



Busy Bees, Busy Blooms (Modified from Project WILD)

Materials

- Dot stickers to represent pollen (need enough for 75% of students, one sheet per student)
- Poker chips, marbles, or beads to represent pollen (need enough for 25% of students)
- Paper bags (one per student)

How To

1. Explain to students that they will be modeling the process of pollination. Although there are many types of pollinators, today, we will be pretending to be bees! Divide students into two groups: flowers (75% of students) and bees (25% of students). It's important that there are more flowers than bees.
2. Give each "flower" a paper bag filled with 5 poker chips, marbles, or beads to represent their source of nectar. Also, each flower student should have a sheet of dot stickers to represent pollen.
3. Give each "bee" a paper bag to represent their stomach.
4. Explain that flowers do not move on their own, so the flower students must remain rooted in one location. The goal of the flowers is to trade as much pollen as possible with the other flowers. To do this, flower students put their pollen (stickers) on a bee's back as bees bend over to pick up nectar chips out of the paper bags. Flowers should also collect other pollen stickers already on the bee's back. When they take a pollen sticker off a bee, they should place it on themselves.
5. Ask flower students to spread out to create a "meadow," and align bees in a line on the edge of the meadow.
6. The bees' goal is to visit as many flowers as they can to collect nectar chips. Bees can only collect one nectar chip from each flower, and can't visit the same flower twice in a row.

7. Ready, set, pollinate! Allow bees to buzz from flower to flower for a few minutes.
8. When the activity ends, ask bees to look inside their “stomachs” to determine if they have at least three nectar chips. If they don’t, they haven’t eaten enough and will be hungry. Ask the flowers if they have at least three pollen stickers on themselves. If they do, they have been pollinated, and will produce seeds.
9. Ask the flowers to explain what their job was (to trade pollen). What was the most difficult part of their job?
10. Ask the bees to explain what their job was (to find enough food or nectar). What was the most difficult part of this job?
11. If time permits, you can try these variations for future rounds:
 - *Habitat Loss*: Reduce the flower population with each round of play. Flowers that are not pollinated are eliminated from the next round. After several times, discuss with the students the changes they observed in the bee population when the flower population decreased.
 - *Pesticides*: Hand out a sheet of unique stickers to a few flowers. These could be shiny, red, a different shape, as long as they stand out from the other pollen stickers. Don’t tell the bees what these different stickers represent, and allow the game to commence. When the game is over, ask the bees if any of them has one or multiple pollen stickers that are different from the rest. Explain that these represent pollen from plants that have been treated with pesticides, and that the food gathered from those flowers can harm the bees, and that they won’t survive to the next round. This is why we want to avoid pesticides!

About Project WILD

Project WILD’s mission is to provide wildlife-based conservation and environmental education that fosters responsible actions toward wildlife and related natural resources. All curriculum materials are backed by sound educational practices and theory, and represent the work of many professionals within the fields of education and natural resource management from across the country.

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