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

**Structures and Functions of Plants Study Guide**

 An **organism** is any living thing. What organism could this diagram represent?

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

 Plants and animals go through predictable life cycles. Match the picture with the stage in the life cycle of a plant by writing the letter that identifies it.

|  |  |
| --- | --- |
| 1. birth
2. growth
3. development
4. reproduction
5. death
 | Diagram of Life Cycle of a Plant |

 The different structures in a plant are responsible for the functions that keep the plant alive. List examples of plant part(s) that provide each of these functions.

|  |  |
| --- | --- |
| Food Production |  |
| Support |  |
| Water Transport |  |
| Reproduction |  |
| Growth |  |
| Protection |  |

**Characteristics** or **Properties** are features that belong to something. A triangle has three sides. A cat has claws. Eyes and hair have color. Some characteristics of living things are inherited from the parents. When something is inherited it is not affected by the climate or the environment. A flower’s color is inherited, but an insect chewing holes in its leaves is not.

Put an X next to each of the following characteristics that are inherited and not caused by the environment.

|  |  |
| --- | --- |
|  | A bird lays 8 eggs but only 6 hatch. |
|  | A tree has white flowers in the springtime. |
|  | A dog has brown eyes. |
|  | Some of a plant’s leaves are brown and wilted |
|  | Roses are red, violets are blue |
|  | A bean seed has mold on it |



What plant part is recognizable at this stage? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If it continues to grow normally what will develop next?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

Why do the roots grow down?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Why do the stems and leaves grow toward the light? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

Number these plant parts in the order in which they develop in a plant’s life cycle.

\_\_\_\_\_\_ Fruits \_\_\_\_\_\_ Flowers

\_\_\_\_\_\_ Roots \_\_\_\_\_\_ Stem

\_\_\_\_\_\_ Leaves \_\_\_\_\_\_ Seeds



**Label**

Label them and explain the **function** (what it does for the plant) of each **structure** (plant part).

1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_