sound like a cat purring can be heard.

Appendix A, cont.



Bergenia leaves sound like a pig squeaking when the leaves are rubbed. If the leaves do not make sound lightly mist the leaves and try again.

Feel



Lambs ear or stachys



cotton

Taste



Use herbs such as mint, lemon basil, lemon balm, thyme, oregano, etc.