

SURPRISING SHARKS

By Nicola Davies

Before Reading



5 min

1. Have children to turn to the green pages at the front and back of the book. Ask:

- What do you see on these pages? (*many kinds of sharks*)
- What information about sharks can you get just from these pages? (*the names of sharks, what they look like, how big they are*)

2. Read the title and the name of the author on the cover of the book. Ask:

- Why might the author Nicola Davies have labeled sharks “surprising”? (*Answers will vary.*)

3. Have children look at the Index on page 28. Ask:

- What does an Index tell you? (*where to find information in the book.*)
- On what page is “angel shark?” (*page 15; You follow the dots to find the page number 13.*)
- What does the paragraph at the bottom of the Index tell you? (*The book has two different sizes of words.*)

During Reading



20 min

1. Read pages 6 and 7. Ask:

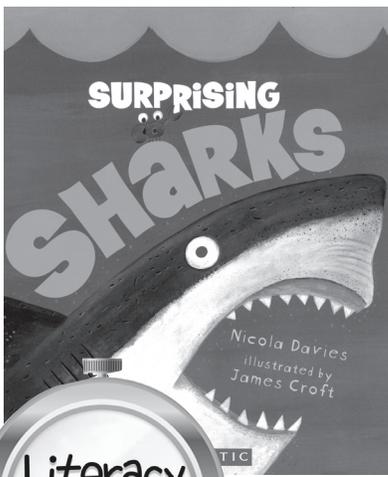
- What do the words on page 6 do? (*Get bigger and bigger.*) Why do you think the author made the words get bigger and bigger? (*Possible answer might be that the big words are scary words.*) How could we read those words aloud to show the words get bigger? (*Speak louder.*)
- What size shark do you think this is? (*very big*) Why do you think that? (*The person’s feet look small and the shark’s fin looks big.*)

2. Turn the page and read pages 8 and 9. Ask:

- How did the author surprise you on page 8? (*We were expecting a big shark and instead saw a tiny one.*)
- What is special about the dwarf lantern shark? (*It’s the smallest kind of shark in the world.*) Is it a predator? (*Yes.*) What is its prey? (*shrimp*)
- Would you be scared to swim with the dwarf lantern shark? Why or why not. (*Answers will vary.*)

1. Read pages 10 and 11. First, read the main text in large type. Then go back and read the details about each shark. Ask:

- What sharks did we learn about on these pages? (*blackbelly lantern shark, swell shark, wobbegong*)



Grades K-2

Theme:
STEM

LINK TO COMMON CORE INFORMATIONAL STANDARD 5 (Grades K-2):

Know and use various text features to locate key facts or information in a text efficiently.

OBJECTIVE:

Children will use the index and graphics to gain understanding of sharks.

MATERIALS NEEDED:

- *Surprising Sharks*
- Peppermint extract
- Jelly beans

VITAL VOCABULARY:

- Predator
- Prey
- Detect

During Reading (continued)

- What is special about each shark? (*Children should use the text to support their answers.*)
- 2. Read pages 12–17, continuing to point to each part of the page as you read. Ask:**
- Which two sharks have names like tools? (*hammerhead and saw sharks*)
 - What parts do all sharks have on the outside? (*tail, fins, skin, gill slits*)
 - What parts do all sharks have on the inside? (*jaws, teeth, skeleton*)
 - What is special about a shark's skeleton? (*It's very bendy and it floats.*)
 - How many teeth can a shark have at once? (*up to 3,000*)
- 3. Read pages 18–23. Ask:**
- How does the author help us find information about sharks on pages 18 and 20? (*The shark names are all in capital letters and are bold.*)
 - How does the author help us understand what we read on pages 20–21? (*Dotted lines connect words to the matching part of the picture.*)
 - What's special about a shark's nose? (*gel-filled pits that sense electricity from passing prey.*)
 - What do you know about a shark's skin? (*It is very sensitive. It can get information from the temperature and the movement of water around it.*)
- 4. Read pages 24–27. Ask:**
- How many sharks are killed by people every year? (*about 100 million*)
 - And how many people are killed by sharks every year? (*about 6*) What kinds of products do people make from parts of sharks? (*grease, necklaces, soup, wallets, cattle feed, fertilizer, shoes, food, skin cream*)
 - Why do you think sharks might be scared to hear the word "human"? (*because people kill so many sharks each year*)

After Reading



30 min

CONNECT TO SCIENCE: Shark Senses

1. Tell children they will learn about how well sharks can smell. Open a bottle of peppermint (or any strong-smelling extract) and let children smell the contents by holding it under their noses.
2. Hold the bottle and have children take two steps back from it. Can children still smell the liquid?
3. Ask children who can smell it to take another two steps back. Now can they smell it? Continue until children can no longer smell the liquid.
4. Have children estimate how far away they are from the liquid. Then tell them that sharks can smell prey in the water from several hundred yards away. Explain that it would be like the children being able to smell the peppermint mixed with gallons of water across the length of a couple of football fields!
5. Tell children that sharks use their noses *only* for smelling, and their sense of smell is not connected to their sense of taste. **Say:** *A shark often does not know how something tastes until it has taken a bite. Humans are different. Our senses of smell and taste are linked.*
6. Use jellybeans to demonstrate how our senses of smell and taste work together. Provide each child with two jellybeans of the same flavor. Tell children to hold their nose and eat one of the jellybeans. Ask children to describe the flavor. **NOTE: When having activities involving food, please check for allergies.**
7. Have children eat the second jellybean without holding their nose. Ask children to describe the flavor.
8. Discuss which jellybean had the stronger taste. (*Children should discover that the jellybean that was eaten when children were not holding their nose had a stronger taste because children used both senses of taste and smell. When they held their nose, they were using taste, but were not using smell.*)

wrap up



5 min

Ask children if *the book, Surprising Sharks*, surprised them. Have children support their answers by telling at least one surprising thing they learned about sharks.

Reread the "About Sharks" paragraph on page 29.

Then ask:

- Does this part of the book change the way you think about sharks? Why or why not?