

Year 7 Ecosystems – Plant Reproduction

Name of unit	
Expected Outcomes • Students will describe the structure and function of the reproductive organs of flowering plants. • Students will understand the processes of pollination, fertilisation, seed formation, and seed dispersal. • Students will identify different methods of seed dispersal and their importance. • Students will investigate the conditions needed for seed germination. • Students will explain how plant reproduction ensures the continuation of species.	
Developmental Focus Opportunities • Scientific enquiry: Designing and conducting fair tests related to germination. • Observation and recording: Using microscopes or diagrams to examine flower parts. • Explanation skills: Using scientific vocabulary to explain reproduction clearly. • Environmental awareness: Understanding the ecological role of plants in sustaining life.	
Key Learning Points • Flowering plants reproduce sexually through pollination and fertilisation. • Flowers contain male (stamen) and female (carpel) reproductive parts. • Seeds are dispersed by wind, animals, water, or mechanical means. • Successful germination requires the right conditions: water, oxygen, and warmth.	Powerful Knowledge • Understanding the life cycle of plants and their role in food chains. • Recognising the importance of biodiversity and plant reproduction in ecosystems. • Linking plant reproduction to food production, agriculture, and sustainability. • Building foundation knowledge for genetics, evolution, and human reproduction in later years.
Subject-Specific Vocabulary • Pollination • Fertilisation • Germination • Seed dispersal • Stamen • Carpel • Ovary	Reading Opportunities • Informational leaflets or books about plant life cycles and biodiversity. • Case studies on seed banks, farming, or pollinator conservation. • Diagrams and texts describing flower structures and reproduction stages.

Year 7 Ecosystems – Plant Reproduction

• Anther • Filament • Embryo	
Possible Misconceptions	Cross-Curricular Links
• Thinking plants reproduce like animals or that seeds are alive before germination. • Confusing pollination with fertilisation. • Believing seeds grow instantly when planted. • Assuming all plants reproduce in the same way.	• Geography: Climate and ecosystems' effects on plant growth. • Art: Drawing and labelling flowers and seed dispersal methods. • English: Report writing based on germination experiments.