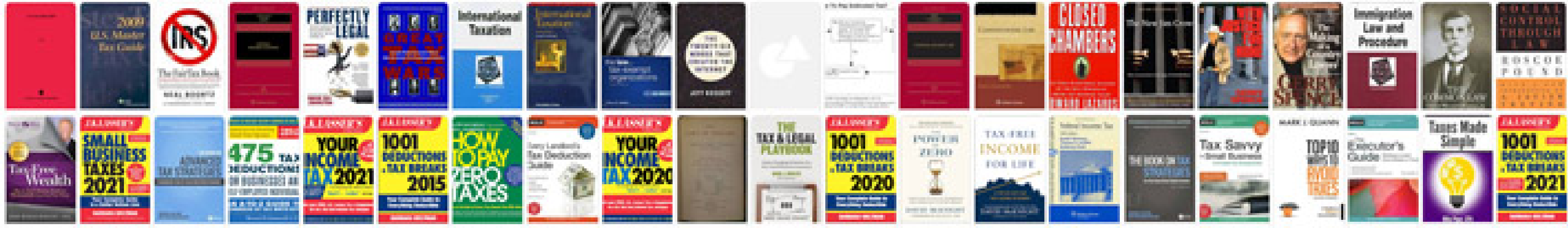

Diagram showing parts of a flower

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In addition to being beautiful, flowers have the important job of creating seeds. Just about all fruits and vegetables come from seeds. For instance, peach trees bloom in spring with flowers. Those blooms eventually turn into peaches. Look closely at a peach blossom, and you can see the various parts of a flower. All these flower parts each have a specific function that allows the flower to bloom and then eventually become fruit or seed. Petals are the pretty part of the flower that gives it its shape and form. Petals come in a wide variety of colors. These may include:. Petals do the job of attracting pollinating insects and creatures to the flowers. These include bees, butterflies, birds and bats. Such creatures aid in fertilization. The sepal consists of small leaves growing at the base of the petals. They protect the flowers before they bloom. The sepals also help hold the flowers in place on the plants. The peduncle is the flower stalk. The flower is located at the top of the peduncle. The peduncle is also known as the stem. This is the part of the plant that's trimmed to produce cut flowers. Pistil: The female part of the flower, the pistil is located at the center of the bloom. The pistil contains the stigma, style and ovary. Stigma: The stigma is located at the tip of the pistil. This is the part of the flower that's sticky and collects pollen. The pollen initiates fertilization so that seeds can be created. Ovary: Of all the parts of a flower, this is one of the most important. The ovary is located at the base of the flower. It has seeds inside known as ovules. These ovules are what turn into fruit. The stamen is the male part of a flower. In a flower diagram, stamen are located on both sides of the pistil. The stamen consists of two parts:. Filament: The filament is the stalk attached to the flower that holds the anther. The stamen's function is to produce male reproductive cells. When pollinating insects, such as bees and butterflies, go to the flower for pollen, they also visit the stigma. This will fertilize the flower. When pollen gets to the stigma, a tube grows down the style. This tube enters the ovary. The male reproductive cells from the anther travel through the tube and join the ovule, fertilizing it. As mentioned, many flowers have both male stamen and female pistil parts. This enables a flower to create seeds and fruit all on its own that can then be pollinated with the help of insects, birds or other creatures. Flowers that have a pistil and stamen and can reproduce on their own are known as perfect flowers. Other types of flowers only have male or female organs. With these types of flowers, another flower of the opposite sex is needed to produce seeds and fruit. Such flowers are known as imperfect flowers. Julie Bawden-Davis is an accomplished writer, who specializes in home and garden. The receptacle is the thickened section at the bottom of the flower that holds its organs. Style: The style is the long stalk that supports the stigma. Anther : The anther is the head of the stamen. It produces pollen. About the Author. Copyright Leaf Group Ltd. The sole purpose of flowers is sexual reproduction, therefore ensuring the survival of the species. Many flowers that rely on pollinators, such as birds and butterflies, have evolved to have brightly colored petals and appealing scents as a way to attract the attention of the pollinators. Flowers that are pollinated by the wind do not need to be as showy in order to survive and, therefore, wind-pollinated flowers are typically duller in both aesthetics and scent. Although all flowers are different, they have several things in common that make up their basic anatomy. The four main parts of a flower are the petals, sepals, stamen, and carpel sometimes known as a pistil. If a flower has all four of these key parts, it is considered to be a complete flower. If any one of these elements is missing, it is an incomplete flower. The reproductive parts of the flower that are necessary for seed production are the stamen the male organ and carpel the female organ. If a flower has both of these parts, it is called a perfect flower, even if it lacks some of the other key parts. If a flower has only one of the reproductive parts, either a stamen or carpel, it is considered to be an imperfect flower. Furthermore, plants that have imperfect flowers can be broken up into two categories. These are monoecious and dioecious. Monoecious plants have imperfect flowers, both male and female, on the same plant. This means that some of the flowers on the same plant will only have a functioning stamen but lack carpel, while other flowers on the same plant will have the reverse situation: functioning carpel but not stamen. These plants make life easier for themselves, and for the gardener, as they are self-pollinating and are therefore able to bear fruit and produce seed on their own. Dioecious plants have imperfect male and female flowers on separate plants, so one plant will have all-female imperfect flowers with carpel and no stamen, while another plant of the same type will have all-male imperfect flowers: functioning stamen but no carpel. Sepals are the exterior parts of a flower that protect the interior flower while it emerges. Sepals are typically green and leaf-like, as they are in fact modified leaves, but it is possible for them to be almost any color depending on the type of plant. The sepal is the first part of the flower to grow, forming at the uppermost end of a stem. The sepal creates a bud around the emerging flower, and its key responsibilities are to protect the flower as it grows and prevent it from drying out. Not all flowers have sepals, and in some cases, the sepals are modified into bracts that surround the flower. They are often brightly colored, and in many cases, the bract draws more attention than the flower itself. Petals exist to draw pollinators to the flower. It is for this reason that they are often brightly colored, showy, and of interesting patterns and sizes. The petals together form what is known as the corolla of the plant. Petals are probably the part of the flower that has most variation from plant to plant. Not only do they differ in color, size, and shape, but some petals form in several layers to create very full-looking flowers, while others appear to not have separate petals, but instead are one solid petal. The stamen is the male reproductive organ of a flower. Each stamen contains two main parts. The filament is the long cylindrical tendril part of the stamen, while the anther is a sac that sits at the top of the filament. The function of the filament is simply to hold up the anther, extending it up to an accessible part of the flower for pollinators reach, or for the wind to disperse the pollen. The anther is where the pollen is produced, and each anther contains many grains of pollen that each have the male reproductive cells present in them. Each flower can have just a few stamens, or hundreds of them. The function of the stamen is to produce pollen and make it available for pollinators to allow reproduction. When a pollinator, such as a bee or a bird, touches the anther the pollen will stick to them, and then get transported to other flowers they visit. This is where the carpel comes in Oregon State University Extension. The carpel, which is also sometimes called the pistil, is the female reproductive organ of a flower. Each carpel is usually bowling pin-shaped, and features a sac at its base in the center of a flower, and this sac is the ovary that produces and contains developing seeds, or ovules. Moving upward, the ovary extends to support a style, that is a tube-like structure leading up to the stigma at the very top. The stigma features a flat surface with a sticky texture, that is ideal for capturing pollen that has been transported to the stigma of the flower by wind or pollinating insects and birds. Upon arriving on the stigma, pollen will germinate to produce a pollen tube down the style. When it reaches the ovary sac, the pollen tube fertilizes the ovules. At this point, pollination is complete. A fertilized ovary swells to protect the developing seeds and transforms the flower into a fruit. Inside the fruit, a fertilized ovule becomes a seed, from that the plant can be sown and an entirely new plant created University of Illinois Extension. The corolla presents differently in different types of flowers, but it always makes up the inner perianth that immediately surrounds the reproductive part of the plant. Typically, the corolla is made up of a circle of distinct petals, but it can also be formed from one solid petal in the case of petunia. It may also be lobed or layered in the case of some roses, which can be referred to as double or even triple blooms with many layers of petals. The corolla attracts pollinators to the plant with its vivid coloring and interesting scents, except for in the case of flowers that are pollinated by the wind. Wind-pollinated flowers have not needed to evolve to attract birds or insects for the survival of the species and, therefore, their corollas are often plain or dull. The filament is the thin tubular part of the stamen that extends and supports the pollen sac at the top. The ovary produces and contains unfertilized seeds. It sits centrally inside the flower at the base of the carpel. Once fertilized, it is the ovary that develops into the fruit of the plant. Ovules are contained within the ovary, and in the event of successful pollination, they will become the seed of the fruit. The anther sits at the top of the filament of a stamen and produces and contains the pollen. A bract works similarly to a sepal on plants that do not have sepals. It is a modified leaf that looks more like a petal than a leaf, as it is usually brightly colored and shaped differently to other leaves on the plant. The style is the elongated part of a carpel that joins the ovary to the stigma. It is the tube through which pollen is delivered to the ovary. The stigma sits at the top of the carpel, and its job is to capture pollen. It is often sticky in texture or contains tiny hair-like structures to help pollen adhere to its surface. A receptacle sits at the top of a stalk underneath the main portion of the flower. It is often enlarged to support the weight of the flower, or the fruit when it develops. Its main function is to both connect the stalk to the flower and to support the flower. A peduncle is the stalk of a flower, or the stem from which a cluster of flowers bloom. A pedicel is the secondary stalk from which flowers grow off the main stem. Only plants that have inflorescence in the form of clusters or similar will have pedicels. A perianth is the scientific term for the parts of the flower that surround the reproductive organs. The perianth can be divided into two segments, the inner perianth and the outer perianth. The inner perianth is usually composed of the corolla, which is made up of a series of petals. The outer perianth is the calyx, which is typically made up of sepals. The purpose of the perianth as a whole is to protect the flower as it develops, protect the fully grown reproductive organs, and to lure pollinators to the flowers for the purpose of pollination and reproduction, ensuring the continuation of the species. The calyx is the technical term for a group of sepals, leaf-like structures that surround and protect the bud as it forms into a flower. This was quite useful, as I am writing a science story in which I want to incorporate accurate science facts on plant anatomy. The explanations were clear and I appreciated the tables. What I wanted some clarification on was the table under the explanation for monoecious vs dioecious, the headings still read perfect and imperfect. Thanks for the clarification. Your Name. Email The content of this field is kept private and will not be shown publicly. Save my name, email, and website in this browser for the next time I comment. Complete vs. Incomplete Although all flowers are different, they have several things in common that make up their basic anatomy. Albertha Joseph-Alexander says:. November 9, at am. Debbie says:. February 17, at am. Add new comment Cancel reply Your email address will not be published. Your Name Email The content of this field is kept private and will not be shown publicly. Homepage Comment Save my name, email, and website in this browser for the next time I comment. A flower is a reproductive part of a plant. It helps in sexual reproduction as it has male parts and female parts. A fully opened flower has the following parts:. Stalkâ€" A flower is attached to the shoot by means of stalk or pedicel stalk. The tip of the stalk is swollen or flattened. This is called torus or thalamus or receptacle. The different parts of a flower are inserted on the thalamus. There are usually four whorls as. Question Papers. Textbook Solutions Important Solutions 5. Question Bank Solutions Time Tables. Answer in Brief. What is a flower? Draw a neat labelled diagram showing the L. Advertisement Remove all ads. Solution Show Solution A flower is a reproductive part of a plant. A fully opened flower has the following parts: Stalkâ€" A flower is attached to the shoot by means of stalk or pedicel stalk. These are leaf like and green in colour. This is the outer covering of the flower and form outer whorl in a flower. The Calyx sepals enclose the inner parts of the flower when it is a bud. It is protective in function. These are usually coloured, gaudy, or white in colour and scented and give sweet smell. The value of a flower is due to the attractive colour of the petals. These attract the insects for pollination. This third whorl is called Androecium. These are the male parts of the flower. Each stamen is formed of a long narrow, hair like structure called filament. On its tip it bears, a rounded broad sac like structure called anther. Each anther has two anther lobes. Each anther lobe has two pollen sacs which have powdery mass called pollen grains. It is lodged on the thalamus and forms the female part of a flower. This whorl of carpels is called gynoecium. Each carpel or pistil has three parts. It is attached to the thalamus. The ovaries contain ovules which later turn into seeds after fertilization and the ovary wall forms the fruit sometimes the thalamus also becomes a part of the fruit as in apple. Concept: Sexual Reproduction in Flowering Plants. Share 0. Select a course. My Profile. My Profile [view full profile]. Inform you about time table of exam. Inform you about new question papers. New video tutorials information. There are many different types of flowers but most of them have the same basic parts. Plant flowers contain female parts called pistil and male parts called stamen which allow the plant to reproduce. The flower is attached to the stalk which is a central shoot that also holds the leaves. The function of the stem is to support the plant and transport nutrients to the leaves and flowers. Of course, flowers and plants have many other parts, each with its own specific function. In this guide to the parts of flower and plant, you will learn what makes them so amazing. After all, we all use different plant parts in our diet and for their healing benefits. This article includes anatomy illustrations of the flower, stem, pistil, sepal, stamen and more. This is an extensive guide that includes 7 plant and flower diagrams illustrating their different parts. Botanically, a flower is considered to be complete flower if it contains the four main parts of a flower: petals, sepals, stamen, and carpel also known as a pistil. If a flower lacks any one of these parts, it is an incomplete flower. Rose, hibiscus and tulip are complete flowers because they have all the main flower organs. The flowers of holly, corn, squash and grasses are incomplete flowers. A perfect flower is also called bisexual bloom because it contains both female and male parts. Flowers that contain either stamen or pistil are called imperfect or unisexual flowers. Flowers attach to the plant via the stalk. A flower has female and male parts. The male part of a flower is the stamen. The female part of a flower is called pistil, and it is composed of parts named stigma, style, and ovary. Petals of various colors surround the male and female reproductive parts. In a similar way to how the human reproductive systems work, the ovary needs to be fertilized to produce a new baby plant. This happens when pollen lands on the stigma and it releases sperm cells. These travel down the style to the ovary where they fuse with an egg and start to grow. The pistil functions as the female reproductive part of the flower that comprises of the stigma, style, and ovary. Sometimes the term carpel is used in place of pistil. In some cases, a carpel and pistil are one and the same thing. However, in some flowers, the 2 or 3 carpels fuse together to form a pistil. The stigma in flower is the upper part of the pistil that receives the pollen. The stigma sits on top of the style and traps pollen due to its hairy or sticky surface. When looking at a diagram of a flower, the ovary is the enlarged part located at the base of the pistil. The function of the ovary is to protect its ovules that fertilize pollen that reaches down the pollen tube. One of the reasons why flowers are necessary for fruit-bearing plants is for fruit to form properly. Once fertilized, the ovary develops into fruit that contains seeds. The sepals are the green leaves surrounding the bud before it flowers. The function of sepals is to protect the flower in the bud stage and also support blooming flowers. The sepal generally falls off after flowering. The bright color of petals functions as a way to attract bees, insects, and birds that

pollinate the plant. The petals of some flowers produce scents that either attract or repel certain pollinators. The color of petals is also important to attract pollinators that have a poor sense of smell. Also, larger petals attract pollinators from longer distances. Looking at a diagram of a flower, you can easily see the individual parts of the flower. The pistil and stamen in the middle of the flower are surrounded by brightly colored petals. Beautiful flowers are just one part of plants that add to their important function. Each part of the plant carries out a specific function to enable the plant grow properly. The main factors involved in healthy plant growth are sunlight, that gives energy to plants through the leaves, and water and minerals that get absorbed through the root system. However, many parts of plants have multiple functions. For example, the roots both help keep the plant anchored in the ground and also take in minerals and moisture from the soil. The stems function to both transport water and minerals from the roots to leaves and support the plant. It is also good to remember that plants also function as the main source of life for humans. Plants are a rich source of nutrients, vitamins, and minerals in our diets. Even meat lovers depend on animals that feed on plant matter for their food. Many plants also have a healing function and are used in many natural remedies. Extracts from plants in the form of essential oils, tinctures, and juice contain phytochemicals with medicinal properties. The plant root system is one of the most important parts of the plant and is generally located below ground. Roots function as the principle way plants get nourishment in the form of water, minerals, and other nutrients. Taproot system. Plants with taproots have a large, thick central root from which other hair-like roots develop. Plants that have taproots also function as functional foods. For example, carrots, parsnips, potatoes, beets, and radishes are all example of plants that are good for you. Fibrous root system. Fibrous root plants have thin small roots that grow downwards and also branch out. Creeping roots. Adventitious roots. Roots that start above the soil from the stem and then go down into the soil. The stem is necessary for the plant to transport nutrients and water throughout the plant and to connect the leaves and flowers. The stems also help to transport food produced by the leaves to the flowers and roots. Stems are also connected to the function of the leaves to make sure the plant gets enough food. For example, stems need to grow tall enough so that the leaves can get sunlight. Some types of plant stems are also edible. Some examples of edible stems include asparagus, broccoli, cauliflower, and rhubarb. The function of leaves is to make food that gives the plant energy and encourages healthy growth. Leaves come in many shapes, textures, and sizes and are found at the end of stems on plants. Together the leaf and stem form a shoot which is usually the first stage of plant growth. Leaves also give off moisture and can also absorb moisture through their leaves. Some plant leaves are simple leaves that only have a single blade and a single main vein. Other leaves called compound leaves and are made up of small leaves that attach to a central stem. Some succulent plants such as aloe vera have thick fleshy leaves that contain a lot of moisture. Leaves are also important parts of the plant that we eat. The leaves of many plants are a rich source of vitamins and minerals. The function of plant flowers could be broken down into two main parts. There is the reproductive part that is necessary for new plants to grow, and the vegetative part with its leaves and petals. The main function of flowers is to produce seed. We have already looked at the female part of the flower and male part of the flower that is involved in reproduction. Flowers and plant blossoms are often consumed in the form of herbal teas and spices. Examples of edible plant flowers include zucchini flowers, nasturtiums and calendula. Essential oils are often produced by extracting the therapeutic properties from flowers. Fruits are one of the most delicious parts of plants we enjoy eating. Fruits develop in the flower when pollination occurs and egg cells in the ovules are fertilized. The ovules develop into seeds and the ovary begins to ripen. Some fruits develop into fleshy fruits such as nectarines, lemons, apples, and strawberries. Fruits are classed as fleshy edible products of flowering plants that contain a seed. This means that some plant products we tend to think of as vegetables are actually fruits. For example, tomatoes, eggplants, and bell peppers are actually a type of berry fruit. Cucumbers are also technically classed as fruits because they have a fleshy structure that contains seeds. Seeds contain all the necessary parts that develop into another plant. Each seed is an embryo that will start to germinate and grow under the right conditions. The first sign of a seed sprouting is a tiny leaf that is connected to a thin stem. As the sprout grows, it develops roots, the stem becomes thicker, leaves appear, and eventually flowers. Dioecious describes a plant group that includes distinct male and female plants. This means that the male and female flowers are on different plants. Monoecious describes a single plant that have both male and female flowers. The plant leaf is a small factory that produces energy through a process called photosynthesis. Leaves also produce oxygen and absorb carbon dioxide from the atmosphere. Chlorophyll is the main chemical in leaves that makes them function properly. This is a green pigment that is responsible for the color of leaves. The main parts of a leaf are the epidermis, cuticle, veins, and stoma. The cuticle is the waxy surface

that covers the epidermis of the leaf. The veins running through the leaf transport nutrients and water throughout the plant. This is a process called photosynthesis and is the reason why leaves are green. For photosynthesis t

dvc 2 ohm wiring diagram
synonym for fuse
mercruiser 30 parts diagram

o happen, a number of factors are needed. Photosynthesis requires energy from the sun, carbon dioxide, water, and chlorophyll. Chlorophyll breaks up water into hydrogen and oxygen. During this process, carbon dioxide and hydrogen combine to produce sugars. This provides energy for the plant and also releases oxygen into the atmosphere. Many plant leaves, roots, flowers, and stems are edible and are an important source of vitamins, minerals, fiber, and other nutrients. Extracts of many plants have medicinal properties that can help address a number of ailments. Parts of plants can be used to make therapeutic herbal teas, essential oils, or taken as supplements. Pleasing to the eye. Flowers, blossoms, and colorful petals are pleasing to the eye. Having houseplants or freshly cut flowers can brighten up a room, create pleasant aromas, and may help clean the air. Email Pinterest Facebook Twitter Linkedin. Parts of a Plant Diagram. Plant Structure Diagram. Leaf structure diagram. Read Next.