

ELA: Grade 2, Lesson 1, Insects

Lesson Objective: Students will know about the types of insects

Practice Focus: Accessing prior knowledge, and making predictions

Today we will be learning new things about insects and learning how to make a prediction about what makes an insect an insect.

TN Standards: 2.RI.KID.1; 2.RI.IKI.7; 2.W.RBPK.8

Teacher Materials:

- ELA, Grade 2, Lesson 1 Teacher Packet – printed (will hold up images for students to see)
- One piece of paper

Student Materials:

- Two pieces of paper
- Pen or pencil

Teacher Do	Student Do
<p>Opening</p> <p>Hello! Welcome to Tennessee’s At Home Learning Series for literacy! Today’s lesson is for all our 2nd graders out there, though all children are welcome to tune in. This lesson is the first in our series.</p> <p>My name is ____ and I’m a ____ grade teacher in Tennessee schools! I’m so excited to be your teacher for this lesson! Welcome to my virtual classroom!</p> <p>Today we will be learning new things about insects and learning how to make a prediction about what makes an insect an insect. At the end of the lesson, you will get to make your own prediction about insects, so listen carefully!</p> <p>Before we get started, to participate fully in our lesson today, you will need:</p> <ul style="list-style-type: none">• Something to write with and a surface to write on• Two pieces of blank paper <p>Ok, let’s begin!</p> <p>Today you will hear some very important vocabulary words. These words will help us better understand what we are reading about. Let’s check out a few of those vocabulary words now.</p> <ul style="list-style-type: none">• <u>Insects</u>- Please say the word after me. INSECTS This word is a noun. The definition is, small animals with six legs and three main body parts	<p>Collects materials needed to engage in the lesson.</p>

<p>Here is an example of the word in a sentence: Mackenzie likes all kinds of insects, especially butterflies.</p> <p>You might hear the singular form <u>insect</u> as well.</p> <ul style="list-style-type: none"> • Habitats- Please say the word after me. HABITATS This word is a noun. The definition is, the natural homes or environments of plants and animals Here is an example of the word in a sentence: Desert habitats are home to plants and animals that can survive without regular rainfall. You might hear the singular form <u>habitat</u> today also. • Social- Please say the word after me. SOCIAL This word is an adjective. The definition is, living together in organized communities Here is an example of the word in a sentence: The social honeybees worked all through the night to take care of the queen bee. <p>Now that we know some important vocabulary words, let's begin!</p>	
<p>Intro [Ask students the following]:</p> <ul style="list-style-type: none"> • What is the smallest animal you have ever seen? [Pause] I heard someone say a mosquito...that's right, they are pretty small! • Do you know of any small animals that have six legs? [Pause] That's right, a spider is one animal that has six legs! <p>For the next several lessons, you will be learning about small, six-legged animals called insects. Insects are the largest group of animals on the earth and there are many different types of insects. Together we will learn about some of these different types, what characterizes an animal as an insect, the life cycle of insects, and how insects may be helpful and/or harmful.</p> <p>What Do We Already Know?</p> <ul style="list-style-type: none"> • [Show image 1A-1: Insect Collage] • Point to the collage and tell students that all of the insects pictured in this domain are shown bigger than life size so the students can see them better. <ul style="list-style-type: none"> • Ask students if they recognize any of the insects pictured in this image. 	<p>Student interacts with teacher's questions as posed. Student will access prior knowledge about insects.</p>

<ul style="list-style-type: none"> • Ask if any of these insects live in the area in which students live. • Ask students to share one fact they know about any of the insects pictured. • [You may want to record student responses on chart paper, a chalkboard, or a whiteboard to review during the course of this series.] <p>Purpose for Listening:</p> <ul style="list-style-type: none"> • You are going to be introduced to a variety of insects with homes all over the planet. Today's read-aloud is called "Insects Everywhere!" because insects live in nearly every habitat on Earth. Please listen carefully to find out the only places on Earth where insects cannot survive. 	
<p><u>Teacher Model</u></p> <ul style="list-style-type: none"> • [Show image 1A-2: Common Housefly]: Hello, boys and girls. I've been invited to join you today to talk about a very important subject—me. Who knows what type of animal I am? Right. I'm a fly. I'll bet most of you have seen lots and lots of flies, haven't you? I'm told that you find us flies rather annoying, so I'm guessing that you've swatted at one of my billions of cousins at least once in your life! • [Show image 1A-3]: I'm wondering just how much you really know about us. For example, did you know that I could walk straight up a wall? I'll bet you can't do that, can you? I have thousands of tiny hairs on my feet that act like suckers. I am a housefly, the most common type, but there are many other fly species on Earth. A species is a group of plants or animals that are alike in important ways. Horseflies, robber flies, fruit flies, gnats, and mosquitoes have many different species that all belong to the same group. • [Show image 1A-4]: Scientists group animals into different categories. What different kinds of animals can you name? [Pause] Yes—fish, snakes, frogs, birds, and insects are just a few of the animal groups you know. Flies, like me, belong to the largest group of animals on Earth. Who knows which group is the largest? [Pause] Insects! Insects are small animals with six legs and three main body parts. We flies are insects, and we share the planet with millions of other insects in many different habitats. Habitats are the natural homes of plants and animals. Can you 	<p>Student interacts with teacher's questions as posed. Student will access prior knowledge about insects.</p>

name a few? Great—deserts, forests, mountains, grasslands, and tundra are some you may know about. During the next few lessons, some of my fellow insect friends are going to teach you lots of interesting facts about insects that live in different kinds of habitats. We insects live all over the globe—everywhere except the oceans. Insects can even live in some very cold or very hot areas of the earth!

- [Show image 1A-5]: We'll start today by looking at meadow grasslands. Look out over this field of alfalfa. Do you see any animals in the picture? It just looks like an ordinary grassy field without much going on, doesn't it? But, don't be fooled; this field is teeming with life! If you sat down in the middle of this meadow and closed your eyes, you would likely hear birds singing, but you might be completely unaware of the often silent, hidden world of insects all around you.
- [Show image 1A-6]: Many insects depend on plants to live. Many insects eat plants and some lay their eggs on plants. The plant on which an insect lays its eggs, and which provides food for its young, acts as host and is called a host plant. Each host plant attracts different types of insects. Many insects would die without their host plants because they have developed very specific diets needed to live.
- [Show image 1A-7]: Many meadow plants attract grasshoppers. Grasshoppers feed on the leaves and stems of the alfalfa plant. Harder to find is the tiny leafhopper, but this wedge-shaped insect can slow down the plant's growth, turning it brown as it sucks nutrition from its host plant. Many insects, such as these tiny aphids, can damage entire meadows. Grasshoppers, leafhoppers, and aphids are all pests. Farmers are never happy when they discover them on their plants because they can destroy their crops. But not all insects are pests.
- [Show image 1A-8]: Who knows what this insect is called? That's right. It's a ladybug. Did you know that ladybugs are some of the most helpful insects on Earth? They feed on aphids and the eggs of moths and beetles that destroy crops. Lacewings and ambush bugs also eat aphids, so farmers are happy when they see these insects on their plants. From grasslands, let's move to a forest habitat. Both cone bearing evergreens and trees that drop their leaves each year live in this forest.

- [Show image 1A-9]: **Many trees, like these pine trees, are hosts to a variety of bark beetles. These tiny insects can kill huge trees! How can that be possible? Bark beetles burrow, or dig, under the tree's bark, creating a series of tunnels in which they lay their eggs. Well, let's think about this . . . what does a tree need to live? [Pause] By burrowing into the layer of wood beneath the bark, these beetles stop the flow of nutrients, or food and water, throughout the tree and often kill the tree.**
- [Show image 1A-10]: **Lots of insect activity takes place overhead in the forests, but many insects also live on the forest floor. Can you think of any? [Pause] Ants are one of the most common insects on Earth, and many live in the forest. Unlike many of us solitary insects that live on our own, ants are social insects that live in colonies, or groups. Let's look at an especially interesting social ant that lives in the rainforest.**
- [Show image 1A-11]: **This is an army ant. Army ants travel in big raiding parties that cooperate to hunt prey. They resemble, or look like, an army of soldiers as they move across the ground together in a large group. These ants are known for swarming their prey all at once, which means that the swarm can attack a lot of prey at the same time. You'll learn more about ants another day, so let's take a quick peek at one more forest insect.**
- [Show image 1A-12]: **This beetle is named for the long, large horn at the front of its head. Does its horn look like that of any other animal that you already know? I'm thinking of a much larger animal. [Pause] Yes, a rhinoceros! The rhinoceros beetle uses its horn for digging hideouts and finding food along the forest floor. Male rhinoceros beetles use the horn for wrestling with other males in an effort to win over a female beetle. The male that succeeds in throwing the other off a branch gets the female rhinoceros beetle.**
- [Show image 1A-13]: **What kinds of insects do you think live in the coldest habitats? There are many types of flies on the tundra, this very cold habitat, including houseflies like me. This Arctic crane fly has amazingly long legs. And, guess what? Adult crane flies have no mouths . . . so they never eat! Here's another fact about them that's not too surprising: they only live for a few days.**

<ul style="list-style-type: none"> • [Show image 1A-14]: Some insects are aquatic, meaning that they live in or near water. Here's one that you may have seen in rivers, ponds, or streams. This insect is a dragonfly! A few minutes ago, however, I told you that there is one large water habitat that does not support the life of insects. Do you remember what that habitat is? [Pause] The ocean! • [Show image 1A-15]: Let's look at the globe again. Is the earth covered by more land or more water? [Pause] Right—nearly two-thirds of the earth is covered by water and most of that water is in our oceans. Think about it. Oceans are the world's biggest habitat, yet no insects live there. But insects, found on only one-third of the earth's surface, are still the largest group of animals on Earth! • Wow! That was a GREAT story! We just learned so much about insects! Let's record some of what we learned! 	
<p>Guided Practice Teacher models folding a piece of paper into thirds and asks students to do the same with their paper.</p> <p>Students, remember that 2/3 of the earth is covered in water. Label 2 of these 3 parts "water." You might even want to color this part of your paper blue after our lesson. Remember this is the part of the earth that insects DO NOT live in. [T model if possible on board, chart paper, or paper].</p> <p>Look at the remaining 1/3 of your paper that is not labeled "water." What type of animal can live only on this portion of our world? That's right, insects! Go ahead and draw a few insects in this part of your paper. [T model if possible].</p>	<p>Student folds paper and labels 2/3 parts "water" (can color blue later). Student draws insects on remaining 1/3 of paper.</p>
<p>Independent Practice</p> <ul style="list-style-type: none"> • [Show image 1A-16]: Flies. Grasshoppers. Ants. Caterpillars. Beetles. These are all insects, yet they look quite different from one another—different shapes, sizes, and colors. So, what makes an insect an insect? You'll find out next time. In the meantime, be thinking about how a fly is like a grasshopper, or a beetle is like an ant. • [Ask students to get out their second piece of paper]. After this lesson is over, I want you to make a prediction about what makes an insect an insect. We'll use this prediction in our next lesson! Write a few sentences on your paper about the features of 	<p>Student responds in writing to question: What makes an insect an insect? (This is a prediction for an upcoming lesson).</p>

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insects that might make them unique from other animals!	
<u>Closing</u> <ul style="list-style-type: none">• I enjoyed learning about insects with you today! Thank you for inviting me into your home. I look forward to seeing you in our next lesson in Tennessee's At Home Learning series. Bye!	

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