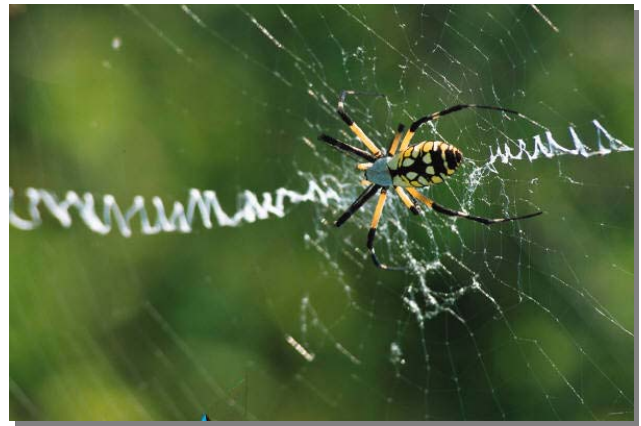


# #9045

## BILL NYE THE SCIENCE GUY:

# SPIDERS

DISNEY EDUCATIONAL PRODUCTIONS  
1996  
Grade Levels: 3-8  
26 minutes



### DESCRIPTION

Bill Nye describes a spider's body structure, tells how it differs from insects, demonstrates how spiders use their silk (the strongest natural fiber in the world), and stresses their importance in nature. Closeups of webs.

### ACADEMIC STANDARDS

#### Subject Area: Life Sciences

- Standard: Understands biological evolution and the diversity of life
  - Benchmark: Knows different ways in which living things can be grouped (e.g., plants/animals, bones/no bones, insects/spiders, live on land/live in water) and purposes of different groupings

### INSTRUCTIONAL GOALS

1. To identify a spider as arachnids.
2. To label a spider's body parts.
3. To list different types of spider webs.
4. To realize that not all spider bites are poisonous.

### AFTER SHOWING

#### Discussion Items and Questions

1. Are spiders insects? How many body parts do they have?
2. Do spiders have a skeleton? How many legs do spiders have?
3. What is the strongest natural fiber for its weight and size?
4. Do all spiders have venom?

#### Applications and Activities

1. Stretch a coat hanger between your two hands to form a large circle or irregular shape. Cut a thin slice of a bagel or use a large metal washer; tie the ends of yarn or twine around the bagel or washer. Tie the other end of the twine around the hanger frame, keeping the bagel or washer in the center of the hanger frame. Hang the "web hanger" out of doors and spray with sugar water or other sticky solution. Leave hanging for 24 hours or longer

and observe the number of insects that are collected. Make additional "web hangers" and place them in different places in and out of doors for comparison.

2. Locate a spider web with a friend. Test the web by pushing a tongue depressor or stick gently against the web, making sure that the web isn't a home for a spider. Use a different spray paint color for each different web pattern that you find. Spray each web with paint; then spray a large piece of stiff paper with an adhesive or clear sticky spray. Quickly push the sticky paper against the freshly painted web while a friend cuts the strands around the web. You now have the start of a web collection.

## RELATED RESOURCES



### Captioned Media Program

- A Close-up Look at Spiders and Insects #9047
- Hunters in the Grass #2294
- The Spider #2529
- Tarantulas #8916



### 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.

- **SPIDERS!**

<http://www.discovery.com/exp/spiders/spiders.html>

You never know what you might find under a rock in Australia! View the photo gallery, get up close and locate each body part and read its function, fill up "Your Spider Jar," and more.

- **ARCHNOLOGY: THE STUDY OF ARACHNOIDS**

<http://www.ufsia.ac.be/arachnology/arachnology.html>

Directory of links, with descriptions, to good Web resources for the study of arachnoids (spiders and their relatives).

- **HOBO SPIDER WEB SITE**

<http://hobospider.org>

Information on the hobo spider, currently found in the Pacific Northwest, but spreading to other states and Canada. Also, covers other commonly found poisonous spiders: the brown recluse, black widow, and yellow sac.

