

# Learning About the Leaf

## Identifying the Parts of a Leaf

**Axil:** The part of the leaf where the petiole meets the stem.

**Petiole:** The stalk that supports the leaf and attaches the leaf to the stem.

**Stipule:** A small growth at the base of the petiole that resembles a small leaf.

**Vein:** The wrinkles and pipes on the blade that transport food and water.

## The Color of Leaves

Leaves get their colors from pigments, which are naturally produced by the leaf cells. There are three pigments:

- Chlorophyll for green leaves.
- Carotenoid for yellow, orange and brown leaves.
- Anthocyanins for red leaves.

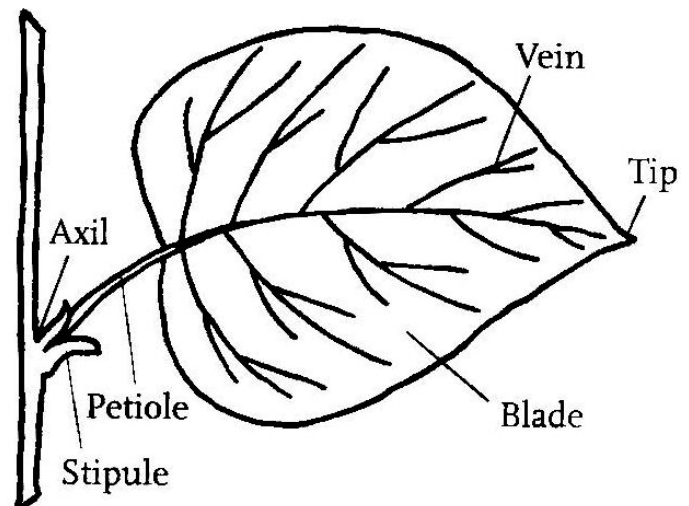
During the summer, trees use sunlight to convert water and carbon dioxide into sugar that feeds the tree. This is called photosynthesis. This takes a lot of work and by the time autumn arrives the trees need a break. The shorter days and decreasing amount of sunlight tells the trees that they need to stop creating chlorophyll, which allows the carotenoid to show through.

Not all trees have anthocyanins, and it is only made during autumn. The anthocyanins are a kind of protection for the trees and allow them to recover nutrients so that the tree is ready for the next growing season.

The best fall colors for the leaves happen when there is an autumn with plenty of warm days and cool nights; a warm, wet spring; and a summer that hasn't been too hot or dry.

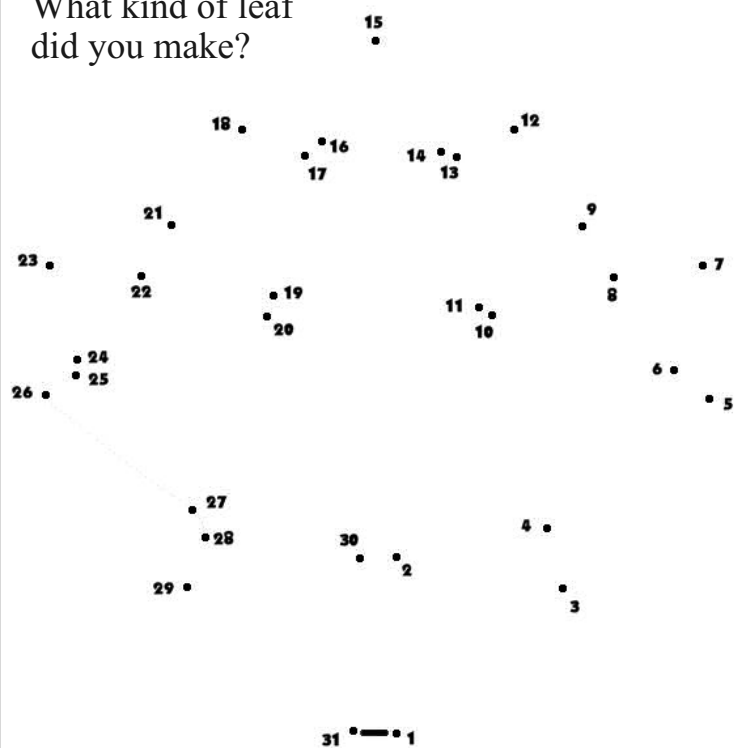
**Tip:** The end of the leaf.

**Blade:** The body of the leaf.



## Connect the Dots

What kind of leaf did you make?



# Make a Leaf Rubbing

## What You Need:

- Leaves of various shapes and sizes
- White construction paper
- Crayons or colored pencils

## What to Do:

1. Collect a variety of fallen leaves that are different shapes and sizes. Make sure they're dry before you use them.

2. Arrange the leaves on your desk to create a sort of collage then cover with the white construction paper.



3. Starting at one edge, color the paper pressing down hard enough so that the bumps and grooves of the leaves can be seen.

The colors should be darker where you went over the leaf edges and veins. You can change colors if you'd like or can use just one color.

## Leaves Word Search

Q O C M N H Z W V E K R X D V  
 Y T U J D Y A E M E S T J O G  
 Y P J L Z Y I F J R L X I W J  
 D B W Z U N A V L T T T A S L  
 F X R B H E C B E F L I R P O  
 Z T O I L B M P R X P R P N G  
 E E E D A L B M R G Y Z A W N  
 H L B B F S S S S B H L K H S  
 Y U S E H F G R Z W Q X O S K  
 Q P F D L M G I X C N B I A G  
 C I O K E O Q H H U E Y V X R  
 A T B T Q X I A U T U M N I M  
 K S S U I X K T E G A L X L M  
 L K Y D J B Z H E R J O E E M  
 P J C G T R Y X R P L G B V H

AUTUMN  
 AXIL  
 BLADE  
 LEAF  
 PETIOLE

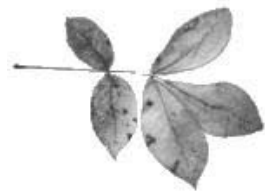
STEM  
 STIPULE  
 TIP  
 TREE  
 VEIN

# Match the Leaf to the Tree

- Oak:** red, brown or russet
- Hickory:** golden bronze
- Birch:** bright yellow
- Poplar:** golden yellow
- Maple:** red or yellow

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**A.**



**B.**



**C.**



**D.**



**E.**

