



PLANTS GIVE US GIFTS* 2016

Grade: 1st

Setting: Any Nat Area...this one written for Magpie Meander

Theme (Bottom Line): Plants have special ways to survive but they also give us wonderful gifts that help us survive.

Description: Students review the parts of plants they learned in class, and learn some of the cool “gifts” plants give to people and animals.

Recommended Time: 30 minutes

Recommended Group Size: 10-12 students

BIAS: [Stewardship](#)

FOSS Kit: New Plants

State Standards: Life Science 2.2 Analyze the relationship between structure and function in living systems at a variety of organizational levels, and recognize living systems’ dependence on natural selection. An organism is a living thing that has physical characteristics to help it survive.

Materials List:

- This lesson plan **with plant information attached.** (*Fringed Sage, Common Mullein, Dandelions, Gumweed, Willows, Cattails, Rabbit brush, Milkweed, Scouring Rush*)
- Flags to mark plant locations
- 5-10 gift bags with plant photos and “gifts” inside, plant name on bottom of bag... for second grade use all nine bags.
- Gift bags that say: “Education activity ahead- do not disturb gift bags”
- Numbered necklace tags for the students

Getting Ready:

1. Scout out the location and find 5-10 plants you’d like to highlight. You only have 30 minutes so decide how many you want to do based on your normal pace and the time of year (in the spring students will know more than in the fall).
2. Before students arrive, place gift bags near plants and place signs “education activity ahead- do not disturb gift bags” on either end of the gift bag area.

Nat Notes: *Activity signs are needed to prevent other site visitors to the site from disturbing the props. This rotation is sometimes done with first graders and sometimes second graders.*

ENGAGE:

Get the students focused with these leading questions/discussion:

1. Ask students if they have been growing plants in their classroom. Ask them how the project is coming- How have their plants changed over time?
2. Ask if they know the parts of plants? Find a plant near the trail and review (or introduce) *Roots, stems, leaves, flowers, fruits and seeds.*

Today you will learn:

1. Plants give us all kinds of things that we use in our daily lives.
2. Plants all have similar parts.
3. Plants have special ways of surviving in nature.

EXPLORE and EXPLAIN:

1. Explain that natural areas are full of interesting plants, and today they will get to meet some of these plants.
2. Ask the students to tell you why plants are important or in other words what gifts do they give us. (*food, shelter for us and animals, beauty, medicines, clothes....*) Hand out the numbered tags to students.

Nat Note: *Here are some basic important uses of plants.*

- *Plants are the foundation of the food web- plants produce food for wildlife.*
- *Plants release oxygen as a by-product of photosynthesis*
- *Plants protect the soil from erosion. Roots hold the soil in place while leaves absorb the impact of falling precipitation.*
- *When roots decompose they add nutrients to the soil, these nutrients provide energy for living plants.*
- *Decayed roots leave channels in the soil for water and air.*

3. Divide the students into groups of 2-4 with one of the numbered tag students in each group. The number on the tag will indicate when it is their group's turn help teach about the next plant (to identify plant parts, show the pictures and open the bag to reveal the gift).

Nat Note: *At Magpie Meander you will be using the following plants. They are highlighted on the attached sheet. Fringed Sage, Common Mullein, Dandelions, Gumweed, Willows, Cattails, Rabbit brush*

4. Stop at 7 (total) plants and have different groups of students take a turn being teacher. Give the name of the plant and ask the students to guess what this plant's gift will be. Open the bag and share the gift.

Nat Note: *If the group seems to understand plant parts well, skip naming them at each stop, or just name a couple of parts, and spend more time looking at plants along the trail.*

ELABORATE

1. Remind the students that plants are important and special because they give us gifts. Ask students to recount some of the gifts that plants give us.

2. Plants are interesting to study. Many people do not think much about all the plants that grow in our world, but we hope that students will look at plants more closely to see their beauty, and the special gifts they give to us.

EVALUATE

1. Ask students to think about items in their world (home, school, their back yard) that might be made from plants. Ask for volunteers to share.
2. Ask students to think about gifts that *we* might give back to plants.

*This lesson was written by Zoe Shark Susan Schafer, and Dolores Daniels of the City of Fort Collins Master Naturalist Department.



naturally yours

Plant	NPM page	Habitat/ Nat Area	Gift	Metaphor
Cattails		Ditches, ponds, valley, marshes	Food and cover for wildlife, food for people, medicine for people	Sample or photo of food, house, pill bottle
Willows		Drainages, rivers, sandbars lakeshores,	Medicine for people, furniture	Picture of furniture, aspirin bottle
Sedges		Ponds	Wildlife food and cover	
Snowberry	189	Pl-Fth Gulches, moist slopes	Medicine for people	Soap to represent the cleansing wash
Chokecherry	399	Pl-Fth Streamsides	Food for people	Jam sample
Clematis	380	Fth-Mts. Valleys, rivers	Beauty for people, nectar for butterflies	Juice for nectar, picture of an arbor of clematis for beauty
Rabbitbrush	63	Pl-Fth Dry open areas	Food and shelter for animals, rubber for people	Pictures of animals, rubber ball
Mountain Mahogany	390	Fth-Mts Dry rocky slopes	Repels bedbugs, dye for moccasins	Plastic bedbug, moccasin/picture
Gumweed	86	Pr -Fth fields	Medicine for people	Pill bottle
Yucca	3	Pl-Fth Dry rocky areas	Soap, medicine, sewing needles	Bar of soap, pill bottle, needle and thread
Needle and Thread Grass	346	Pl-Fth Grasslands	Food for Wildlife	Picture or sample of food
Milkweed	31	Pl- Mts. Ditches, fields	Host plant for Monarch butterfly, fluff for old-fashion life preservers, people eat shoots (taste like asparagus)	Picture of Monarch, or life preserver, or vegetables
Hairy Golden aster	100	Ft- Mts.	Toothache relief, insect repellent	Picture of tooth, sample of insect repellent
Bush Sunflower	96	Fth-Mts Roadsides, slopes	Seeds made into oil	Sample/picture of oil
Thistles	57-61	Fth-Mts Pastures, fields, neglected areas	Goldfinch seed	Picture of goldfinch

Three-leaf Sumac	17	Pl-Fth Rocky slopes	Berries make a lemony drink, stomach aches, deodorant, org/blue dyes	Picture of lemonade, sample deodorant, sample of org or blue fabric
Curly Dock	374	Pr-Fth Moist ditches, drainages	Stems can be ground into flour	Picture of a bag of flour/ bag of flour
Winged Buckwheat	372	Fth-Mts Open hillsides	Pain diarrhea and cough medicine	Sample medicine
Sulphur flower	370	Fth-Mts Dry open spots, rocky slopes	Food for chipmunks and mice, dried flower arrange for people	Picture of chipmunk, or sample of flower arrangement
Scarlet Guara	304	Pr-Mts Grasslands, sagebrush	Fragrance	Sample of perfume
Harebell	185	Fth-Mts Dry slopes	Flowers are edible and sweet	Picture of food/flower
Prickly Pear	179	Pr-Fth Rocky slopes	Pads combined with other foods make a stew (okra like)	Picture of a stew
Cow parsnip	22	Fth-Mts Moist meadows streams, shady edges	Host plant for Anise Swallowtail	Picture of Anise Swallowtail
Woods Rose	412	Fth Valleys, gulches, trail edges	Vitamin C for animals	Vitamin C sample
Buckbrush	386	Fth-Mts Dry areas	Soap , hair tonic, seeds for food	Sample of soap, hair product
Coneflower/ Mexican Hat	118	Pr-Fth Open areas	Medicine for reducing fever and for poison ivy	Sample of medicinal lotion
Common Mullein	455	Pl-Fth Roadsides, Disturbed areas	Medicine for infections, skin lotions, Cowboy toilet paper	Samples of medicine or lotion or toilet paper
Gay Feather	105	Pl-Fth Dry open slopes, rdsides	Beauty/color for flower arrangements	Picture of flower/arrangement
Buffalo Grass	335	Prairies	Forage for wildlife, home for butterflies	Picture of grazing animals, butterflies
Blue Grama grass	339	Pr-Fth	Forage for wildlife winter and summer, Colorado state grass	Picture of grazing animals, picture of CO
Dwarf Fleebane	83	Pl-Fths Open grasslands and foothills	Nectar and pollen for insects, heads are like a landing pad for insects/pollinators	Photo of pollinators

Fringed Sage	7	Pl-Mts Dry meadows, slopes	Fragrance, ceremonial smudges, flavor	Sample of dried sage spice
Yarrow	33	Fth-Mts Meadows, roadsides, slopes	Yellow dye	Sample of yellow fabric

NPM = Native Plant Master Guide

Key to abbreviations:

Fth= foothills

Mts= mountains

Pl= plains

Pr= prairie