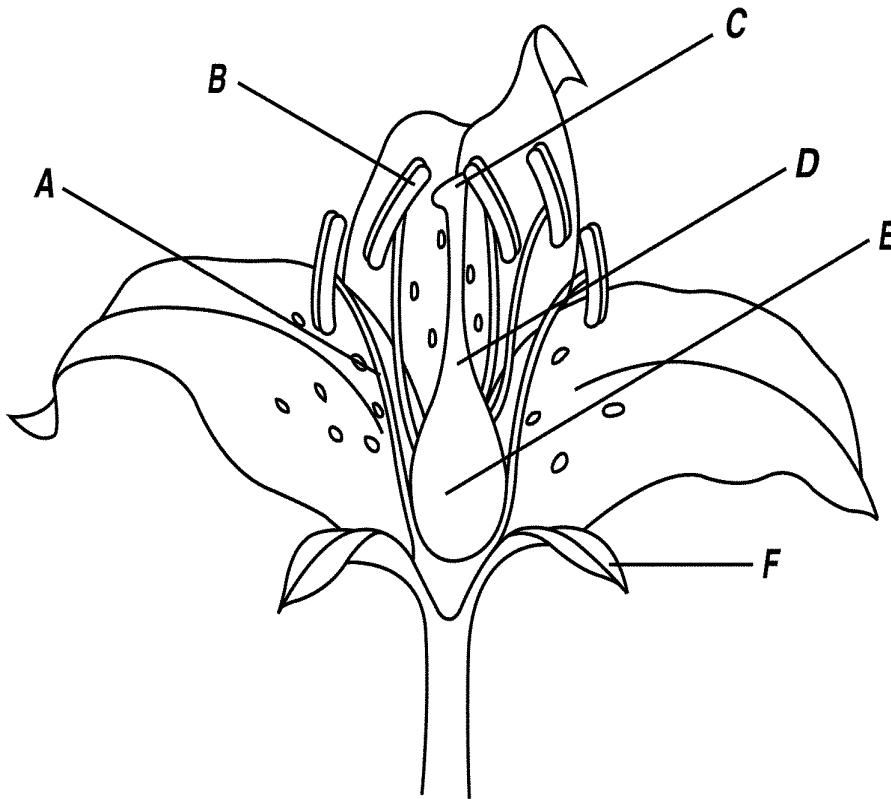


Flower Reproductive Structures



Which letters make up the pistil? Write the letters and plant parts in pink.

Which letters make up the stamen? Write the letters and plant parts in blue.

Flower Structure and Reproduction

Flowers are the plant's reproductive structures. Angiosperms are types of plants that bear fruits and flowers. Flowers are usually both male and female, and are brightly colored to attract insects to help carry pollen used for sexual reproduction. Not all flowers are colorful. These flowers usually use the wind for pollination. Gymnosperms use cones to reproduce and don't produce flowers.

Parts of the Flower

Sepals are leaf like structures that surround and protect the flower before it blooms. *Color the sepals (F) green.* **Petals** are the colorful part of the flower attracts insects and even other small animals, such as mice, birds, and bats. *Color the petals a bright color of your choice.* All angiosperms have flowers, but some are not brightly colored. The petals of these flowers are reduced or absent and depend on wind or water for pollination.

The female reproductive parts are combined to form the **pistil**. The **stigma** at the top of the pistil is often sticky and is where the pollen attaches. *Color the stigma (C) purple.* The style is the long tube that attaches the stigma to the ovary. Sperm from the pollen will travel down this tube to the ovules. The ovules, or eggs, are stored in the ovary until they are fertilized. Plants can only fertilize eggs of the same species. Special chemicals prevent sperm from fertilizing the eggs of flowers the eggs that are not the same kind. *Color the style (D) red and the ovary (E) pink.*

Flower Reproductive Structures

The male reproductive structures are called the stamens. Each stamen consists of an **anther** which produces pollen, and a **filament** which supports the anther. *Color the anther (B) dark blue and the filament (A) light blue.* Pollen produced by the anther is carried by insects or other animals to the pistil where it may fertilize the eggs.

Plant Reproduction

Sexual reproduction in plants occurs when the pollen from the anther is transferred to the stigma. Plants can fertilize themselves: called self- fertilization. Self-fertilization occurs when the pollen from the anther fertilizes the eggs on the **SAME** flower. Cross-fertilization occurs when the pollen is transferred to the stigma of an entirely **DIFFERENT** plant. Nearly all plants undergo sexual reproduction.

Asexual reproduction- the prefix of asexual reproduction means "without", so asexual reproduction means reproduction without sex. An example would be taking a cutting from a plant and growing a new plant or the runner off of a strawberry plant to produce a new plant.

When the ovules are fertilized, they will develop into seeds. The petals of the flower fall off leaving only the ovary behind, which will develop into a fruit. There are many kinds of fruits, including apples, oranges, and peaches. A fruit is any structure that encloses and protects a seed, so fruits are also "helicopters", acorns, and bean pods. When you eat a fruit, you are actually eating the ovary of a flower.

Focus Questions

What are the 2 plant types?

_____, _____

What are the 4 main plant organs?

_____, _____, _____, _____

What are the male parts of a flower?

What are the female parts of a flower?

Why is it important that the stigma be made of a sticky material?

What is the purpose of the anther and ovule?

What is pollination, name three ways pollen can be transferred?

How is cross-pollination different from self-pollination?

Compare and contrast asexual and sexual reproduction.