**Plant Identification**

**I. Taxonomy**

 **1. Define the term taxonomy.**

 Taxonomy –

 **2. Circle the letter of each sentence that is true about early efforts at naming organisms.**

 a. Names were usually in English.

 b. Names often described detailed physical characteristics of a species.

 c. Names could be very long.

 d. It was difficult to standardize the names.

 **3. Who developed the modern classification system of organisms?**

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **4. Define the term binomial nomenclature.**

 Binomial Nomenclature –

 **5. Circle the letter of each sentence that is true about binomial nomenclature.**

 a. The system is no longer used today.

 b. Each species is assigned a two-part scientific name.

 c. The scientific name is always written in italics.

 d. The second part of the scientific name is capitalized.

 **6. Identify the genus and species names of a red maple*, Acer rubrum*.**

 Genus = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Species = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **7. List the remaining seven taxonomic levels** *(from general to specific)***.**

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - contains phyla

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - contains classes

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - contains orders

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - contains families

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - contains genera

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - contains species

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - individual species

**II. Leaves & Shoots**

 **1. Identify the differences between the following leaves and draw each type of leaf.**

 Simple Leaf : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Compound Leaf : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Bi-pinnate Leaf : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Palmate Leaf : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **2. Draw a picture of an orbicular leaf and a serrated leaf.**

 Orbicular Leaf Serrated Leaf

 **3. What is the difference between alternate, opposite, and whorled petiole arrangements?**

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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 **4. Define the following shoot identification terms.**

 Bundle Scar -

 Lateral Bud -

 Terminal Bud -

**III. Flower Parts**

 **1. Match the following flower parts with the correct definitions.**

 1. \_\_\_\_\_ Anther A. Structure in which female gametophytes form

 2. \_\_\_\_\_ Carpel B. Circle of flower parts that enclose a bud before it opens

 3. \_\_\_\_\_ Filament C. Brightly colored; Attracts insects to flowers

 4. \_\_\_\_\_ Ovary D. Male part of the flower; Made up of anther & filament

 5. \_\_\_\_\_ Ovule E. Long, thin structure that supports the anther

 6. \_\_\_\_\_ Petal F. Part with no differentiation between petals and sepals

 7. \_\_\_\_\_ Sepal G. Structure in which male gametophytes form

 8. \_\_\_\_\_ Stamen H. Female part of the flower; Made up of stigma and style

 9. \_\_\_\_\_ Stigma I. Flower structure that contains one or more ovules

 10. \_\_\_\_\_ Style J. Narrow stalk of the carpel in a flower

 11. \_\_\_\_\_ Tepal K. Sticky portion at top of style; Where pollen grains land

 **2. Draw a picture of an inferior flower ovary and superior flower ovary.**

 Inferior Ovary Superior Ovary

 **3. Give an example of each type of botanical fruit.**

 **Simple Fruits**

 Fleshy Dry, Indehiscent Dry, Dehiscent

 Berry : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Achene : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Capsule : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Drupe : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grain : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Follicle : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Pome : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Nut : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Legume : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Samara : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Silicle : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Schizocarp : \_\_\_\_\_\_\_\_\_\_\_\_ Silique : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **Complex Fruits**

 Aggregate : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Multiple : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_