

Have you ever visited a botanical garden? A botanical garden is a place where you can see many different kinds of plants and many beautiful flowers. Not all plants have flowers. But in plants that do, the flower is the organ of sexual reproduction. A flower makes a plant's sex cells, or gametes. Male and female gametes join to produce seeds. Each seed may grow into a new plant.

Let us examine the parts of a flower. Check with Figure A on the next page as you read.

The bottom of a flower is surrounded by special leaves called **sepals** [SEE-puls]. Sepals support and protect the flower bud.

The petals of a flower are just inside the sepals. Petals are another kind of special leaf. Petals are the colorful leaves that protect the reproductive organs.

The most important parts of a flower are the **stamens** [STAY-muns] and the **pistil**.

STAMENS The stamen is the male reproductive organ of a plant. Most flowers have several stamens.

A single stamen has two parts: thread-like **filament** [FIL-uh-munt], and a knob-like **anther**. The anther is at the top of the filament.

An anther makes a powdery substance called **pollen**. Pollen grains are the male sex cells of a plant.

PISTIL The pistil is the female reproductive organ of a flower. It is located in the center of the flower. Some flowers have more than one pistil.

The lower part of a pistil bulges. This bulge is the **ovary** [OH-vur-ee]. An ovary contains one or more **ovules** [OH-vyoolz]. Each ovule has an egg cell. Egg cells are the female sex cells. Fertilization of an egg by a pollen grain takes place in the ovule. A fertilized egg becomes a seed. What will a seed produce?

WHAT ARE THE PARTS OF A FLOWER?

Study Figure A. Then fill in the blanks.

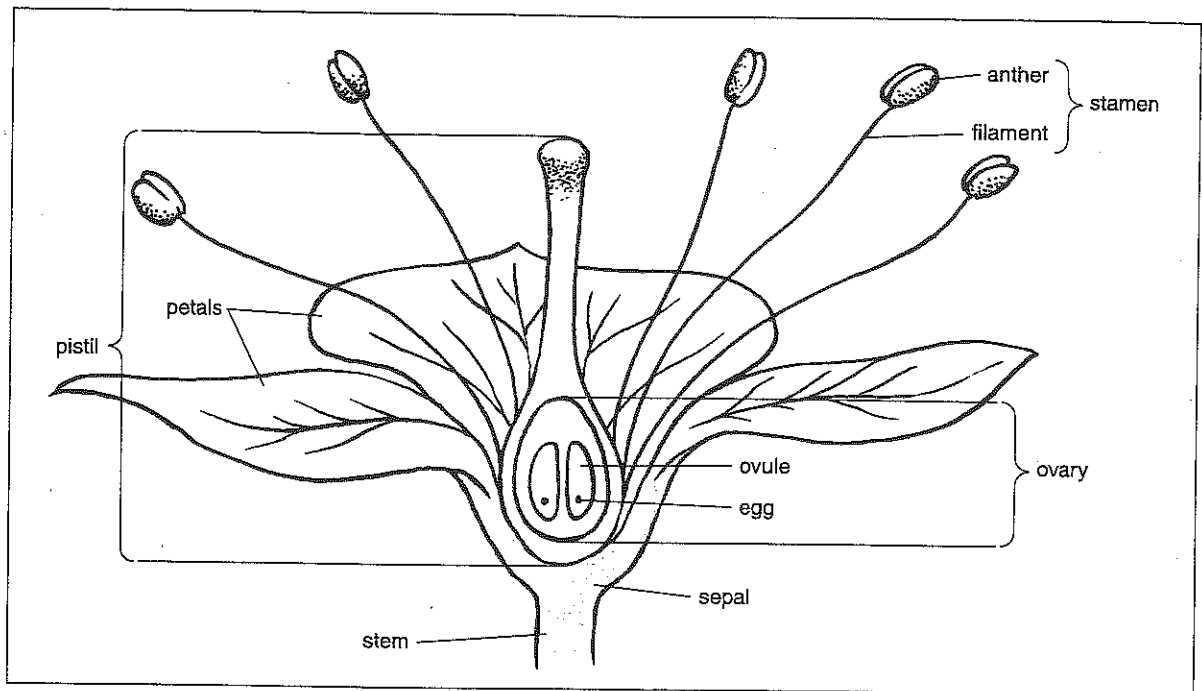


Figure A

1. Name the male reproductive organ of a plant. _____
2. Name the female reproductive organ of a plant. _____
3. Pollen is made by the _____.
4. Eggs are made by the _____.
5. How many stamens does this flower have? _____
6. a) Name the parts of a stamen. _____
b) Which part of a stamen makes the pollen? _____
7. What is the swollen part of a pistil called? _____
8. a) How many ovules does this ovary have? _____
b) How many eggs are in each ovule? _____
9. What do the sepals do? _____
10. What do you call a flower's colorful special leaves? _____

PERFECT AND IMPERFECT FLOWERS

- Some flowers have only stamens. They are male or staminate [STAM-uh-nit] flowers.
- Some flowers have only pistils. They are female or pistillate [PIS-tuh-lit] flowers.
- A flower that has only pistils or stamens is an **imperfect** flower.
- Most plants have both stamens and a pistil. They are called **perfect** flowers.

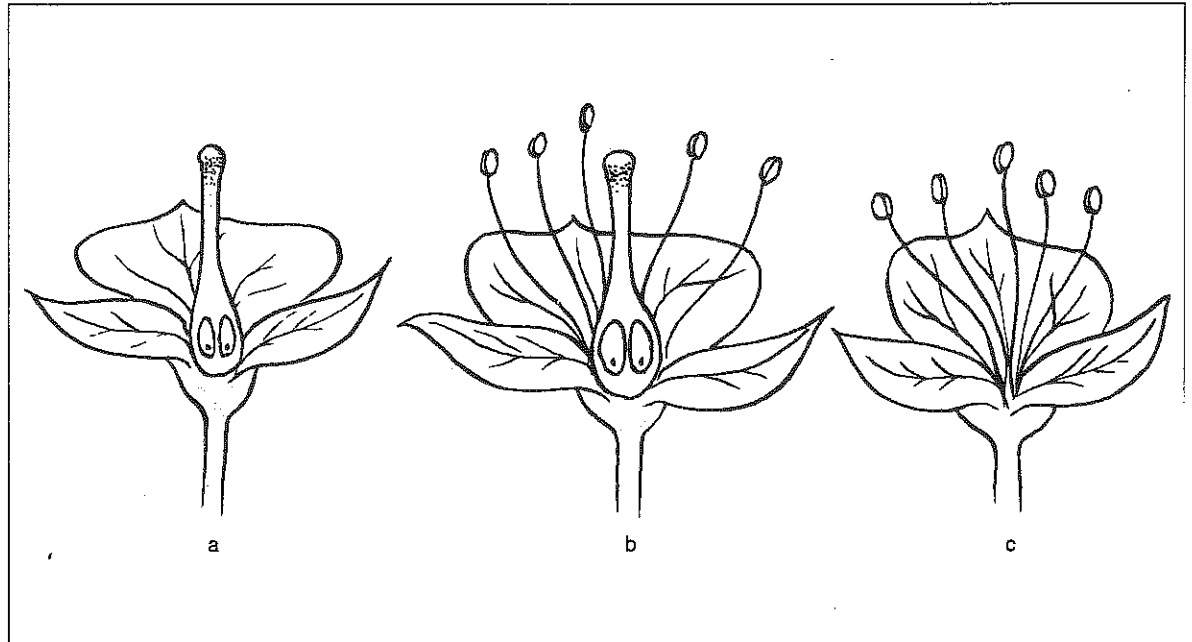


Figure B

Study the flowers in Figure B. Then answer the questions by placing the correct letter in the spaces provided.

1. Which is a staminate flower? _____
2. Which is a pistillate flower? _____
3. Which is a perfect flower? _____
4. Which flower makes only pollen? _____
5. Which flower makes only eggs? _____
6. Which flower makes both pollen and eggs? _____
7. Which flowers are imperfect flowers? _____
8. Look at the perfect flower. The stamens are _____ than the pistil.
higher, lower
9. Which flower(s) has sepals? _____
10. Which flower(s) has/have petals? _____

FILL IN THE BLANK

Complete each statement using a term or terms from the list below. Write your answers in the spaces provided. Some words may be used more than once.

stamens
ovary
pollen grains

anther
seed
pistil

egg
ovules
gametes

1. A female sex cell is called an _____.
2. Pollen grains are a male plant's _____.
3. A male plant's sex cells are _____.
4. The male part of a plant is made up of several _____.
5. The part of a stamen that makes pollen is the _____.
6. The entire female plant part is the _____.
7. The swollen part of a pistil is the _____.
8. An ovary has special parts called _____.
9. An ovule contains a single _____.
10. A fertilized plant egg cell becomes a _____.

MATCHING

Match each term in Column A with its description in Column B. Write the correct letter in the space provided.

Column A	Column B
_____ 1. egg	a) male plant sex cells
_____ 2. pollen grains	b) special leaves
_____ 3. sepals	c) female plant part where fertilization takes place
_____ 4. ovule	d) female sex cell
_____ 5. anther	e) have both stamens and a pistil
_____ 6. imperfect flower	f) makes the pollen.
_____ 7. flower	g) reproductive organ of a plant
_____ 8. perfect flowers	h) has only a pistil or stamens

NAMING THE FLOWER PARTS

Label the parts of the flower in Figure C. Write the correct names on the spaces provided. Choose from the following words:

pistil
anther
petals

sepal
ovule
filament

ovary
stamen
egg

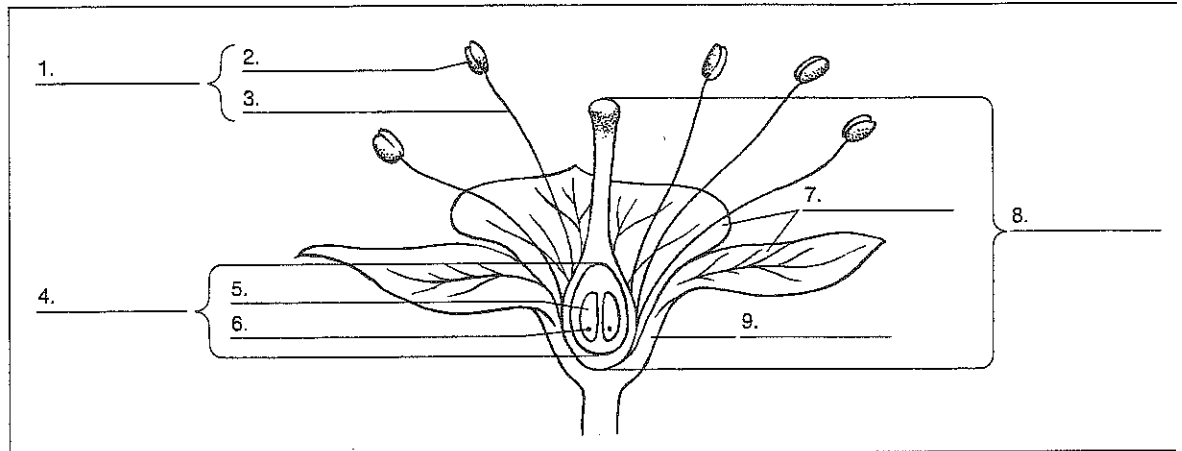


Figure C

TRUE OR FALSE

In the space provided, write "true" if the sentence is true. Write "false" if the sentence is false.

- _____ 1. A flower is an organ of sexual reproduction.
- _____ 2. All plants reproduce sexually.
- _____ 3. There are male plants and female plants.
- _____ 4. Some plants are both male and female.
- _____ 5. The most important parts of a flower are the stamens and the pistil.
- _____ 6. Stamens are female parts.
- _____ 7. Stamens make egg cells.
- _____ 8. An ovary has at least one ovule.
- _____ 9. One ovule has many eggs.
- _____ 10. A fertilized egg becomes a seed.