

# All About Rattlesnakes

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## Lesson Plan 1—

**Mathematics 4.2a** *Measure objects with nonstandard and standard units.*

### Supplies:

*Option 1:* pre-cut long strips of paper about 3” wide and 30” long, crayons or markers, rulers, yardsticks and/or tape measurers, scotch tape, scissors and labels. A list of rattlesnakes is included in the attached table. Cut the 14 cards apart for your class.

*Option 2:* A time saver would be to substitute yarn for the paper strips. The end product will have a less impressive visual impact, but the objective for measurement will be met.

1. After reading and discussing All About Rattlesnakes, divide the class into pairs or small groups. Have a member of each group choose a snake card (see table below.) Each group should cut and/or tape together long strips of paper about 3” wide that measure the length of the rattlesnakes on the snake card. Use rulers, yardsticks or tape measures. Markings and color used by Arnosky can be added. A label identifying the name of the snake should appear on each snake.
2. Have students measure their snakes a second time using a nonstandard measurement such as their feet or jumbo paperclips. Students in a group can use a ruler to see which foot in the group is closest to 12 inches. Have students in the group walk the length of the snake by having their feet touching heel to toe, heel to toe. Another nonstandard unit of measure could be jumbo paperclips. A jumbo paperclip is approximately 2” long. Make a paperclip chain.
3. Clear space so students can display snakes on the floor or attach the snakes to blackboards or whiteboards so the class has a visual impression of the various lengths of the snakes. The snakes could be grouped by size.

<b>Mottled Rock Rattlesnake</b> <b>Size: 24 inches</b> <b>Southwestern U. S. Mexico</b>	<b>Banded Rock Rattlesnake</b> <b>Size: 24 inches</b> <b>Southwestern U. S. Mexico</b>	<b>Dusky Pygmy Rattlesnake</b> <b>Size: 24 inches</b> <b>Extreme Southeastern U. S. Mexico</b>
<b>Western Pygmy Rattlesnake</b> <b>Size: 30 inches</b> <b>South central U. S.</b>	<b>Carolina Pygmy Rattlesnake</b> <b>Size: 30 inches</b> <b>North Carolina</b> <b>South Carolina</b> <b>Alabama</b> <b>Georgia</b>	<b>Mojave Rattlesnake</b> <b>Size: 36 inches</b> <b>Southwestern U. S. Mexico</b>
<b>Prairie Rattlesnake</b> <b>Size: 60 inches</b> <b>All of western U.S Mexico</b>	<b>Black-tailed Rattlesnake</b> <b>Size: 42 inches</b> <b>Southwestern U. S. Mexico</b>	<b>Western Massasauga Rattlesnake</b> <b>Size: 40 inches</b> <b>Central and Southwestern U. S.</b>
<b>Canebrake Rattlesnake</b> <b>Size: 60 inches</b> <b>South central to southeastern U. S.</b>	<b>Timber Rattlesnake</b> <b>Size: 75 inches</b> <b>Midwestern, central, and northeastern U. S.</b>	<b>Eastern Massasauga Rattlesnake</b> <b>Size: 40 inches</b> <b>Midwestern U. S. into Pennsylvania and New York</b>
<b>Eastern Diamondback Rattlesnake</b> <b>Size: 84 inches</b> <b>Extreme southeastern U. S.</b>	<b>Western Diamondback Rattlesnake</b> <b>Size: 84 inches</b> <b>Southwestern U. S. Mexico</b>	

## Lesson Plan 2

**Social Studies 1.1** *Use information located in resources such as encyclopedias, timelines, visual images, atlases, maps, globes, and computer-based technologies.*

**Language Arts 7.1a-d** *Accessing information—using the best source for a given purpose.*

### Activity 1

**Supplies:** Snake cards, large political map of the United States and a class set of atlases.

**Note:** This activity may be done in the library. Use this opportunity to collaborate with the library media specialist to introduce maps, globes, and the atlas. Review the term “directions” and the purpose of the compass rose. Display a large map of the United States.

1. Allow the students to choose a partner. One partner should go to the teacher for a snake card and the other should get a classroom atlas.
2. The teacher will help the students find a political map of the U.S. in the atlas. Each pair will read the information on a snake card to learn the habitat for a rattlesnake and locate that habitat on a U. S. map in the atlas.
3. When called on, the pair will go to the large U.S. map, give the name of a rattlesnake matching their snake card, and show the class where it lives.
4. When all pairs have had a turn, review the prominent habitats for rattlesnakes in the U.S. Collect snake cards and atlases.

### Activity 2

**Note:** Collaborate with the LMS at your school and schedule a time to take your class to the library.

1. LMS can point out the books in the reference and nonfiction sections of the library. LMS will review the purpose of an atlas and how it was used to locate habitats of rattlesnakes.
2. LMS will review or introduce the class to the following:
  - a. *encyclopedias* and explain how information is arranged in alphabetical order. Each volume represents letter(s) of the alphabet and each page has subject headings at the top.
  - b. *nonfiction books* about rattlesnakes and other snakes and where they are located in the library collection. Students will also be shown that some nonfiction books have the table of contents, index, and glossary to help them find information in the book
    - i. *Zoobook*, July 2008 has an issue on rattlesnakes that could be included as a source of information

- c. *Bookmarked websites* about rattlesnakes
3. Students working in pairs will take turns looking for additional information about rattlesnakes in the encyclopedia, nonfiction books, Zoobook and websites.
  - a. Students should recognize information presented in All About Rattlesnakes
  - b. Students should write down new information they learn from library resources
  - c. Allow students time to share new information they collect. If possible, display this new information.

**Websites:**

<http://animals.nationalgeographic.com/animals/photos/rattlesnakes.html>

<http://www.bbc.co.uk/cbbc/wild/amazinganimals/animalalphabet/index.shtml?animal=rattlesnake&video=16x9>

<http://animals.nationalgeographic.com/animals/reptiles/eastern-diamondback-rattlesnake.html>

[http://news.nationalgeographic.com/news/2005/11/1116\\_051116\\_predator\\_video.html](http://news.nationalgeographic.com/news/2005/11/1116_051116_predator_video.html) Note: this site shows a video of a diamondback rattlesnake killing some prey and a red-tailed hawk killing the rattlesnake. Preview first.

TPS teachers: Safari Montage has a 35 sec. video explaining the rattlesnake's ability to sense the infrared light of animals. Do a keyword search: rattlesnakes. It's part of a video in Eyewitness: Sight