

# Plants



Plants have many uses—food, lumber, medicine, paper—and they make oxygen that is part of the air you breathe.

## 1. Seed Race

Seeds take different amounts of time to grow. Try an experiment to see which seed wins a sprout race.

You will need:

- Potting soil.
- 6 kinds of seeds.
- 1/2 of an egg carton.
- A spoon.
- Water.

Fill each section of the egg carton with about two tablespoons of potting soil. Put one kind of seed in each section. Label each section. Cover the seeds with soil and sprinkle with water. Add some water every day.

Write down what you see happening each day. When did you see little green leaves pushing up through the dirt? How long did it take? Did some of these plants grow faster than others? Use a ruler to measure the height of each of the plants as they grow.

Move the plants to small pots with more soil. When they are bigger (at least 6" tall),

try planting your sprouted seeds outside (if it's warm enough).

## 2. Plant Rubbings

A rubbing is one way to bring home something from the out-of-doors without harming nature.

You will need:

- Crayons.
- Plain white paper.
- Notebook with a hard cover or a table.

Lay your paper against the bark of a tree. Gently rub a crayon back and forth until a pattern starts to show. Pick up a leaf from the ground. Put it on a hard surface like a notebook with a hard cover or a table. Then place the paper over the leaf. Rub the crayon over the paper. You can make many different kinds of rubbings. Do any of the rubbing patterns look alike?



### 3. Baby Beans

Every seed has an *embryo* (baby plant) inside of it waiting to grow. The *seed coat* covers the seed and helps protect the embryo. The two halves of the seed provide food until the baby plant's real leaves can develop. Watch as a baby lima bean plant grows its first leaves, a stem, and roots.

You will need:

- 5 dry lima beans, soaked overnight.
- A wide-mouth jar.
- Paper towels.
- Water.

1. Fill the jar with wet paper towels.
2. Place the lima beans halfway down the jar between the paper towels and the side of the jar. Leave space between the seeds.
3. Place the jar in a bright spot, but not in direct sunlight.
4. Add water to the jar so that the paper towels stay moist all the time.
5. Watch what happens over the next week or two.

Did all of the seeds grow into plants? Which part of the plant grew first? How many days did it take for the plant to come out of the seed? Which part of each plant grows up? Which grows down? Why?

### 4. Leaf Hunt

Look for different types of leaves that have fallen to the ground. (Don't put your hands in your mouth after touching leaves and never put any leaves in your mouth. Be sure you wash your hands when you are done.) Pick one leaf that you like a lot. Describe it by drawing it or writing about it. You and your friends can put all your leaves in a pile. Describe your leaf to someone. Can she find it?

### 5. Simple Plants

Mold is a very simple plant that makes spores. Spores are like very small seeds. They are in the air and in dust. Try making some mold.

1. Wet a folded paper towel with water.
2. Wave some bread in the air and sprinkle it with dust.
3. Put the bread on the towel, wrap it in foil, and put it in a dark spot.
4. Check the bread every day. Rewrap it after checking. Use a toothpick to move the bread and wash your hands each time. Do not eat the moldy bread.
5. Draw a picture of what you see. A magnifying glass will help. What color(s) do you see? Does the bread smell?

## Try It!