ONE PAGE SUMMARY

Academic Education GSEB › Class 7 › Science

Nutrition in Plants

Plants Get Their Food in Unique Ways!

DEFINITION

> Nutrition in plants refers to how they obtain and use food for growth and energy. Most plants make their own food through a process called photosynthesis.

KEY CONCEPTS

Photosynthesis

Photosynthesis is the process by which plants use sunlight, carbon dioxide, and water to create food.

Chlorophyll

Chlorophyll is the green pigment in plants that captures sunlight for photosynthesis.

Mineral Nutrients

Plants absorb essential minerals from the soil, like nitrogen and phosphorus, for healthy growth.

Transpiration

Transpiration is the process of water movement through a plant, helping to transport nutrients.

Autotrophs

Plants are autotrophs, meaning they produce their own food, unlike animals that are heterotrophs.

EXAMPLES

→ A sunflower uses sunlight to make food through photosynthesis.

→ Roots absorb minerals like nitrogen from the soil.

→ A cactus stores water and nutrients to survive in dry conditions.

MEMORY TIPS

★ Remember 'Chlorophyll' as 'Chlorophyll = Green + Fill' for plant food.

★ Use the acronym 'P-C-M-T' for Photosynthesis, Chlorophyll, Minerals, Transpiration.

★ Visualize a plant with a sun, water, and soil to remember its needs.

COMMON MISTAKES

✗ Confusing photosynthesis with respiration.

✗ Not recognizing that plants need minerals from the soil.

✗ Thinking all plants can survive without sunlight.

QUICK RECAP

Plants obtain nutrition mainly through photosynthesis, using sunlight, water, and carbon dioxide. They also absorb essential minerals from the soil. Understanding these processes is key to grasping how plants grow and thrive.