Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_

Kramarczyk/Wood Science 7

**Leaf Classification Project (50 points)**

**Directions:** Create a slide show showing the classification of three trees (from which you collected leaves). You may NOT work with a partner for this project. Follow these steps:

1. Determine the common name (ex: sugar maple) of your leaf using Mrs. Kramarczyk’s Leaf ID books in room 220, or another resource.

Note: “oak”, “maple”, “beech”, or “birch”, etc is **not** enough. You must determine the specific name for your leaf (ex: sugar maple).

1. Go to <http://plants.usda.gov> and find out the Kingdom, **Division** (Phylum), Class, Order, Family, Genus, and Species for your leaf.
2. Use the search box in the upper left corner of the page.
3. Change the drop down menu to Common Name, type the common name (ex: sugar maple) in the search box and click ‘GO’.
4. Click on your leaf’s name, then on the **Classification** tab.
5. TYPE (do not copy and paste) the classification information you need onto your slide (see below)
6. For any trees NOT found on the usda site, google the common or scientific name to find out the kingdom, phylum, class, order, family, genus, and species (KPCOFGS)
7. Create a slide for each of your three leaves that contains the following:
   1. One photo of as much of the tree as possible (1 point)
   2. One close up photo showing a leaf (1 point)
   3. The KPCOFGS for the tree (7 points) *(+1 point bonus if contains both Latin and English names)*
   4. The common name for the tree (1 point)
   5. One photo showing the tree’s berries or seeds (+1 bonus)
8. Design a taxonomic key specific to the three leaves you identified in this project. The key must be pairs of yes/no statements and must identify each of your leaves based on their physical characteristics. A student unfamiliar with your leaves should be able to use your key to correctly identify the leaves you found. Write the key on one of your slides. Be sure to use some of the leaf vocabulary words (lobed, toothed, etc…) (15 points)
9. Make a title slide with your name on it. (5 points)

Be sure to list the SOURCES for your classification information and images. Presenting to the class will be optional.

**You will work on this project in class and at home. The project is due by Wednesday, November 28 at 11:59 pm and must be emailed or shared to Mrs. Kramarczyk** [**dkramarczyk@socsd.org**](mailto:dkramarczyk@socsd.org)**. Late Penalty will be 5 points per day late, starting on November 29.**

**Leaf Classification Project Checklist (50 points)**

*Directions: Use this checklist to check your project before submitting it on Wednesday.*

|  |  |  |
| --- | --- | --- |
|  | **Points**  **Possible** | **Points**  **Earned** |
| **Title slide**  Includes name and project title.  Sources for images and data are included | **5** |  |
| **Leaf Slide 1**  Common name for the tree  Photo of the tree  Photo of the leaf  KPCOFGS\* for the tree | **1**  **1**  **1**  **7** |  |
| **Leaf Slide 2**  Common name for the tree  Photo of the tree  Photo of the leaf  KPCOFGS\* for the tree | **1**  **1**  **1**  **7** |  |
| **Leaf Slide 3**  Common name for the tree  Photo of the tree  Photo of the leaf  KPCOFGS\* for the tree | **1**  **1**  **1**  **7** |  |
| **Original Taxonomic Key**  Write an original taxonomic key to identify the three  leaves in your slide show. Key must be in proper format  and correctly identify your three leaves based on their  physical characteristics (but not color)  Include an unlabeled picture of each of your leaves on  this slide as well | **12**  **3** |  |
| **Extra Credit**  Including Latin and English names for KPCOFGS  Including a photo of berries, flowers, or seeds, for a tree | **(+6 maximum)**  **+1 for each extra credit for each tree** |  |

**\*KPCOFGS stands for kingdom, phylum (division), class, order, family, genus, and species. Make sure you get the species for your leaf! If plants.usda.gov doesn’t list a species for your common name, then your common name is not specific enough (ex: you wrote Cottonwood instead of Eastern Cottonwood)**