

Nova's Botanical Discovery Flashcards

Learning objective: To identify and describe the functions of different parts of flowering plants and understand the process of the plant life cycle.

Read the front of the card and test your knowledge of plant biology. Check the answer provided after the pipe symbol to see if you are correct.

What is the primary function of the roots in a flowering plant?

Roots anchor the plant in the soil and absorb water and essential minerals for growth.

Define 'photosynthesis' and identify which part of the plant usually performs this task.

Photosynthesis is the process where plants use sunlight, water, and carbon dioxide to create food (glucose). This mainly occurs in the leaves.

Name the male reproductive part of a flower.

The stamen, which consists of the anther and the filament.

What is the role of the stigma in a flower?

The stigma is the sticky part of the female carpel designed to capture pollen grains.

Explain the process of 'seed dispersal'.

Seed dispersal is the movement or transport of seeds away from the parent plant to reduce competition for resources.

What is 'germination'?

Germination is the process by which a seed begins to grow into a new plant under the right conditions of water, oxygen, and warmth.

How do petals assist in the life cycle of a flowering plant?

Their bright colours and scents attract pollinators, such as insects or birds, to assist in fertilisation.

What is the function of the stem?

The stem supports the leaves and flowers, and contains tubes to transport water and nutrients between the roots and leaves.

Describe the difference between cross-pollination and self-pollination.

Self-pollination occurs when pollen lands on the stigma of the same flower; cross-pollination occurs when pollen is transferred to a different flower.

What is the purpose of the sepal?

Sepals are the small, leaf-like structures that protect the flower while it is still in the bud stage.