**Plants - Study Guide** Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Structure/Function of a Plant**

**Directions**: Use the image to match the plant part to its name (A-D) and function (1-4). Write the correct letter and number on the line.



**Plant Structure:**

A – Stem B – Root

C – Leaf D – Flower

**Plant Function:**

1 – produces energy (solar panels)

2 – produces seeds and attracts pollinators

3 – supports plant and takes in water and nutrients

4 – supports leaves and is the transportation system for water and nutrients

**Structure of a Flower**



\_\_\_\_\_\_ anther \_\_\_\_\_ filament \_\_\_\_\_ovary \_\_\_\_\_ ovule

\_\_\_\_\_ petal \_\_\_\_\_ sepal \_\_\_\_\_ stigma \_\_\_\_\_ style

**Survival, Reproduction or Defense?**

**Directions**: Check all functions that apply for each part of a plant and flower.

|  |  |  |
| --- | --- | --- |
| **Survival** | **Reproduction** | **Defense** |
| **Plant Structure**\_\_\_\_ root \_\_\_\_ stem\_\_\_\_ flower \_\_\_\_ leaf**Flower Structure**\_\_\_\_ anther \_\_\_\_filament\_\_\_\_stigma \_\_\_\_ style\_\_\_\_ovary \_\_\_\_ ovule\_\_\_\_ sepal \_\_\_\_ petal  | **Plant Structure**\_\_\_\_ root \_\_\_\_ stem\_\_\_\_ flower \_\_\_\_ leaf**Flower Structure**\_\_\_\_ anther \_\_\_\_filament\_\_\_\_stigma \_\_\_\_ style\_\_\_\_ovary \_\_\_\_ ovule\_\_\_\_ sepal \_\_\_\_ petal  | **Plant Structure**\_\_\_\_ root \_\_\_\_ stem\_\_\_\_ flower \_\_\_\_ leaf**Flower Structure**\_\_\_\_ anther \_\_\_\_filament\_\_\_\_stigma \_\_\_\_ style\_\_\_\_ovary \_\_\_\_ ovule\_\_\_\_ sepal \_\_\_\_ petal  |

**Photosynthesis, Respiration or Transpiration?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ -** When plants use carbon dioxide, water and light to create their own food (sugar) and release oxygen into the air.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - When sugars stored in a plant is used as energy for GROWTH, REPRODUCTION or REPAIR.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - When water vapor escapes a leaf from the stomata under the leaf

**Formulas – Photosynthesis or Respiration?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ -** 

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ -** 

**Phloem or Xylem?**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - Transports water and nutrients UP from the roots to the leaves.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - Transports food (sugar) DOWN from the stem to areas of growth.

**Stomata or Guard Cells**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - Opening (pore) in the leaf where water vapor escapes

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - Controls the opening in the leaf