Dear Teacher,

We are looking forward to our interactive virtual field trip with you and your learners. During the program your learners will have the opportunity to explore the unique animals of the Pacific Ocean with one of our Aquarium Educators.

The following materials are provided to support learner exploration and dive deeper into program topics. These resources are optional and can be used before or after your virtual field trip. Suggested discussion questions and a vocabulary word list are also included.

**Magnificent Marine Mammals (Gr 1-2)**

- Whale Watching Pre or Post Activity
- Hungry Gray Whale Puzzle Pre or Post Activity
- Adaptation Match-up Pre or Post Activity
- Move Like a Mammal Pre or Post Activity
- Whale Writing Post Activity
- Coloring Marine Mammals Post Activity
- Marine Mammal Crossword Post Activity

You may find additional activities for your learners in pre/post materials from other programs.

Thank you for your interest in our programs, we are excited to connect with you!

Sincerely,

The Aquarium of the Pacific Education Staff
Teacher Resources

Vocabulary Word Bank

**Baleen**: Hair like filter feeding structure in the large whales like blue whales and humpback whales.

**Blowhole(s)**: The opening of the airway on dolphins, whales, and porpoises on the back of the head. These are like nostrils; however, they can be selectively closed like humans can close their eyes.

**Blubber**: The insulating layer or fat in many marine mammals.

**Cetacean**: The scientific name for the group of whales, dolphins, porpoises, beluga, sperm whales, and beaked whales. Commonly they are all often just called “whales.”

**Flippers**: Appendages on marine mammals. Flippers have bones, fins do not.

**Fluke**: The tail of a whale, dolphin, or porpoise.

**Mammal**: Animals from this family all have warm blood, breathe air, nurse their young and drink milk as babies, and have live birth. Exceptions to the live birth characteristic are the echidna and the platypus.

**Mustelids**: The family of mammals that includes sea otters, river otters, badgers, weasels, and wolverines.

**Pectoral Flipper**: Side flippers on a whale or dolphin, much like arms for humans.

**Pinniped**: The group of marine mammals that includes seals, sea lions, and walruses.

Activity Notes

**Whale Watching**

This activity can be done before or after the program. Learners will use the alphanumeric key at the top of the page to solve each puzzle to name the parts of a whale. The clue at the bottom is not related to the alphanumeric key.

![Whale Watching Puzzle](image)

Whale type of animal is a whale? **Mammal**
**Hungry Gray Whale**

This maze can be a little challenging as it is a larger maze, so younger learners may struggle. All materials in this packet are optional and can be modified for your learners. This activity may be completed by learners at any time.

![Hungry Gray Whale Maze](image)

**Adaptation Match-up**

This activity can be completed before or after the program. This will review some adaptations we cover in the program or it can provide some background information for them before the program begins. Learners that complete the worksheet before the program can go back and review or change answers based on what they learn. Some of the adaptations can be matched by making observations of the picture itself, while others will require more knowledge of the characteristics of marine mammals in general.

![Adaptation Match-up Diagram](image)

**Whale Writing!**

This activity is intended for after the program is completed. Learners can write down what they learned or other things they know about whales to reinforce and review content covered in the program. Multiple pages can be provided for Learners.
Move like a Mammal
This activity should be done after the program as it reviews how different marine mammals can move through their environment. During the program we will discuss how the anatomy of different marine mammals creates different methods of moving through their environment. This activity is a quick review of that process. Learners will draw a line from the description of how the mammal moves to the animal on the right side.

Coloring Marine Mammals
This is a coloring page that has learners match up the color to a specific type of marine mammal. Alternative directions could include simply coloring the animals as they choose and writing the name of the animal next to the picture or assigning numbers to the types of animals and writing the number next to the picture.
Colloquially, dolphins are often called whales. Scientifically, whales and dolphins are relatives in the cetacean group. For this activity they are identified separately.

Marine Mammal Adaptations Crossword
This crossword is ideally a post program activity reviewing marine mammal adaptations. This optional activity can be coupled with other activities from this set to reinforce marine mammal adaptations.
Whale Watching!

Use the key below to decode the different parts of a whale’s body. See if you can answer the question on the bottom based on what you might already know about whales.

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Whale type of animal is a whale? ____________________________
Hungry Gray Whale!

This gray whale is feeding in the mud in Alaska! Help them find their food, small animals called amphipods, at the end of the puzzle.
Adaptation Match-up

Draw a line from each adaptation to the correct animal or animals. Sometimes different animals have the same characteristic or ability, so you may have to draw multiple lines from one adaptation.

Hint: [2 Lines] [1 Line] [1 Line] [1 Line] [3 Lines]

- Has external (outside) ear flaps
- Have Blowholes
- Has Baleen
- Furriest or hairiest animal on the planet
- Has Blubber
Whale Writing!

Use this space to write two facts you learned about marine mammals. OR, use this space to write down the coolest or most interesting thing you know about marine mammals.
Move like a Mammal

Make some predictions! Look at the pictures of the animals below and think about how they move. Match the description on the left by drawing a line to the animal on the right.

Long front flippers, and they can stand up on their rear flippers. They flap their front flippers like wings and steer with the back flippers.

Short front and rear flippers, they push with their rear flippers and steer with the front, like an airplane.

Have large, powerful tails the move up and down to push them through the water. The front flippers help them steer.

Now you can practice moving like a marine mammal! Move around the room swimming like a whale, sea lion, or a seal. You could even make up a “Simon Says” game with how much you know about mammal movement.

Aquarium of the Pacific

Virtual Field Trip Programs
Coloring Marine Mammals!

Color the mammals like this:

Whales = Red
Sea Otters = Blue
Sea Lions = Yellow
Seals = Green
Dolphins = Orange
Marine Mammal Adaptations Crossword

Down
1. Sea lions have external these, seals do not
3. Some whales eat with teeth, others use this
5. The special fat that keeps whales warm
7. The tail of a whale is also known as this

Across
2. The long trip during different seasons
4. Mammals have ____ instead of laying eggs
6. Otters have the thickest ____ of any mammal
7. Instead of arms and legs, sea lions have these
8. Whales breathe through this (like a nose)