

# THE SECRET OF THE DECEIVING STRIPED LIZARD...AND MORE!

**Age Range:** 8-11 years  
**Grade Level:** 3-6  
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## *About the book:*

Enter the fascinating world of animal secrets. Travel to India, Belgium, France, Panama, Germany, and the Netherlands to discover facts and mysterious information about speedy striped lizards, sticky chameleon tongues, red-eyed tree frogs, tempting plants and friendly ants, and the secret that empowers the swordfish to be one of the fastest fish on Earth!

## *About the author:*

Ana María Rodríguez is the daughter of Spanish immigrants, was raised in Venezuela, and moved to the United States in 1987. After being a scientist for 20 years she decided to focus on writing about science, nature, and people. She has authored 26 books for children and adults and contributed over 80 magazine articles. Her accolades include the “Highlights for Children” History Feature of the Year Award, books in Science Books & Films’ “Best Books Lists”, and awards from the Society of School Librarians International. She lives in Houston, Texas. Learn more about Ana by accessing her website at [www.anamariarodriguez.com](http://www.anamariarodriguez.com).



## *Discussion Questions:*

### THE SECRET OF THE DECEIVING STRIPED LIZARD

- Examine reasons why animals need camouflage.
- The word *illusion* means misleading, false, and deceptive. Explain how the lizard’s colors and stripes create an illusion that helps to keep them safe.
- Discuss the benefits of using computer games to explore scientific hypotheses.
- Click [HERE](#) to watch a video featuring a young man attempting to catch a six-line race runner. Discuss the factors that contributed to the difficulty he had in his efforts to catch the deceptive little lizard.

### THE CHAMELEON’S STICKY TRICKS

- The word *velocity* refers to acceleration and speed. The term *viscosity* means sticky, slimy, and syrupy. Explain the connection between velocity and viscosity in researching the chameleon.

- Tell why it is more beneficial for a chameleon to capture enough prey to eat one large meal rather than hunt for several small meals.
- Consider the range of sizes chameleons come in. Imagine and explore the velocity and viscosity of the tongue of a cat-sized chameleon!
- Click [HERE](#) to watch a video of high-speed footage of the chameleon’s powerful tongue in action. Consider the length of a chameleon’s remarkable tongue in relation to its body size.

### THE SECRET OF THE QUICKLY HATCHING EGGS

- Discuss the connection between the release of enzymes and the sense of impending danger as they relate to the hatching of red-eyed tree frog eggs.
- Describe the step-by-step sequencing of the hatching of red-eyed tree frog eggs in danger.
- To watch a short video demonstrating the rapid hatching red-eyed tree frog eggs in efforts to escape danger, click [HERE](#). Observe the response of the embryos as they are attacked by predators.

## SWEETS AND ANTS PROTECT THIS PLANT

- A *relationship* is defined as an exchange, an association, or a dependency. Explain the connection between the terms symbiosis and relationship as they relate to ants, the bittersweet nightshade plant, and its predators.
- Explain how being a “bodyguard” for the bittersweet nightshade benefits the ants.
- Click [HERE](#) to watch a video featuring the luring effect the sugary oozing of the bitterweet nightshade has upon ants. Explore the relationship between the plant and its protectors.

## SLICK AND FAST

- Consider how the swordfish’s “streamlined figure” and the oil gland in its skull help it be one of the fastest animals in the world. Explain how these facts help design underwater vehicles.
- Propose a hypothesis to explain why swordfish avoid cooler waters nearer to the poles based on the connection between cold water and its oil glands.
- Click [HERE](#) to watch a video demonstrating the swordfish in action. Explore ways that the content described in the video compares to the information presented in the chapter.

### *Extension Activities:*

#### ECOSYSTEM ANALYSIS—CREATE A SNAKE FOOD WEB:

Snakes are important to their ecosystem as both predators and prey. Analyze the energy flow of the snakes ecosystem by creating a model of a reptile’s food web similar to the example depicted on the right. Write a short essay discussing your discoveries. Share your findings with your class.

**Materials Required:** Construction paper, markers, scissors, bulletin board, push pins, tape, string, index cards

#### Animal Lists:

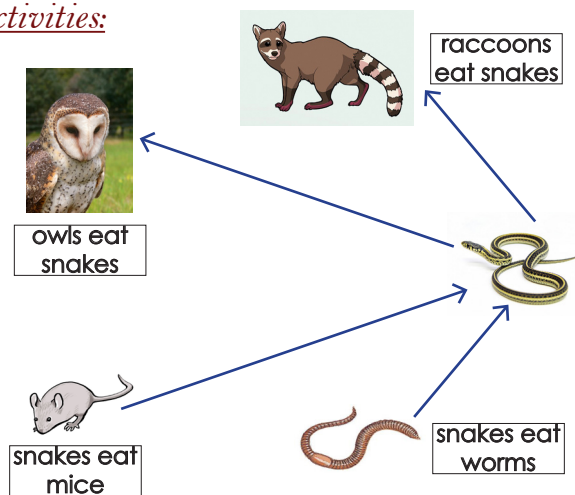
Snake

**PREDATORS**—owl, hawk, mongoose, coyote, raccoons

**PREY**—earthworms, slugs, mice, rats, toads, lizards

#### Procedure:

- Draw and label all animals listed above.
- Cut out drawings and attach to bulletin board.
- Draw and cut arrows to tape to string to indicate which direction the energy is flowing in the food chain.
- Using string, arrows, and pushpins, connect the featured animals on the bulletin board.
- Using index cards and markers, create labels clarifying the energy flow for each aspect of the food web. Post the index card label beside each animal in the food web.



#### THE SECRET OF THE DECEIVING STRIPED LIZARD... AND MORE WORDSEARCH ANSWERS

U C C W N W V A N X E Z B W G N V T G O  
 D T I T T D \_\_\_\_\_ F P M T Q  
 G O C L \_\_\_\_\_ C R X M \_\_\_\_\_ R D  
 N R P O D A I R B B R U O Z Y Z Z \_\_\_\_\_ E D  
 W K G F C B R O S A \_\_\_\_\_ G Q S  
 U U I B I Q L F N G F R M Y S S V \_\_\_\_\_ G X  
 Q U X \_\_\_\_\_ H A L A \_\_\_\_\_ V X V P \_\_\_\_\_ V B  
 B T V \_\_\_\_\_ K X H T D K G D H \_\_\_\_\_ N O  
 P M G \_\_\_\_\_ U K A A E A T G W F P J \_\_\_\_\_ H S X  
 X \_\_\_\_\_ H \_\_\_\_\_ \_\_\_\_\_ Y V P S  
 G R \_\_\_\_\_ U E K \_\_\_\_\_ S N S X M H \_\_\_\_\_ H Z \_\_\_\_\_ H N  
 V I \_\_\_\_\_ V D \_\_\_\_\_ \_\_\_\_\_ O J C  
 U X \_\_\_\_\_ O \_\_\_\_\_ K W Q C W T \_\_\_\_\_ P Z \_\_\_\_\_ Z V R W  
 A G \_\_\_\_\_ L X U D H H \_\_\_\_\_ T H \_\_\_\_\_ P K C Y B  
 W I \_\_\_\_\_ T S T M Z F \_\_\_\_\_ E I P J G S L C Q  
 W \_\_\_\_\_ N N K O X M \_\_\_\_\_ Q \_\_\_\_\_ \_\_\_\_\_ R O  
 D \_\_\_\_\_ Q F G M N Q \_\_\_\_\_ Q T G B \_\_\_\_\_ \_\_\_\_\_  
 W U \_\_\_\_\_ \_\_\_\_\_ K Q Y A Q F L W N C A W  
 V T M P O T Q G J K O Z O R Q Z I C X T  
 M D N E U \_\_\_\_\_ \_\_\_\_\_ B Y Y \_\_\_\_\_ \_\_\_\_\_ P

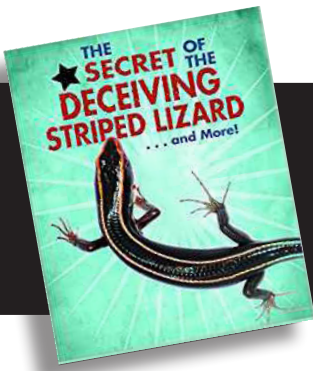


**Common Core State Standards - Anchor Standards:** Reading: R.1, R.2, R.4, R.7, R.10.  
 Writing: W.2, W.6, W.7. Speaking & Listening: SL.1, SL.2, SL.4, SL.5.  
**Next Generation Science Standards:** K-LS1-1, 3-LS2-1, 3-LS3-2, 3-LS4-4

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# THE SECRET OF THE DECEIVING STRIPED LIZARD...AND MORE! Wordsearch

U C C W N W V A N X E Z B W G N V T G O  
 D T I T T D S I S O I B M Y S F P M T Q  
 G O C L H E R B I V O R E C R X M H R D  
 N R P O D A I R B B R U O Z Y Z Z C E D  
 W K G F C B R O S A E M Y Z N E G T Q S  
 U U I B I Q L F N G F R M Y S S V A G X  
 Q U X P H A L A D N A L G V X V P H V B  
 B T V R K X H T D K G D H M U C U S N O  
 P M G E U K A A E A T G W F P J C H S X  
 X V H D H G R E E N H O U S E A Y V P S  
 G E R A U E K L S N S X M H M H Z P H N  
 V S I T V D E O L F A C T O R Y R O J C  
 U I X O O C K W Q C W T U P Z E Z V R W  
 A C G R T L X U D H H F T H Y P K C Y B  
 W L I R T S T M Z F L E I P J G S L C Q  
 W E O N N K O X M A Q S U O I C A R O V  
 D N Q F G M N Q G Q T G B V I S C O U S  
 W U L A R V A E K Q Y A Q F L W N C A W  
 V T M P O T Q G J K O Z O R Q Z I C X T  
 M D N E U S L U G B Y Y E V I E C E D P

CAMOUFLAGE  
 ENZYME  
 HATCH  
 MUCUS  
 PREY  
 VESICLE

DECEIVE  
 GLAND  
 HERBIVORE  
 OLFATORY  
 SLUG  
 VISCOUS

ELECTRON  
 GREENHOUSE  
 LARVAE  
 PREDATOR  
 SYMBIOSIS  
 VORACIOUS