

# For Creative Minds

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## Plant Parts

A



Like all living things, plants have different body parts that help them live, grow, and reproduce. Match the plant body part to its image. Answers are below.

B



Plants absorb water and nutrients through their **roots**. The roots are usually below the ground. They anchor the plant in place so it doesn't fall over or blow away. Some plants have very deep root systems. Other plants have shallow roots that branch out just under the surface.

C



The **stem** supports the weight of the plant. It holds the leaves and flowers off the ground. The stem connects the leaves and flowers with the roots.

D



Plants absorb sunlight through their **leaves**. They use the light's energy to make their own food. This process is called "photosynthesis." Leaves also have tiny holes that allow air to pass in and out of the plant.

Flowering plants need **flowers** in order to reproduce. Flowers make pollen. Wind, water, or animals (including insects) carry the pollen from one flower to another. When pollen from one flower lands on another of the same type of flower, that makes a seed.

Plants have four basic needs:

- water
- air
- nutrients
- sunlight

What body part do plants use to take in water and nutrients from the soil?

Plants use their leaves to meet which two basic needs?

Which body part is used to create new plants (reproduce)?

Answers: A—flowers. B—leaves. C—stem. D—roots.

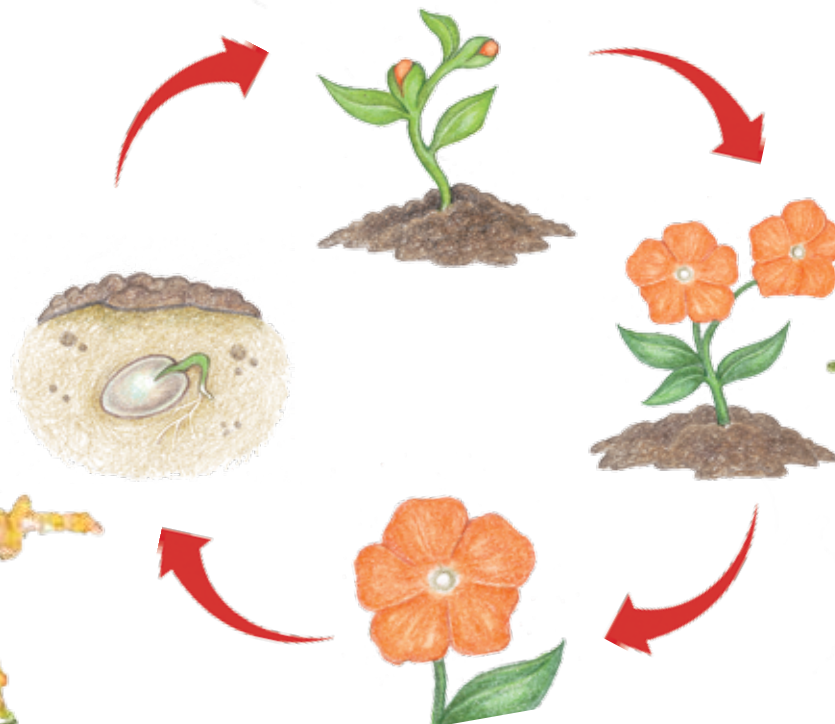
# Life Cycle of Plants

Flowering plants have a life cycle, like all living things. Plants begin their lives as **seeds**. When the conditions are right to grow, a seed puts down roots to take in water and nutrients from the soil.

The **juvenile plant** has a shoot that starts to grow leaves. Plants need energy to grow. They get this energy from the sun, through their leaves.

As the plant grows, it becomes a **mature plant**. Like the juvenile plant, mature plants have roots, a stem, and leaves. They also grow flowers.

**Flowers** are how flowering plants reproduce. The flowers make seeds. When the conditions are right, the seed will put down roots and start to grow.



Some plants grow, produce flowers, and die all within one year. These plants are called **annuals**. Other plants may die in the cold months of winter, but regrow or return when conditions are right. These are **perennials**.

*Which flowers in this story are annuals?  
Which are perennials?*

## Potting Flowers



Do you want to save a flower from winter like Kate? It's easy. Just follow these steps:

1. Before it gets too cold, choose a small flowering plant to bring inside. Geraniums are a good choice. Even with the best care, some types of plants may not survive the whole winter. Make sure there are no bugs trying to hitch a ride with the plant. If there are bugs, a gentle squirt with a hose should take them off.
2. Take an empty pot that is made of plastic, rubber, or metal. Clay pots will dry out too fast. Be sure that the pot is a little larger than the plant. Make sure it has drainage holes. Place a saucer or a plate underneath the pot to catch the water.
3. Use a small shovel to dig in a circle around the plant, about 2 or 3 inches away from the stem. If you don't know how far that is, lay your hand flat on the ground against the stem, wrapping your thumb around it. The shovel should go along the outside of your hand, by your pinkie finger.
4. Scoop up the plant, making sure you leave dirt around the roots, and place it into the pot.
5. Add more dirt to the pot and pat it down to keep a snug fit around the plant.
6. Water your plant. Most flowers need to be watered a few times a week. A plant in a pot needs more water than one planted outside in the ground. But don't over-water it. If you poke your finger into the dirt, you can feel if it is wet or dry. Don't just feel the top; during winter the heat inside a building can dry the top of the dirt quickly. If half of your finger feels dry, you can water it. If it feels wet, check again in a day or two.
7. Place your plant by a window. Some plants need lots of direct sunlight, but others don't do well with too much light. Research your plant to find out its needs.



Follow these steps and your plant will be happy in its home for the winter. In the spring you can plant it back outside in the ground again.

## Flower Identification

Can you identify the flowers in this book? Match the descriptions to the images of the flowers. Answers are below.

Marigolds have many layers of overlapping petals. The petals get smaller and closer together toward the center of the flower. They can be orange, yellow, maroon, red, or yellow-orange like the one shown here.

Impatiens have shiny, greasy leaves. The flowers are around 1 inch (2.5cm) long. There are many types of impatiens, like these pink ones.

Geraniums have large clusters of brightly colored flowers, each with five petals. The petals have veins running through them and can be white, pink, purple, blue, or red like the ones shown here.

Black-eyed susans have gold leaves around a brown cone. The flowers are about 4 inches (10cm) in diameter and the plants are 1-3 feet (30-100cm) tall.

Goldenrods can grow up to 3 feet (1 meter) tall. Small yellow flowers grow in thick clusters at the top of the stem. Goldenrod leaves are about 4 inches (10cm) long.

Snapdragons bloom on a central, vertical spike. They get their name from the flower shape that, when the sides are squeezed together, looks like a dragon's mouth. They come in many different colors, like these pink ones.



Answers: A-black-eyed susans, B-geraniums, C-snapdragon, D-impatiens, E-marigolds, F-goldenrod