



CLASS NOTES

Parts of a seed

Seed coat:

- Each seed is covered with an outer covering called seed coat.
- Seed coat protects the inner parts of the seed.

Cotyledons:

- Seeds have one or two seed leaves, also called cotyledons.
- Seeds with one cotyledon are called monocotyledons.
- Seeds with two cotyledons are called dicotyledons.
- The cotyledons store food for the growing embryo.

Embryo:

- A seed contains the baby plant or embryo that grows into a new plant.
- The embryo has a baby root called the radicle, that forms the root system of the plant.
- The embryo has a baby shoot called the plumule, that forms the shoot system of the plant.

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Fill in the blanks.

1. Avocados have ----- seed(s).

Answer: one

2. Seed leaves are also called -----.



Answer: cotyledons

Seed germination

- The growth of a seed into a young plant or a seedling is called germination.
- During the process of germination, the seed absorbs water and the seed coat becomes soft. The radicle emerges first and forms roots and then the plumule comes out and forms shoot with stems and leaves.
- Conditions for seed germination are air, water and warmth.
- Conditions required for the growth of a seedling are air, water, warmth and sunlight.
- Sprouts are seeds which have just begun to germinate.

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Answer in a word.

1. The part of the embryo that emerges first during the process of germination.

Answer: radicle

2. Another name for seeds that have just begun to germinate.

Answer: sprouts

Seed dispersal



- The scattering of seeds from one place to another is known as seed dispersal.

Dispersal by wind:

- Seeds with hair, wing-like structures, small in size and light in weight are able to float in the air.
- Examples: Dandelion, cotton, milkweed and Indian elm plant

Dispersal by water:

- Light and spongy seeds of lotus and water lily are able to float on water.
- Thick, fibrous, waterproof outer coverings of coconuts enable them to float in water for long periods.

Dispersal by animals: mangoes, apples, papayas

Dispersal by explosion: peas and ladies' finger

Quick check (Page no: 26)

Give two examples of the following.

1. Plants whose seeds are dispersed by animals

Answer: Mangoes, papayas

2. Plants whose seeds are dispersed by explosion

Answer: Peas and ladies' finger