

Activity: Critter Count

Grade Level: Kindergarten

Major Emphasis: Animal Movement

Major Curriculum Area: Science

Related Curriculum Areas:

Refer to Outdoor Education Curriculum Matrix K-2

Language Arts

Mathematics



Program Indicators:

1. The student will demonstrate an understanding that living things can be classified.
2. The student will demonstrate an understanding that living things are similar but unique.
3. The student will develop an understanding that living things have anatomical parts that serve particular purposes and create a whole.

Student Outcomes: The student will:

1. collect and classify animals by method of movement. **(DL1,3)**
2. record movement data on a graph. **(DL1,2)**

Readiness:

1. Introduce vocabulary:

fly	hop	crawl	legs	wings	insect
critter	bug	worm	ant	caterpillar	
cricket	butterfly	ladybug	spider	grasshopper	
2. Refer to kindergarten Unified Science Unit **Animals**.
3. Using literature and/or experience, expose students to various types of **critters** including insects, spiders and worms.
4. Discuss ways in which living things move.

Materials:

- | | | |
|--------------|--------------|------------------------------|
| bug boxes | hand trowels | sifting screen |
| insect books | sweep nets | crayons |
| magnifiers | small jars | red, blue and yellow squares |
- Critter Graph chart (enlargement of Supplement A)
 Critter Graph sheet (Supplement A, optional, copies provided by teacher)

Procedures:

1. Explain to the students that they will be searching for bugs or **critters** that crawl, hop or fly.

2. Group students into pairs. Instruct students to use hand trowels to search for and collect critters from the ground, under the leaves, and in the dirt and sand. Avoid direct contact with critters. Instructors may turn over dead logs in the search. The sifting screen may be used to separate critters from the dirt.
3. Place small critters in bug boxes, larger ones in jars. Put only one creature in each box or jar.
4. Use sweep nets to brush shrubs, branches and grassy areas to collect additional critters. Place them in bug boxes and jars.
5. Instructors may assist students with identification using insect books.
6. After collection and identification, gather students together at a table. Allow students to group together all the boxes or jars containing fliers, those containing hoppers and those containing crawlers. Use questioning to point out those body parts used in each method of movement. For example, **What body parts do the fliers use?** **Do all the crawlers have legs?** **Do the hoppers= legs look different from the crawlers= legs?**
7. Instruct students to place a colored square next to each bug box or jar: blue for crawlers, red for hoppers and yellow for fliers.
8. Assist students in constructing a graph by taking the colored squares next to the critters and placing them in the appropriate columns on the **Critter Graph** chart.
9. If time permits, students may complete individual **Critter Graph** sheets by coloring the squares. Refer to Supplement A.
10. Gently release the critters near where they were found.

Summary:

1. Use questioning to compare how many of each were found. For example, **How many fliers did we find?** **Of which type did we find the most?** **Did we find the same amount of any types?**

Follow-Up:

1. Provide each student with paper, pencil and crayons. Instruct students to draw a picture of one critter found and write a sentence to inform about its method of movement. The instructor will write the students= sentences in conventional print under the students= writing.
2. Dramatize the movements of the fliers, crawlers, and hoppers.
3. Borrow puppets from the Outdoor Education Center to revisit the experience.
4. Combine the critter drawings to make a class book.

Extension Activities:

1. Allow students to act out the different methods of movement observed in the activity. In addition, have students demonstrate the variety of methods people can use for movement. For example: skip, hop, jump, etc.

2. Compare modes of transportation and movement.
3. Start an ant or worm farm.
4. Raise and release butterflies native to Maryland.

Teacher Resources:

Books:

- < *Golden Guides: Insects, field guide.
- < Big Bugs, Booth, Jerry, Harcourt Brace & Company.
- < The Ladybug and Other Insects, Jeunesse, Gallimard, de Bourgoing, Pascale, Scholastic, Inc.
- < Monarchs, Lasky, Kathryn, Harcourt Brace & Company.
- < Weird and Wonderful Insects, Hadden, Sue, Thomas Learning.
- < Wonderful Worms, Glaser, Linda, Millbrook Press.
- < Insects: A New True Book, Podendorf, Illa, Childrens Press.
- < The Very Hungry Caterpillar, Carle, Eric, Scholastic, Inc.
- < The Very Quiet Cricket, Carle, Eric, Philomel Books.
- < The Grouchy Ladybug, Carle, Eric, Harper Collins Childrens Books.
- < The Very Lonely Firefly, Carle, Eric, Scholastic, Inc.
- < The Very Busy Spider, Carle, Eric, Scholastic, Inc.
- < Why Worms?, Davies, Gillian, Forest House Publishing Company, Inc. (Instructions for starting a worm farm included.)
- < Billys Beetle, Inkpen, Mick, Harcourt Brace Jovanovich.
- < Fireflies! Brinckloe, Julie, Macmillan Publishing Company.
- < I Wish I Were a Butterfly, Howe, James, Harcourt Brace Jovanovich.
- < Ladybug on the Move, Fowler, Richard, Harcourt Brace Jovanovich.
- < Miss Spiders Tea Party, Kirk, David, Callaway Editions.

Critter Graph

