



INSECTS

BIG IDEA

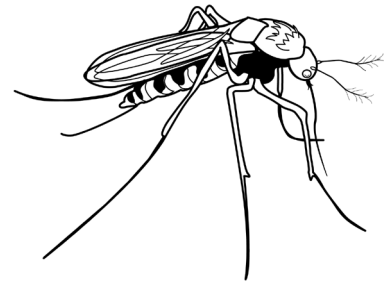
Exploration of living organisms helps children learn about their world. Children investigate in order to describe, organize, classify, and compare characteristics of insects.

Content objective(s):

The child will observe and describe characteristics of insects and sort insect pictures into groups: with wings/can fly or without wings/cannot fly.

Materials needed:

- ♦ T-chart (Handout 1)
- ♦ Pictures of insects with wings (Handout 2)—copy and cut out
- ♦ Pictures of insects without wings (Handout 3)—copy and cut out



Texas Prekindergarten Guidelines (Revised) domains addressed:

Language and Communication:

II.A.1. Child shows understanding by responding appropriately.

II.B.2. Child engages in conversations in appropriate ways.

II.D.5. Child uses category labels to understand how the words/objects relate to each other.

Mathematics:

VI.E.1. Child sorts objects that are the same and different into groups and uses language to describe how the groups are similar and different.

Science:


VI.A.1. Child describes, observes, and investigates properties and characteristics of common objects.

Lesson vocabulary:

- ♦ fly—volar
- ♦ wings—alas



Activities:

1. The home educator models and demonstrates for the parent.

 *Last time I visited, we learned about insects. What do you remember? **(Pause)** What insects did you see? **(Pause)** How do they look?*

Today we will continue learning about insects. Remember that insects have six legs and antennae. Their antennae help them feel and smell. Sometimes people call the antennae "feelers," and sometimes they are too small to see.


While you are reviewing these concepts point to the parts of the bee from Handout 2a.

  *Now we will be talking about insects that have wings and insects that don't have wings. Do you know what wings are? **(Pause)** Wings are body parts that are used to fly, or move around in the air. Do you have wings? **(Pause)** Can you fly, or move in the air? **(Pause)** Some insects have wings and they can fly, like the birds. Have you seen an insect with wings? **(Pause)** Tell me about it.*


If you had wings, how would you move? (Encourage the child to demonstrate flying by flapping his/her arms.)




Show the child the T-chart with the titles "Wings" and "No Wings." Model the process for the parent: naming insects, discussing and describing the insects, and sorting the insects on the T-chart into "Wings" or "No Wings" categories.

 *Here are some pictures of insects with wings. (Show insect pictures that have been cut out from Handout 2, the winged insects.) These insects are able to fly because of their wings.*


Demonstrate flying movements. Show a winged insect picture. Think aloud,

 *I think this insect is a bee. I have seen bees in the back yard. They like to fly near the flowers. I know they can be dangerous because my grandpa told me he got stung by a bee once. I have seen bees fly, and I can see wings on this picture of the bee. I'm going to place this picture of a bee on the T-chart where it says "Wings."*

Point to the appropriate section of the T-chart. Then continue modeling the same process with insect pictures from Handout 3, the wingless insects. If the child does not know the name of an insect, provide the name.

 *Here are some pictures of insects with no wings. Do you think these insects can fly? **(Pause)** You are correct. They don't have wings and that is why they can't fly.*

Show a wingless insect picture. Think aloud,

 *I think this insect is an ant. I have seen ants in my yard. I have not seen ants fly. Most ants do not fly, but there are a few that do have wings and can fly. I cannot see wings*

on this picture of the ant. I'm going to place this picture of an ant on the T-chart where it says "No Wings" because it cannot fly. It walks, or moves with its legs.

Place the picture of the ant on the appropriate section of the T-chart.

2. The parent works with the child.



Have the parent repeat the process with the child, selecting a different insect. The parent can name the insect, describe it, and share experiences he/she has had with that insect that will be familiar to the child. For example, the parent could say,

Here is a mosquito. We have lots of mosquitoes in our backyard. When they bite, my skin itches. Since I have seen mosquitoes flying and I can see the wings in the picture, I'm going to put it on the T-chart under the word "Wings." What do you think? Is that where it belongs? (Pause) Why/Why not?

The parent can continue with a few more insects, asking the child to help name and describe them and share prior experiences. The parent can work with the child to sort the insect into the correct category.

3. The child works with the parent's help.



Have the parent say,

Now it is your turn to tell me whether the insects have wings or not and we will place each insect in the correct group.

The parent guides the child through the process with the remaining insects: naming, describing, and discussing experiences. The parent asks the child to rethink his/her classifications and make any changes. The parent can also ask other questions, such as, *Why are some insects not able to fly? [They don't have wings.]* The parent provides guidance and reinforcement as appropriate.

4. The child works independently as the parent and home educator watch for learning.

Watch for the child to name and describe insects and to sort insects correctly into "Wings" and "No Wings" categories.

Watch for the child to increase discussion of insects, their characteristics, and his/her experiences with insects.

5. The home educator summarizes the lesson.

Finish by reviewing the content objective and talking about what the family learned today.

Follow-up questions to deepen the child's thinking:



1. *What other things have wings and are able to fly but are not insects?* (E.g., bird, airplane)
2. *How is a _____ (e.g., butterfly) like a _____ (e.g., bird)?*
3. *How is a _____ different from a _____?*
4. *Are insects good or bad? (Pause) Why?* (Accept any answer and be prepared to provide a response to confirm either option; i.e., *Yes, some insects can bite and they can be very annoying.* OR *Yes, some insects help our plants grow.*)
5. *Would you prefer—to fly or walk? (Pause) Why?*
6. Show the pictures of the insects to the child and ask him/her, *If you were an insect which one would you like to be? (Pause) Why?*

Ways to extend on the lesson concepts:



1. Count the number of insects with wings and the number without wings.



2. Compare different insect characteristics and discuss them.



3. Look at all of the pictures and identify the insects that begin with the sound /b/.


Modifications:

If the lesson activity is too hard—

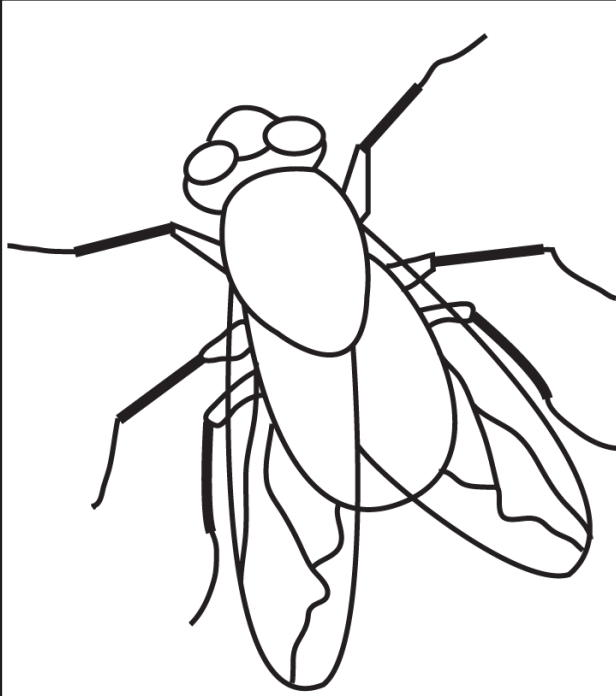
1. Discuss only one category of insects per lesson (either wings or no wings).
2. Provide additional practice by cutting pictures of insects from magazines that contain pictures of nature and sorting by wings or no wings; place them onto the correct side of the T-chart.

If the lesson activity is too easy—

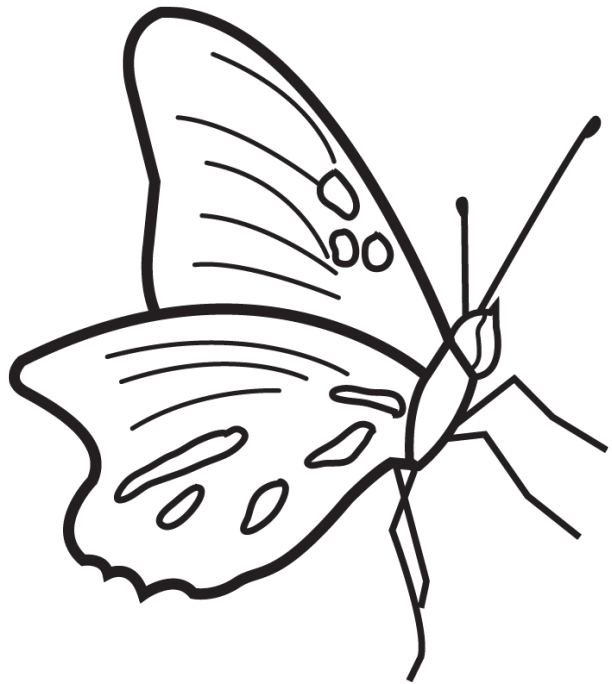
1. Draw attention to the words on the T-chart. Encourage the child to distinguish between the headings (Wings/No Wings) by beginning to recognize the word “no.” Encourage the child to use the heading words to help him/her sort the insects.
2. Sort more insects.
3. Draw attention to and discuss additional insect characteristics (e.g., How do the insects see the world around them? Which insects bite or sting and which do not? Which have antennae?).
4. Sort insect names using the first sound of the name of the insect.

Wings 	No Wings

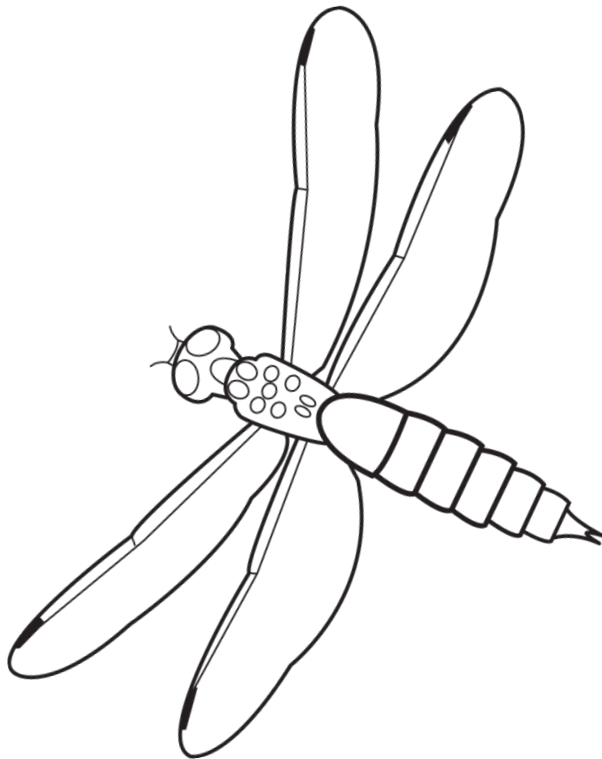
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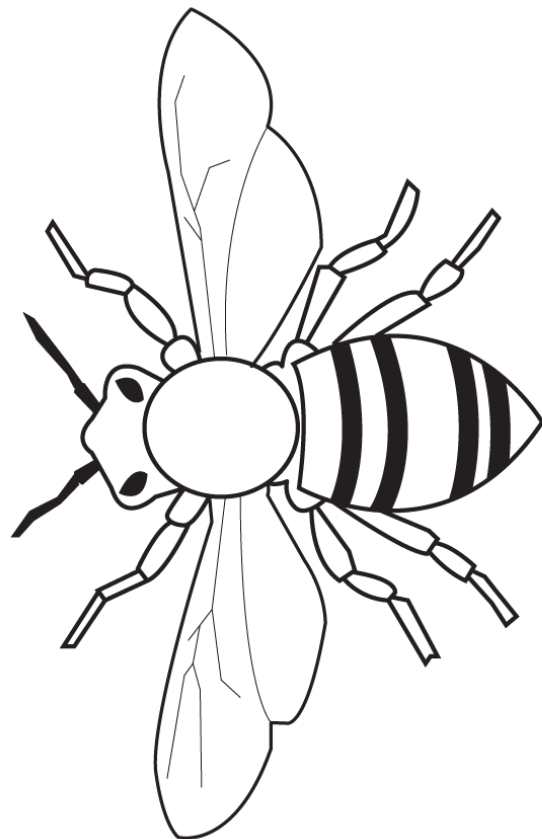
fly



butterfly

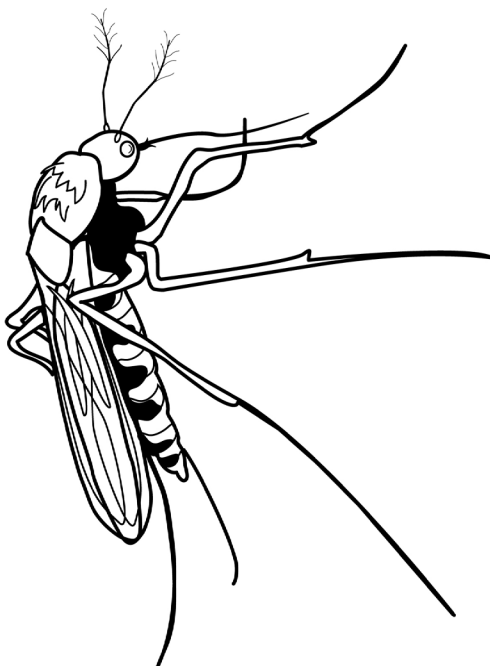


dragonfly

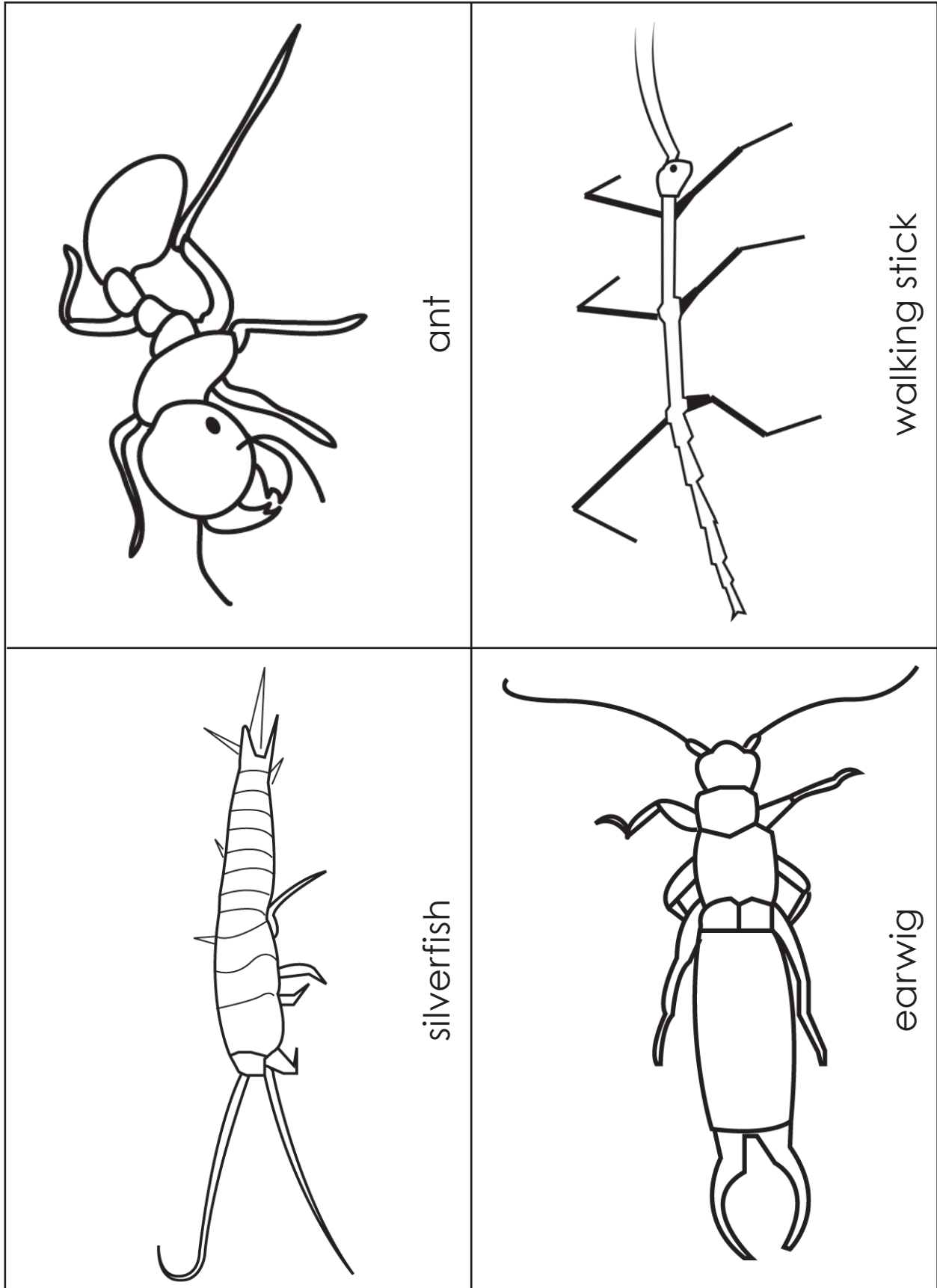


bee

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 <p>mosquito</p>	

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INSECTS (LESSON 2)

PARENT PAGE

What we are learning:

Your child will observe and describe characteristics of insects and sort insect pictures into groups: with wings/can fly or without wings/cannot fly.

Words to know:

- ♦ fly—volar
- ♦ wings—alas



What to ask:

1. *What other things have wings and are able to fly but are not insects?* (E.g., bird, airplane)
2. *How is a _____ (e.g., butterfly) like a _____ (e.g., bird)?*
3. *How is a _____ different from a _____?*
4. *Are insects good or bad? (Pause) Why?* (Accept any answer and be prepared to provide a response to confirm either option; i.e., *Yes, some insects can bite and they can be very annoying.* OR *Yes, some insects help our plants grow.*)
5. *Which would you prefer—to fly or walk? (Pause) Why?*
6. Show the pictures of the insects to your child and ask him/her, *If you were an insect which one would you like to be? (Pause) Why?*

What else to do:

1. Have your child count the number of insects with wings and the number without wings.
2. Compare different insect characteristics and discuss them.
3. Look at all of the pictures and have your child identify the insects that begin with the sound /b/.

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