

Science in a Nutshell



illustrations by
Jo Anna Poehlmann

Here's a science lesson in a nutshell! Take advantage of a glorious fall day and plan a nature walk with your class. You'll sharpen observation skills with each step as you examine seeds, nuts, pods, cones, and leaves. First, preview the neighborhood around your school and choose a walking path with a variety of trees. Then look at the nature identification pages in this unit. If the trees in your area are very different than those covered, you may want to create additional pages to include trees for your locale. Finally, create nature identification booklets for your class, following the directions at right. On the day of your walk, have kids bring along their booklets. Ask them to work together as partners to locate items in the booklet and collect seeds, nuts, pods, cones, and leaves in the plastic bag attached to their booklets. Encourage them to write observations in the booklets, and bring along nature guides to identify other trees and

plants observed along the walk. Then take time to sit together and just bask in the glory of fall. Describe the sounds...the rustling of dry leaves and the crackling of dead limbs. Share fall textures...leaves, cones, pods, needles, bark, and branches. Take deep breaths and fill up with the scent of fall.

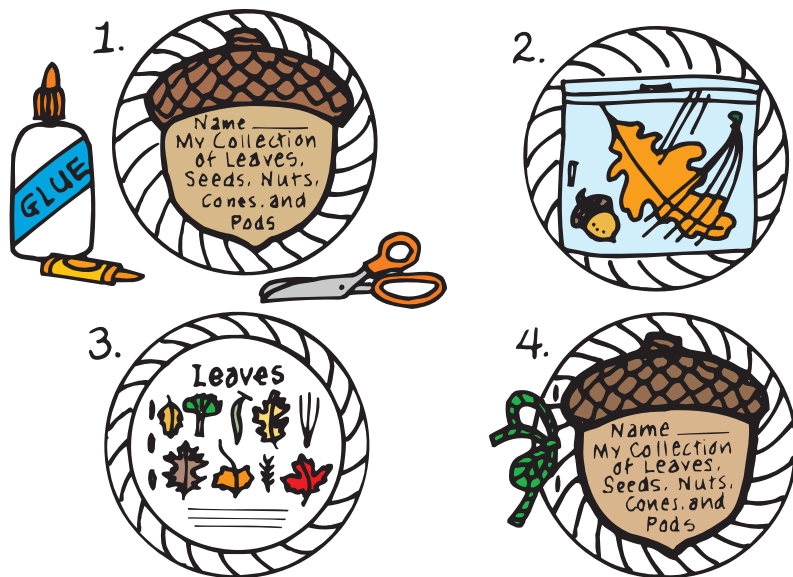
Nature Booklet

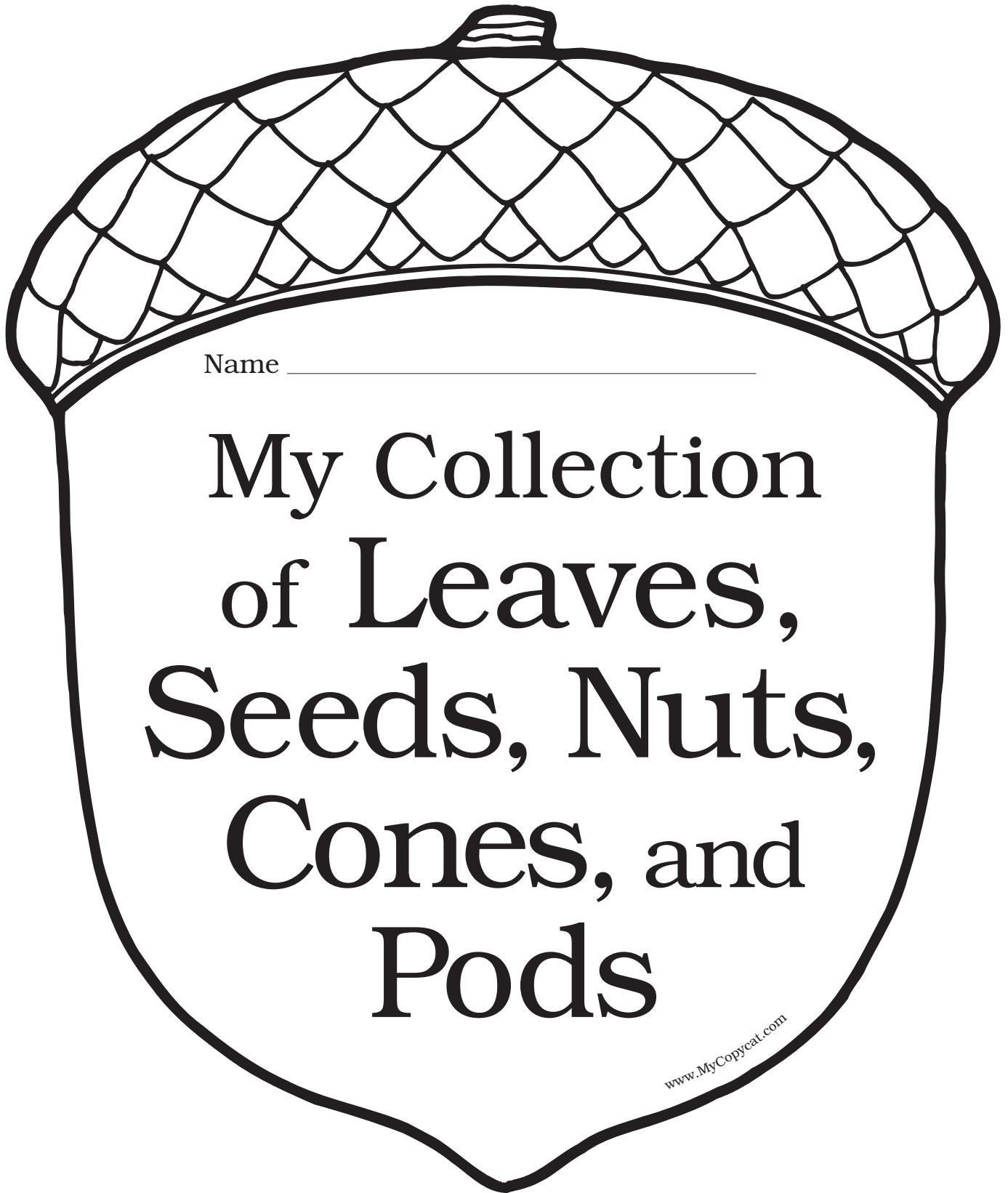
Duplicate the nature identification booklet cover and pages. You may wish to make additional blank pages for identification of other trees in your area. Then follow the instructions below to construct the booklet. You'll need scissors, crayons, glue, stapler, and two paper plates (the cheap kind) for each booklet.

1. Color, cut out, and glue the acorn cover shape to a paper plate.
2. Staple a small plastic bag to the back of the plate for collecting leaves, seeds, etc.
3. Cut out the identification pages. Gather them together and staple to the second plate (back cover), as shown.
4. Staple the two covers together at the side edge.

Plant a Future Tree

When you go on your nature walk, bring along a grocery bag and have children help you collect acorns for a class project. You can grow little oak trees from acorns. Sort through the acorns and discard any that aren't fully developed or have been infested by bugs. Place the good acorns in a plastic bag and cover with wet moss. Store the bag in the vegetable compartment of your refrigerator until spring planting time. Then have each child fill a pot with a potting soil mixture of half moss and half sand. Press the acorn $\frac{3}{4}$ inch deep into the soil and place the pots on a sunny window sill. Keep the soil in the pot moist but not wet. Once the seedling has emerged, children can take their pots home and transplant the seedlings into larger containers. By the following spring, the seedlings will have grown 8 to 12 inches with a root system of 6 to 12 inches. The year-old seedlings are then ready to be transplanted to a permanent site. Children can watch their trees grow up—just as they do!



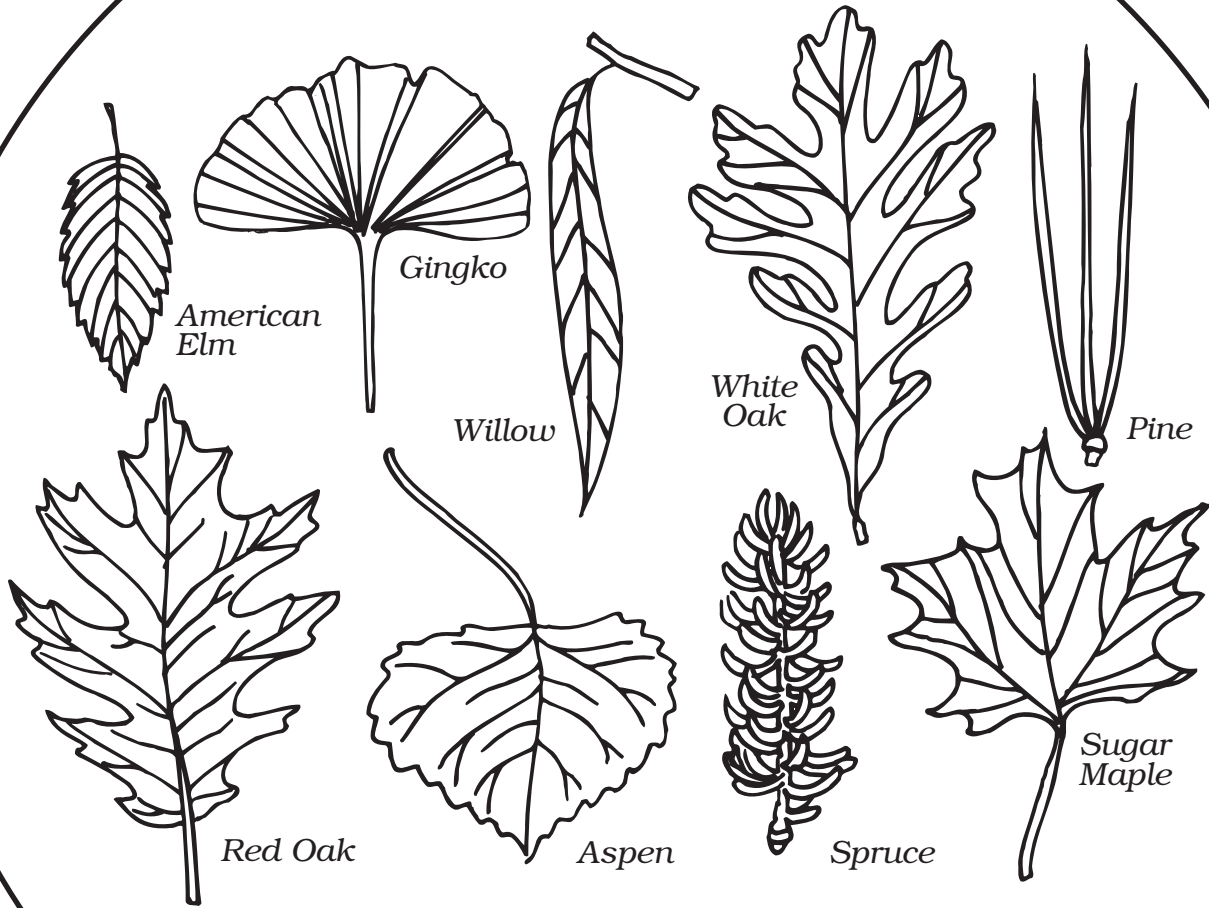


Name _____

My Collection
of Leaves,
Seeds, Nuts,
Cones, and
Pods

www.MyCopycat.com

Leaves

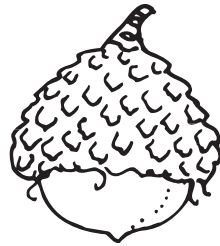


Leaves make food for trees. They come in many different sizes, shapes, and colors. Some trees lose their leaves in autumn.

Nuts



Pin Oak
Acorn



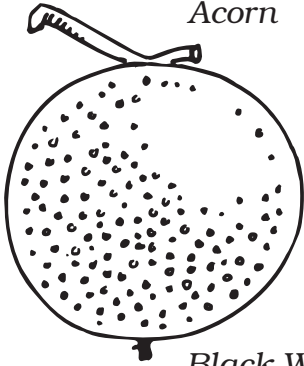
Burr Oak Acorn



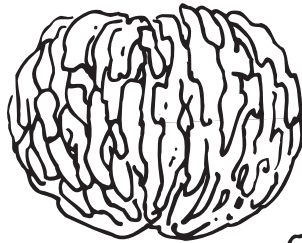
Red
Oak
Acorn



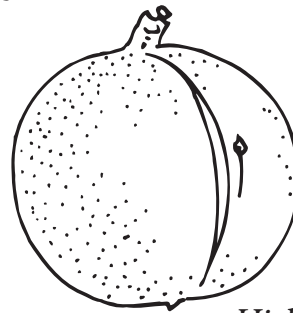
Beechnut



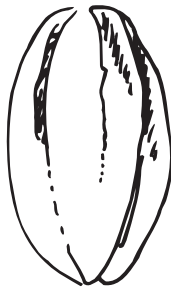
Black Walnut



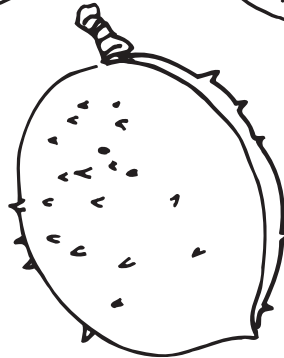
Hickory Nut



Pecan

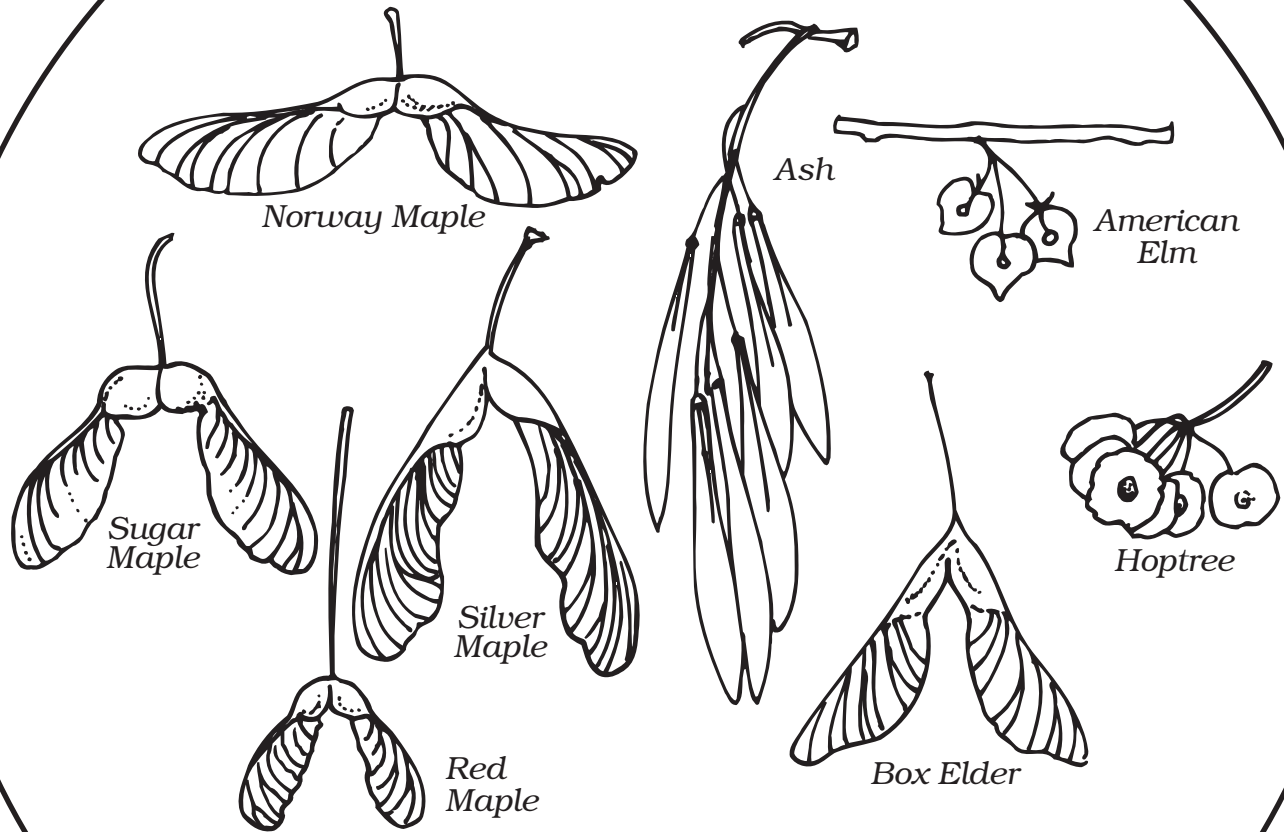


Buckeye
(not edible)



Nuts are the seeds or fruits of some trees.
Some are food for people or for wildlife.
When a nut is buried in the ground,
it can grow into a new tree.

Winged Seeds



Some trees have winged seeds. In autumn, when the wind blows, they spin away from the tree... like little helicopters. When they fall to the ground, some will grow into new trees.

Cones

Pine



Spruce

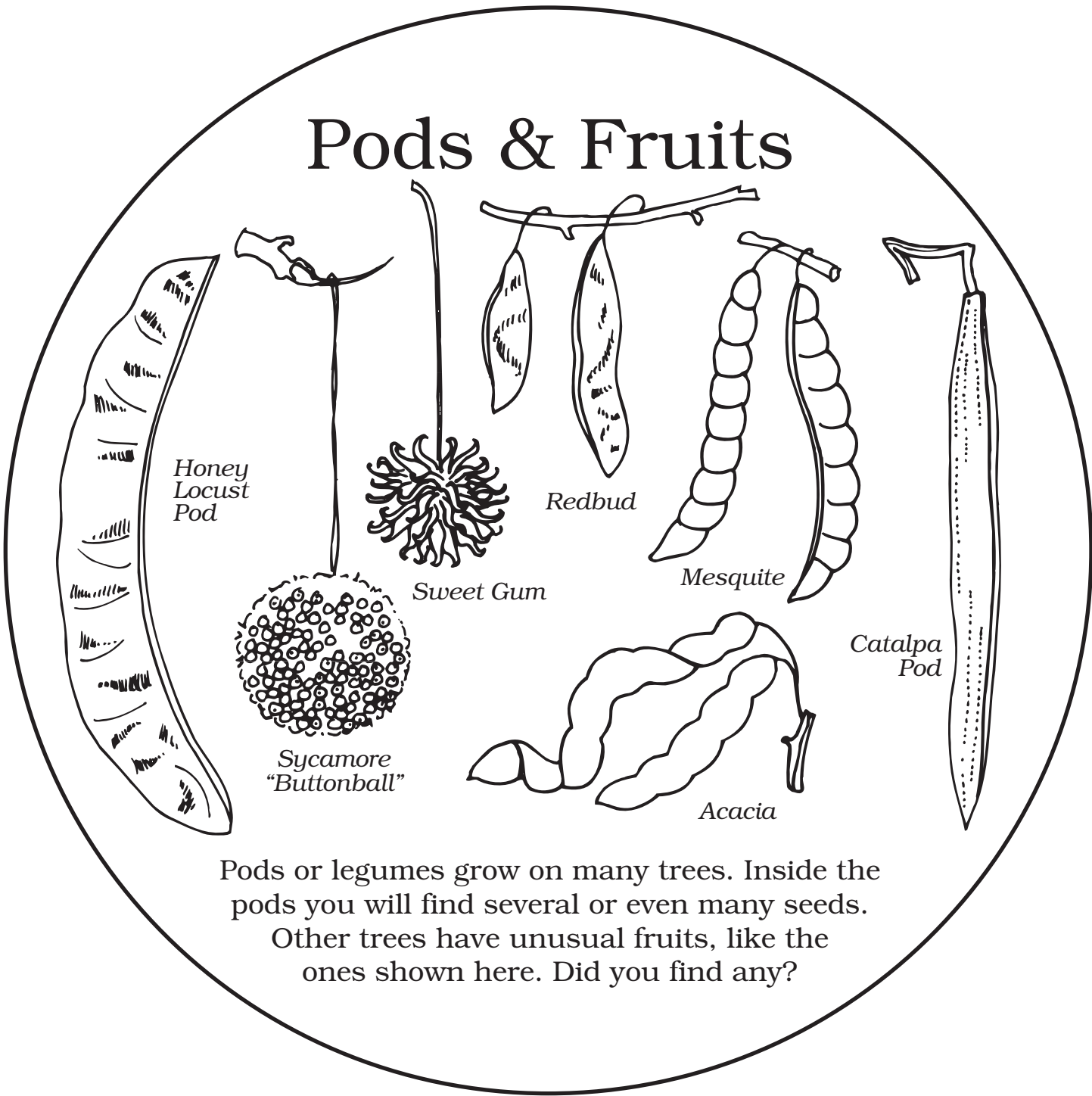


Fir



Some trees have cones. The cones protect the seeds. Some animals like to eat the seeds found in cones.

Pods & Fruits



Pods or legumes grow on many trees. Inside the pods you will find several or even many seeds. Other trees have unusual fruits, like the ones shown here. Did you find any?