

Laura McShane

## Sharks - Keystone Species 40 min

### Objective:

Understand role of sharks in the ocean ecosystem

### Big Idea:

Sharks are critical to the ocean food chain and vital "keystone" species for the health of our oceans.

## 1. Warm Up / Anticipatory

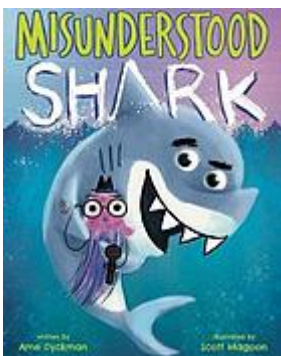
In building construction, the word "keystone" refers to a large stone that holds the entire structure in place and prevents the building from falling down.

In biology, a keystone species is an organism that helps define an entire ecosystem. Without its keystone species, the ecosystem would be dramatically different or cease to exist altogether.

## 2. Investigation and New Learning 25 min

Pair fiction and non-fiction book about sharks to help students determine facts about sharks.

### Fiction resource:



**Authors:** Dyckman, Ame  
Magoon, Scott - Illustrator

**Title:** [Misunderstood Shark starring Shark! starring Shark!](#)

**Summary:** Shark interrupts the filming of Underwater World With Bob, scattering the other creatures (and the audience), but he claims it is all a terrible misunderstanding--that he would never think of eating the fish, the squid, the audience...or Bob.

**Non-fiction resource:**



**Authors:**Weiss, Matt  
Botelho, Daniel - Photographer

**Title:** [Please be nice to sharks -fascinating facts about the ocean's most misunderstood creatures](#) [fascinating facts about the ocean's most misunderstood creatures](#)

**Summary:**Introduces fifteen shark species, sharing information about their size, habitat, and behavior to show why people should be nice to them.

### 3. Review & Check for Understanding 30 min

In **Misunderstood Shark** - a talking shark is interviewed by a jellyfish. The jellyfish interviewer "learns" about shark teeth, shark food, shark senses and that humans pose a real danger to sharks, not the other way around. The interviewer makes the mistake of hugging a shark (not recommended).

In **Please Be Nice To Sharks** -sad facts revealed that sharks have more to fear humans than the other way around. Scientists estimate that humans kill over 100 million sharks each year. There are many species of shark (with an estimate of 400+) - this book features several key species:

Whale Shark  
Bamboo Shark  
Hammerhead Shark  
Tiger Shark  
Shortfin Mako Shark  
Blue Shark  
Great White Shark  
Oceanic Whitetip Shark  
Nurse Shark  
Caribbean Reef Shark  
Wobbegong Sharks  
Broadnose Seven Gill Shark  
Lemon Shark  
Bull Shark

And - Manta Rays (not a shark - but related because they both have cartilage and no bones!)

Watch- Galapagos by Darek Sepiolo. Encourage kids to identify animal they can recognize from the books! (magnificent footage includes diver in relation to whale shark, and more!)

Take the Wonder Quiz to find out how much your students have learned about sharks

<https://www.wonderopolis.org/wonder/how-many-shark...>

Review

Additional information

<https://rangerrick.org/games/name-that-shark/>

<https://www.wiseoceans.com/>