



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences –particularly students of color and girls – by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

Make your own honey bee and a beehive. You will learn about social insects such as the honey bee, ants and termites.



Supplies Required:

- 1 black pipe cleaner
- 1 yellow pipe cleaner
- 1 white pipe cleaner
- 1 pencil
- 1 pair scissors
- Empty coffee can or something of same size
- 4 toilet paper rolls or 2 paper towel rolls
- 1-2 paper bags, tape, string

Video

Follow along and listen to the passage being read aloud: <https://tinyurl.com/y9nxmcrx>

Learn how to make a bumblebee: <https://tinyurl.com/ybpbbo29>

Learn how to make a beehive: <https://tinyurl.com/y6uw6vjy>

Overview

Entomologists are scientists who study the life and behavior of insects and bugs. In the reading you learned about social insects. Social insects live together in colonies. These social insects, such as honey bees, ants and termites, have a king and a queen. They also have workers that protect their own. Life is very busy in the beehive. Only one Queen bee lives in the hive and the rest are workers. The Queen is the mother who lays the eggs and the rest are workers who care for the young bees and queen, guard, protect and control the hive's temperature. The workers also make food for all the bees in the hive. You will make your own honey bee and beehive for the bees!



Instructions

1. To make your bee, watch the video. Start with wrapping the black pipe cleaner around your pencil 2 times.
2. Cut a small piece of yellow pipe cleaner and using the bigger piece wrap it together with the black pipe cleaner.
3. Make sure the the black and yellow are side by side as you continue to wrap it around the pencil.
4. Squish it together as shown in the video, slide it off the pencil.
5. Pull out a piece of black pipe cleaner on one end and on the other end tuck it in to create the face.
6. Take a small piece of white pipe cleaner and bend it to make 2 loops, slide it in the middle of your bee. Use black and white construction paper and glue to make googly eyes if you have it.
7. To make your beehive, watch the video. Measure the amount of toilet paper or paper towel tubes to fit inside your container; ask for help when using scissors if you need it.
8. Next, cut pieces of the paper bag the same height as container and tubes.
9. Using your pen or pencil roll up the pieces paper one at a time.
10. Try to roll as tight as you can and tape down starting at the edges.
11. Release your tube from the pencil/pen and tape/seal one end of the tube.
12. Using the side that you sealed up, place it down into your beehive.
13. Repeat this process as shown in the video until your beehive is complete.
14. Unless you plan to attract bees to your hive grab a string and hang it somewhere in your home—show others your work!

Additional Resources

1. Want to learn more about social insects? <https://tinyurl.com/yd3xm7hv>
2. Watch a video about the happy Entomologist: <https://tinyurl.com/y82lfhww>
3. Life inside a beehive: <https://tinyurl.com/yaa5meu2>

Share It Out

Now that you've learned about how some insects work together, share with family, friends and social media! Take a photo of your bee and beehive. Have someone record you talking about the life of a busy busy bee, including the job of the Queen bee and the workers! Don't forget to mention the important jobs of the workers such as protecting the others and making food!

Use the hashtags:

#BeePowerReadAlong
#ProjectExploration
#StemAtHome

Share via PE's website: Students who complete STEM@home activities and share what they learned with the PE team via our website will earn points which can be traded in for cash prizes at the Explore Store. Your project number is 108. Learn more at www.projectexploration.org/explore-store

Join PE's character contest!

Design a STEM character who will lead kids through activities and be featured on our website and in our STEMbooks. Cash prizes will be awarded to the top 3 finalists. Learn more at: www.projectexploration.org/character-contest.



Call or text us for help: 312-772-6634

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