

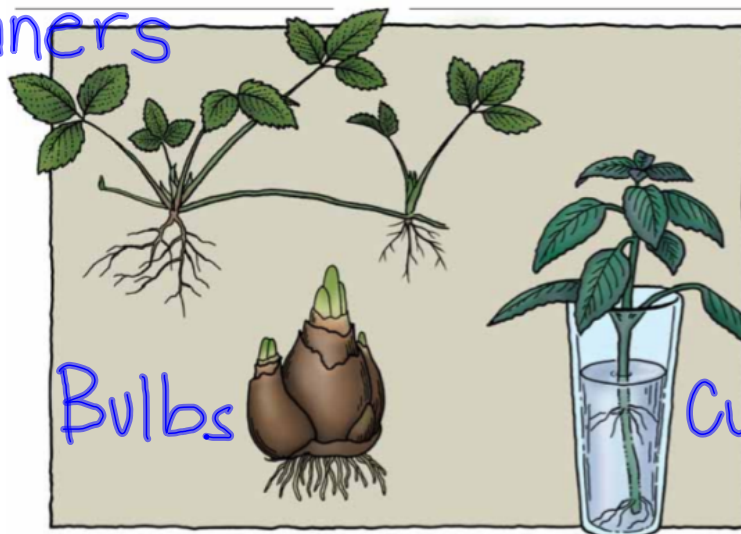
Lesson 9: Sexual Reproduction in Flowering Plants

Oct 14-4:45 PM

In what ways do plants
reproduce asexually?

not or without

Runners



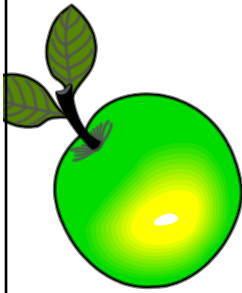
Bulbs

Cuttings

Oct 14-4:45 PM

Why might this be a benefit?

- The offspring will have the same DNA as the parent
- The plant is being cloned



If one apple tree has really good tasting apples, you can create clones by taking cuttings. That way, all of your trees could have the same great tasting fruit.

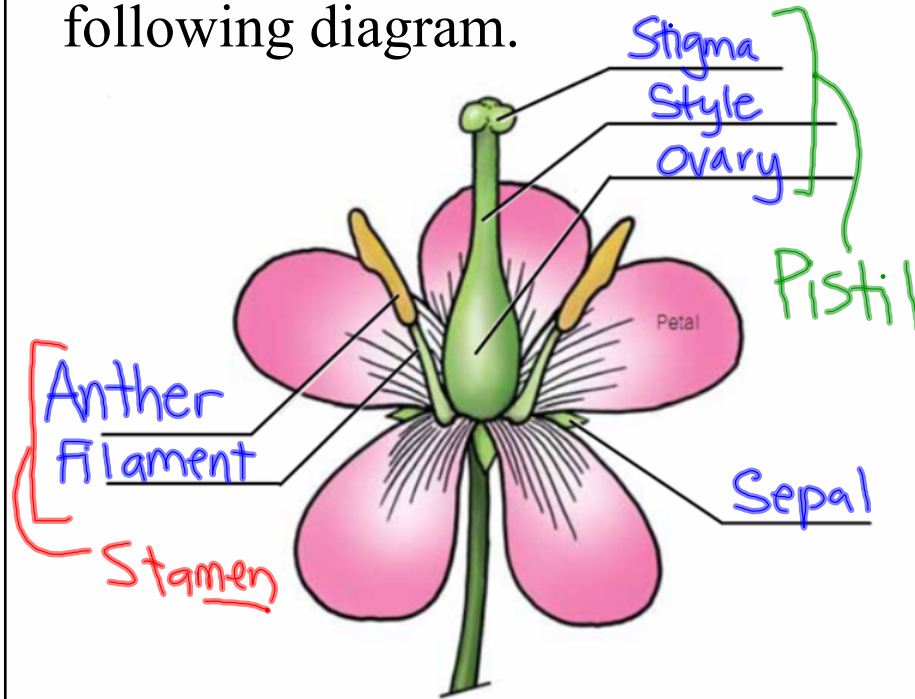
Oct 14-4:47 PM

Describe the steps involved in sexual reproduction in a flower.

- 1-Pollen is produced by the anther.
- 2-Pollen sticks to the body of an insect or bird.
- 3-Pollen comes in contact with the stigma.
- 4-Pollen tube starts to grow down through the style.
- 5-Sperm nucleus unites with an egg nucleus.
- 6-Seed develops; ovary becomes a fruit.

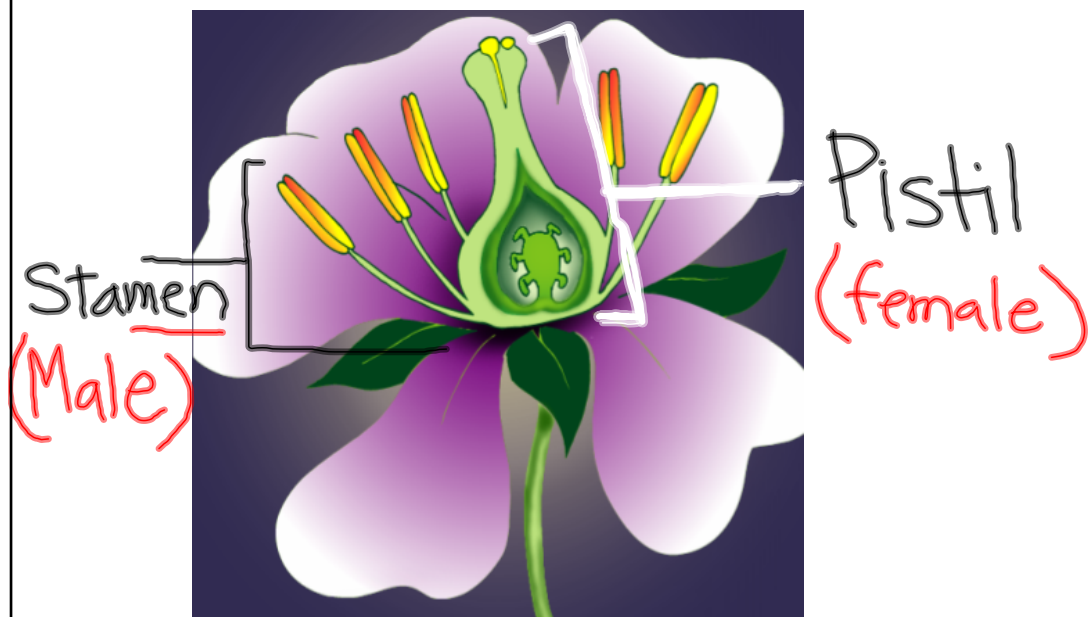
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Label the parts of the flower in the following diagram.



Oct 14-4:59 PM

What are the male and female structures of a flower called?



Oct 14-5:02 PM

Describe self and cross pollination.

SELF: The pollen from an anther on ONE plant lands on the stigma of the SAME plant and fertilizes the ovule

CROSS: The pollen from one plant is carried (by wind, insects, or other pollinators) to the stigma of a DIFFERENT plant of the same species.

Oct 14-5:09 PM

Describe self and cross pollination.

SELF

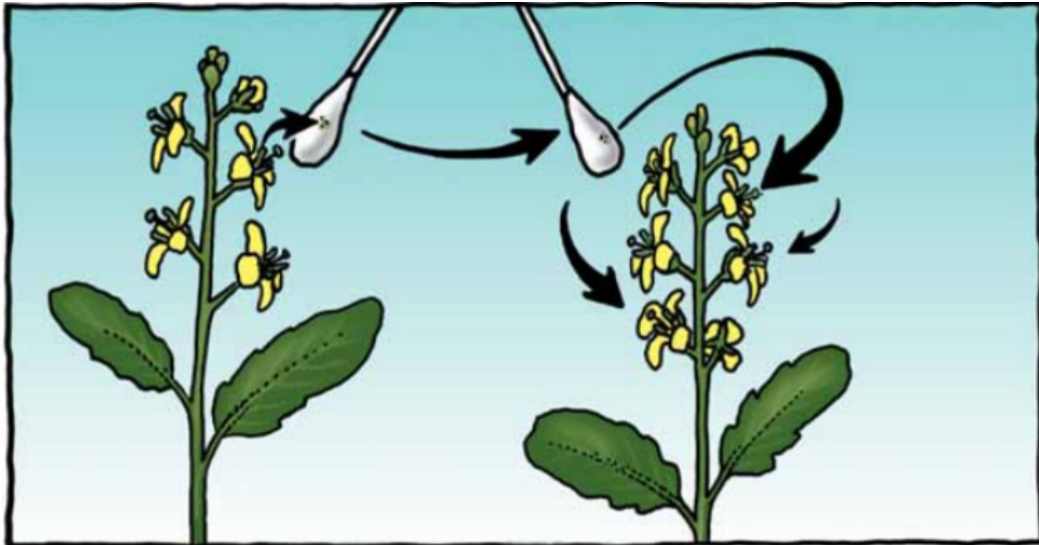
- One flower
- Easy - can be done by wind, H₂O, etc.
- Does not always produce seeds

CROSS

- More than one flower
- Requires pollen to move from plant to plant.
- Used for selective breeding

Oct 14-5:06 PM

Which did you use for your fast plants?



One plant

Different Plant

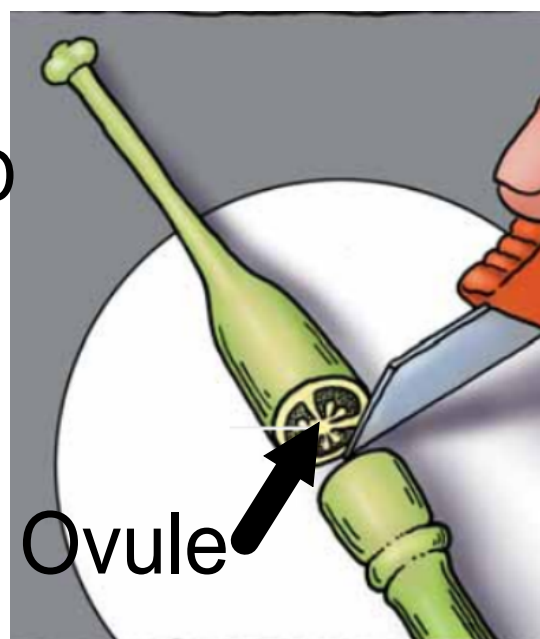
CROSS POLLINATION

Oct 14-5:09 PM

What is an ovule? Is it the same as a seed?

Ovule is the
UNFERTILIZED
egg

A seed is when
the ovule is
fertilized



Oct 14-5:15 PM