

POLLINATION

Subject

Basic Science

Prepared By

[Instructor Name]

Grade Level

4

Overview

This lesson plan covers teaching content for;

1. Types of pollination.
2. Process of pollination.
3. Agents of pollination.

Objectives

Students should be able to;

1. Explain pollination.
2. Explain the process of pollination.
3. List agents of pollination.

Activity Starter/Instruction

- 1 Ask students what are seeds used for?
- 2 Explain to them that the formation of seed starts from the flower. Defining pollination to them as the transfer of pollen from the anther (male part of a flower) to the stigma (female part of a flower) of flowering plants.
- 3 Ask students of possible ways pollen can be transferred.
- 4 List the agents of pollination and explain how they carry/transfer pollens.

Guided Practice

Day 2/ Lesson 2: 15 Mins

1. Remind students that the pollen which needs to be transferred to the stigma for reproduction is on the anther.
2. Make the students know that the pollens are very light as powder and can be carried easily.
3. Ask for two volunteers. One representing the anther with powder on his/her hand and the other student representing the stigma.

Teacher Guide

Day 1/ Lesson 1: 15 Mins

1. Ask students what the anther contains. (Answer: pollen)
2. Show them pictures of two flowering plant.
3. Explaining to them the two types of pollination. (self-pollination and cross-pollination)
4. Ask four students to come out.
5. Label them 'Anther 1, Stigma 1, Anther 2, Stigma 2' respectively.
6. Anther 1 and stigma 1 should stand together naming them as PLANT 1 with quite a large distance anther 2 and stigma 2 standing together as PLANT 2.
7. Give anther 1 and anther 2 dice/powder. Explain to the students that when anther 1 transfers dice/powder (pollen) to stigma 1 it's called self-pollination and if anther 1 transfers dice/powder (pollen) to stigma 2 it is called cross-pollination.

Guided Practice

Day 3/ Lesson 3: 15 Mins

1. Get a bright and colorful flower with nice scent. (It can be an artificial or real flower)

Materials Required

- Powder
- Dice
- Flower

Additional Resources

- http://www.sustainability.ucsb.edu/wp-content/uploads/Seeds_3-Part-Garden-Lesson_Colby.pdf
- <https://www.calacademy.org/educators/lessons/plans/flowers-seeking-pollinators>
- <https://k8schoollessons.com/pollination-and-fertilization/>
- <https://www.sciencelearn.org.nz/resources/pollination-and-fertilisation>

Additional Notes

	<p>4. Ask the student representing the anther to blow the powder off his/her to the direction of the stigma.</p> <p>5. Ask the remaining students to explain what happen in relation to wind blowing the pollen off the anther to the stigma.</p>	<p>2. Pass the flower round the class.</p> <p>3. Ask the students what makes the flower attractive. (their answer: color, scent)</p> <p>4. Explain to them that's how insect and animals such as birds are attracted to flowers. When they land on the flowers, pollens attach to their body and they carry the pollens to another flower or same flower by landing on the flower they are attracted to.</p>
	<p>Assessment Activity</p> <p>Assess if pupils can:</p> <p>1. Define pollination.</p> <p>2. List the agents of pollination.</p>	<p>Assessment Activity</p> <p>Assess if pupils can:</p> <p>1. Explain the types of pollination.</p>
	<p>Summary</p> <p>1.</p>	