

Tuan Cao

Learning about pollination, BioME lesson

Recommended grade level: Second grade

Submitted by: Tuan Cao

Time to complete activity: 60 minutes

Description: This exercise is aimed at teaching second graders the fundamentals of pollination. The goals of this activity is to (1) introduce the basic concepts of reproduction in plants, (2) describe the role of pollinators in plant reproduction, (3) describe animals that are pollinators, and (4) use a hands-on activity to reinforce the understanding of pollination.

Materials:

1. PowerPoint presentation used for introduction of the material.
2. Colored glitter (used to simulate pollen), crayons, and scissors
3. Double-sided tape (used to adhere glitter to flowers and bees)
4. Flower drawing
5. Bee drawing
6. Activity worksheet

Procedure:

1. First, use the PowerPoint presentation to introduce the concept of pollination. The presentation will include clear diagrams and colorful pictures that will help engage the students. Use inquiry techniques to reinforce understanding, and provide ample time for students to talk about different types of pollinators. ~ 15 minutes
2. Give half of the class each a printout of the flower and the remaining half each a printout of the bee. Instruct the students to color their bee or flower. While the students are coloring, place a small piece of double-sided tape onto the center of each flower and the thorax of each bee (see diagram below). For only half of the flowers, add plenty of glitter to the double-sided tape. Have the students cut out their flower or bee. ~15 minutes
3. By now, all the students should have their bee or flower cutout. Half of the flowers should have glitter attached to the double-sided tape. Arrange the students with flowers into two groups at the front of the class, one group having flowers with glitter (i.e. pollen) and one group having flowers without glitter. Have the students hold their flowers up against their chests. This represents two flower patches. Now line up the students with bees. Have each student, one at a time, fly his or her bee first to a flower with glitter and simulate nectar feeding by having the bee lands on and press against the flower. Make sure that the double-sided tapes (on the flower and bee) are pressed firmly against each other; this will ensure that the bee ‘collects’ pollen from the flower! Now have the student fly his or her bee over to the flowers without pollen. Let the student land his or her bee onto one of the flowers and feed. This process should result in the bee transferring glitter (i.e. pollen) from the first flower to the second (pollination!). ~15 minutes
4. After all the bees have performed pollination, have the students observe all the flowers. All of them should now have pollen! Ask questions to reinforce understanding of pollination. Have the students sit back down and let them complete the worksheet. ~ 15 minutes.



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