



INSECTS

BIG IDEA

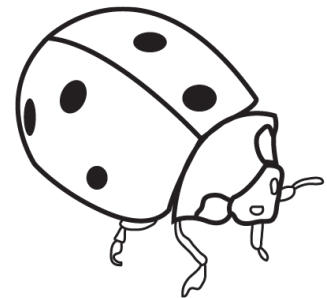
Exploration of living organisms helps children learn about their world. Children investigate in order to describe, organize, classify, and compare characteristics of insects.

Content objective(s):

The child will identify groups containing more objects and fewer objects. The child will correctly identify groups that are equal in size.

Materials needed:

- ◆ Unit book: *The Grouchy Ladybug*, by Eric Carle
- ◆ Paper-plate “Ladybug” with ten black dots (made in Lesson 5)
- ◆ Black construction paper
- ◆ Small candies or mini cookies
- ◆ Cups
- ◆ Milk or water



Lesson vocabulary:

- ◆ dots—puntos
- ◆ more—más
- ◆ fewer/less—menos
- ◆ equal—igual
- ◆ same—mismo

Texas Prekindergarten Guidelines (Revised) domains addressed:

Social and Emotional Development:

I.A.3. Child shows reasonable opinion of his own abilities and limitations.

Language and Communication:

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

Mathematics:

V.A.1. Child knows that objects, or parts of an object, can be counted.

Fine Arts: (extension)


VIII.A.1. Child uses a variety of art materials and activities for sensory experience and exploration.

Technology: (extension)


X.A.5. Child recognizes that information is accessible through the use of technology.

Activities:


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

 *Remember we're learning about insects. I'll bet you remember the story about the grouchy ladybug. Tell me what you remember.*


Show the book to the child so that he/she can remember and use the pictures to retell important parts of the story. Encourage the child to retell as much as he/she is able and praise his/her attempts. Ask questions and provide additional detail where needed.

 *Today we will be playing with a ladybug's dots. Remember the dots we put on the ladybug's wings? (Show paper-plate ladybug from Lesson 5.) There are many kinds of ladybugs—some are red, orange, or yellow with black dots on their wings, and some ladybugs are black with red dots. Different kinds of ladybugs have different numbers of dots—some only have one or two dots and some have many dots. Scientists think that they are colored that way to warn birds that might want to eat them that they taste very bad.*


Begin by placing three candies or mini cookies on one of the ladybug's wings and one candy or cookie on the ladybug's other wing. Ask,

 *Which group would you like to have? (Pause) Why? (Pause) That's right! This side has more than that side! You take the side that has more, and I'll take this side that has fewer.*

Next, go through the same process using black paper dots cut from the construction paper. Encourage the child to identify which side (group) has more and fewer. After the child has identified which side has more and fewer, repeat the process again demonstrating the concept of equal.


 *Now which group has more? (Pause) That's right! Neither side has more or fewer. Each side has the same amount. They are equal!*

2. The parent works with the child.

 Have the parent work with cookies or candies again, but place three cookies/candies on one wing and two cookies/candies on the other wing. Ask the child which side has more, and after he/she gives the correct response, have the parent say,

 *I would like to have the same number of cookies/candies as you have.*

Pause to see whether the child knows to add more to the other wing to make the groups equal. If not, the parent should guide the child to add one more and discuss the concept of equal. Say,

 *Now we have the same amount—the groups are equal. Now I have as many candies/cookies as you do!*

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

The parent can eat one cookie/candy then ask the child to identify which side has more now. The parent and child can take turns eating candy/cookies, one at a time, and discuss at each step which side has more and which has fewer, or whether they are equal.

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

Encourage the child to count independently. Watch for the child to be able to identify and describe more, fewer/less, and equal.

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. *Would you rather have more grapes or more peas?*
2. *Do you eat more food or less food than your dad?* (Explain that “less” is similar to “fewer”; they both mean not as much—or not as many—as something else.)

Ways to extend the lesson concepts:



1. Practice the concept of more, less, and equal using other insect manipulatives or pictures. For example, create two lines of ants (use pictures from Lesson 7) and help the child determine which line has more or fewer.
2. Pour cups of milk or water to drink while eating the cookies. While pouring the milk (in same-size, transparent cups) discuss when the cups have more and less milk/water or have equal amounts.
3. Compare buttons on the clothing of the parent and child. Have the child identify who has more and who has fewer, or whether they both have equal numbers.
4. Play a game. Hide three to five small objects (pennies, buttons, paper dots, etc.) in one hand and fewer of the same objects in the other hand. Then show the child the objects in both hands and ask him/her to identify which hand has more or fewer. Change the number of objects in each hand and continue playing. Have both sides equal sometimes.

Modifications:

If the lesson activity is too hard—

1. Use fewer cookies/candies/dots.
2. Make the groups more different so it is easier for the child to see the difference (e.g., use 5 objects on one wing and 1 object on the other).
3. Do not introduce the concept of equal.

If the lesson activity is too easy—

1. Use more cookies/candies/dots.
2. Count the objects and begin to compare numbers (e.g., five is more than three).
3. Encourage the child to add the correct number of objects to the “less” group to make the two groups equal.



INSECTS (LESSON 8)

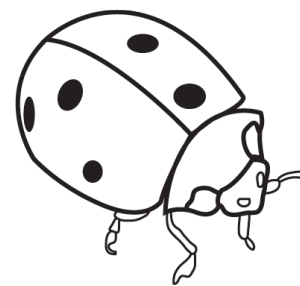
PARENT PAGE

What we are learning:

Your child will identify groups containing more objects and fewer objects. He/she will correctly identify groups that are equal in size.

Words to know:

- | | |
|--------------------|---------------|
| ♦ dots—puntos | ♦ equal—igual |
| ♦ more—más | ♦ same—mismo |
| ♦ fewer/less—menos | |



What to ask:

1. *Would you rather have more grapes or more peas?*
2. *Do you eat more food or less food than your dad?* (Explain that “less” is similar to “fewer”—they both mean not as much as something else.)

What else to do:

1. Practice the concept of more, less, and equal using other insect pictures. For example, create two lines of ants (use pictures from Lesson 7) and help your child determine which line has more or fewer.
2. Pour milk or water to drink while eating a snack, using same-size transparent cups. While pouring the milk/water discuss when the cups have more and less milk/water or have equal amounts.
3. Compare buttons on your clothing and your child’s clothes. Have him/her identify who has more and who has fewer, or whether you both have equal numbers.
4. Play a game. Hide three to five small objects (pennies, buttons, paper dots, etc.) in one hand and fewer of the same objects in the other hand. Then show your child the objects in both hands and ask him/her to identify which hand has more or fewer. Change the number of objects in each hand and continue playing. Have both sides equal sometimes.

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