Unit 1 Reproduction in Flowering Plants

Content Area: **Science**
Course(s): **Horticulture 2**
Time Period: **February**
Length: **8 blocks**
Status: **Published**

Transfer

At the end of this unit of instruction students will be able to identify structure and function of flowering plant parts.

Enduring Understandings

Plants have adapted structures and strategies which allow them to reproduce sexually.

Sexual reproduction ensures continued genetic diversification which enhances survival.

Many ingenious methods of pollination are utilized by plants to ensure fertilization and thus species propagation.

Essential Questions

If species naturally evolve and die off, why are we trying to save the rainforest?

Why are weeds weeds, and flowers flowers?

Content

Vocabulary

Pollination, complete flower, self-fruitful, sepals, petals, stamen, pistil, ovules, stigma, style, ovary, ovules, incomplete flower

Learning Objectives

Identify the functions of flower and recognize is as the organ of sexual reproduction.

Examine and identify male and female floral structures.

Describe the basics of the process of pollination.

Observe a wide variety of adaptations that flowering plants have evolved to attract pollinators.

Standards

HS-LS1-2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

HS-LS2-7 Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.

HS-LS4-4 Construct an explanation based on evidence for how natural selection leads to adaptation of populations.

	Observed patterns in nature guide organization and classification and prompt questions about relationships and causes underlying them.
SEP.1.a.1	that arise from careful observation of phenomena, or unexpected results, to clarify and/or seek additional information.
	Events have causes, sometimes simple, sometimes multifaceted. A major activity of science is investigating and explaining causal relationships and the mechanisms by which they are mediated. Such mechanisms can then be tested across given contexts and used to predict and explain events in new contexts.
SEP.1.b	Evaluate a question to determine if it is testable and relevant.
9-12.HS-LS4-4	Construct an explanation based on evidence for how natural selection leads to adaptation of populations.
9-12.HS-LS1-2	Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
9-12.HS-LS2-7	Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.

Resources

Text:

Introductory Horticulture 8th ed(Cengage Learning), Hardcover (2011)
by H Edward Reiley, Carroll L Shry

Greenhouse

Planting Materials including soil, water, seeds, Fertilizer.

Flower

Weed Samples