

Botany
Chapter 17

Match the following:

(some answers may be used more than once).

- | | | |
|-------------|---------------|-----------|
| a) monocots | c) autogamous | e) pistil |
| b) dicots | d) allogamous | f) stamen |

- _____ 1) Consists of the anther, filament, and connective.
- _____ 2) Vascular bundles in stems are usually arranged in a ring.
- _____ 3) Soybeans are generally pollinated this way.
- _____ 4) Consists of the stigma, style & ovary.
- _____ 5) Leaves usually parallel-veined.
- _____ 6) Floral parts typically occurring in threes and sixes or their multiple.
- _____ 7) When a flower is pollinated by pollen of another flower.
- _____ 8) Floral parts are in fours, fives or their multiples.
- _____ 9) Root system usually consists of a tap root & secondary roots.
- _____ 10) Vascular bundles are scattered in stem.
- _____ 11) Usually two cotyledons.
- _____ 12) Endosperm usually present in mature seed.

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Put the following statements about plant reproduction in the correct order:

- _____ The surviving megaspore divides in three successive mitotic divisions to form six 1N cells and one 2N cell.
- _____ One of the two sperms in the pollen tube enters the egg to form the zygote & the other combines with the two polar nuclei to form a 3N nucellus.
- _____ The megaspore mother cell undergoes meiosis & forms four 1N daughter cells.
- _____ Pollen begins germination on the stigma.
- _____ Pollen grain divides to form two sperm nuclei.

True or False:

- _____ 1) Fruits derived from several to many ovularies include the raspberry & apple.
- _____ 2) Compound fruits consist of a single ripened ovary.
- _____ 3) Dehiscent fruits do not open at maturity & usually contain one or two seeds.
- _____ 4) Indehiscent fruits split open along definite lines or points at maturity.
- _____ 5) Accessory fruits are made up of ripened ovaries plus tissue from some other floral part.

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Fill in the blanks:

- 1) The part of the embryo the cotyledons is the _____ and that below the cotyledons is the _____.
- 2) The hypocotyl ends in a meristematic region that differentiates into the _____.
- 3) _____ are long, slender stems that grow from the parent plant horizontally over surface.
- 4) A _____ is an underground horizontal stem.
- 5) A _____ is a short, fleshy terminal enlargement of a rhizome.
- 6) _____ are very short stems surrounded by many overlapping, fleshy leaves.
- 7) _____ are short, squat stems with only thin, scaly leaves present.
- 8) A typical leaf consists of a _____, with a _____ and a _____.
- 9) The root tip region contains an apical meristem covered by a _____.
- 10) About 90% of all plant absorption takes place through the _____.

Chapter 18, cont.

Match the following:

- a) bark
- b) xylem
- c) stem modifications
- d) leaves
- e) transpiration
- f) root

- _____ c 1) The thorn and tendril are examples of this.
- _____ e 2) Loss of water vapor from a plant.
- _____ b 3) In bulk it forms wood.
- _____ a 4) The phloem, cortical cells & periderm.
- _____ f 5) Serves as a storage reserve for food and water.
- _____ d 6) Organs of determinate growth - they have a finite growth period.

Define the following:

1) Tropism:

2) Phototropism:

3) Geotropism:

Chapter 18, cont.

4) Hydrotropism:

5) Nutations:

6) Nastic Movements: