

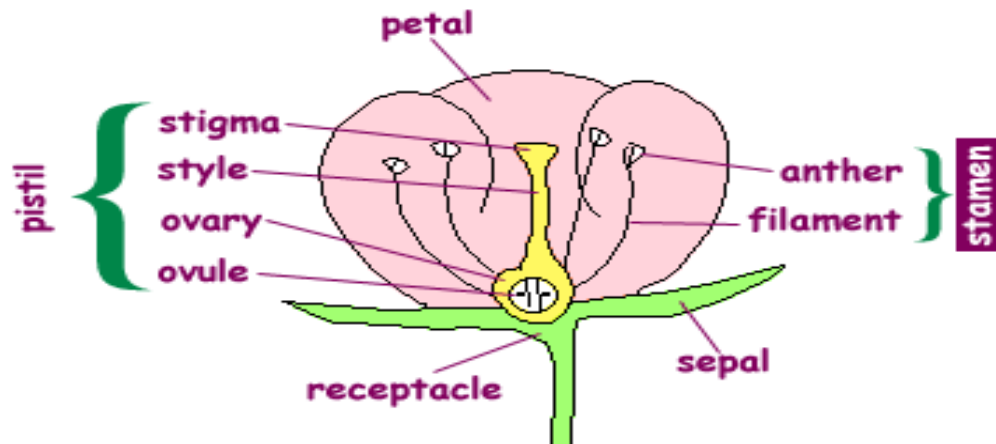
Sexual and Asexual Reproduction of Flowering Plants



Differentiate between the processes of sexual and asexual reproduction of flowering Plants.

Sexual Reproduction

- Process of reproduction that requires a sperm cell (in pollen) and an egg cell (in the ovule) to combine to produce a new organism.
- All flowering plants undergo sexual reproduction.



Asexual Reproduction

- Process of reproduction that involves only one parent plant or plant part and produces offspring identical to the parent plant.
- Many plants can grow new plants asexually from their plant parts.
- If a plant is cut or damaged, it can sprout new growth from the stems, roots, or leaves.

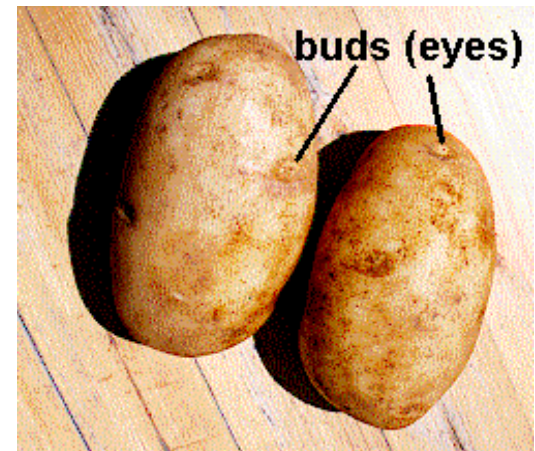
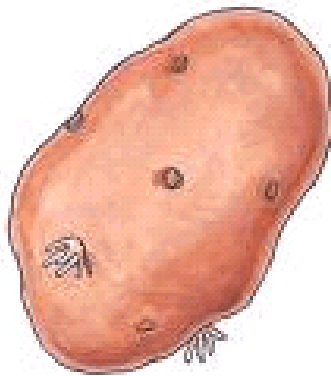


Plants use a variety of parts to produce new plants such as:

- Tubers, bulbs
- Runners
- Stem Cuttings
- Roots
- Leaves

Tubers, bulbs

- All types of underground stems.
- “Eyes” or buds of tubers, ex: potatoes, grow into roots and shoots to produce new plant.
- Bulbs, ex: onions, are big buds made of a stem and special types of leaves.



Runners

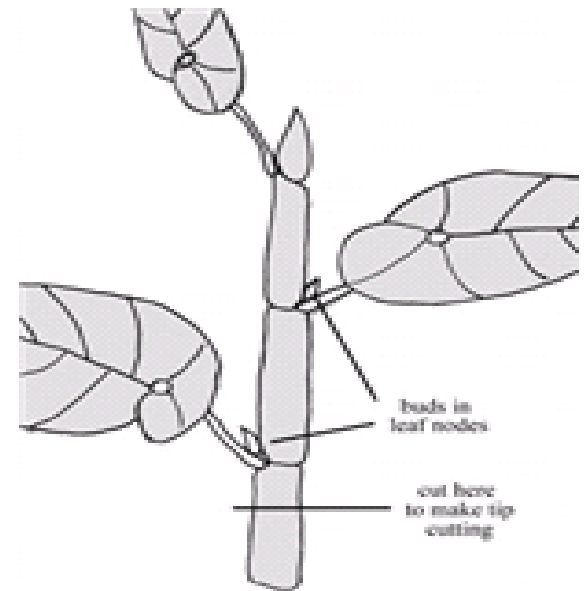
- All types of stems that run along the ground.
- New strawberries or some ivy grow from the tips of runners.
- Many lawn grasses grow from runners.



Stem Cuttings

Video
2 mins.

- When a piece of cut stem is planted, roots may form from the cutting, and then a full plant develops.
- Ex: sugar cane and pineapple



Roots

- Some fruit trees and bushes send up “suckers” or new shoots from the roots.
- Some plants have roots that can produce new plants from root pieces, such as a sweet potato.



Leaves

- Some houseplants produce little plants right on their leaves.
- Ex: African violets can produce plants from leaves placed on top of soil.

