



## Leaf Scavenger Hunt

ZooMontana is a botanical garden as well as a zoological park. Autumn is the best time to come out and visit the plants! See if you can find the following leaves:

Name of Leaf Hunter \_\_\_\_\_

Today's date \_\_\_\_\_

The leaf I found is a simple/compound leaf.

The shape is \_\_\_\_\_

It does/does not have toothed edges.

It is/is not lobed.

It is/is not hairy.

I think this leaf belongs to a \_\_\_\_\_ tree.

My leaf's fall color is \_\_\_\_\_

*Draw a picture or make a rubbing (vein-side up) of your leaf. Describe the texture, color, shape, smell of your leaf. Write your leaf's biography:*

# Why Do Leaves Change Color?

Leaves are the food-making part of a plant where the conversion of sunlight into energy (photosynthesis) takes place. It is the chemical compounds called chlorophylls that allow this conversion to happen and gives leaves their green color. Chlorophylls are constantly being used up and replaced by the plant until growing season ends and no more chlorophyll is produced. The leaves also contain yellow and orange pigments known as carotenoids. These pigments are hidden by the chlorophylls and only appear after the chlorophyll factory shuts down in the fall. The red coloration is caused by anthocyanins, a by-product of sunlight on the sugars within the leaf when the phosphates, which are other chemicals found within leaves, begin to disappear. The reds of autumn become more intense after periods of cool, bright weather.

Trees that lose their leaves seasonally are called 'deciduous'. Some trees do not lose all their leaves at once but stay green all year round. These trees are called 'coniferous'.

