NAME:	
INSTRUCTIONS: Visit our free online photo gallery at motemarinelab.photoshelter.com. Choose GALLERIES: CULTIVATED GALLERIES. Then browse or search on the collections to answer the questions below. Check out our topic to leave your answers: admin.flipgrid.com/discover partners/81	- - lipgrid
1 Name four kinds of live sharks on display at Mote.	
(1)	
(2)	
(3)	
(4)	
2 Find a picture of a Mote shark scientist. Describe what are doing in the picture.	t they
3 Why do you think it is import to learn about sharks?	



REAL SHARKS, REAL SCIENCE









BONUS: Sharks, skates, rays, guitarfish and sawfish are in a group of fish called **Elasmobranchs** (*ih-lasmuh-brangks*). Find another species of elasmobranch besides sharks that lives at Mote.



WHAT ARE SHARKS

Fish can be divided into two main groups. The first group are fish with skeletons made of bone. The second group are fish with skeletons made of **cartilage**. Sharks, skates, rays, guitarfish and sawfish all belong to this second group called **Elasmobranchs** (*ih-las-muh-brangks*).

ELASMOBRANCHS AT MOTE

There are currently **seven** species of shark on display at Mote Aquarium. Mote also displays skates, rays, and guitarfish.

Shark Zone (135,000 gallons, 511,031 L)

- sandbar sharks (Carcharhinus plumbeus)
- **blacknose sharks** (Carcharhinus acronotus)
- nurse sharks (Ginglymostoma cirratum).

Shark Tracker exhibit

- bonnethead sharks (Sphyrna tiburo)
- Two other species of Elasmobranchs, the **cownose rays** and butterfly rays.

Oh, Baby! exhibit

- epaulette sharks (Hemiscyllium ocellatum),
- **coral catsharks** (Atelomycterus marmoratus)
- brownbanded bamboo sharks (Chiloscyllium punctatum)

MOTE MARINE LAB STUDIES SHARKS

Mote has been obsessed with sharks since we opened our doors in 1955 and our founding Director, Dr. Eugenie Clark, earned the nickname "The Shark Lady."

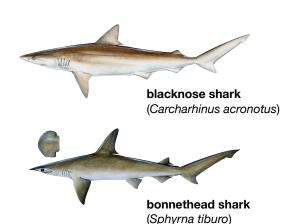
Today, our Sharks and Rays Conservation Research Program is dedicated to studying sharks and their relatives. There are over 1,000 kinds of these fish and many are threatened by humans. We study their populations, migrations, behavior and health.



Find out more about sharks by visiting our website or connecting with us for a Virtual Field Trip: mote.org/seatrek

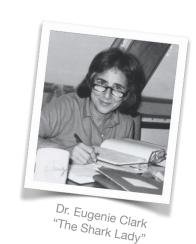


REAL SHARKS, REAL SCIENCE



mages: FWC/Diane Pebbles









NOTE TO TEACHERS & STUDENTS

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motemarinelab.photoshelter.com/signup/signup/free

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REAL SHARKS, REAL SCIENCE



ANSWER KEY:

1) Name four kinds of live sharks on display at Mote.

Sandbar shark, blacknose shark, bonnethead shark, nurse shark, epaulette shark, coral cat shark, bamboo shark

2) Find a picture of a Mote shark scientist. Describe what they are doing in the picture.

Possible answers include: fishing, tagging, tracking, using a computer, measuring, on a boat

3) Why do you think it is import for to learn about sharks?

Possible answers include:

Sharks are an important part of ocean **ecosystems**.

Sharks are apex predators at the top of most ocean **food chains/pyramids**.

Sharks may help us learn more about human health.

People enjoy fishing for sharks and eating sharks. Shark oil and skin are used in commercial products like cosmetics and industry.

4) Sharks are in a group of animals called Elasmobranchs (ih-las-muh-brangks). This groups also includes skates, rays, and sawfish. Find another kind of elasmobranch besides sharks that Mote scientist study.

Spotted eagle ray, clearnose skate, cownose ray, yellow stingray, southern stingray, Atlantic stingray, butterflyray



STANDARDS

- · Next Generation Science Standards
 - 6th 8th Grades:
 - MS-LS2 Ecosystems: Interactions, Energy, and Dynamics
 - LS2.A: Interdependent Relationships in Ecosystems (MS-LS2-1), (MS-LS2-2)
 - LS2.C: Ecosystem Dynamics, Functioning, and Resilience (MS-LS2-4), (MS-LS2-5)
 - LS4.D: Biodiversity and Humans (secondary to MS-LS2-5)
 - MS-ESS3: Earth and Human Activity
 - ESS3.C: Human Impacts on Earth Systems (MS-ESS3-3), (MS-ESS3-4)
 - 9th 12th Grades:
 - HS-LS2: Ecosystems: Interactions, Energy, and Dynamics
 - LS2.A: Interdependent Relationships in Ecosystems (HS-LS2-1), (HS- LS2-2)
 - LS2.C: Ecosystem Dynamics, Functioning, and Resilience (HS-LS2-2), (HS-LS2-6), (HS-LS2-7)
 - LS4.D: Biodiversity and Humans (HS-LS4-6), (secondary to HS-LS2-7)
 - ETS1.B: Developing Possible Solutions (secondary to HS-LS2-7)
 - HS-LS4: Biological Evolution: Unity and Diversity
 - LS4.C: Adaptation (HS-LS4-5), (HS-LS4-6), (HS-LS4-5)
 - LS4.D: Biodiversity and Humans (HS-LS4-6), ((HS-LS4-7)
 - HS-ESS3: Earth and Human Activity
 - ESS3.C: Human Impacts on Earth Systems (HS-ESS3-3), (HS-ESS3-4)

UN Sustainable Development Goals

- #4: Quality Education https://www.un.org/sustainabledevelopment/education/
- #14: Life Below Water https://www.un.org/sustainabledevelopment/oceans/

Ocean Literacy Principles

- OLP #5 The ocean supports a great diversity of life and ecosystems
- OLP #6 The ocean and humans are inextricably interconnected



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