

# SAVE YOURSELF...WITH PLANTS!

*A lesson plan by Maura Schramm*

## Objectives

- Teach kids about the medicinal value of plants
- Explain the importance of protecting plants for possible future scientific discovery
- Demonstrate how to actually use plants for medical needs

## Background

An example of a medicine derived from plants is Paclitaxel, which came from Taxol, a natural product found in the bark of the Pacific Yew Tree. It now helps treat cancer, and is a strong chemotherapy drug.

This is simply one example of the many medicinal benefits of protecting plants for the possibility of future scientific discovery, just like the Pacific Yew. We need to preserve our ecosystems, and save our plants, so that one day, they might be the ones that save us.

	Identifying features	What's wrong?	What about it helps?
Oregon Grape	Holly-like leaves Clusters of blueberries	Psoriasis (skin condition that causes itchy red patches)	Rub on affected area
Black Cottonwood	Dark green, heart-shaped leaves with pointed tips	Mucus in lungs	Warming resins in the buds, taken in hot water
Oregon White Oak	Light gray bark Drops acorns Leaves have 5-7 rounded lobes	Sore throat	Tea of the bark gargled as a mouth rinse
Thimbleberry	Light green, 5-lobed leaves White flowers	Diarrhea	Tea of the leaves
Usnea Species Lichens	Hanging strands or tufts Gray-green clumps	Pneumonia	Dissolve in ethanol, take by mouth

**\*\*Do not actually drink the solutions\*\***

## Materials

- Disease tags (labeled psoriasis, diarrhea, etc.)
- Pictures of all the plants
- Samples of the plant parts needs (ex. thimbleberry leaves, lichen, etc.)

- Rocks for crushing leaves
- Eye droppers for handling the “ethanol”(water), plastic containers
- Vial of water, hot water

### **Procedure**

1. Give out disease cards
  2. Tell them that whatever disease they have, they need to act like it (role playing!)
  3. Tell them you will be saying which plant will cure which disease, so pay attention
  4. Once you get to a plant, you will ask who knows what it is and who has that plant (and later: who remembers what that plant was?)
  5. After every plant, ask them to get back with their groups and sit down at a certain table with the materials for their plant already laid out
  6. Walk around to each group and show them how to use the materials to “cure” their particular disease
  7. They will “cure” each other; when “cured” they can stop acting diseased and have to come run and find you
  8. Collect disease tags
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**Age:** Grades 1-6

**Subjects:** Science, Physical Education

**Skills:** application, discussion, generalization, observation

**Duration:** 40 minutes

**Group size:** 10-15 people

**Setting:** indoors and outdoors; outdoors must house all plants discussed

**Key Vocabulary:** plant, disease, cure, medicinal value, medicine, heal

### **Final Notes**

- This lesson is much more engaging if students act out their ailments and pretend like naturistic doctors trying to heal each other.
- You may need to spend a few minutes to explain complex terms like psoriasis, pneumonia, mucus, etc.