

Reproduction in Flowering Plants

Flowering plants generate pollen, ovules, seeds, and fruit.

Normally, we associate flowers with a nice smell. But one type of flower, called a *carrion flower*, smells like rotting flesh. The smell of the carrion flower attracts flies. When flies crawl into the stinking flower looking for a meal, they brush up against the *anthers* of the flower which contain pollen. The flies fly out, carrying the pollen with them. When they land on another carrion plants flower, they brush up against the *stigma* and leave pollen behind!

Angiosperms

Angiosperms—the _____ plants, were the last of the seed plants to _____. They appeared around 100 million years ago during the age of the dinosaurs and probably descended from a _____ (cone-bearing) ancestor.

What are flowers?

A flower is the reproductive _____ of angiosperms. Flowering plants reproduce by _____, the transfer of pollen, containing _____, to the female part of the flower. Since plants cannot _____, they have evolved adaptations to ensure successful pollination. In many plants, the sperm from one plant must fertilize the egg of another plant. This ensures _____.

Over millions of years, a variety of flowers have evolved, many with unique _____ for pollination. Some involve _____ or birds while others involve _____, gravity, and other factors.

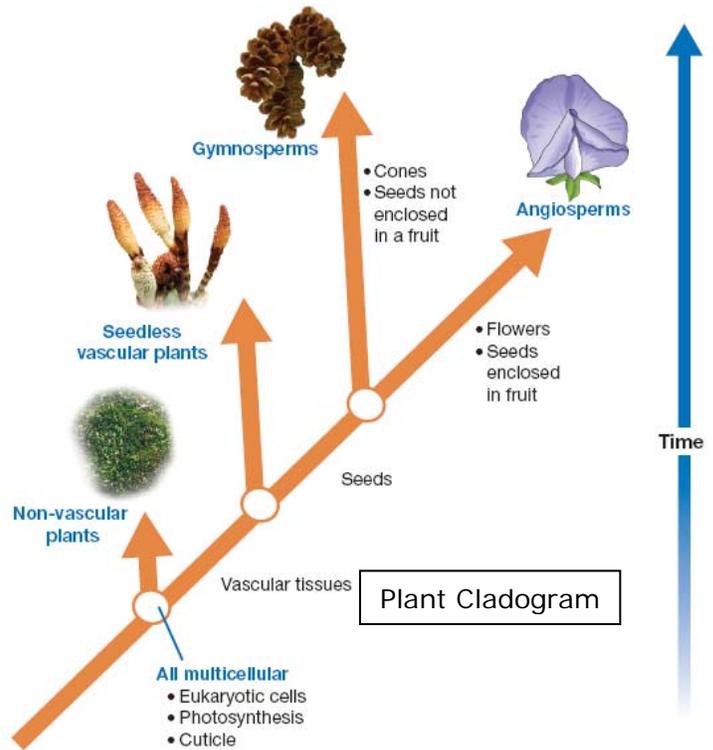
Today, there are about 250 million species of flowering plants—more than any other group of plants. Many flowers are beautiful and are used to celebrate important events. But as far as plants are concerned, flowers are used for one purpose: _____.

Flower Parts

The flower parts are usually arranged in a ring around the _____ parts of the flower, called the pistil. _____ make up the bottom ring of flower parts and are modified _____. Petals are the colorful part of the flower (sepals are sometimes colorful too). Petals often help the plant reproduce by _____ insects or birds. The petals of the carrion flower are red and spotted and resemble rotting flesh!

Male flower parts

The male part of the flower is called the _____. The stamen consists of the anther, pollen, and filament. The _____ is a thin stalk that holds an anther. Each _____ produces grains of _____. Pollen is the reproductive spore that contains _____.



Female flower parts

The female part of the flower is called the _____. The pistil consists of the __, style, ovary, and ovules.

A flower may have one or more _____. They are usually in the _____ of the flower. The tip of the pistil is called the s_____. The stigma attracts and holds grains of _____. Stigmas are often sticky or feathery. Below the stigma is the _____. The style connects the stigma to the _____. The ovary is located at the base of the pistil and contains one or more _____. Each ovule contains one _____. If fertilization occurs, each ovule develops into a seed and each ovary develops into a _____.

