

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.

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).
- Zanfel (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

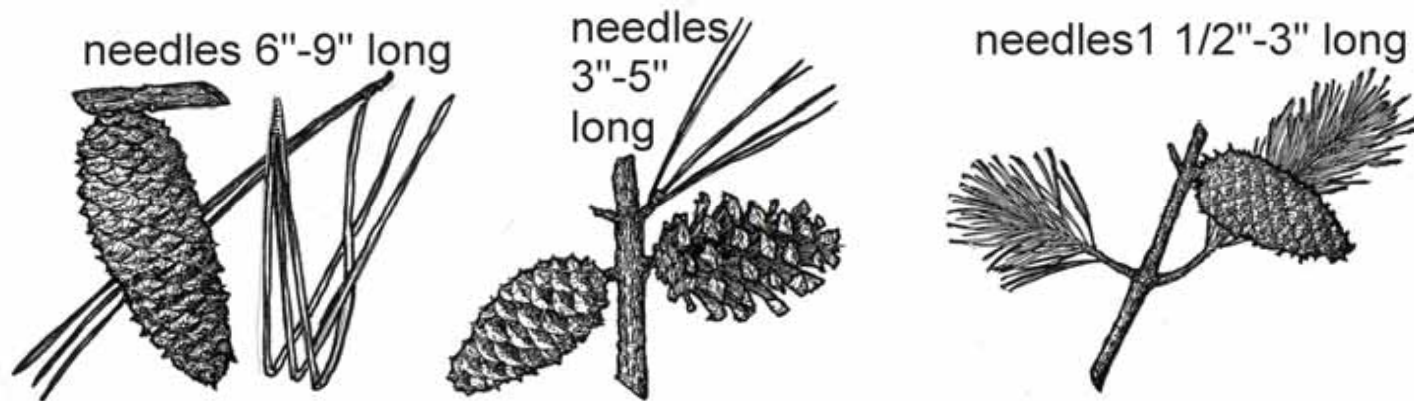
Part One

What Kind of Leaf is it?

Are the leaves needle or scale
like?

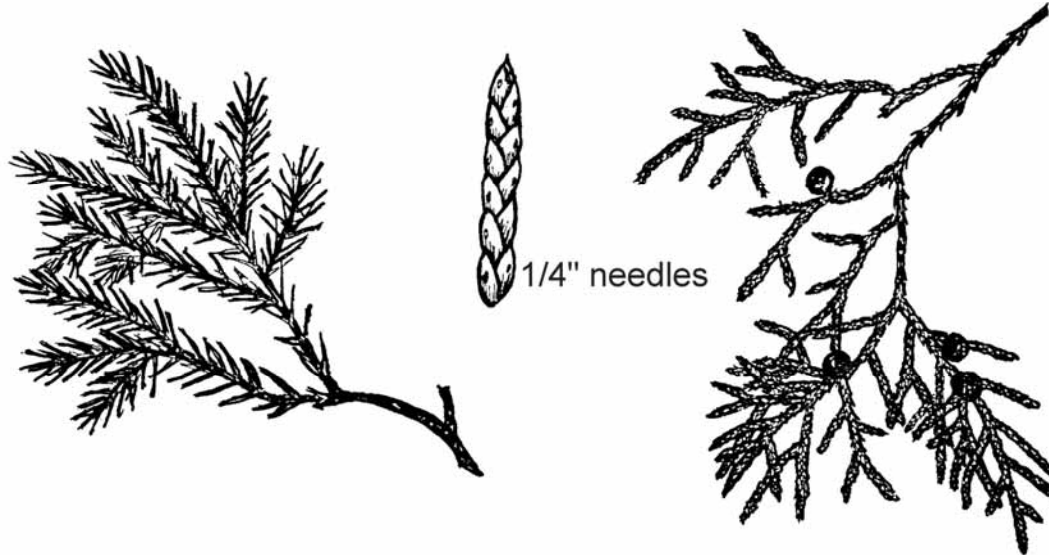
Or, are they broad, flat and thin?

Needle-Like or Scale-Like Leaves



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

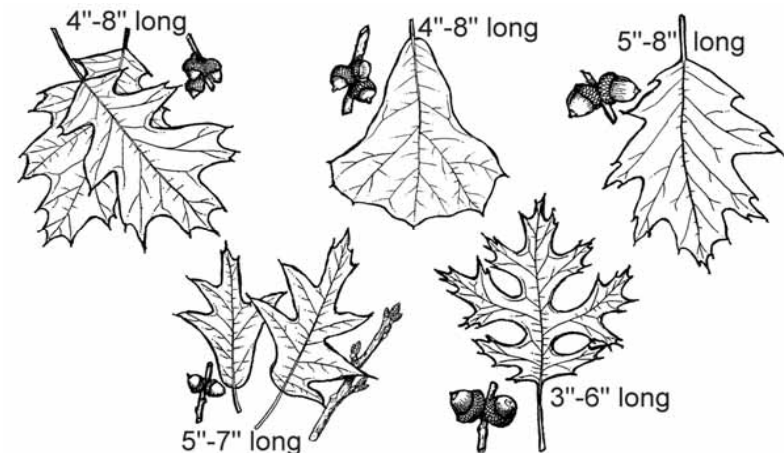
Scale-Like Leaves



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

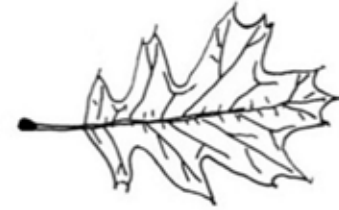
Leaves that are Broad and Flat

- 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.

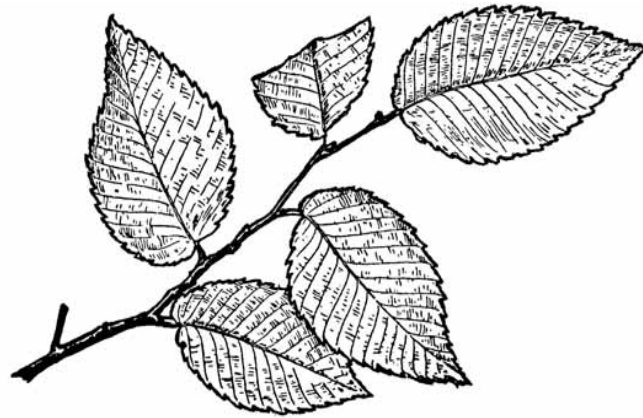


- Or
Compound.



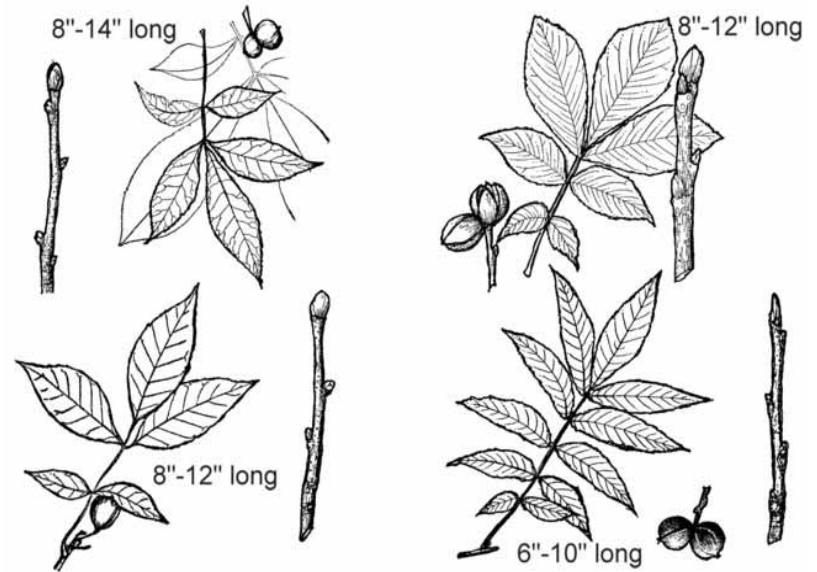
[Simple Leaves]

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

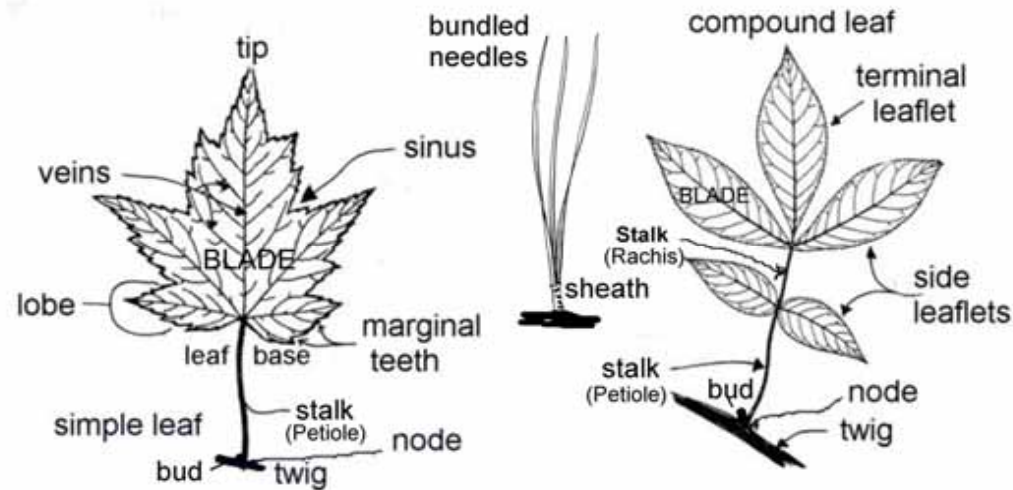


[Compound Leaves]

- 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.

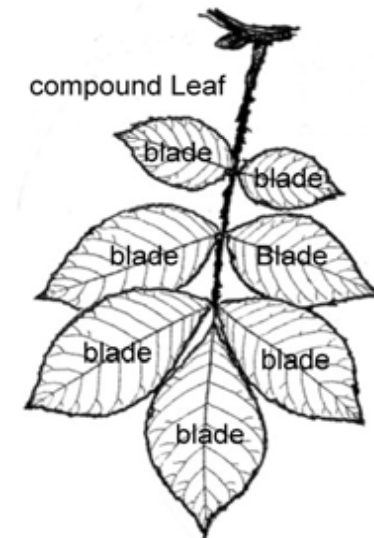
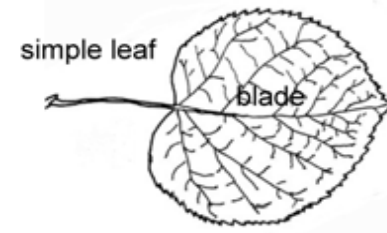


Both Simple and Compound Leaves have Characteristics that can be used to make positive identification.



[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]

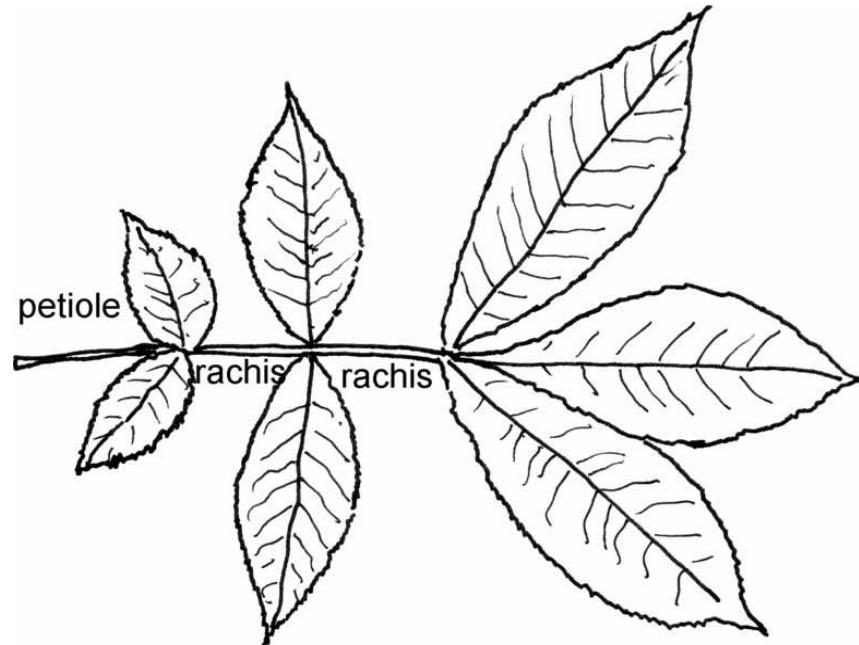
- The portion of the stem between the base of the leaf or leaflets and the tree twig is called the **PETIOLE**.



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**



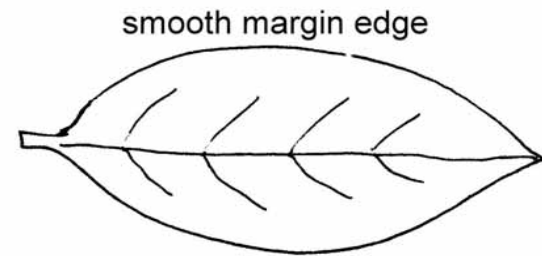
[The Leaf Node]



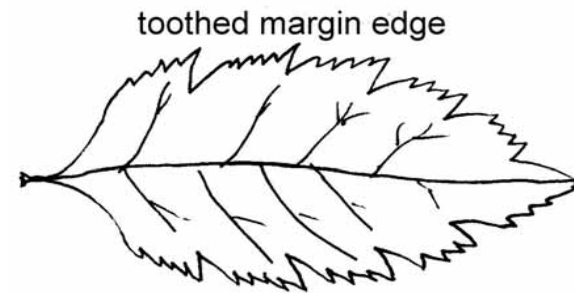
- The **LEAF NODE** is the point where the leaf petiole attaches to the twig.
- A bud will be found at this point

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

- The leaf margin may be **SMOOTH**.

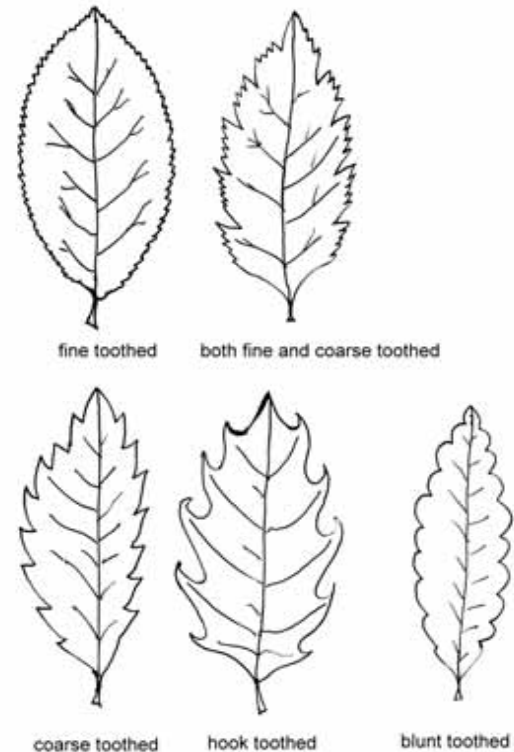


- Or it may have **TEETH**.



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.



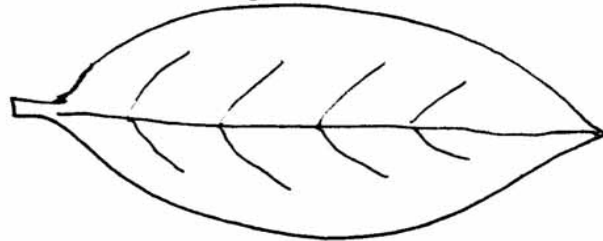
smooth (entire)



wavy with dips and bulges

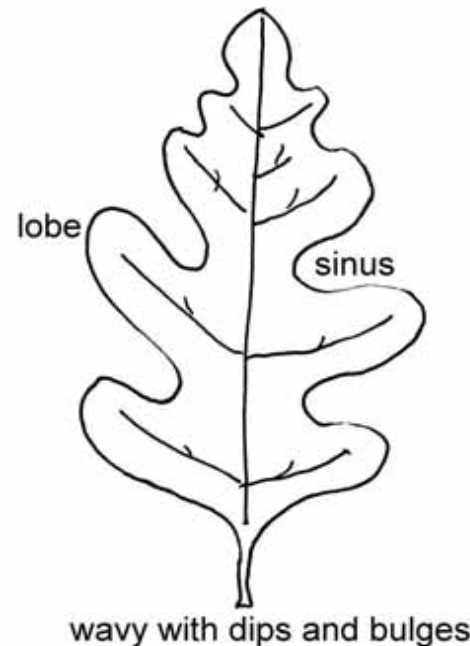
Leaves or Leaflets With Smooth
Margins Are Said to be Entire.

Entire edges are smooth



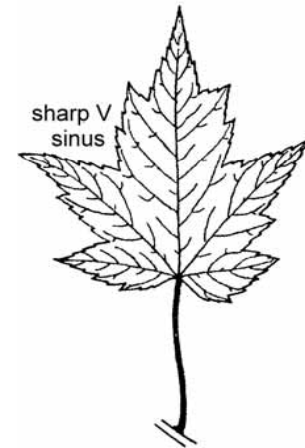
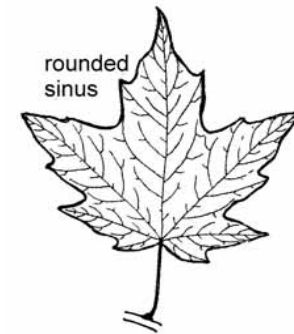
Leaves or Leaflets With Dips and Bulges are Said to Have Sinuses and Lobes

- 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.

rounded lobes

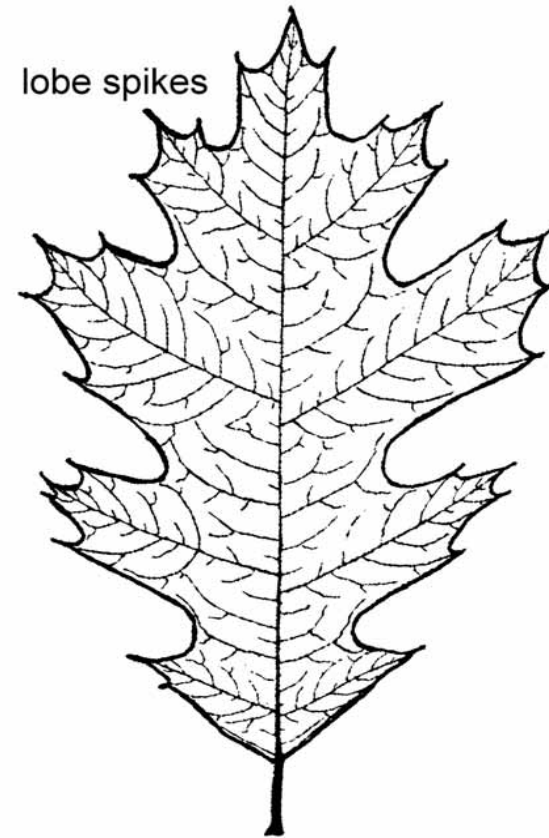


pointed lobes



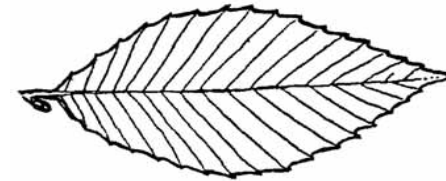
[The Lobe]

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

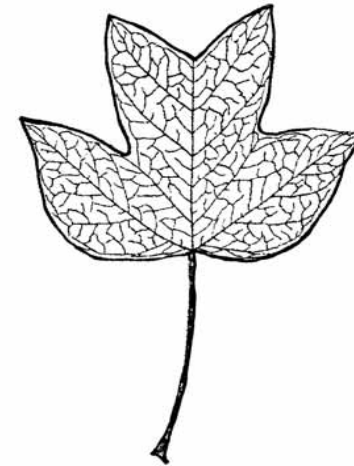


[Leaf Veins]

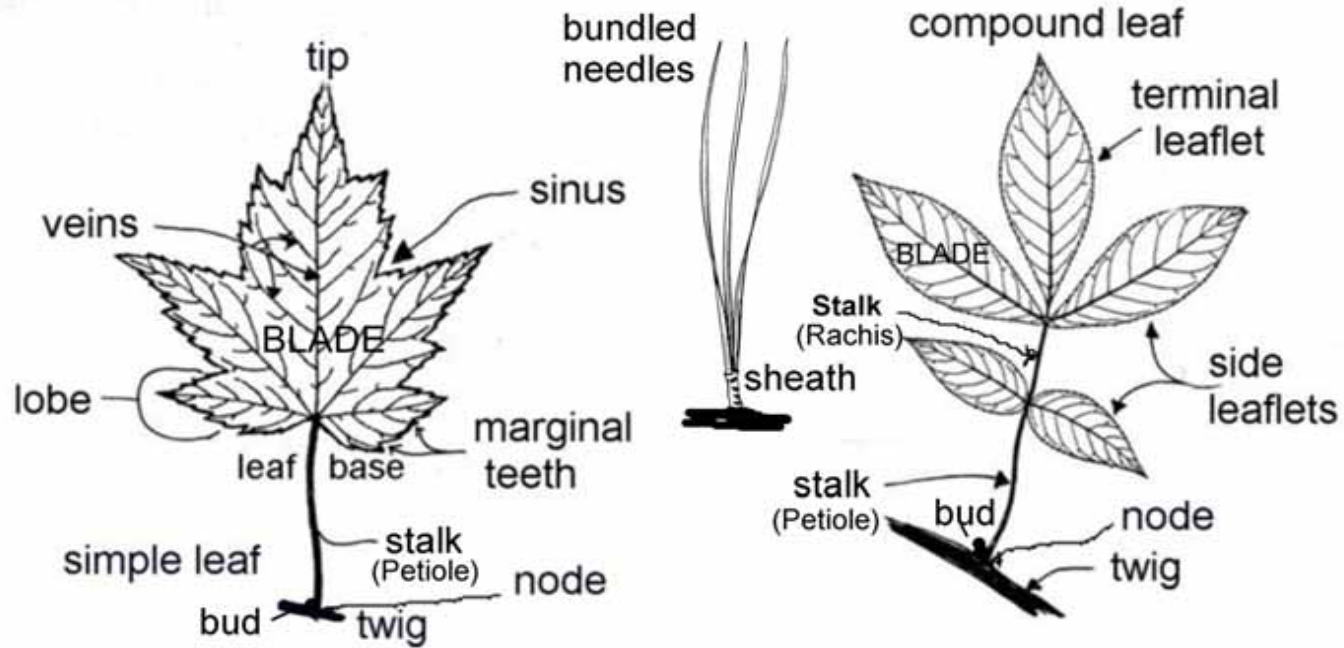
- Leaves have veins.
- Different leaves have different vein patterns that can be used to identify the tree.



leaf vein patterns




[Leaf Parts Review]





Part Two

What is the Leaf Arrangement?

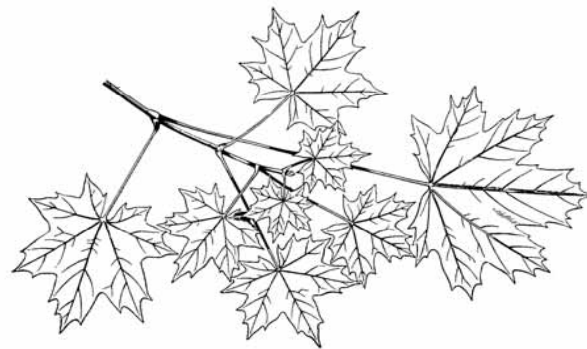


Leaf arrangement is the position of leaves along the stem. This position may be opposite or alternate.

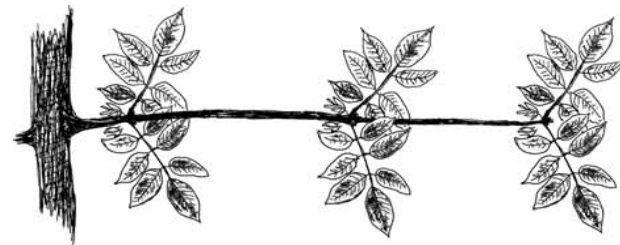
Opposite Alignment

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

- Trees with simple leaves and opposite alignment.

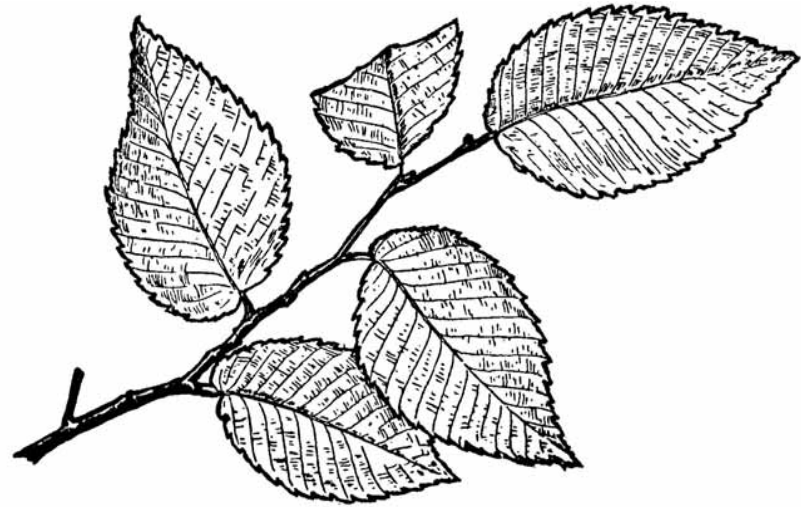


- Trees with compound leaves and opposite alignment.



[Alternate Alignment]

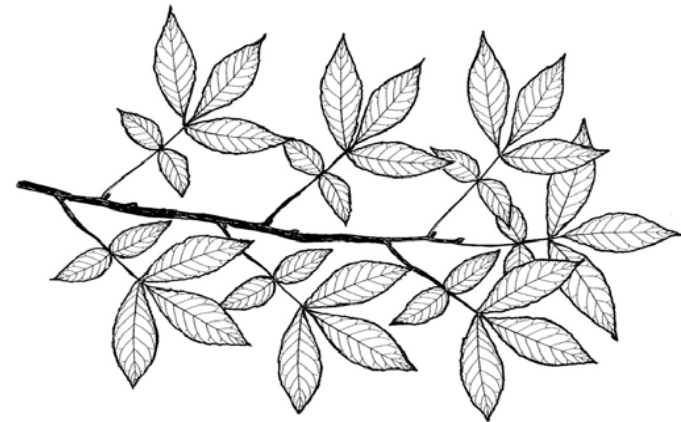
- Leaves growing at random intervals along the stem not directly across from one another are said to have **ALTERNATE ALIGNMENT.**



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]



[Alternate alignment]



■ SYCAMORE

Alternate alignment



■ SASSAFRA
S

[Alternate alignment]



Hemlock

Alternate alignment

■ LOCUS
T



Alternate alignment



- YELLOW POPLAR (TULIP POPLAR)

Opposite alignment



■ ASH

Alternate alignment



■ WHITE
OAK

[Alternate alignment]



■ White
pine

[Opposite alignment]



■ SUGAR
MAPLE

[Alternate arrangement]

■ BEECH



Alternate alignment



[Alternate alignment]

■ HICKORY




Alternate alignment



■ VIRGINIA PINE

CONGRATULATIONS,
YOU MADE IT TO THE TOP!



A decorative graphic consisting of a horizontal line with a gradient from light green to white. A large black left square bracket is on the left side, and a large yellow right square bracket is on the right side.

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