



## Hands ON!

### When students finish working through this section:

1. They will have researched the needs of conifers.
2. They will have observed and documented the growth of a conifer.
3. They will have summarized what they have learned.

This particular growth cycle is a long one ... years. In order to explore the growth process in "classroom time," you may choose to use a plant that moves through the growth process at a faster rate. Doing this would allow your students to compare the plants (conifer and the plant of your choice).

This is a great culminating activity for your unit of study ... and a plus for your school and the environment.

If your students are planting their seedling(s) on school grounds, be sure to protect it from the mowers!

### Possible Discussion Points/Activities:

- Ask students to create a list of questions they have (beginning with the questions in the lesson). Have them report those answers in a newscast, press release, poem, book, video, website, or other presentation.
- Depending on your focus, you may want to:
  - review/introduce the scientific process.
  - ask students to design a protocol (question, hypothesis, etc.).
  - have students predict the amount of growth they expect to see per week/per month.
  - have students predict changes based on the growing cycle.

### Materials Needed:

- a conifer seedling
- planting space
- peat moss
- a small shovel
- water
- a notebook (Students may use the journal pages in the Think Tank section.)

### Words to Know in this Section:

- peat moss: dark brown, partly decayed plant matter

### Fast Facts in this Section:

- Real Trees help filter dust and smog from the air AND they help stop erosion by holding soil in place!



### Quick Crafts in this Section:

#### ▪ Pine Scented Ornaments

1. Cut out shapes of trees from construction paper.
2. Put a few drops of scented pine oil in a small dish with 4 tablespoons of Elmer's glue.
3. Mix with cotton swab and spread scented glue on paper shape.
4. Sprinkle pine needles on the mixture and decorate with sparkles.
5. Punch a hole at top of shape and poke a pipe cleaner through hole to hang in a car as an air freshener or use as a scented gift tag.

Thanks to Linda Franz for this cool idea!

### Student Directions:

It's time to put all that you have learned about Real Trees to work!

*Hey Kids!* You will need an adult's permission and help to do the first part of this project ... be sure to ask!

Materials: a conifer seedling, planting space, **peat moss**, a small shovel, water, and a notebook (or the journal page in *Think Tank*)

Take some time to learn about the conifers in your area. Remember that plants and animals grow and develop a way that works in their environment.

Check with a REAL TREE grower or a nursery in your community to see what kind of conifers live in your area. Ask lots of questions!

- Where is the best place to plant them?
- What time of year do they grow best?
- How do I plant the seedling so that it will be healthy?
- How do I keep the seedling healthy after I plant it?
- How much water does it need?

Once you have all of your answers and materials, you are ready to plant. Use a notebook to keep track of what you do.

- Carefully measure the height of your seedling.
- Record the number of branches it has.
- Count the number of needles on each branch and describe how they feel ... be careful not to harm the needles!

Care for your seedling using the tips from your local grower or nursery. Then, every week, take your notebook with you when you check on your tree. Take and record the same measurements you did when you planted the seedling. Are there any changes? Write a short summary of the changes you see!