# Teacher **Tree**sources

## TREE SEEDS

Seeds are the beginning of life for most plants. Trees seeds are a perfect way to teach many standards. They are hardy, diverse, easy to obtain and store well.

- In the lower grades students learn about different structures that help plants survive in different environments and compare germination in various plant life cycles.
- In middle school students are to learn about sexual reproduction. The outcome of that sexual encounter in a tree is a seed.
- In high school students are to relate diversity and adaptation to structures and their functions in living organisms.

## **Background**

Tree seeds come in a variety of shapes, sizes and colors. Every tree has its very own seed. Tree seeds form after the flowers of the tree are pollinated. Find out more about <u>pollination</u>. Once a seed has matured, it drops from the tree and must find the perfect spot to germinate. If it drops directly under the tree, it will compete with other seeds for light, space, and other resources. Since seeds can't move to a better spot on their own, some depend on wind and animals to spread them, while others "shoot"

out of pods or float in water. Once established in a spot, some seeds need cold temperatures before they can germinate. This can occur naturally during winter months or artificially in a process called stratification. Find out more about stratification.

The activities and resources listed below are aimed to help your students discover the variety of tree seeds and learn about seed germination.

#### **Activities**

#### Germination

<u>Let's Start Growing</u> (Grades K-5) – Plant a tree seed.

<u>Tree Chain Game</u> (Grades 2-5) – Game that demonstrates what factors are necessary for germination.

<u>Seed Germination Experiment</u> (Grades 6-12) – Design an experiment that tests the effect of certain variables on germination.

### Types of Seeds

<u>Seed Sorting - How to Make a Dichotomous Key</u> (Grades 4-12) - Look at characteristics of a variety of seeds to create a dichotomous key. There are <u>examples</u> and <u>blank worksheets</u>

Angiosperms and Gymnosperms (Grades 6-12) – Identify characteristics of each plant group, including type of seed.

#### Resources

#### Websites:

<u>Online Seed Tour</u> – Click on a tree to see an image of its seed.

<u>Thinking Like a Seed Germination Requirements</u> – Learn what a seed needs to start growing.

<u>How to Germinate Tree Seeds</u> – Learn how to germinate honey locust and white oak seeds.

If you are interested in collecting seeds with your students, it is worth knowing what time of the

year you can find them. For example, maple seeds mature in the spring, while acorns mature in early fall. Click on an Ohio native tree from this <u>list</u> to find out when its seeds mature.

#### Rooks:

<u>A Seed Is Sleepy</u> by Dianna Hutts Aston (Grades 1-4) – Discover the shapes, colors and personalities of dozens of seeds.

<u>Berries, Nuts, and Seeds</u> by Diane Burns – Identify a plant or seed using colorful illustrations.

