



Insects and the Garden

Lesson Description

Students are introduced to insects; including their body parts, adaptations and functions. Students will create their own insects out of craft supplies and hunt for real insects in the garden.

- Time required: 60 minutes
- Location of lesson: Classroom and garden

Learning Objectives

- Identify and define the different body parts of an insect.
- Be introduced to different insect's roles in the garden and how unique adaptations help insects survive.

Materials and Preparation

- Scissors
- Large package of multicolored pipe cleaners; 3-5 pipe cleaners per student
- Craft supplies (pom pom balls, eyes, sequins, etc.)
- 5 bottles of Elmer's type school glue
- Optional: Prepare 1 example of a pipe cleaner insect to show the class
-  **Insect Parts**
-  **Beneficial Insects**
-  **Create an Insect**
- Prepared vegetable snack of the week – 1 for each student
- Water to drink during the Class Warm-up – water dispenser in the classroom and 1 cup or a water bottle for each student

Class Warm-up: Champion Cheer and Veggie Taste Test (5-10 minutes)

- Give each student a cup of water or ensure that they have a filled water bottle in front of them.
- Give each student the prepared veggie snack of the day.
- Lead the students in enthusiastically reciting the  **Champion Cheer**.
- At the end of the cheer, drink water and eat the veggie snack together.
- Have students complete their  **Taste Test Observations** about the vegetable snack of the week.

Review of Last Lesson (2-3 minutes)

- Review the evaluation questions from last week’s lesson. Evaluation questions from all lessons are listed at the end of the workbook .

Class Discussion (5-10 minutes)

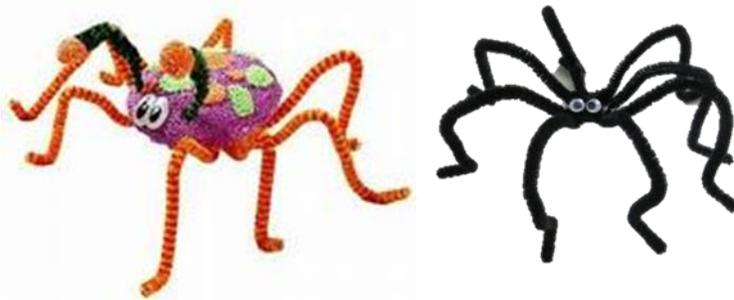
Insects are a very important part of the garden. We couldn’t live without them! What are insects? Are insects good or bad for the garden? What do good insects do for the garden? What type of insects have you seen before? Where do insects live? What about insects makes it hard to see them sometimes?

Insects are small animals that have 6 legs and generally 1 or 2 pairs of wings. Some are good for the garden and some are bad. The good insects are pollinators, predators and recyclers. We will learn more about those in 4th grade. All insects are similar to each other in many ways, but they are also unique and different from each other. Insects adapt to their environment in order to do different things and survive in the wild. For example, bees and ants are both insects. But they look different and do different things. The bee’s wings help it to fly around and collect pollen from flowers to make honey and the ant’s legs and pinchers help it to walk around, dig tunnels and carry big heavy things. What are some other examples?

Activities (35-40 minutes)

-  **“Insect Parts” (5-10 minutes)**: Students label the insect diagram in their workbooks with the correct body part names.
 1. Refer students to the  **Insect Parts** page in their workbooks.
 2. Explain the different parts of an insect:
 - a. *Head: Where the mouthparts, eyes and antennae are located.*
 - b. *Antennae: Primary sensors of smell.*
 - c. *Eye: An organ of vision or of light sensitivity (bright vs. dark).*
 - d. *Thorax: The part of an insect’s body between the head and abdomen, where the legs and wings are.*
 - e. *Wing: One of a pair of movable organs for flying.*
 - f. *Abdomen: The back end of the body behind the thorax, consisting of up to 10 similar segments.*
 - g. *Legs: Limbs (like our legs and arms), used for walking or supporting the insect.*
 3. Have students identify and write the appropriate names of the insect parts in corresponding blank boxes in their workbook.
 4. Refer students the  **Beneficial Insects** workbook page for examples of different beneficial insects that are found in the garden.
-  **“Create an Insect” (20 minutes)**: Students create their own insect from craft materials and answer questions in their workbook to invent a story about their insect.

1. Refer students to the  **Create an Insect** page in their workbooks.
2. Read through the questions on the workbook page (*where does your insect live, how does it move, etc.*) to get students thinking creatively about which insect they will create.
3. Students may either work in groups and create 1 group insect or work individually and each create their own insect.
4. Pass out craft supplies and allow approximately 10-15 minutes for insect creation time.
5. Have students fill in answers to the questions in the workbook that create a story around their newly created insect.
6. Time allowing, invite students to share their insect with the class.



- **“Outside Insect Discovery” (5-10 minutes):** Students go outside to find and examine insects.
 1. Take the students outside (preferably to the garden) and find insects.
 2. Examine the insects to find and name the body parts of the insect.

Evaluation Questions (5 minutes)

1. *What are the different insect body parts?* (Answers: head, antennae, eye, thorax, wing, abdomen, legs)
2. *What do antennae do for insects?* (Answer: primary sensors of smell)
3. *What part of the insect are the wings and legs connected to?* (Answer: thorax)
4. *What do good insects do for the garden?* (Answers: pollinators-help plants make new plants, recyclers-help the soil, predators-eat the bad bugs)
5. *How much water should you drink every day?* (Answer: at least 6 cups of water a day)
6. *How many fruits and vegetables should you eat every day?* (Answer: at least 5 fruits and vegetables a day)
7. *Does gardening connect you to your culture and help you learn new words in your language?* (Answer: yes)

Preparation for Future Lessons – Reminder for the Instructor

- Review the materials and preparation needed for the next lesson
- Remember that an Elder guest instructor is needed for these Fall lessons: Lesson 2 (What is a Plant?), Lesson 4 (Seed Exploration), Lesson 6 (Preserving the Harvest), and Lesson 10 (Companion Planting and Traditional Cooking).

Notes
