**Plant Guided Reading**

**Use the word bank below to fill in the blanks in the reading.**

**Word Bank:**

|  |  |  |  |
| --- | --- | --- | --- |
| angiosperms  cones  cuticle  dispersal | growth  gymnosperms  multicellular, eukaryote  nonvascular | nutrients  photosynthesis  protected  protection | roots  vascular tissue  water  water |

A plant is a ­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The stems and leaves of most plants have a waxy waterproof coating called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The waxy cuticle creates a barrier that helps prevent the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the plants tissues from evaporating into the atmosphere.

The leaf is a plant organ that grows from a stem and usually is where \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ occurs.

Plants take in water and nutrients from the soil with their \_\_\_\_\_\_\_\_. They contain tissues that transport nutrients to the stem. Roots anchor a plant in the ground.

A stem is a plant organ that provides structure for \_\_\_\_\_\_\_\_\_\_. It contains tissues for transporting food, water and other minerals.

The stems of most plants contain \_\_\_\_\_\_\_\_\_\_\_ tissues. These are made up of tubelike, elongated cells through which water, food and other materials are transported. Plants that possess vascular tissues are known as vascular plants.

*There are two types of vascular tissues: xylem and phloem*

*-xylem: is a plant tissue used for transporting \_\_\_\_\_\_\_\_\_\_\_\_ to the rest of the plant*

*-phloem: is a plant tissue used for transporting \_\_\_\_\_\_\_\_\_\_\_\_\_*

Mosses, hornworts and liverworts are classified as \_\_\_\_\_\_\_\_\_\_\_\_\_\_ plants since they do not have tissues that help transport water and nutrients. Water and nutrients must travel from one cell to another by the processes of osmosis and diffusion.

Vascular plants can live farther away from water than nonvascular plants. They can also grow much larger than nonvascular plants because of thickened cells called fibers that help support growth.

A seed consists of an embryo and its food supply enclosed in a tough, protective coat. The seed contains a supply of food to nourish the young plant during the early stages of growth. The food is used by the plant until its leaves are developed enough to carry out photosynthesis. The embryo is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ during harsh conditions by a tough seed coat. The seeds of many species are adapted for easy \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to new areas. Then the new plants do not have to compete with their parent plant for sunlight, water, soil, nutrients and living space.

In some plants, seeds develop on the scales of woody parts called \_\_\_\_\_\_\_\_\_\_\_\_\_. This group of plants is referred to as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The term gymnosperm means “naked seed” and is used with these plants because their seeds are not protected by a fruit.

Flowering plants, called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ produce seeds enclosed within a fruit. The fruit provides \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for seeds and aids in seed dispersal.