

#10003 BUGS DON'T BUG US!

> BIG KIDS PRODUCTIONS, INC., 1991 Grade Level: Ps-2 35 mins. 1 Instructional Graphic Enclosed

Preschoolers explore a meadow and discover the world of insects, spiders, and other of nature's tiny creatures. They are intrigued as they watch the movements of ladybugs, ants, earthworms, snails, grasshoppers, butterflies, and more. Closeup photography captures both the insects and their fascinated observers. Shows the metamorphosis of a butterfly, which the children mimic. No factual information given.

ACADEMIC STANDARDS

Subject Area: Science-Life Sciences

- Standard: Understands the structure and function of cells and organisms
 - Benchmark: Knows that plants and animals have features that help them live in different environments (See INSTRUCTIONAL GOALS 1 and 2.)
 - Benchmark: Knows the basic needs of plants and animals (e.g., air, water, nutrients, light or food, shelter) (See INSTRUCTIONAL GOALS 2.)
 - Benchmark: Knows that plants and animals progress through life cycles of birth, growth and development, reproduction, and death; the details of these life cycles are different for different organisms (See INSTRUCTIONAL GOALS 4.)

INSTRUCTIONAL GOALS

- 1. To explore the world of small insects, spiders, and other small common creatures and identify many by name.
- 2. To investigate the various environments that bugs and other small animals live in, how they move, and what they eat.
- 3. To illustrate appropriate handling of insects and other small creatures and show that there is no need for to be afraid of them.
- 4. To show the metamorphic stages of butterflies.

BACKGROUND INFORMATION

This video explores the miniature world of insects, spiders, and other tiny creatures of nature. The following are shown, and most are identified by name in the video: ladybugs, ants, earthworms, snails, grasshoppers, bumblebees, honeybees,

Captioned Media Program

beetles, pill bugs (potato bugs), daddy-long-legs, spiders (various ones not identified by individual names), praying mantis, dragonflies, waterskaters, caterpillars, butterflies, and monarch and painted lady butterflies. All the insects are lumped together as bugs; no distinctions are made for different classes of insect.

VOCABULARY

1. bugs	6. flower	11. stretching
2. catch	7. honey comb	12. teensy
3. climb	8. hopping	13. tickle
4. crawling	9. juice	14. tunnel
5. flying/flew	10. slimy	15. web

BEFORE SHOWING

List common bugs. Describe the physical characteristics of each one and where it lives. Share personal experiences catching and holding bugs.

Explain the double meaning of the word "bug." If appropriate, identify the correct sign for both meanings. Practice using the word "bug" both ways.

DURING SHOWING

View the video more than once, with one showing uninterrupted.

Consider pausing to identify each insect as it is shown.

Pause during the footage of the caterpillars, cocoons, and butterflies to identify each stage of metamorphosis.

AFTER SHOWING

Discussion Items and Questions

- 1. Describe what a ladybug looks like.
- 2. Where do ants live? Describe their home.
- 3. What do earthworms do when you hold them?
- 4. Describe how snails move.
- 5. Here can you find grasshoppers? Why are they hard to catch?
- 6. Why do bees land on flowers? Where do bees live? Why do people wear protective clothing when working with bees?
- 7. What is unusual about pill bugs (potato bugs)?
- 8. Why do spiders make webs?
- 9. Describe what a praying mantis looks like.
- 10. How many wings does a dragonfly have?
- 11. Describe how waterskaters move.
- 12. Explain the stages of metamorphosis for butterflies.

Applications and Activities

- 1. Take a "bug" walk.
 - a. Notice and try to identify the creatures you find.



- b. Make a chart and record information about each insect, such as color, number of legs, wings, size, food, homes, etc.
- c. Use a magnifying glass to observe the insects close-up.
- d. Collect some of the insects in a collection jar.
- e. Make a class book about the various creatures the class saw.
- 2. Bring some creatures into the classroom that do not exist in the immediate environment. Examine and handle them if appropriate. (See INSTRUCTIONAL GRAPHIC.)
 - a. Fill a pan with dirt and some earthworms. Allow students time to dig carefully in the dirt and handle the earthworms.
 - b. Centipedes and spiders can be studied in clear plastic observation jars.
 - c. Watch snails move in glass containers or on any flat surface.
- 3. Find or purchase caterpillars. Keep the caterpillars inside a netting-type container. Watch the process of metamorphosis. Record the number of days at each stage.
- 4. Make earthworms or other small animals with play dough or clay.
- 5. Try building "ant tunnels" in slightly damp sand.
- 6. Create "spiders" and "insects" with pipe cleaners, glue, paper, and recycled household packaging (plastic bottles, cans, paper tubes, bags, etc.).
- 7. Observe an ant farm or ant colony.
- 8. Do creative movement activities based on the way different insects move. Add props such as scarves, small blankets, and paper to suggest wings or cocoons.
- 9. Collect a vacant spider web with a large embroidery hoop.
 - a. Put each half of the hoop on either side of the web.
 - b. Close and tighten the hoop.
 - c. Then run your finger around the outside of the hoop.
 - d. Display the web for close observation.
 - e. Draw the web.

SUMMARY

This videotape explores the miniature world of insects, spiders, and other tiny creatures of nature. It shows close-up views of children observing and interacting with bugs, as well as showing the insects in their natural settings. Children will learn about what these small creatures eat, how they move, even some of the transformations they go through. Most of the footage shows common creatures that young children will easily recognize and ones that will most likely be around them in nature. In addition the video explores the complete life cycle of butterflies to give a sense of the different stages of development all insects go through. The tape provides some verbal information; however, it is

left intentionally minimal.

CMP RELATED RESOURCES

- *The Bee* #2452
- The Big Green Caterpillar #3342

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.





BUTTERFLIES AND BUGS

http://www.billybear4kids.com/butterfly/flutter-fun.html

A Web page developed for the very young child. Contains photos, activities, games, and crafts.

AMAZING BUTTERFLIES

http://www.amazingbutterflies.com/abbutterflykits.htm

Order butterfly and ladybug kits for your classroom or for home education. Select from butterfly gardens, pavilions, feeders, or mounting kits.



CHILDREN'S BUTTERFLY SITE

http://www.mesc.usgs.gov/resources/education/butterfly/bfly_intro.asp

Sponsored by the U.S. Geological Service, this animated Web site contains pages of information and photographs. Includes data regarding the butterfly life cycle, activities, resources, FAQ, and Web links.



BUG-GO

http://www.uky.edu/Agriculture/IPM/teachers/bug-go/bug-go.htm

A game that helps to identify insects while learning which insects are beneficial. The game is played similar to the game BINGO. You'll need a printer to print out the playing cards.

SPIDERS!

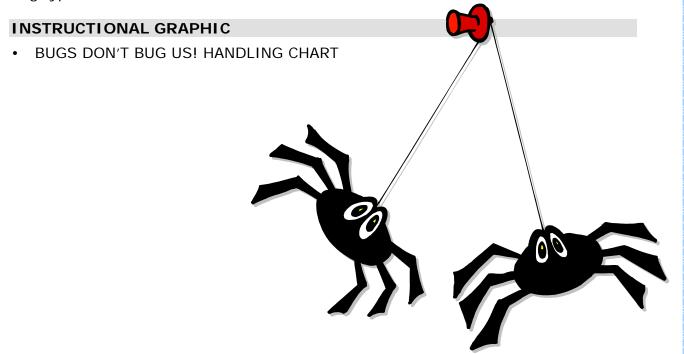
http://www.slsc.org/newsite/just4kids/onlineactivities/onlineactivities/spiders/

This Web site has activities for home and classroom, including how to make a 3-D spider and a spider mask, how to spin a spider web, several lesson plans about spider development, and a spider camouflage activity, plus more.

THE BUG CLUB

http://www.ex.ac.uk/bugclub

This is the AES Bug Club for Young Entomologists. The site includes information on many different kinds of bugs, and also has a list of Web site links categorized by bug type.





Bugs Don't Bug Us! Handling Chart





SUPERVISED WHILE HANDLING ANY ANIMALS. fingers. Some small creatures have natural defense systems that could prove painful or and legs. Let them crawl onto your hand on their own instead of pinching them with your unpleasant to you. The following chart will help you avoid some potential hazards and creatures are delicate and need to be handled gently. Avoid pinching or pulling antennae informative. Remember that both the handler and the animal can be at risk. All small make the experience fun. YOUNG CHILDREN SHOULD BE CLOSELY IMPORTANT NOTE: Handling insects and other small animals can be fun and

container. DO NOT place creature containers in direct sunlight, as they will overheat be provided by moistening a cotton ball or wad of absorbent paper and placing it in the If you can't find its food, you will have to return it to its natural environment. Water can them with food and water. Determine the kind of food by where the animal is found If you keep any of these creatures for more than an hour or two, you will need to provide Notice if your pet is actually eating the food you have selected; if not, try something else.

Bees	Butterflies and moths	Caterpillars	Beetles	Grasshoppers	Millipedes	Centipedes	Pill bugs	Earthworms	CREATURE
Flower nectar and pollen	Usually flower nectar	Mostly leaves, usually a specific kind	Varies quite a bit with different kinds, from plant matter to other insects	Grass and leaves	Plant matter, apple pieces	Small insects	Decaying plant matter	Organic matter in soil	FOOD
Do not handle	Extremely carefully	Gently, do not squeeze	Most are fun to handle	Fun to handle	Do not handle	Do not handle	Fun to handle	For short periods	HANDLE
Most will sting as a defense. Observe from a distance.	Allow them to crawl onto you rather than picking them up. Their wings can be damaged easily.	Some fuzzy caterpillars have hair that may irritate skin and eyes and should not be handled.	A few release bad-smelling substances that may be unpleasant.	If they are cool, they will not hop away so quickly.	Probably harmless, but easily confused with centipedes.	They may bite. Observe from a slight distance.	They curl up and unroll.	Keep moist.	NOTES

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Daddy Long Legs	-	Ants	Scorpions	Fireflies	Dragonflies	Snails	Praying Mantis	Spiders	Flies	Wasps
Small insects		Varies, sweet things, seeds, dead insects	Small insects	Larvae eat small insects, snails, and slugs; adults, unknown	Other insects, often catching them in flight	Plant matter	Other insects	Insects and other small animals	Varies, decaying organic matter, sweet things, blood	Varies, sweet things, meat, other insects, and live insect hosts
gently	May be handled	Not recommended	Do not handle	Fun to handle	Hard to catch	Fun to handle	Gently, front legs have small spines and can pinch	Not recommended	Not recommended	Do not handle
		Many ants are known to bite and/or sting.	Many scorpions have an extremely toxic stinger in their tail.	Find them when it's dark out, and watch them light up.	Fun to watch in action, they have very large eyes and can see very well. Putting them in a jar may damage their wings.	Be careful not to crush the shell.	Immature ones whose wings have not developed will not fly away.	Some are okay to handle, but others can give painful, even toxic, bites.	Some are beneficial, but some carry germs. Others will bite (such as horse and deer flies).	Some will sting as a defense. Do not bother them.