Science Story Adventures

Bees

Learning outcomes

- » Students know flowers and fruits are associated with reproduction in plants. (Grade 2 Life Sciences)
- » Students know plants and animals have structures that serve different functions in growth, survival, and reproduction. (Grade 3 Life Sciences)
- » Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial. (Grade 3 Life Sciences)

From: California's Science Content Standards

Books we read

Honeybee Man by Lela Nargi The Bumblebee Queen by April Pulley Sayre Jam & Honey by Melita Morales

Activities we did

- » We examined honeybee and bumblebee specimens and talked about how different parts of their body help with gathering nectar and pollinating flowers.
- » We learned about how honeybees communicate and did the waggle dance.

Today's craft: Pollinating Bee

You will need:

- » Cardstock
- » Crayons or colored pencils
- » Sticky Back Velcro squares (2.22 cm)
- » Scissors

- » Yellow and black felt
- » Black chenille sticks
- » Glue
- » Tape
- » Googly eyes



Directions:

- 1. Print out the sunflowers and bee templates on cardstock.
- 2. Color in the sunflowers and put a non-fuzzy Velcro square on the center of each flower.
- 3. Cut out the cardstock bee. Cut out a piece of yellow felt that is the same shape as the bee, and glue it to one side of the cardstock. Cut out small strips of black felt, and glue those on the bee.
- 4. Fold one of the chenille sticks into a figure-eight to make wings. Take a fuzzy Velcro square (the opposite of what is on the flowers), and place it over the center of the figureeight. Then attach the wings and Velcro to the back of the bee.
- 5. Cut a chenille stick in half. Cut one of the halves in half again. Shape these two pieces into antennae and tape them to the back of the bee.
- 6. Glue on the googly eyes.
- 7. Let your bee gather nectar and spread pollen from flower to flower.

Want to find out more?

Here is a selection of further resources to explore in the Naturalist Center, in the public library or at home. Please ask if you can't find what you're looking for.

Books

La Abeja by Gallimard Jeunesse, Ute Fuhr & Raoul Sautai. Nat. Ctr. Juv. QL565.2 .F8318 1993

Learn about the life of a honeybee and beekeeping in this book in Spanish.

Are You a Bee? by Judy Allen

What would your life be like if you were a bee? Find out in this informative and beautifully illustrated book. Part of the "Backyard Books" series.

The Buzz on Bees: Why Are They Disappearing? by Shelley Rotner & Anne Woodhull

Bold photos and simple text explore the importance of honeybees to humans, why they are disappearing, and what we can do to help.

The Hive Detectives: Chronicle of a Honey Bee Catastrophe. by Loree Griffin Burns. Nat. Ctr. Juv. SF538.5.C65 B87 2010

Go on a quest with beekeeper Dave Hackenberg as he tries to discover why his hive of bees simply disappeared one day. Part of the "Scientists in the Field" series.

Honey: A Gift from Nature by Yumiko Fujiwara. Nat. Ctr. PZ7 .F9515 Ho 2006

A young girl helps her father care for his beehives throughout the year.

The Magic School Bus Inside a Beehive by Joanna Cole.Nat. Ctr. Juv. QL568.A6 C565 1996

Join Ms. Frizzle and her class as they shrink to the size of bees to explore the inside of a beehive.

Media

The Cat in the Hat Knows a Lot About That!: Wings and Things (DVD). Nat. Ctr. Media PN1992.77.A1 C38 2010 A collection of episodes from the TV show. In "Show Me the Honey," the Cat in the Hat goes on an adventure with Sally and Nick to discover how bees make honey.

Tales from the Hive (VHS). Nat. Ctr. Media QL565 .T34

Specially designed cameras show the workings of a bee colony up-close.

The Magic School Bus: Bugs, Bugs, Bugs (DVD). Nat. Ctr. Media Q181 .M34 2009

A collection of episodes that includes one where the gang goes into a beehive to learn what all the buzz is about.

Websites

Bumblee Pages

Extensive information about bumblebees. Includes many cool close-up photos of bumblebees.

http://www.bumblebee.org/

The Great Sunflower Project

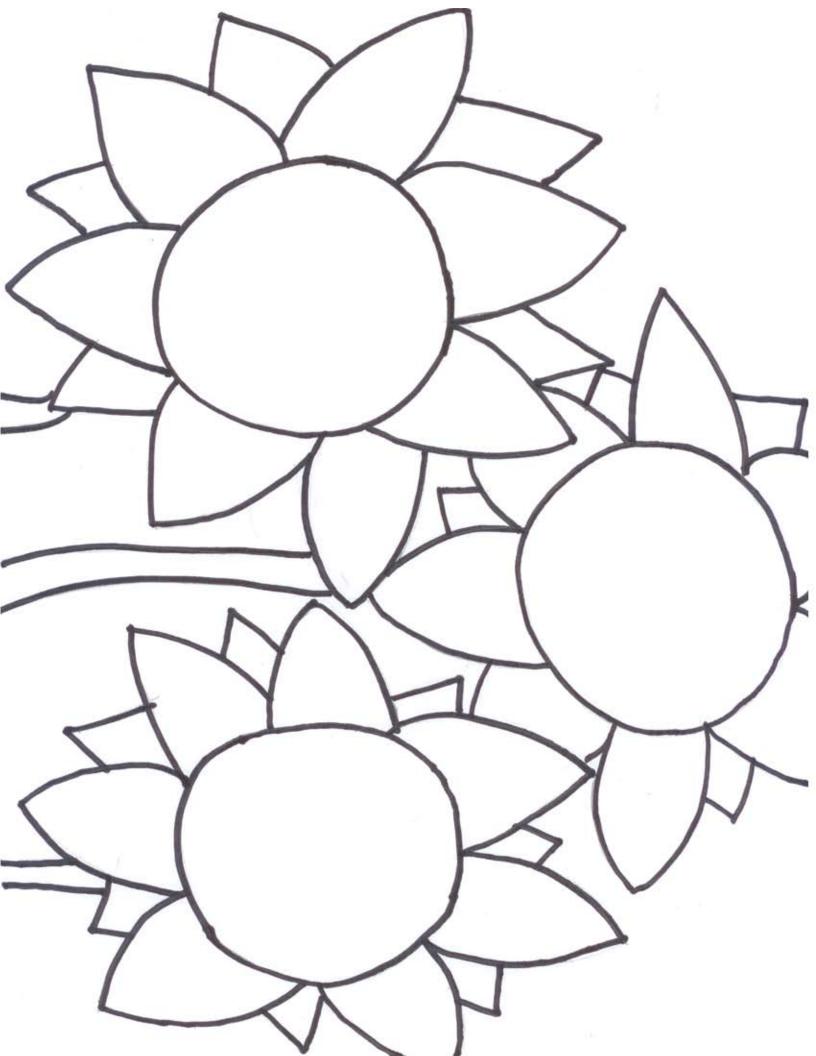
A citizen science project to help monitor bee populations started by a professor at San Francisco State University.

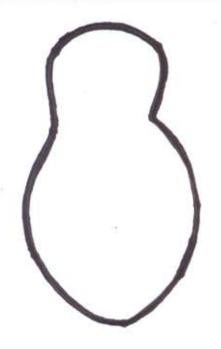
http://www.greatsunflower.org/

Guide to Bee-Friendly Gardening

Includes information on plant selection, garden design, and urban bee research and species.

http://nature.berkeley.edu/urbanbeegardens/index.html





Bee template