

These pages are from the Kindergarten  
"Plants and Animals Have Needs" journal.



Show the photo and lead a discussion.

## Bonnethead sharks are gentle

Bonnethead sharks are small and gentle.

This is a photo of Samantha swimming with a bonnethead shark in her research area. It's kind of cute, don't you think?

### Ask

Would you like to swim with a bonnethead shark like Samantha? Why or why not?

Example: Yes, it looks fun! I would like to be a scientist like her if I get to swim with sharks.

### Explain

All plants and animals need certain things to live and survive.

Note: This discussion is a chance for the teacher to have an informal pre-assessment of students' understanding for this unit.

### Ask

What do you think bonnethead sharks need to live?

Example: Take this opportunity to hear from your class. Don't just tell them the answers. Ask probing questions to help them think of what a shark might need to survive.

Discussion questions: Do you think a shark might get hungry? What would it eat? Do you think a shark might get tired? Do you think sharks sleep or rest? Do you think a shark gets thirsty? Could a shark live without water? Do sharks need to breathe? How does a shark breathe? (They breathe oxygen in the water using gills.)

Bonnethead sharks need many different things to live.

1. They need something to eat.
2. They need water.
3. They need warmth.
4. They need sleep.



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## Bonnethead Sharks Eat Seagrass

Samantha is interested in bonnethead sharks because they eat seagrass as well as other creatures. Wait, bonnethead sharks eat seagrass? Yes! And that is very special and unusual for a shark! The bonnethead shark is the only shark species known to eat large amounts of plant material.

### Define

An **omnivore** is a creature that eats both plants and animals.

### Ask

Can you think of an animal that eats both plants and animals?

Example: A bonnethead shark, a crow, a raccoon, and you are all example of animals that eat both plants and animals.

### Explain

Bonnethead sharks eat seagrass, which is a plant. They also eat fish and squid, which are sea animals. Because they eat both plants and animals, bonnethead sharks are omnivores. Most sharks are carnivores.

### Ask

Do other sharks usually eat plants? Are other sharks omnivores?

Example: No. Other types of sharks only like to eat meat. They only like to eat other animals. Other sharks are not omnivores. That is what makes the bonnethead shark so special!



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## Samantha studies what sharks need

Samantha designed an experiment to test how much seagrass bonnethead sharks actually digest after they eat it. She found that the sharks really do use nutrients from the seagrass to live and grow!

### Explain

Samantha also knows other things that bonnethead sharks need to live and grow. In addition to food, the sharks need lots of warm water, space to swim, and they need to rest every night.

### Ask

How are your needs the same as a shark's needs?

Example: People need food, water, space, warmth, and rest just like sharks do.

### Ask

How are your needs different from a shark's needs?

Example: People are very different from sharks because we breathe air and sharks breathe water. We need fresh water to drink, but most sharks live in salty ocean water. Although we are omnivores just like bonnethead sharks, people eat many more different types of foods than sharks do.