

#8619

ARTHROPODS

Grade Levels: 6-9

11 minutes

NEW DIMENSION MEDIA 1997

DESCRIPTION

Arthropods have jointed limbs, hard exoskeletons, segmented bodies, and molt--or shed--their shells in order to grow. Crabs, beetles, centipedes, squillas, pill bugs, and walking sticks demonstrate a variety of ways some of the one million different species of arthropods walk.

ACADEMIC STANDARDS

Subject Area: Science

- ♦ Standard: Understands relationships among organisms and their physical environment
 - Benchmark: Knows that all individuals of a species that exist together at a given place and time make up a population, and all populations living together and the physical factors with which they interact compose an ecosystem

INSTRUCTIONAL GOALS

1. To define and identify characteristics of arthropods.
2. To classify animals as arthropods based on physical characteristics.

BEFORE SHOWING

1. Provide some examples of arthropods for viewing. Try to bring in a diverse assortment. Look for similarities among the samples. List responses on the chalkboard, and compare them with AFTER SHOWING responses.
2. Use dictionaries to define the following terms: arthropod, limb, segmented, jointed, exuviation, molting, exoskeleton, tripod, cuticula, camouflage, and squilla.

AFTER SHOWING

Discussion Items and Questions

1. What does the word *arthropod* mean? What animals belong to this group?
2. What characteristics do arthropods possess?

3. For what reason does a crab molt? What does the word *molt* mean?
4. Discuss the different ways that a beetle can move.
5. Describe the physical traits of the Okinawan stick insect. Why does it look like a twig?
6. List and describe some of the arthropods that live in water.
7. How many kinds of arthropods exist? What do they all have in common?

Applications and Activities

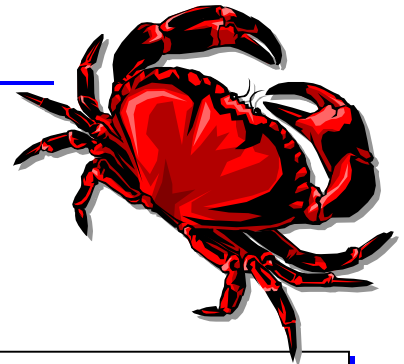
1. Choose an arthropod to study. Pick a different animal, and report on findings.
2. Make models of arthropods.

RELATED RESOURCES



Captioned Media Program

- Animals Without Backbones #2356
- Biology: Studying the Beetle #2652



World Wide Web



The following Web sites complement the contents of this guide; they were selected by professionals who have experience in teaching deaf and hard of hearing students. Every effort was made to select accurate, educationally relevant, and "kid-safe" sites. However, teachers should preview them before use. The U.S. Department of Education, the National Association of the Deaf, and the Captioned Media Program do not endorse the sites and are not responsible for their content.

- **SMITHSONIAN INSTITUTION**

<http://www.si.edu>

Perform a search for "arthropods" to locate research and recent articles. Use the Smithsonian Magazine at <http://www.smithsonianmag.si.edu> as well.

- **THE PET ARTHROPOD PAGE**

http://www.key-net.net/users/swb/pet_arthropod/intro.html

Huge and closeup pictures of different arthropods. Select on the left side "Hissing Roaches," "Emperor Scorpions," "Misc. Photos," and others.

- **WORLD'S MOST NOTORIOUS BUGS**

<http://www.pbrc.hawaii.edu/~kunkel/wanted/bottom.html>

The FBIA (Federal Bug Intelligence Agency) seeks your help in locating a gang of notorious creepy crawlies! Presents very clear and large "Bug Mugs," "Bug Bodies," and "Rap Sheet" which lists the bug's characteristics.