

Chapter Two

Science Study Guide

Vocabulary:

Photosynthesis: The process in which plants make their own food (sugar)

Chlorophyll: The green material in plants that captures energy from sunlight for photosynthesis

Sepal: The leaf-like parts that cover and protect the flower bud

Pistil: The female structure in plants that produces egg cells

Stamen: The male part of the flower that makes tiny grains of pollen at their tips

Ovary: The thick bottom part of the pistil

Fertilization: The process by which an egg cell and a sperm cell combine and develop into a seed

Dormant: A state of rest when a seed does not get what it needs

Key Points:

- ✓ Plants can be pollinated by the wind, insects, birds, and other animals.
- ✓ Stems carry materials, such as water, minerals, and food, and hold the leaves of a plant so they can catch sunlight. The stem is an organ that carries materials and also supports the plant.
- ✓ In order for a seed to germinate, it needs water, oxygen, and the right temperature.
- ✓ Grafting works only if the tubes that carry water, mineral nutrients, and food between the two plant parts match up. Then, new tubes can grow together.
- ✓ Spores are scattered when spore cases burst and spores head in every direction.
- ✓ All plants are made of cells.
- ✓ A fibrous root system has no main root. Roots and root hairs stretch out in many directions.
- ✓ A taproot system has a large main root and it grows straight down. The taproot absorbs water and nutrients from the soil.
- ✓ Stomata are on the underside of the leaves and let oxygen, carbon dioxide, and water pass into and out of the leaf.
- ✓ Leaves produce food for the plant.
- ✓ Flowering plants and conifers both reproduce by means of seeds.