

What's The Buzz?	Grade 3
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Plants on your plate- Post activity

Assessment	
Cross-curricular	Science

<p>Big Ideas 50 minutes</p> <p>Humans need to protect plants and their habitats.</p> <p>Plants play an important role in animal habitats.</p> <p>An introduction to the idea of ecological conservation._____</p>	<p>Specific Expectations</p> <ol style="list-style-type: none"> 1. Describes the reliance that humans have on plants and animals. 2. Explores the importance of protecting plants along with their habitats in order to preserve honeybee habitats. 3. Describe the basic needs of animals including air, water, food and shelter.
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Description

Using the downloaded and printed pages provided the students will play a game called plants on your plate. They will then answer the following question, “It is important to protect honeybee habitats because...”, the students can also draw their answers as a way to visualize their solutions.

<p>Materials</p> <p>Construction paper</p> <p>Scissors</p> <p>Glue</p> <p>Yellow Pom Poms</p> <p>Markers and colored pencil crayons</p> <p>Printed copies of the word document</p>	
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Introduction

1. Start by asking the students what some of their favorite fruits and vegetables are. Some if not all of the plants that they just listed are likely pollinated by honeybees. This would be a good time to discuss with the students who plants are the primary source of food for many living things such as insects, bees and humans.
2. You can transition into asking the students about how honeybees collect pollen. Make it clear that they have special adaptations on their legs called pollen baskets, which allows the pollen to stick to them. Explain the interaction between honeybees and the plants that they rely on to collect pollen and nectar.
3. This is a good time to ask the students to look at the big picture and brainstorm why it is important to protect our plant populations. Explain that we as humans can play a role in protecting plant and animal habitats.

Action

1. Download and print one copy of each fruit and vegetable. You can also download and print multiple copies of the flowers in the document (4 or 5 of each flower will suffice).
2. Handout materials such as scissors, tape and construction paper so that the students can make pollen baskets from the materials.
3. The students must fasten these baskets to their legs and they must also be able to carry multiple pompoms. They might want to test them out before doing the race to make sure that they work.
4. At this point the students should be divided into 4 teams, team apple, team strawberry, team broccoli and team carrot.
5. This activity can be conducted in the gym or in a large outside space. Start by placing each team in their separate corners of the gym with their corresponding team photo. Now spread the pictures of the flowers all over the gym floor. Place 1 or 2 pieces of pollen (pompoms) onto the photos of the flowers.
6. On your count the students must run around collecting pollen from the flowers and placing them into the pollen baskets. Make a note that each student may only collect one pompom from each flower at a time.
7. The students can then bring the pompoms back to their home base and place the pollen onto the picture of their fruit or vegetable. The team with the most amount of pollen wins.
8. This game can be repeated multiple times and can be made harder or easier depending on how many pompoms you have or how many flower pictures there are.
9. After the physical activity there is one final task for the students to complete. They can write a couple of sentences as to why it is important to protect honeybee habitats. At the top of their page they can draw out their ideas and make it more visual.

Consolidation/Extension

1. Here are a list of fruits and vegetables that grow thanks to honeybee pollination.
 - a. Apples
 - b. Mangos
 - c. Kiwi Fruit
 - d. Plums
 - e. Peaches
 - f. Pears
 - g. Onions
 - h. Strawberries
 - i. Cashews
 - j. Avocados
 - k. Green Beans
 - l. Coffee
 - m. Walnuts
 - n. Cotton
 - o. Watermelon
 - p. Beets
 - q. Broccoli
 - r. Carrots
 - s. Mustard Seeds
 - t. Vanilla
 - u. Cocoa
 - v. Tomatoes
 - w. Grapes

2. What are pollen baskets? Honeybees have very interesting adaptations on their legs, which allow them to collect pollen and carry it from flower to flower and even back to the hive. These specially designed baskets can be very useful given that most honeybees visit 100 plus flowers in one trip.
3. Honeybees are one of our largest pollinators that help to grow many fruit nuts and vegetables
4. Without the flower pollen and nectar bees cannot make honey.
5. Plant and flower diversity helps pollinators like honeybees pollinate farmers fields.

Facts about the flowers.

Both of the flowers for this activity are native to Northern Ontario and provide excellent sources of pollen and nectar for honeybees.

The orange flower is a coneflower and the purple flower is a giant hyssop.

These are both examples of flowers that you can plant in your garden at home in order to attract honeybees and help to support the repopulation efforts of honeybee colonies.