



Tree Identification Summer Phase

Learning to identify trees by looking
at their leaves.

Poison Ivy Alert



- Climbs trees and grows along the ground.
- Three leaf clusters.
- Leaves are shiny green and 3 to 5 inches long.
- Leaves may be entire, have one lobe, or two lobes.
- Contact with any part of the plant can cause severe, itchy rash. Leaves of 3, let it be!

Poison Ivy Products

Results may vary with individual.

- Jewel weed (local weed growing in woods).
- Oral Ivy (taken orally in advance to build up immunity).
- Ivy block (applied to skin in advance as barrier).
- Zanafel (cleanses skin after exposure).

Where to get Poison Ivy Products

- Jewel weed grows wild in wet, wooded areas.
- Local pharmacy
- Ben Meadows company 1-800-241-6401
- Forestry Suppliers, Inc. 1-800-647-5368

Virginia Creeper

- Leaves in clusters of five leaves.
- Often mistakenly called poison oak.
- Harmless but often found growing mixed in with poison ivy on the same tree.





Summer Tree Identification

Learning to Identify Trees by
Looking at their Leaves

The background of the slide is a solid brown color with faint, stylized outlines of autumn leaves in a lighter shade of brown. The leaves are scattered across the background, some overlapping.

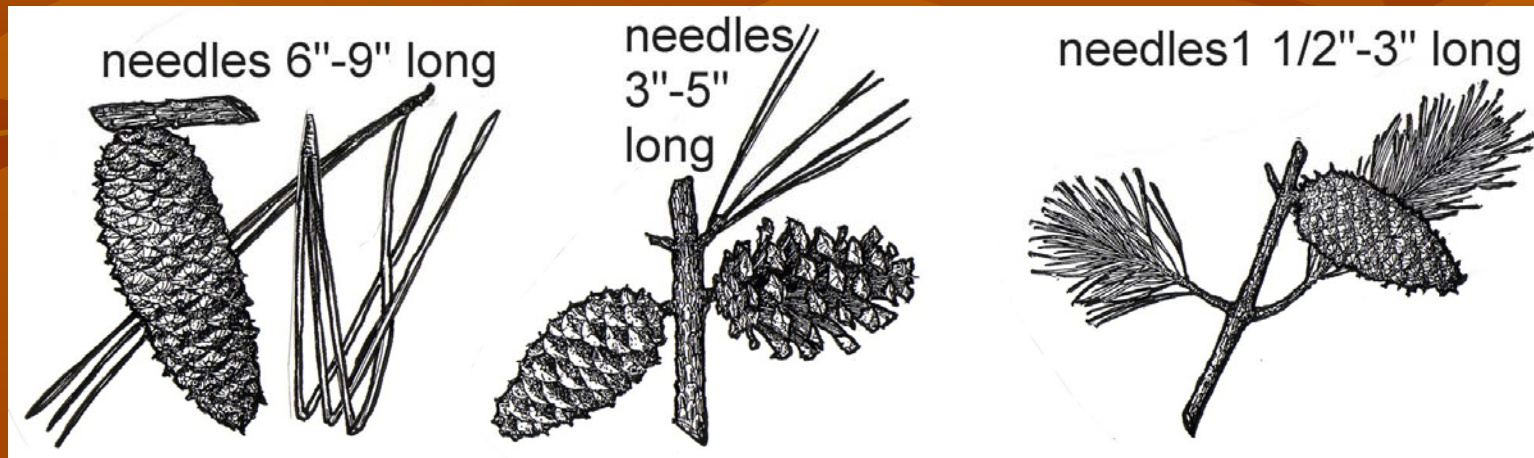
Part One

What Kind of Leaf is it?

Are the leaves needle or scale like?

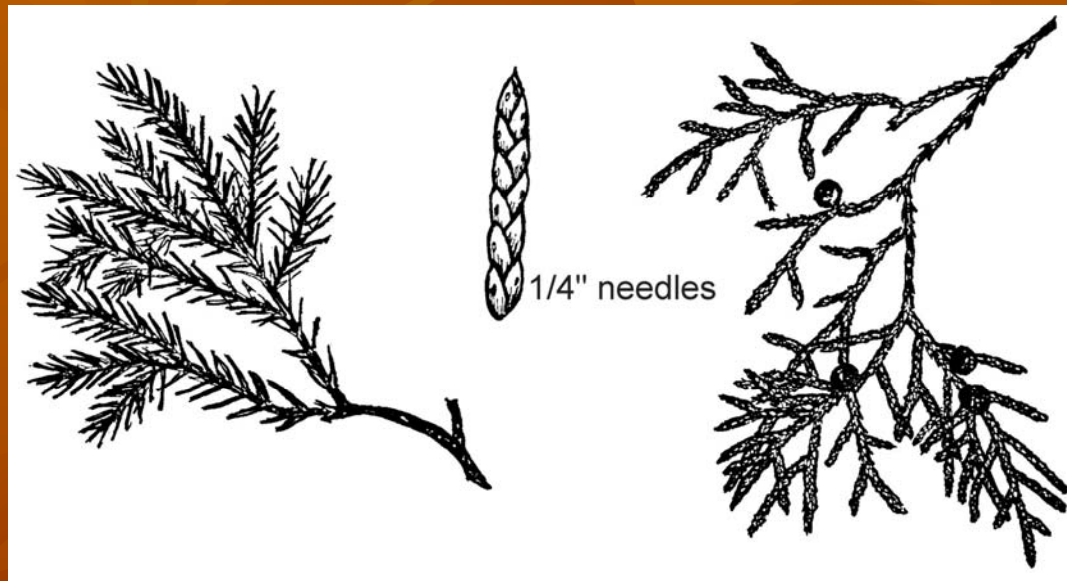
Or, are they broad, flat and thin?

Needle-Like or Scale-Like Leaves



- Needle-like leaves are long and slender. They get their name by looking like sewing needles.

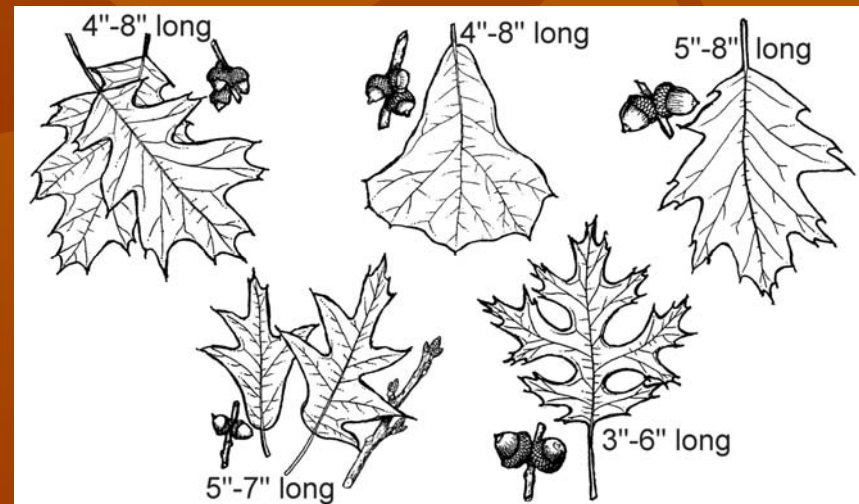
Scale-Like Leaves



- Scale-like leaves are very small, overlapping one another like the scales of a fish. Juvenile leaves may stand out and be prickly.

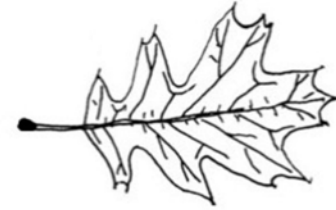
Leaves that are Broad and Flat

- Leaves that are broad and flat have many shapes and sizes but all are much wider and longer than they are thick. Red oak leaves are a good example.



Broad and Flat Leaves May Be

- Simple.
- Or Compound.



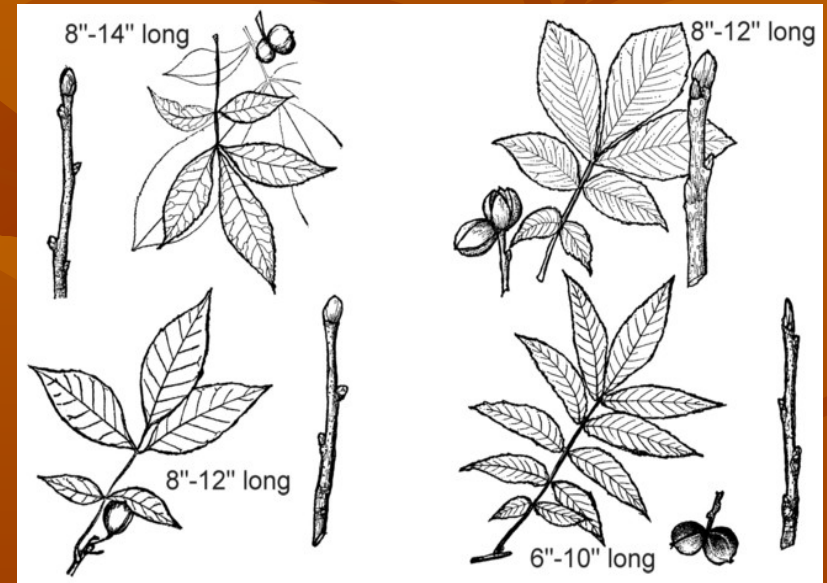
Simple Leaves

- Simple leaves have a single leaflet attached directly to the limb at the node.

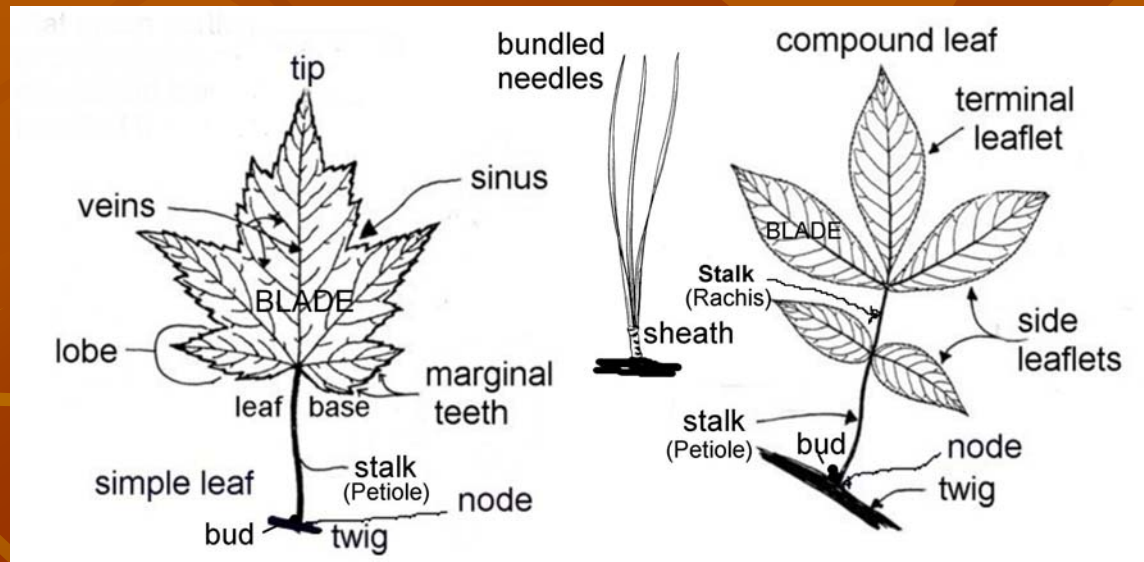


Compound Leaves

- Compound leaves have three or more leaflets attached to a central leaf stalk that is in turn attached to the tree limb at the node.

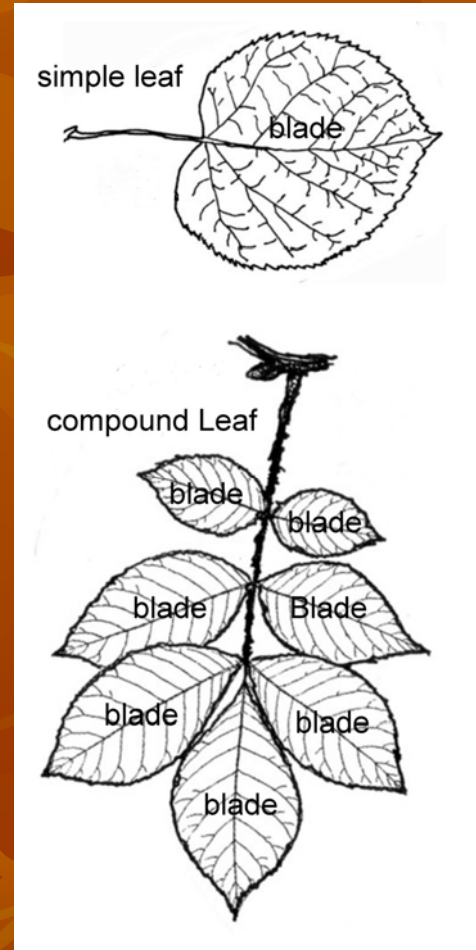


Both Simple and Compound Leaves have Characteristics that can be used to make positive identification.



Leaf Blade

- The broad, flat, part of the leaf or leaflet is called the blade



Leaf Ends

- The far most point of the leaf away from the twig is called the **LEAF TIP** or **APEX**.
- The closest point of the leaf blade joining the leaf stem (petiole) is called the **LEAF BASE**.



Simple leaf stem or stalk

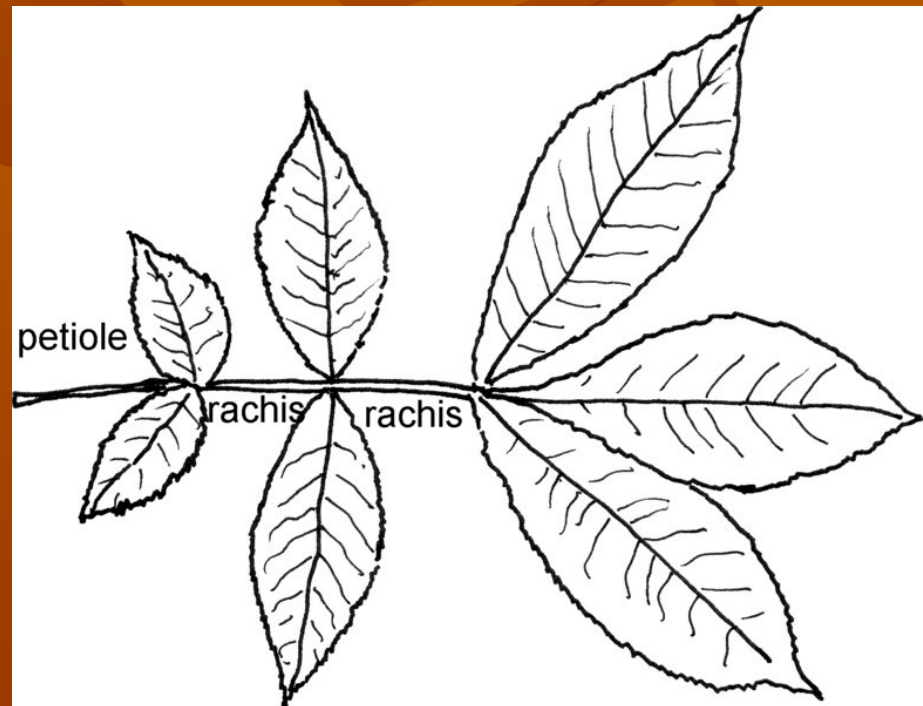
- The portion of the stem between the base of the leaf or leaflets and the tree twig is called the **PETIOLE**.



Compound leaf stem or stalk

The stalk of compound leaves is divided into two sections

- The portion between the leaf node and the first leaflets is called the Petiole
- The portion between leaflet attachments is called the Rachis



The Leaf Node

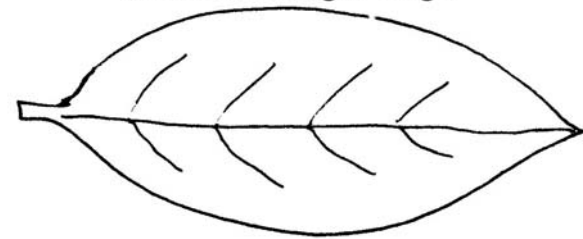


- The **LEAF NODE** is the point where the leaf petiole attaches to the twig.
- A bud will be found at this point

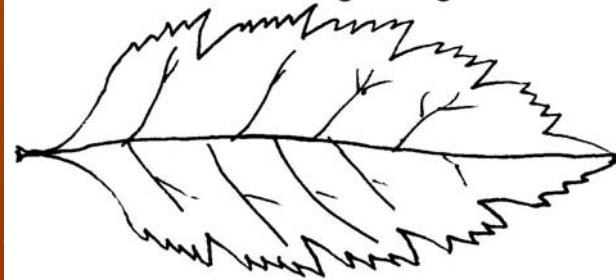
The Edge of the leaf or leaflet is called the **MARGIN**

- The leaf margin may be **SMOOTH**.
- Or it may have **TEETH**.

smooth margin edge

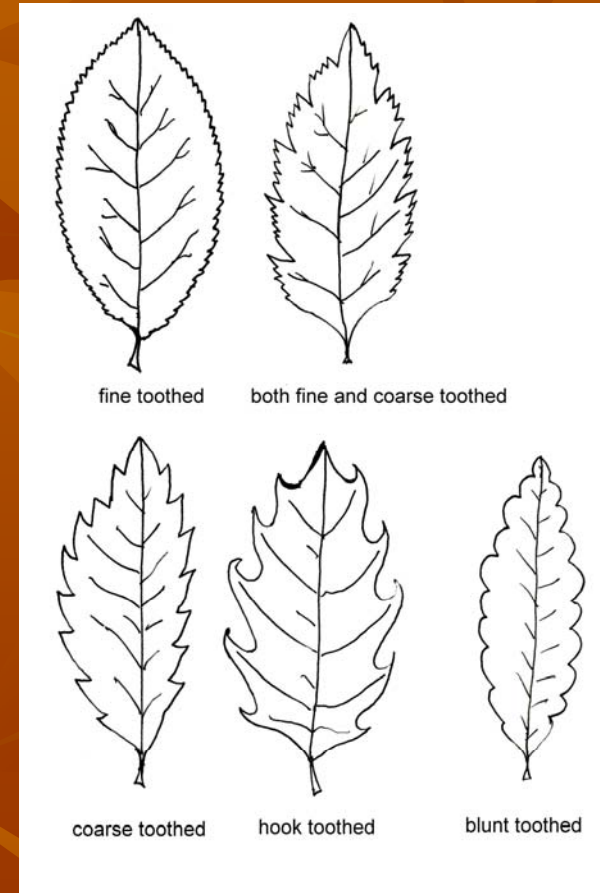


toothed margin edge



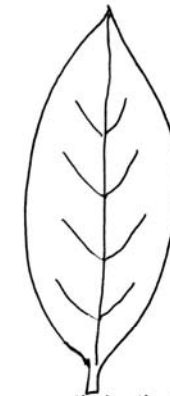
Teeth Along The Margin May Be

- Fine.
- Coarse.
- Or both fine and coarse on the same leaf.
- They may also be hooked or blunt.

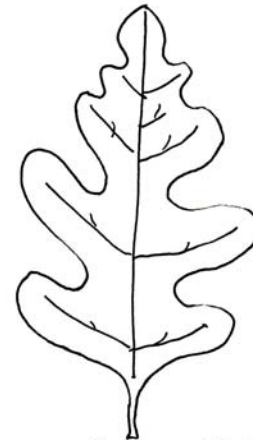


Margins May Be:

- Even (entire).
- Or wavy with dips and bulges.



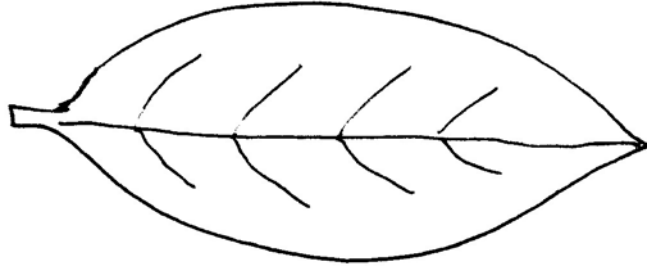
smooth (entire)



wavy with dips and bulges

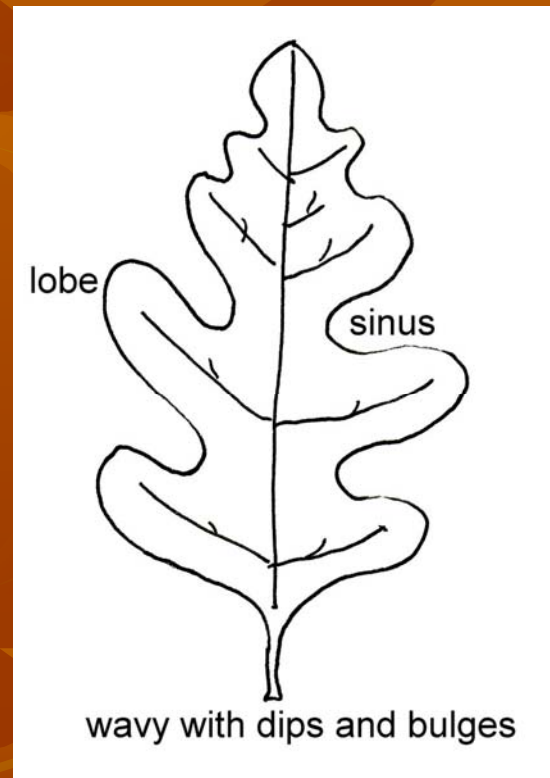
Leaves or Leaflets With Smooth Margins Are Said to be Entire.

Entire edges are smooth



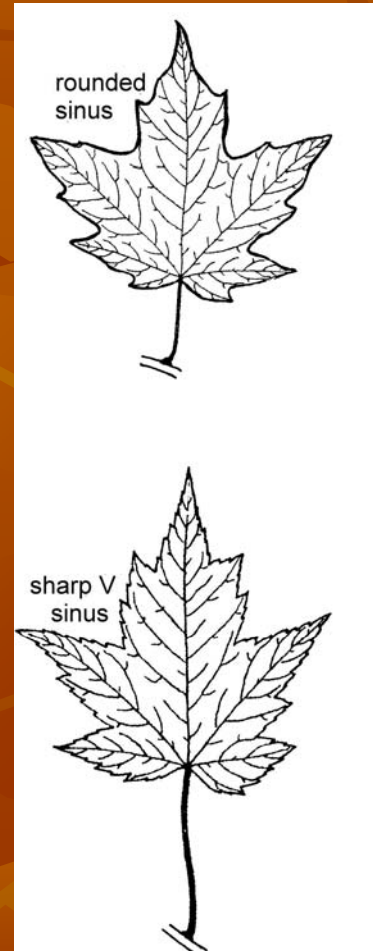
Leaves or Leaflets With Dips and Bulges are Said to Have Sinuses and Lobes

- The dip in the margin is called a **SINUS**.
- The bulge in the margin is called a **LOBE**.



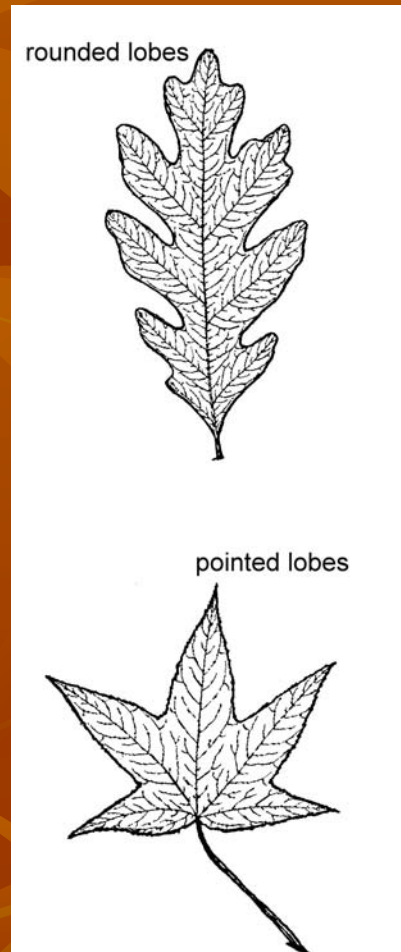
The Sinus

- May be rounded or U shaped.
- Or it may be sharp V shaped.



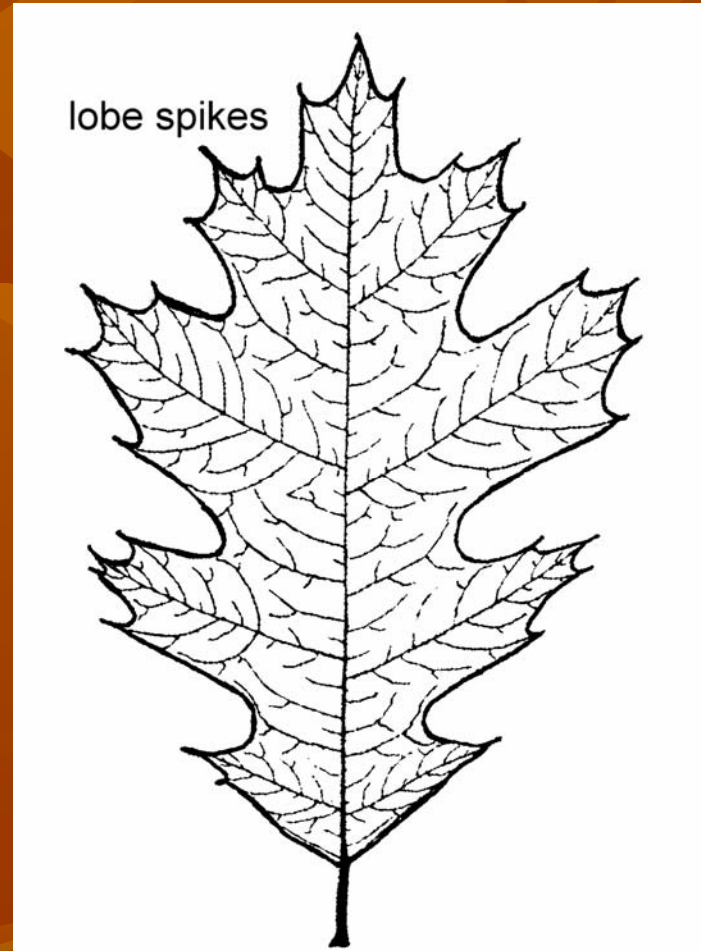
The Lobe

- The lobe may be rounded.
- Or the lobe may form a point.



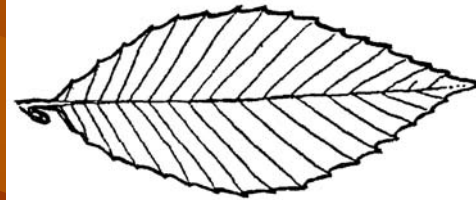
The Lobe

- The Lobe May Also Have A Tip, Spike, or Hair Like Projection Sticking Out From It's Center Point.

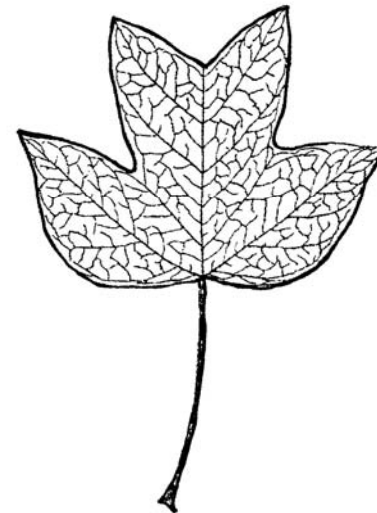


Leaf Veins

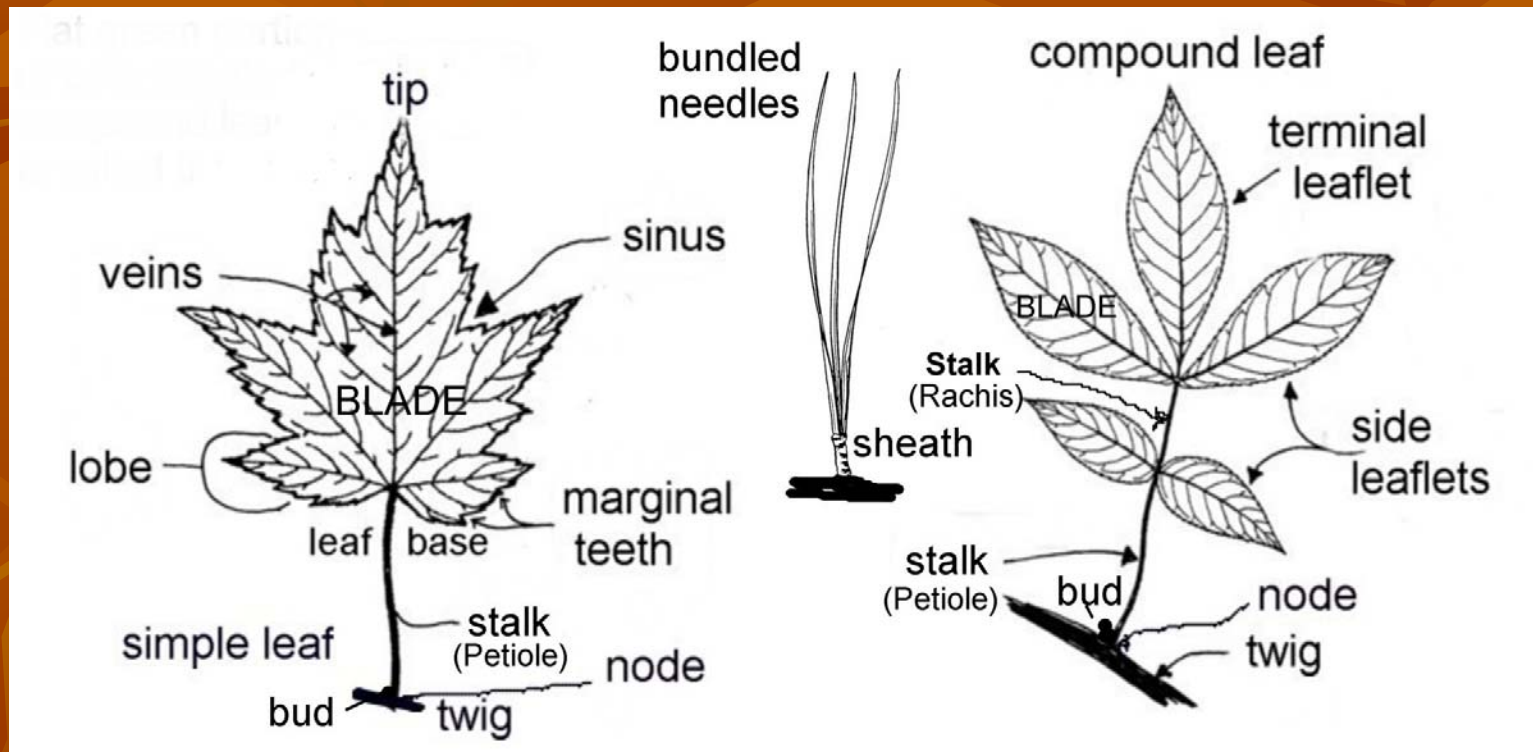
- Leaves have veins.
- Different leaves have different vein patterns that can be used to identify the tree.



leaf vein patterns



Leaf Parts Review



Part Two

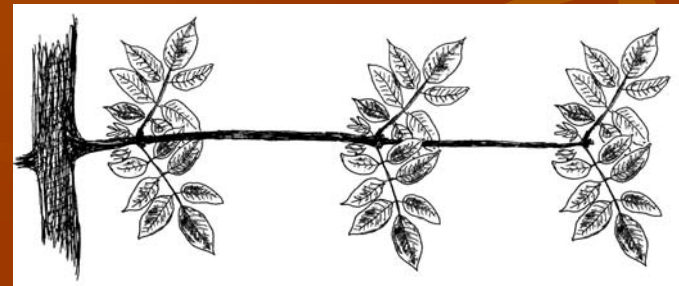
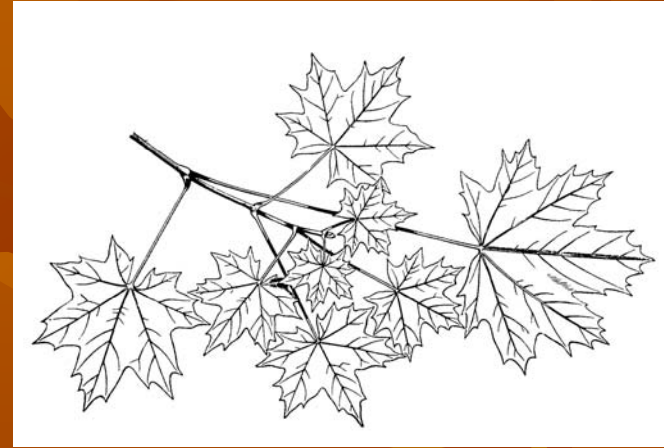
What is the Leaf Arrangement?

Leaf arrangement is the position of leaves along the stem. This position may be opposite or alternate.

Opposite Alignment

Trees with opposite alignment may have either simple leaves or compound leaves

- Trees with simple leaves and opposite alignment.
- Trees with compound leaves and opposite alignment.



Alternate Alignment

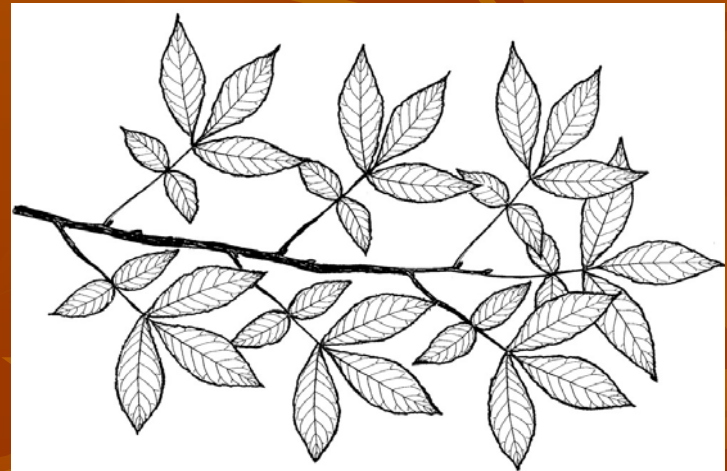
- Leaves growing at random intervals along the stem not directly across from one another are said to have **ALTERNATE ALIGNMENT**.



Trees with Alternate Alignment

Trees with alternate alignment may have simple leaves or compound leaves

- Simple leaves with alternate alignment.
- Compound leaves with alternate alignment.



Leaf Keys

- Leaf keys may be used to identify trees by identifying their unique leaf characteristics.
- The key leads to the tree's identity by asking questions about the sample leaf and referring the reader to new questions based on the answer given.
- Each question closes in on the identity of the tree by eliminating all the others that do not match.
- In the end the key provides a picture of the leaf that matches the sample, and names the tree it came from.

Practice Leaf Identification

- Use the leaf identification key to find which trees the following leaves most likely came from.

Alternate alignment



- EASTERN RED CEDAR

Opposite alignment



Silver Maple

Alternate alignment

- RED OAK GROUP
(SCARLET OAK)



Alternate alignment

■ SYCAMORE



Alternate alignment



■ SASSAFRAS

Alternate alignment



Hemlock

Alternate alignment

■ LOCUST



Alternate alignment



- YELLOW POPLAR (TULIP POPLAR)

Opposite alignment



■ ASH

Alternate alignment



Alternate alignment



■ White pine

Opposite alignment



■ SUGAR MAPLE

Alternate alignment

■ BEECH



Alternate alignment

■ SWEETGUM



Alternate alignment

■ HICKORY



Alternate alignment



■ VIRGINIA PINE

**CONGRATULATIONS,
YOU MADE IT TO THE TOP!**



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