Deciduous Tree Identification Lab: Post-Lab Exercise

name_____

<u>Silhouette Matching</u>. The following images are a series of silhouettes for some common deciduous trees. The images are not scale. (1) Write the letter and scientific name of the appropriate tree or shrub below each of the diagrams below. (2) Write the common name for each species after the binomial in the list.

- a) Ulmus americana
- b) Acer saccharum
- c) Ostrya virginianum
- d) Tilia americana
- e) Populus grandidentata
- f) Populus tremuloides
- g) Betula papyrifera
- h) Aesculus glabra
- i) Quercus macrocarpa

- *j) Quercus rubrum*
- k) Catalpa speciosa
- I) Populus deltoides
- m) Ginkgo biloba
- n) Celtis occidentalis
- o) Gleditisia triacanthos
- *p)* Zanthoxylum americanum
- q) Quercus alba
- r) Acer saccharinum







1. In the space below, complete the sketches for Figure 1 and Figure 2.

| Fig. 1. Sketch a twig with 4 simple leaves, each leaf with an entire leaf margin. The leaves are attached to the stem alternately | Fig. 2. Sketch a pinnately compound leaf with 7 leaflets; each leaflet has a serrate leaf margin |
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- 2. How can you tell the difference between a tree and shrub?
- 3. What is a foolproof method to distinguish between a simple leaf and a compound leaf?
- 4. What is a bud?
- Name the family of woody plants at CSB/SJU that is represented by the greatest number of species (hint: see the checklist of species available at the following site: <u>http://www.employees.csbsju.edu/ssaupe/essays/trees_shrub_checklist.htm</u>).
- 6. Name the genus of woody plants at CSB/SJU that is represented by the greatest number of species.
- 7. Why are keys called "dichotomous"?
- 8. From what structures do branches arise?

9. Explain why non-botanists rarely ever see the flowers of most deciduous trees.

| 1 | warty bark; often infected with a "witches broom" |
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| 2 | acorns |
| 3 | shrub whose twigs are chewed to relieve a toothache (2 possible answers) |
| 4 | baseball bats |
| 5 | good for carving and honey |
| 6 | large brown inedible seeds often confused with edible ones |
| 7 | introduced shrub that has escaped into our woodlands |
| 8 | large heart shaped leaves; hard seeds attached to modified leaf, may be 'ski' dispersed |
| 9 | white or grayish peeling bark used extensively by Native Americans |
| 10 | fruit cluster makes a lemonade substitute |
| 11 | produces cyanide, glands on the leaf stalk |
| 12 | thorns on trunk of native tree; cultivated variety unarmed; fruits mastodon dispersed? |
| 13 | huge leaves, doubly compound, salmon- colored pith, hard seeds make a beverage |
| 14 | |
| 15 | understory tree with fruit clusters that look like flavoring produce for beer |
| 16 | seeds are eaten, husk and bark used to make a vegetable dye |
| 17 | common prairie tree, around farmsteads (more than one possible answer) |

Fill-in-the-Blanks: write the appropriate species in the blank