

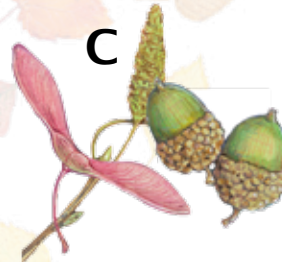
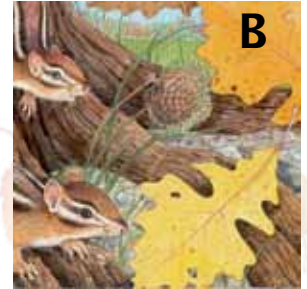
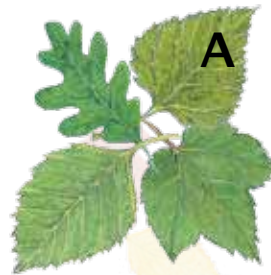
# For Creative Minds

The “For Creative Minds” educational section may be photocopied or printed from our website by the owner of this book for educational, non-commercial uses. Cross-curricular “Teaching Activities,” interactive quizzes, and additional resources are available online. Go to [www.ArbordalePublishing.com](http://www.ArbordalePublishing.com) and click on the book’s cover to find all the links.

## Plant Parts

Match the plant part to the picture. Answers are upside down at the bottom of the page.

- 1 Think of **stems** (trunks are a type of stem) as “pipes” or “straws” to carry the water and nutrients from the roots to the leaves. They are also a type of support to keep the plant standing up so that the leaves can reach sunlight.
- 2 **Seeds** to help new plants grow are found in plant **flowers**, **fruit**, or **nuts** (including pinecones). The seeds need to be carried away from the parent plant so that they have enough room, nutrients, and sunlight to grow.
- 3 **Roots** are usually not visible since they are typically underground. Not only do they keep the plant in one place, but they absorb water and nutrients out of the ground for the plant to grow.
- 4 The **green color** in leaves comes from **chlorophyll**. When the days start to get shorter and cooler in the fall, many leaves stop making food and the chlorophyll (green color) goes away. Some of the colors that are left have been there all year long but the green covers them up! Trees survive the winter on food they have stored in their roots.
- 5 The **leaves** make food for the plant to grow. They use chlorophyll reacting in sunlight to take the water and nutrients that were absorbed by the roots and carried up by the stem and combine it with gas (carbon dioxide) that they absorb from the air. This makes a type of sugar (glucose) that gives the plants the energy they need to grow and give off the oxygen that we need to breathe. This is called photosynthesis.



Answers: 1D, 2C, 3B, 4A, 5E

# Leaves—The Shape of it All

Leaves come in all shapes and sizes. In the fall, as the weather gets colder, they come in all different colors, too! Leaf shapes include round, oval, diamond-shaped, triangular, long and narrow, fan-shaped, or even mitten-shaped. Some leaves have smooth edges, some have toothed edges, and some are lobed. Match the leaf to its type (answers are upside-down at the bottom of the page):

smooth edges

toothed edges

lobed

needled



birch



maple



oak



dogwood



linden



chestnut



pine

smooth edges: dogwood  
tooth edges: birch, chestnut, linden  
lobes: maple, oak  
needles: pine



# What Good Are Plants?

Plants are producers and are near the bottom of the food chain. Every animal depends on plants to survive – even if the animal doesn't eat the plants themselves! All kinds of animals eat plants. We eat lots of things that come from plants. What are some things that you eat from plants?

Plants give us the oxygen that we need to breathe.

Some animals build their shelter in or around plants; or they might use plant material to build their nests.

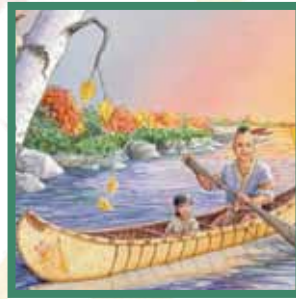
Animals might hide in or around plants to protect themselves from predators or to wait for prey.

Here are just a few ways that people or animals use some of the trees mentioned in the book.



**Maple**

We eat the syrup on pancakes.  
Deer and moose eat the bark.



**Birch**

Deer eat the leaves.  
Native Americans used the bark for their canoes.



**Pine**

Squirrels and other animals eat the seeds in pinecones.  
We use the wood for building houses and furniture.



**Quaking Aspen**

Deer and elk love eating the leaves.  
Beavers eat aspen, as well as use it for building their homes.



**Oaks**

Squirrels and chipmunks eat the acorns.  
Deer eat all parts of the tree.  
We use wood for furniture and floors.

# Match the Leaves

Using the information and the illustrations in the book, match the fall leaves to the summer leaves. Answers are upside down at the bottom of the page.

1



A



2



B



3



C



4



D



5



E



Answers: 1d, 2a, 3e, 4b, 5c