

Plant Collection

The plant collection will be a major part of your grade. It is worth 100 points. The purpose of this collection is not to have you become an expert in identification of plants, but to reinforce some of the botany and classification that we studied in class. It should not require an excessive amount of time to collect but care should be taken to prepare a neat and professional collection.

Materials Needed:

1. 25 - 5 x 8 index cards. Each card will need to be stamped in the lower right hand corner with the collecting data for each sample. The stamp will be available through Mr. Mower Mr. Miller or Mr. Lawson.
2. Field guide for identification of plants. Mr. Mower Mr. Miller or Mr. Lawson will provide this.

Requirements:

Arrange your collection in the order given below. Only 5 of the 25 plants in your collection need to include scientific names.

1. **Gymnosperms**

- a. Needle-like leaves (pines, spruces, firs, etc.) (3)
- b. Scale or awl leaves (junipers, arborvitaes) (2)

2. **Angiosperms**

- a. *Monocots*
 - i. Grasses with flowering heads if possible (2)
 - ii. Flower of a monocot with petals (1)
 - iii. Fibrous root system (1)
 - iv. Your choice of non-grass monocot (1)
- b. *Dicots*

Woody plants (10 trees and/or shrubs)

 - i. Opposite leaf arrangement
 - ii. Alternate leaf arrangement
 - iii. Simple pinnate leaf
 - iv. Compound pinnate leaf
 - v. Simple palmate leaf
 - vi. Compound palmate leaf
 - vii. Flowering parts in 4's
 - viii. Flowering parts in 5's
 - ix. 2 of your choice

Herbaceous plants (5 annuals, weeds etc.)

 - i. Plant with a flower and a tap root
 - ii. Plant with white flowers
 - iii. Plant with pink or blue flowers
 - iv. 2 of your choice

Extra Credit:

5 additional plants may be done for extra points. Use the plant stamp and complete **all** of the information.