



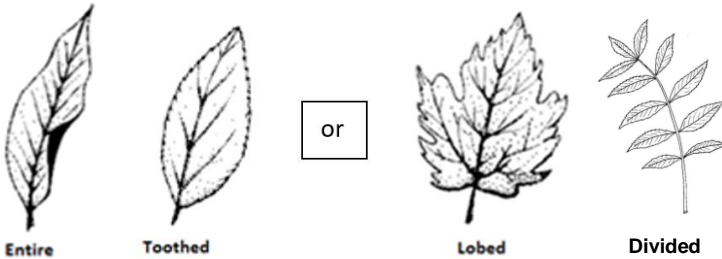
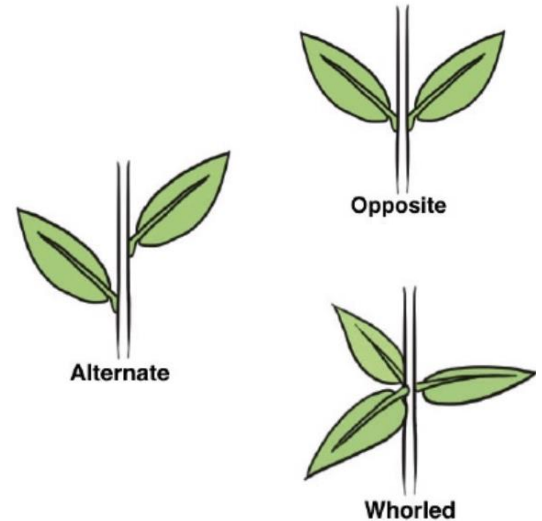
HOW TO MEET A WILDFLOWER

Three Things to Consider: Leaf Arrangement, Leaf Type, and Flower Type

1) Leaf Arrangement

Leaves branch off of stems at places called nodes, and the most common patterns you will see are:

- **Alternate arrangement:** one leaf per node
- **Opposite arrangement:** two leaves per node and leaves appear opposite each other
- **Whorl arrangement:** three or more leaves per node, arranged in a circle around the stem



2) Leaf Type

There are several common leaf types:

- **Entire:** leaves have smooth edges
- **Toothed or Lobed:** leaf edges have teeth or lobes; lobes can be shallow or deep, and either round or pointed
- **Divided:** leaves are separated into two or more leaflets, often called compound leaves

Other details that will help you:

Look at the shape and texture of the **stem**: Is it round or square? Is it smooth or hairy? There are two main kinds of stems:

- **Herbaceous Stem**- soft and flexible, usually found on plants that grow for only one season.
- **Woody Stem**- hard and strong, and can generally survive above ground in winter, like bushes.

Notice how the leaf is attached to the stem.

- **Basal** leaves are located at or near the base (or bottom) of the plant stem.
- **Stalked** leaves are attached to the stem with a stalk.
- **Sessile** leaves are directly attached to a plant stem and do not have a stem of their own.

Continued

3) Flower Type

Wildflowers exhibit three main types of flowers with many varying characteristics:

- **Irregular flowers:** petals often vary in shape and size from one another and flower lacks radial symmetry (it can be divided into two equal parts no matter how you draw the line)
- **Regular flower parts:** petals generally share the same shape, number, and size and flower has radial symmetry
- **Flower parts indistinguishable:** no visible petal-like parts or parts so small such that it is difficult to make out their number or arrangement



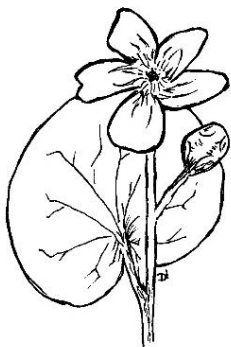
Regular flowers

Nightcap
(*Anemone nemorosa*
var. *quinquefolia*)
Found in woodlands



Irregular flowers

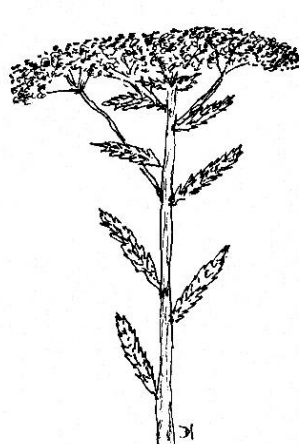
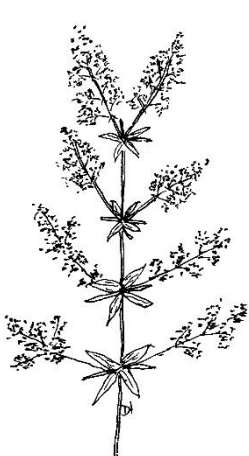
Common Blue Violet
(*Viola sororia*)
Found in meadows and
moist woods



Notice how the flowers are arranged. Are flowers on a stem by themselves like the Marsh Marigold, or in a cluster?

How do the flowers bloom? Do they start at the top, with flowers on lower stalks following? Or do the lower flowers bloom first and the flowers at the tip bloom last?

Raceme is a term for clusters of flowers on a stalk that is attached to a central stem, like Yellow Bedstraw and Dames Rocket. The flowers keep blooming at their tip.



Cyme is a term for a plant with a flat-top cluster of flowers, like yarrow.

Examples, left to right: Yellow Bedstraw, Dames Rocket and Yarrow *Illustrations by Dee Herbrandson*