Pollinators in the Garden

Grade level: Preschool

Season: Spring

Larger IGS Unit
In the School Garden

Essential Questions
Who are our pollinators?
What is a pollinator’s job?
What’s inside a flower?
What does a flower turn into?

Objective
Students will understand why bees are important, how we should treat them, and what we can do to help them. They will also explore inside flowers and the process of pollination.

Materials
- Dead specimens of honeybees, bumble bees, butterflies, moths, bee larvae
- Honeycomb
- Parts of a hive body including box and frames
- Flowers

Introduction
- Start with a discussion: Who are our pollinators? Make a list. Ask: Why they are important? This part will need a little explanation, such as pollinators help turn flowers into seeds and fruits. Why do we need seeds and fruits? What would happen if there were no more pollinators?

Activity
- Hand out flowers for students to examine. Have them stick their fingers inside to find the pollen. Explain that when this gets spread around, it will turn a flower into a fruit or seeds. Circle back to the question about why we need seeds and flowers. Allow students to rip open the flowers and examine on their own.
- Show students the dead bees! Point out their furry bodies (used for collecting pollen) and their proboscis (used for drinking nectar). Encourage them to gently touch the bees to feel the fur and to use a magnifying glass to find the proboscis. Take out the bee larvae and show them what the baby bees look like. Ask lots of observational questions. What’s different between baby bee versus grown up bee? What’s different between the honeybee and the bumblebee?
- Show students what the hive looks like. Explain that they live in the honeycomb and lay the eggs that will grow into baby bees and store honey in each of those holes. Challenge them to figure out what shape the comb is. HOW did they make
those hexagons without a ruler or pencil or paper? What is the comb made out of? What do we use wax for?

- This is the real hot button issue: how do we act around bees? Ask students: What eats bees? Some of them will know that birds do. Have them act like birds by flapping their arms. Now, pretend you are a person scared of a bee, trying to shoo them away and who is scared (flap your arms to demonstrate being scared). What do you look like? A BIRD! So what does the bee think? (That you might eat it, and they might be scared). Ask how we should act around bees and act out being calm.
- Show some examples of other types of pollinators including moths and butterflies.

Wrap Up/Assessment

- Circle back to the question: Why do we need bees? Make sure they understand about seeds and fruits. What can we do so that bees and other pollinators are happy at our school? Then, go to plant some flowers for the pollinators!

Extensions:

Plan out and plant a pollinator garden. Provide water, food and shelter for them.

Dissect fruits and examine the seeds inside.