



MYSTERIES FROM THE **DEEP**

EXPLORING
UNDERWATER
ARCHAEOLOGY

FAMILY EXHIBITION GUIDE

FAMILY EXHIBITION GUIDE

Mysteries from the Deep Family Guide

Explore and learn about underwater archaeology while having fun as a family or group. In each exhibit zone, there are opportunities to learn and talk about the adventurous people, exciting science, and mysteries of underwater archaeology.

IN THE EXHIBITION: ENCOURAGE ALL IN YOUR GROUP TO EXPLORE!

- There is no right or wrong way to visit the exhibition! Ask open-ended questions to start conversations together: What do you see? What looks interesting? What makes you say that? What else can we find together? What questions do you have?
- The exhibition is divided into Zones, but there is no right or wrong way to move throughout the space. Do what makes you comfortable. A _____ is available. You are welcome to touch anything that is not in a glass case! Please take turns and share with other visitors. All videos have open captions.

Keep these questions in mind when exploring the exhibition:

- What can scientists learn about the past by exploring underwater archeological sites?
- Why are underwater sites good at preserving clues about human history?



BECOME AN UNDERWATER EXPLORER!

Discover the amazing world of underwater archaeology. In this exhibit, you will **FIND, LOOK,** and **EXPLORE MORE** together.

Before you start, talk about times you have been in or around water. What was it like? What did you do there? Is it easy to see underwater? What happens if you drop something in the water?



FIND:

Tools are an important part of underwater archaeology. How many tools can you find that underwater archaeologists and scientists use when they are exploring?



LOOK:

Do any of these tools look like the ones you use at home or school? Talk about how you think the underwater archaeologists use these tools.



EXPLORE MORE!

Talk about what other types of tools might be useful. If you could make a tool to help underwater archaeologists, what would it do?



FIND:

People cannot **breathe** underwater without help while exploring. What helps an underwater archaeologist breathe underwater for a long time to do their work?



LOOK:

Look closely at all the different parts. What do you think it might feel like to breathe underwater using help?



EXPLORE MORE!

What other things help archaeologists explore underwater? There are models of underwater robots in the exhibit!



FIND:

There are underwater archaeology **sites** all over the world. How many different sites can you find?



LOOK:

These sites are in many types of places: oceans, rivers, and lakes. Look closely and talk about what was found in these different types of water.



EXPLORE MORE!

Can you find a map of where these sites are located? Talk about what it might be like to visit these places.



FIND:

Many **artifacts** have been found underwater. What types of artifacts can you find?



LOOK:

The artifacts are made up of different materials. What types of materials do you see? What materials and artifacts look familiar to you?



EXPLORE MORE!

Underwater archaeologists search oceans, rivers, and lakes for artifacts that tell us about the past. What more do you want to know about the past from these clues hidden underwater?



TRY AN UNDERWATER EXPERIMENT AT HOME!

- How does water affect objects over time? Find objects made of varied materials and submerge them in fresh water and salt water. Take pictures and record what happens after a week, two weeks... for as long as you want!

WORDS TO KNOW

- **Artifact:** something made by people in the past.
- **Archaeology:** the study of the past through the things people left behind, like tools, buildings, and art.
- **Excavation:** the process of digging out or removing material from the ground.
- **Sonar:** an underwater visualizing tool that uses sound waves to find things in the water by sending out a sound and listening for the echo that bounces back when it hits something. The sonar then creates a picture based on sound.
- **SCUBA (Self-Contained Underwater Breathing Apparatus):** a piece of equipment that allows people to breathe underwater.
- **Exosuit:** a mechanical suit that's attached to the outside of a person's body.
- **Submersible:** a vehicle that can go underwater.
- **ROVs (Remotely Operated Vehicles):** tethered submersible robots that allow people to explore the ocean without actually being in the ocean. (NOAA definition)
- **AUVs (Autonomous Underwater Vehicles):** a robot that travels underwater without requiring continuous input from an operator. (NOAA definition)

*See Visual Vocabulary for illustrations/examples

