Identifying Trees using a Dichotomous Key

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Objectives

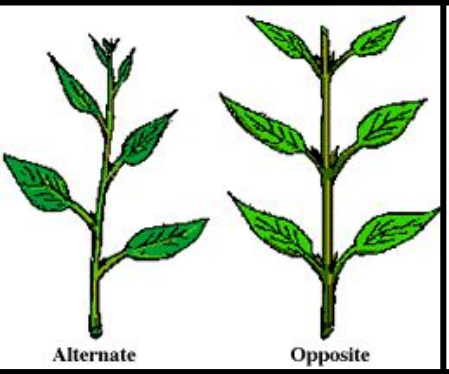
- Learn basic characteristics used in identifying plants
- Learn how to use a dichotomous key
- Identify common trees of northern Virginia

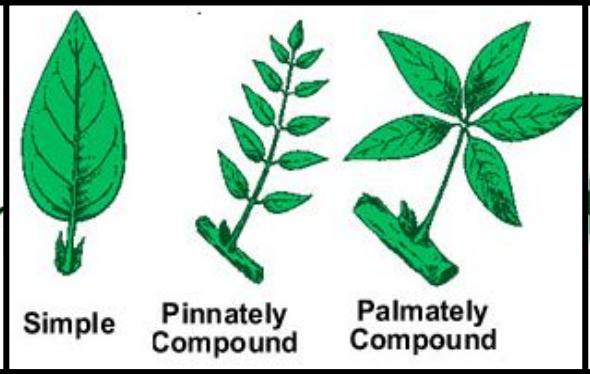
Tree Identification

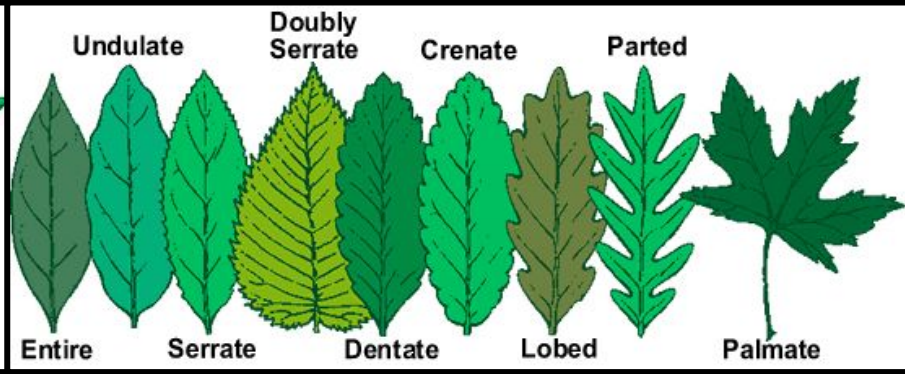
- Bark
- Reproductive structures (flower/cone/fruit/seed pod)
- Tree shape/silhouette
- Leaves

Leaf Basics

- Type
  - Needle-like
  - Scale-like
  - Broadleaf
- Placement
  - Alternate versus Opposite
  - Simple versus Compound
- Edges (margins)
  - Entire
  - Toothed
  - Lobed







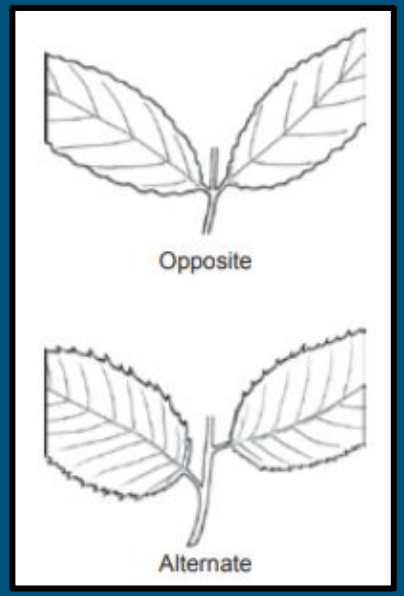
Leaf Basics: Type

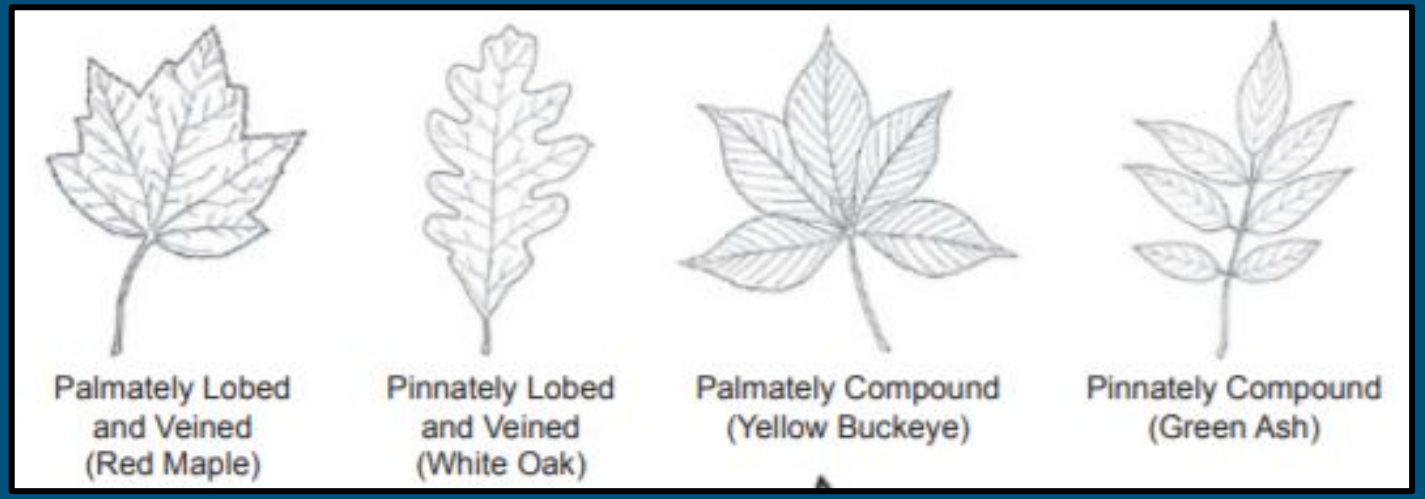
Needle-like

Scale-like

Broadleaf

Leaf Basics: Placement and Arrangement





Leaf Basics: Opposite Leaf Arrangement

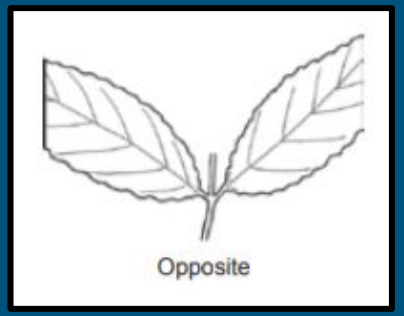
Maple

Ash

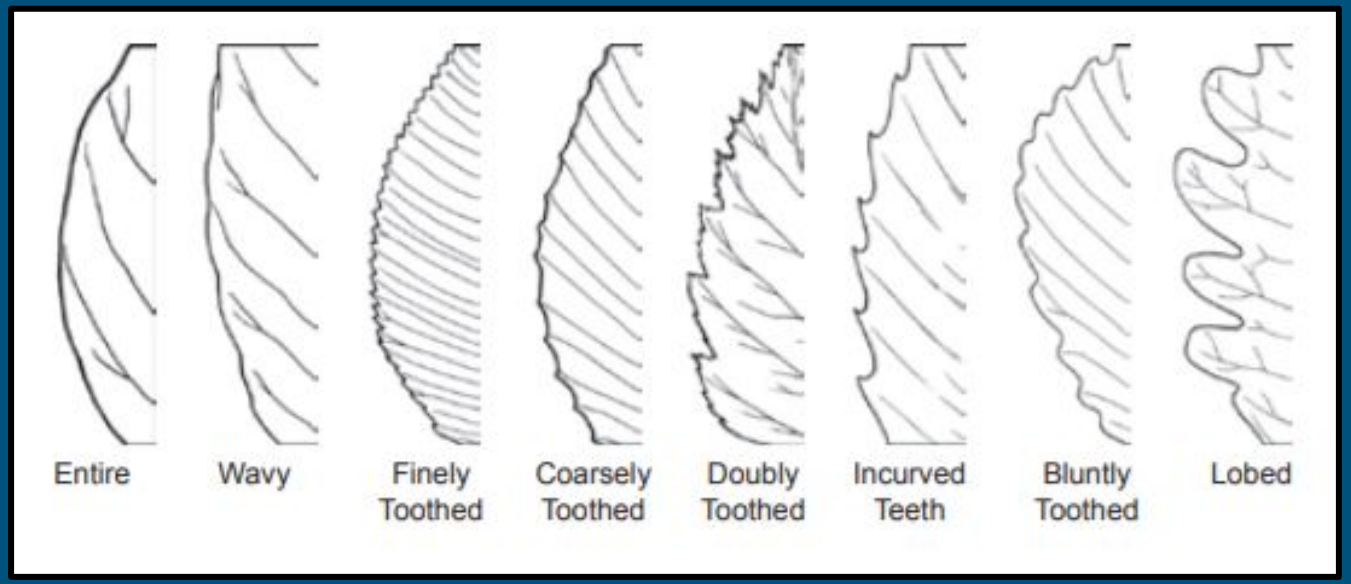
Dogwood

Horse Chestnut

MADHorse

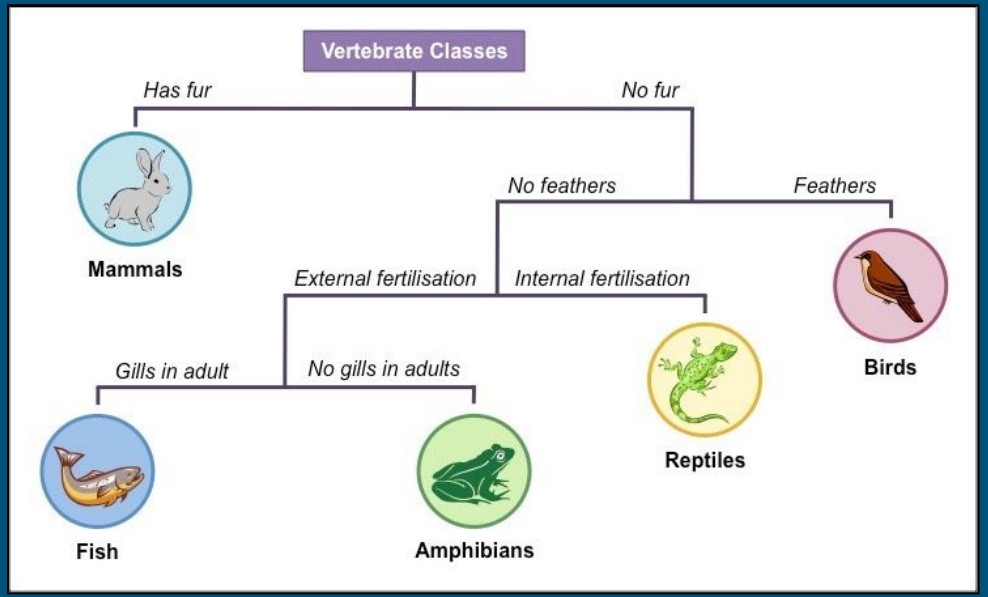


Types of Leaf Margins

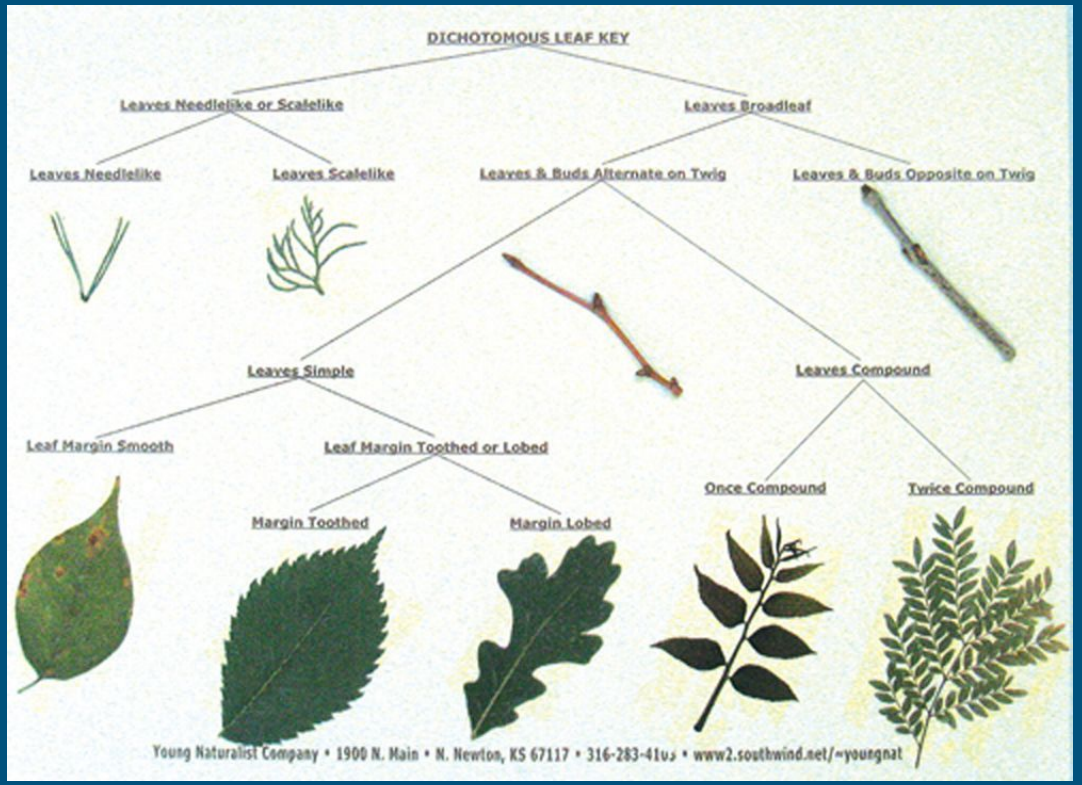


What is a dichotomous key?

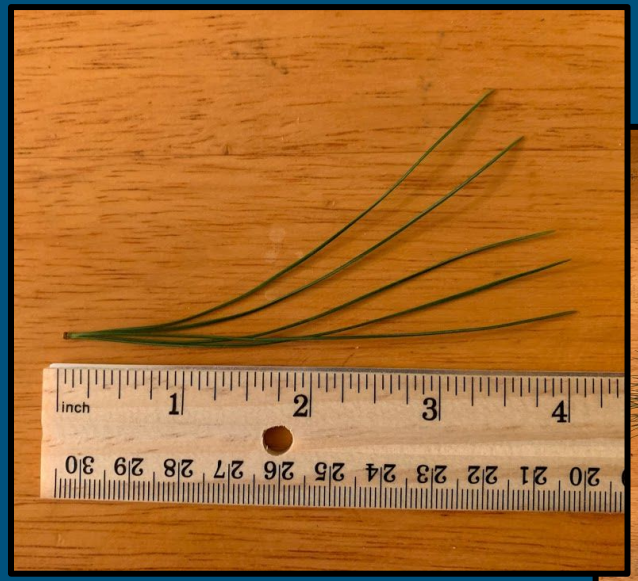
- Tool used to identify objects and organisms
- Series of statements consisting of 2 choices that describe characteristics



Activity: Dichotomous Key for Leaves



Specimen A

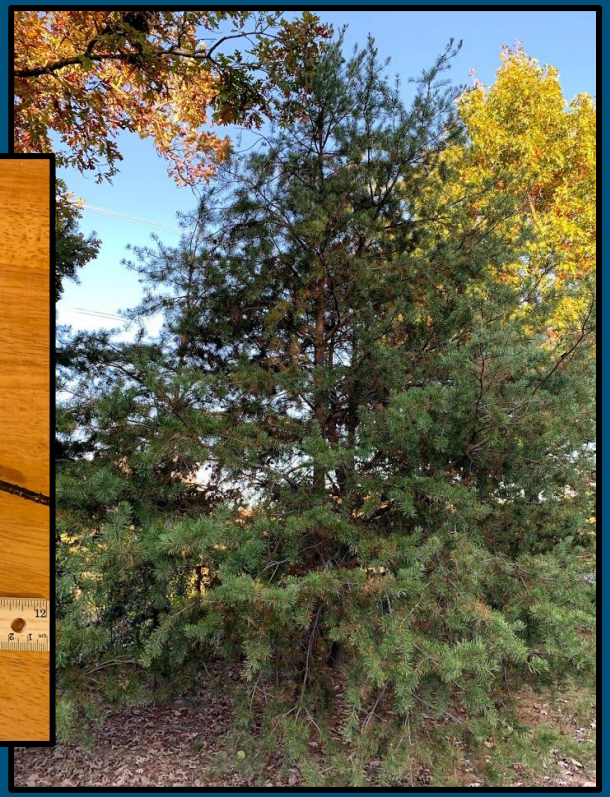


Location: Woodbridge, VA

Specimen B

Location: Fairfax, VA

Specimen C



Location: Woodbridge, VA

Specimen D

Location: Alexandria, VA

Resources

- Common Native Trees of Virginia, Virginia Department of Forestry (http://www.dof.virginia.gov/infopubs/Native-Tree-ID-spreads_2016_pub.pdf)
- Field Guide to Trees, National Audubon Society
- Trees of North America: A Guided to Field Identification

Answer Key to Specimens

A: 1a, 2a, 3a
Eastern White Pine (*Pinus strobus*)

B: 1b, 14b, 25b, 36b, 53a, 54a, 55b, 65b, 67a
American Holly (*Ilex opaca*)

C: 1a, 2a, 3b, 4b, 8b, 9a
Virginia Pine (*Pinus virginiana*)

D: 1b, 14b, 25b, 36a, 37b, 41b, 42b, 47b, 49a, 50b
Northern Red Oak (*Quercus rubra*)