

ELA: Grade 2, Lesson 4, Insects

Lesson Objective: Students will know about the features of an insect's body

Practice Focus: Accessing prior knowledge, answering questions related to text

Today we are going to continue learning about insects and their main body parts by exploring the relationship of the words: microscopic and gigantic.

TN Standards: 2.RI.KID.1; 2.RI.IKI.7; 2.W.RBPK.8; 2.RI.CS.4

Teacher Materials:

- One piece of paper (or chart paper/white board) to model drawing microscopic and gigantic insects
- Teacher packet (printed – will hold up pictures for students to see)

Student Materials:

- One piece of paper and a surface to write on
- A 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 fourth 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 are going to continue learning about insects and their main body parts by exploring more information the relationship of the words microscopic and gigantic. At the end of today's lesson, you will get a chance to create a project highlighting 2 very different insects. Listen carefully so you will know exactly how to complete your project! Oh projects are my favorite!</p> <p>Before we get started, to participate fully in our lesson today, you will need:</p> <ul style="list-style-type: none">• One piece of paper and a surface to write on• A pen or pencil <p>If you didn't see our previous lesson, you can find it on www.tn.gov/education. You can still tune in to today's lesson if you haven't see any of our others. But, it might be more fun if you first go back and watch our other lessons since we'll be talking about things we learned previously.</p> <p>Ok, let's begin!</p>	

In our previous lesson we learned some very important vocabulary words. These words will helped us better understand what we are read about. Let's review those vocabulary words now.

- Abdomen- Please say the word after me. ABDOMEN
This word is a noun.
The definition is, the end part of an insect's body; the body segment that contains the digestive and reproductive structures
Here is an example of the word in a sentence: The abdomen is the largest body part of most insects.
You might hear the plural form, abdomens.
- Exoskeletons- Please say the word after me.
EXOSKELTONS
This word is noun.
The definition is, the stiff body coverings of insects, providing support and protection; skeletons on the outside of the body
Here is an example of the word in a sentence: The thick exoskeletons on beetles protect them from being squashed by larger animals.
You might hear the singular form, exoskeleton.
- Thorax- Please say the word after me. THORAX
This word is a noun.
The definition is, the middle part of an insect's body between the head and the abdomen; the body segment that contains the heart and the leg attachments
Here is an example of the word in a sentence: Joshua's favorite dragonflies have a bright green thorax.
You might hear the plural forms, thoraxes, thoraces.

Let's add a new one for today:

- Microscopic Please say the word after me.
MICROSCOPIC
This word is an adjective.
The definition is, something that is too small to be seen without the aid of a microscope; very small
Here is an example of the word in a sentence: Tiny microscopic bugs live in the pond behind my house, but they are too small for me to see with my eyes alone.

<p>Now that we know some important vocabulary words, let's begin!</p>	
<p><u>Intro</u> We've already learned a lot about insects in this lesson series so far! Let's review what we know.</p> <ul style="list-style-type: none"> • The largest group of animals on Earth are insects. • The fly telling the story in our previous read-aloud introduced you to a variety of insects that live in nearly all parts of the world. • One habitat in the world that does not have insects is the ocean. • Finally, the difference between social and solitary insects are that social insects live in groups, whereas solitary insects live alone or in pairs. <p>Thumbs up if you remember learning these facts about insects. [Pause] Awesome! I saw lots of thumbs!</p> <p>Today we will see what we remember about insects. I am going to ask some questions based on our lesson yesterday. I will give you a minute to think about the question, and then I will ask you to tell me what you think the answer could be. Finally, we will look at new vocabulary words and write two sentences about our new vocabulary.</p>	<p>Students will give a thumbs up if they've seen prior lessons.</p>
<p><u>Teacher Model</u> Boys and girls, I want you to think very carefully about what we discussed in our previous lessons as I ask these questions.</p> <ul style="list-style-type: none"> • This first question is hard but I know you can do it! What do all insects have? [Pause] <ul style="list-style-type: none"> • Way to go!! You said all three body parts: head, thorax, and abdomen! I heard someone else say they also have exoskeletons, or hard outer coverings! Jump up and turn around three times for being such a good learner!! • In the read-aloud from our last lesson, you saw pictures of many different insects. Based on what you heard and the pictures you saw, what do you think the author wanted us to know about the different kinds of insects? [Pause] <ul style="list-style-type: none"> • WOW! Those were some great answers. You're right, the author was trying to explain to use what makes an insect an insect, and that, although there are many different types of insects, they all have the same body parts! You have really been paying attention. Clap for how smart you are. 	<p>Students listen to questions and provide answers out loud.</p>

- **Let's think about the cricket. On what part of the cricket's body are its ears located?** [Pause]
 - **You are so smart! Kiss your brain! You're right, the cricket's ears are located on its front legs, just below the knee!**

[Show image 2A-8: Cockroach, aphids, mosquito, and bee (clockwise)]

Look at these insect mouth parts again.

- **Which insects bite and chew their food?** [Pause]
 - **Yes! Cockroaches.**
- **How can you tell?** [Pause]
 - **You got it! You can tell by the shape of its mouth. It does not have a long tube for sucking or a sharp object for piercing.**
- **Which insect has a mouth shaped like a straw and is used to suck out sap from plant leaves and stems?** [Pause]
 - **I heard the right answer out there...it's the aphid. Good job!**
- **Which insect has a long tongue that is used to suck nectar from flowers?** [Pause]
 - **That's right...it's the bee!**
- **Which insect has a sharp mouthpart that is used to pierce the skin of its prey?** [Pause]
 - **Wow! You're on a roll! You're right, it's the mosquito!**

Good job, boys and girls!

Now let's compare and contrast your body and an insect's body.

- **In what ways is an insect's skeleton different from yours?** [Pause]
 - **Great job! I heard a student say that an insect's skeleton is on the outside of the body and is called the exoskeleton.**
- **In what ways is it the same?** [Pause]
 - **That's right! Our skeletons serve the same purpose – to protect and support our bodies. And, both have muscles attached to them. Great job!**

[Show image 2A-13: Caterpillar with focus on true legs and prolegs]

Let's look at this picture

<ul style="list-style-type: none"> • Who remembers how many legs insects have? [Pause] <ul style="list-style-type: none"> • That's right, six! • This caterpillar has many more legs than that. Is it an insect? Why or why not? [Pause] <ul style="list-style-type: none"> • Wow, I thought I could trick you with that one but you're too smart! Yes, it has six true legs and is therefore an insect! The other legs are prolegs, or false legs. Great job! <p>We have discussed lots of insect body parts today, if you could choose any insect feature (antennae, special mouth parts, more legs, wings, etc.) to add to your own body, what would it be? Why? [Pause]</p> <ul style="list-style-type: none"> • Wow! I heard some really cool reasons for the body parts you'd want. • Teacher: share your own choice and reason! 	
<p><u>Guided Practice</u></p> <p>In our read-aloud you heard that "Some insects, like butterflies and grasshoppers, have wings whereas others, like fleas and <i>microscopic</i> lice, don't."</p> <p>Say the word <i>microscopic</i> with me.</p> <p>If something is microscopic, it is very, very small - so small you would need a special tool like a microscope to see it. The germs that cause many diseases are microscopic, so they can't be seen with just your eyes.</p> <p>Can you name some other things that are microscopic or very, very small? [Pause] Great job! You have been listening very well.</p> <p>So let's review, what's the word we've been talking about? [Pause] Great, yes microscopic!</p> <p>Did you know the opposite, or antonym, of the word <i>microscopic</i> is the word <i>gigantic</i>?</p> <p>If <i>microscopic</i> means very, very small, what do you think <i>gigantic</i> means? [Pause]</p> <ul style="list-style-type: none"> • That's right! Gigantic means very, very large. 	<p>Students say the word: <i>microscopic</i>.</p> <p>Students name things that are microscopic.</p> <p>Students say the word: <i>microscopic</i>.</p>

<p>I am going to name some things. If what I name is very, very small, say, “That is microscopic.” If what I name is very, very large, say, “That is gigantic.”</p> <ol style="list-style-type: none"> 1. A building that is forty stories tall [Pause] <ul style="list-style-type: none"> • That’s right, it’s gigantic! 2. An insect that we can’t see crawling through the soil [Pause] <ul style="list-style-type: none"> • Good job, that’s microscopic! 3. The sun [Pause] <ul style="list-style-type: none"> • Yes, the sun is gigantic! 4. The Pacific Ocean [Pause] <ul style="list-style-type: none"> • You go it, it’s gigantic! 5. A single grain of sand on the beach [Pause] <ul style="list-style-type: none"> • That’s correct, that’s microscopic! <p>Excellent job! You now know the difference between microscopic and gigantic. Also, as we talked about today, you know the features of an insect’s body. How exciting!</p>	<p>Student responds out loud with appropriate phrase.</p>
<p><u>Independent Practice</u> Take out a piece of paper and fold it in half. [T Model if possible]</p> <p>Ok, here’s your task! I want you to draw a microscopic insect that has three body parts on one side of your paper. [T model along with students working at home]</p> <p>Ok, now draw a gigantic insect that has three body parts on the other side of your paper. [T model along with students working at home]</p> <p>Great job, students!! I see some microscopic and gigantic insects on your papers and they look great! I also like how you included all three body parts! Give yourselves a pat on the back.</p>	<p>Students take out their paper and pencil.</p> <p>Students draw tiny insect with its three body parts.</p> <p>Students draw a gigantic insect with its three body parts.</p>
<p><u>Closing</u></p> <ul style="list-style-type: none"> • I enjoyed learning about the features of an insect’s body 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! 	

This work is based on an original work of the Core Knowledge® Foundation made available through licensing under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License. This does not in any way imply that the Core Knowledge Foundation endorses this work. Licensing terms: <http://creativecommons.org/licenses/by-nc-sa/3.0/>