

The Amazing Bee Race – Educator Resource

Approximate Activity Time: 45 minutes - 1 hour

About Amazing Bee Race

This activity was created after our Free Flow Bee Hive was installed at the Farm and Food Discovery Centre. We wanted an activity to highlight our new exhibit and teach students in a fun way about how important bees are for agriculture. With that in mind, we created a fun relay race at FFDC that models all the steps bees take when making honey. With this resource you can create your own version at home!

Answer the pre-activity questions and then watch a short video. Then enjoy some crafting time when you create all of the tools you'll need to become a bee. Once you've completed all of the crafts, set up your Amazing Bee Race and have fun!

How to use this resource

- 1. Have students complete the "Pre-Activity Questions" and discuss.
 - Homeschool adaptation: use the "Pre- Activity Questions" as a discussion guide and talk through the questions together
- 2. Watch the <u>PBS video "How Do Bees Make Honey"</u>
- 3. Start crafting your own version of FFDC's Amazing Bee Race.
- 4. Participate in your own Amazing Bee Race. Check out our video demonstration:
- 5. Have students complete the "Post-Activity Questions" and discuss this
 - Homeschool adaptation: use the "Post-Activity Questions" as a discussion guide and talk through the questions together
- 6. Check out our "Complimentary Resources" at the bottom





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Pre-Activity Questions

- 1. How do you think bees make honey?
- 2. What does a Queen Bee do?
- 3. How do you think bees communicate to each other?
- 4. Do you think bees are important for farmers?
- 5. What do you think "pollination" is?
- 6. Do you like eating honey? What is your favourite way to eat it?





Making your own Amazing Bee Race

Supplies Needed:

- Construction Paper (6 different colours)
- Cups (At least 5)
- Pompoms(5 different colours, 3 of each)
- Scissors
- Crayons or Markers
- Tape
- Small Bag, eg. brown paper bag, zip bag etc... (1 for each student participating)

Crafting Directions:

- 1. Select 6pages of different colours of construction paper. Set one colour aside to be your nectar tokens. The other five will become the flowers. Draw and cut out your flowers and set them aside.
- 2. Take the colour you set aside for your nectar tokens. Pick a small shape (circles or honeycombs) that will be your nectar tokens and cut out 5 for each student participating. Write an "N" on one side and an "H" on the other.
- 3. Build your bee wings by folding a piece of construction in 10cm increments. Once the paper is completely folded tape one end together and spread out the other.
- Sort out your pompoms into coloured piles. These will be your pompom pollens.
 *** If you don't have pompom you could make pollen using construction paper. Just make sure it's a different shape than your nectar so you don't get confused.
- 5. Place your cups close together Use the cups for the honeycombs in your hive. If you're using disposable cups like us you can tape them together.
- 6. Optional*** Decorate your small bag into a honey sac.





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The Amazing Bee Race Directions

Set Up:

- Find an open space.
- Place your flowers randomly on the ground, around 1 metre away from each other.
- Place your hive off to the side of your open area, away from the flowers
- Place your bee wings next to the hive.
- Distribute the nectar tokens evenly on the flowers.
- Place the pompom pollens (sorted by colour) on the flowers. Each flower should have nectar token(s) and a pile of same colour pompom pollens.

Check out this video for a visual demonstration of how to play or follow the instruction below.

Instructions:

<u> Task 1 – Field Bee</u>

- **1.** Grab your honey sack
- **2.** Fly to one of the flowers
- **3.** Grab a nectar token to put in your honey sack.
- **4.** Pick up a pompom pollen to bring to another flower (*DON'T PUT IT IN YOUR HONEY SACK!*)
- 5. Fly to the next flower and drop your pompom pollen to pollinate that flower.
- 6. Repeat steps 3-5 until you've gotten a nectar token from each flower and there is at least 2 colours of pompom pollens on each flower.

<u> Task 2 – Hive Greeter Bee</u>

- **1.** Take the nectar tokens from the honey sack and pass it back and forth to "add the digestive juices" to the nectar.
 - If you're playing with 3 or more students: have students stand in line and pass the nectar tokens down the line.
 - If you're playing with 1 or 2 students: pass the nectar tokens back and forth 5 times. Parents may have to help out if there is only 1 student
- 2. Place the nectar tokens in the hive honeycombs with the "N" facing up.

<u> Task 3 – Hive Worker Bee</u>

- **1.** Pick up your fan and start fanning to dry all the water out of the nectar and turn it into honey!
- 2. Once you've fanned a nectar token for 5 seconds, flip it over so that "H" is facing up to show you've turned your nectar into honey.





Suggestions on how to adapt the race

- 1. If there are 3 or more students, assign each student to a specific task (Field Bee, Hive Greeter Bee or Hive Worker Bee). Run the race multiple times until each person completes each task!
- 2. Have the students work as a team the entire time they have to link arms and fly to each flower together!
- **3.** Time yourselves and run the race a few times to see what the quickest time you can get is!
- **4.** Set this race up outside and enjoy the sun! Just be sure to weigh down the paper flowers if it is windy!

Post-Activity Questions

- 1. How do bees make honey?
- 2. What are some of the different jobs different bees do?
- 3. What is the Queen Bees job?
- 4. How do bees help farmers and plants?
- 5. Why is pollinating so important for plants?
- 6. Why do bees dance?







Complimentary Resources

- Agriculture in the Classroom, Canada's <u>Blossom's Big Job storybook</u>
- Want to include some baking in your day? Test out some recipes by Beemaid!
- In celebration of Earth Day, Google released a super cute and fun <u>Doodle game to teach</u> you about bees!

Check out all of FFDC's At-Home Resources

