



BEE PATROL

Grades K-3: Week 3, Day 4

EXPLORE BEE FLIGHT

WELCOME

(5 min)

Welcome your students to camp. Be friendly.

Say: **Bees are amazing! They help plants grow by spreading pollen, which gives us food and flowers. But some bees are disappearing, and when they're in trouble, other parts of nature are too. Bees have extraordinary flight—they even dance to tell other bees where to go! Scientists have studied how bees fly to make better drones and robots.**

MEDIA

(5 - 10 min)



MEET LUCAS THE SPIDER'S FRIEND

Say: Let's meet a marvelous bee, Maizie! As you watch, try to notice what Maizie is often busy doing.

The Most MARVEOUS Maizie Compilation EVER! | Lucas The Spider

<https://www.youtube.com/watch?v=UdFLjLZY9bs>

Discuss. Ask: **What is Maizie good at? (Example: Flying)** Ask: **What can Maizie do? (Example: Pollinate flowers)** Ask: **Where does Maizie go in the winters? (Example: Her hive; she goes to sleep)**

GAME TIME

(20 - 30 min)

Materials:

- Soft ball/group
- Tape or chalk to mark zones



BEE BOUNCE

Say: **Today, you're going to act like busy bees! Bees transfer pollen from flower to flower to help plants grow. You'll work with your team to throw the ball and 'land' it on the flowers! The better your bounce, the more pollen you deliver. Let's see how many flower zones you reach!**

Prep beforehand: Set up three to five "Flower Zones" in a large grassy area. Use cones, mats, or tape to mark the flower zones. Mark a throw line.

What you'll do:

1. Students work in groups. Each group will need one ball.
2. Players line up behind behind the throwing line. Students can throw, bounce or roll the ball trying to land it in a Flower Zone. If the ball stays in the flower zone, they get a point. If you set up a flower zone farther away it can be worth two points or three points.
3. Students can recover the ball and throw again.
4. After a set time or when all members have gotten a turn, add up the points and compare. The team with the most points wins.

Explain: As bees fly, their fuzzy legs pick up pollen and carry it to other flowers. Bees don't just reach a target; they help plants grow so we can have food!

READING TIME

(10 - 15 min)



STEM GAME

(30 min)

Materials:

- Space to dance!
- Music



Read “Wiggle Waggle”:

Say: **Flight isn’t just about getting from one place to another. Often, flight helps animals like bees find food. When honey bees find a good source of flowers for nectar they return to the hive and tell the other bees where it is by doing a waggle dance!**

Read the story ‘Wiggle Waggle’ with your students. Ask: How do bees tell each other where to go to find food? How could you tell a partner where to go using a dance?

DO THE “WAGGLE DANCE”

Preparation:

Arrange a device to play music and do this activity outside if possible.

Say: **“Today we get to think like a honey bee and do a fun dance to guide a classmate to find an item! You’ll get to design your own dance to communicate your directions”** Have students stand up and follow along with you as you do a few simple dance moves: Move your arms back and forth, tap your feet, try clapping, spinning around, and hopping to the side.

What you’ll do:

1. Split the students into groups of four to five students.
2. Have them spread various objects around a grassy area. Use balls of different sizes and colors, backpacks or other objects of your choice. Mark a starting point for each group using a paper cup or a piece of paper.
3. Ask groups to secretly choose an item and design a dance to guide another group from their starting point to the secret item of their choice.
4. Students practice their dance so that all members of the group can perform their dance together like a TikTok dance. **Example:** A dance such as this: Point, point, point, march in place for 10 steps, Hop to the left, hop to the left, Tap tap tap. could communicate that to reach the item, you must take ten steps in the direction pointed and two steps to the left to reach the secret item.
5. Groups take turns performing their dance for other groups to see if they can figure out which item to find.

Play this music as they practice and as they perform.

Busy Like A Bee | by Stephanie Leavell

<https://www.youtube.com/watch?v=xg3aruqoEXs>



STEM GAME

(30 min)

HONEY TIME!

Say: "Bees work together to make honey. For this game, one student will be Mr. or Mrs. Bee and stand with their back to the rest of the class. Students will chant, "What time is it Mr. Bee?"

Mr. Bee calls out a time (example: 5 o'clock). **You need to listen carefully to the time and take that number of steps (e.g. 5 steps).**

When Mr. Bee thinks the rest of the class is close, instead of a time, he/she will shout "Honey Time!" turn around and chase all the players. Whoever gets tagged is the next Mr./Mrs. Bee!

What you'll do:

1. Take students outside. Show them the 'Home' line. choose a student to be Mr. or Mrs. Bee. Students stand about 20 feet away on "home" line. Mr. or Mrs. Bee stands with his or her back to the class.
2. Students chant **"What time is it Mrs. Bee?"**
3. Mrs. Bee calls out a time. Players take that amount of steps.
4. Repeat until Mrs. Bee thinks the players are close. Then, Mrs. Bee shouts **"Honey Time!"** and chases all the players back home. Whoever he or she tags is the next Mr. or Mrs. Bee.
5. Continue until many students get a turn or STEM Coach decides.

STEM SNACK

(30 min)

Materials:

- Lemonade packet
- Dehydrated honey
- Cups



LEMONADE TIME!

Say: **Bees make honey by collecting sweet nectar from flowers. Then, they drink it as their food! Today, we're honey to make lemonade! Yum!**

Each students mixes their lemonade in a dixie cup.

Please encourage students to experiment to make a recipe. Ideally they will add a little bit of lemon and honey powder at a time instead of just adding them in all at once.

Give each student:

- One lemonade packet
- Two dehydrated honey packets
- Add water to taste



STEM SONG

(5 - 10 min)

SING A BEE SONG

Instructions: Sing the song to the tune of Do Your Ears Hang Low?

Do you like to buzz? Are you covered all in fuzz?

Do you call a hive a home/ In the garden where you roam?

Can you make yummy honey? Are your stripes a little funny?

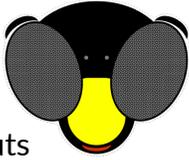
Do you like to buzz?

PAPER CRAFT

(20 min)

Materials:

- Hand-outs
- Scissors + tape
- Mini-flyer



MINI-FLYER PLAY

(20 - 30 min)

Materials:

- Mini-flyers
- A large ball



STEM CRAFT

(30 min)

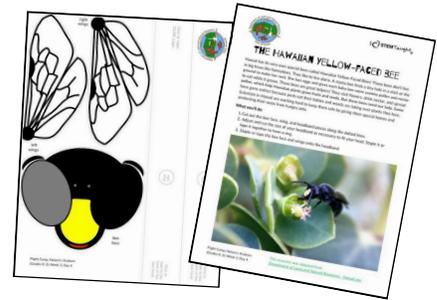
Materials:

- Paper
- Coloring utensils



MAKE A HAWAIIAN YELLOW-FACED BEE HAT

Say: **There are many different types of bumblebees. In the islands of Hawaii, there is a unique yellow faced bee that helps pollinate special flowers. Unlike other bees, it lives alone.**



First, read the bee facts sheet to the students. then, the students make bee hats. Each student gets a handout from the end of this lesson plan and follows the instructions.

1. Cut out the bee face, wings, and headband strips.
2. Make the headband. Staple or tape the two headband strips together and fit the headband to the size of your head.
3. Staple the bee face and wings to the headband.

MINI-FLIER/BALL BUZZ & BOUNCE

Students watch this video to see bee's at play.

Bumblebees Enjoy Playing with Balls | BBC News

<https://www.youtube.com/watch?v=Ghws6YFsPJA>

Instructions:

Say: **Bees like to play just like you do! Today you get to dress up as bees and play a game with your mini-flyer.**

Students (dressed as bees!) pass the "pollen" (the mini-flier) around while music plays. When the teacher pauses the music, the student holding the pollen performs a wiggle-waggle bee dance.

Play this music: **Busy Like A Bee | by Stephanie Leavell**

<https://www.youtube.com/watch?v=xg3aruqoEXs>

MAKE AN ORIGAMI BEE

Preparation:

Cut paper into squares, about 15cm by 15cm.

Paper Bee Craft For Kids | Easy Origami For Kids

<https://www.youtube.com/watch?v=yToOo2L8kVY>

What you'll do:

1. Students follow along with this tutorial to make an origami bee.
2. Students color and decorate their bees.



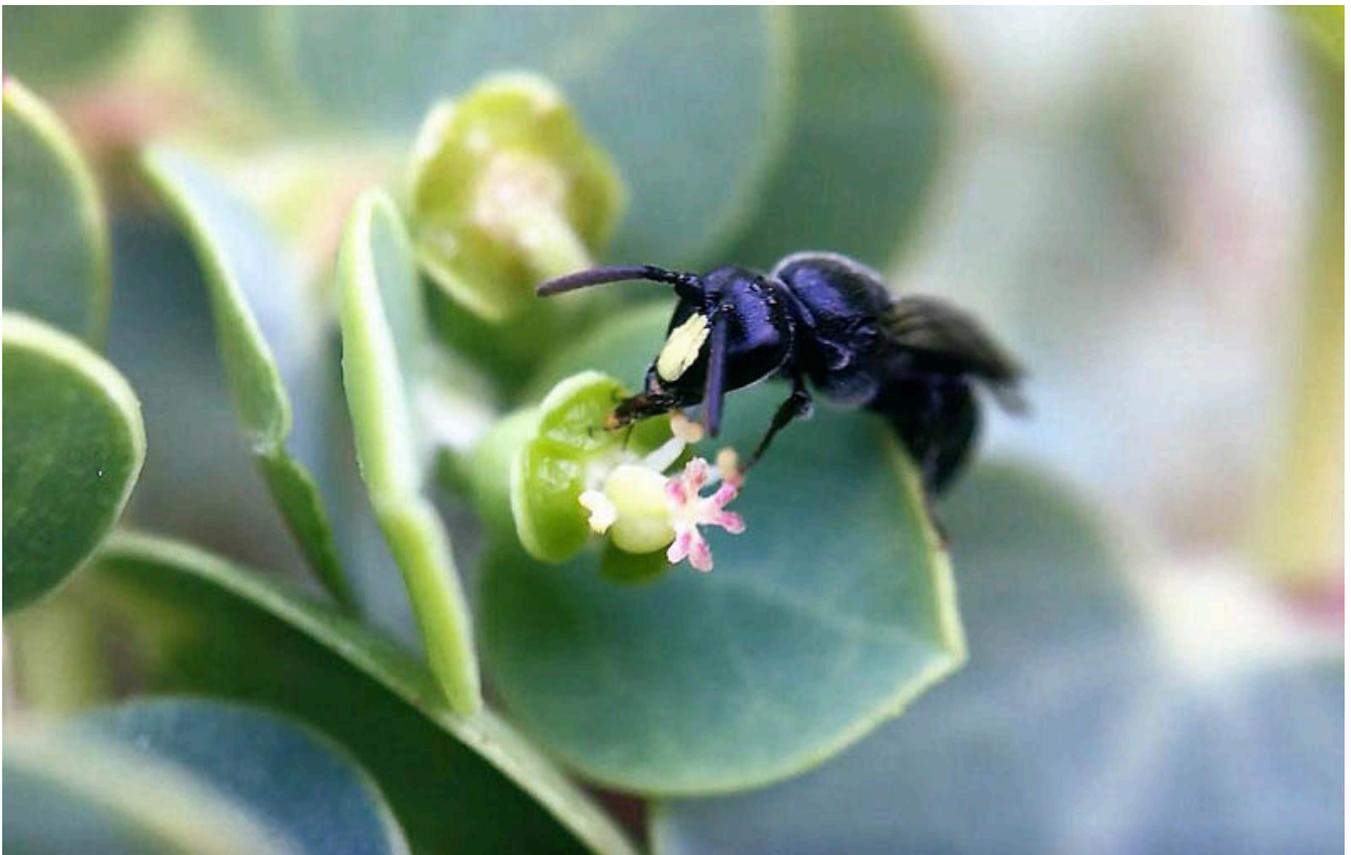


THE HAWAIIAN YELLOW-FACED BEE

Hawaii has its very own special bees called Hawaiian Yellow-Faced Bees! These bees don't live in big hives like honeybees. They like to live alone. A mama bee finds a tiny hole in a stick or the ground to make her nest. She lays eggs and gives each baby bee some yummy pollen and nectar to eat while it grows. These bees are great helpers! They visit flowers, drink nectar, and spread pollen, which help Hawaiian plants grow fruits and seeds. But these bees need our help. Some have gone extinct because pests eat their babies and weeds are taking over plants they love. Scientists in Hawaii are working hard to keep them safe by giving them special homes and protecting their nests from hungry ants.

What you'll do:

1. Cut out the bee face, wing, and headband pieces along the dotted lines.
2. Adjust and cut the size of your headband as necessary to fit your head. Staple it or tape it together to form a ring. This is your headband.
3. Staple or tape the bee face and wings onto the headband. Now you can dress up as a bee!





Glue or tape
behind
DLNR Logo.

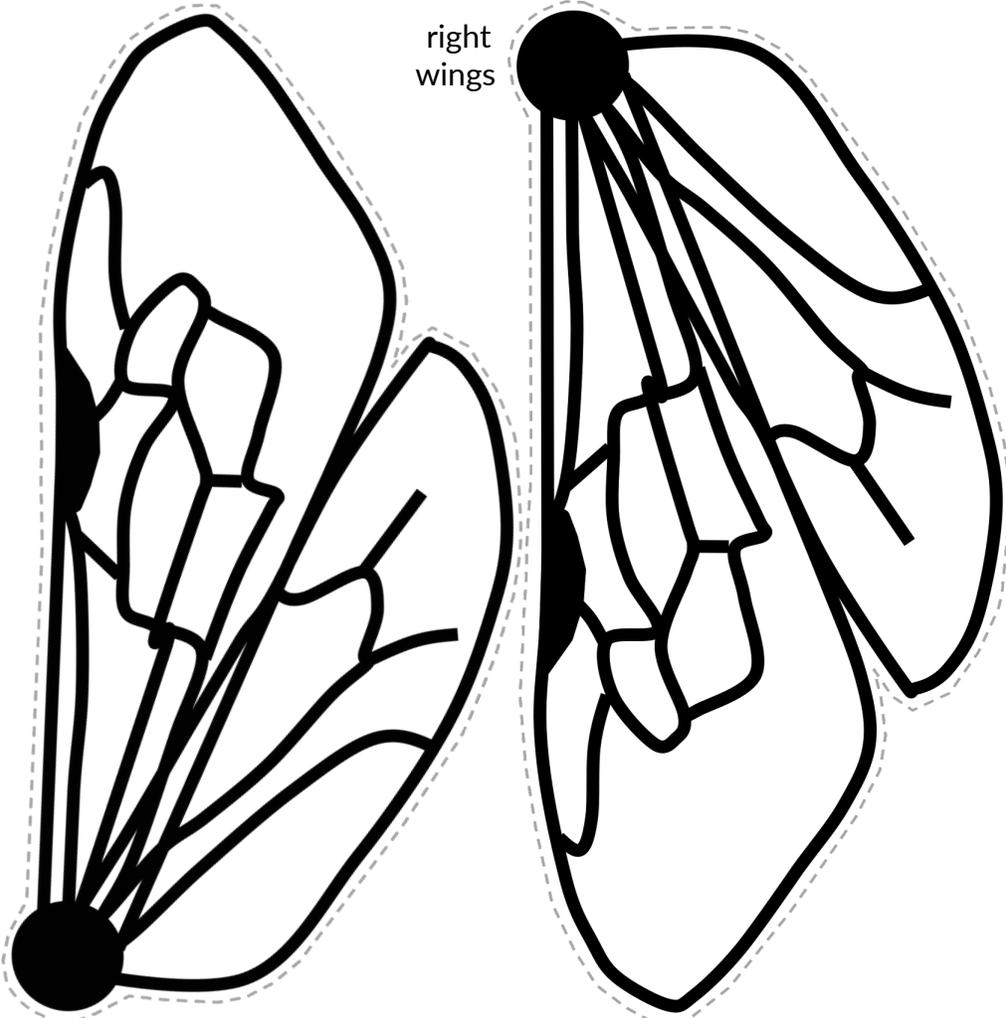
right
wings

left
wings

Glue or
tape to the
back of the
bee head.

Glue or
tape to the
back of the
bee head.

right
wings



left
wings

bee
face

