# NEW BEDFORD WHALING MUSEUM WHALES GIANTS OF THE OCEAN

# Facilitator's Guide - Lesson 3.2 Whale vs. Fish

Lesson time: 45 minutes



Whales and fish are both aquatic animals that share a few common characteristics. But, there are important differences that distinguish them. This activity uses these commonalities and differences to further practice the process of classification. It serves as an extension of Lesson 3.1, Animal Classification.



www.whalingmuseum.org



## WELCOME!

This facilitator's guide will assist you as you lead *Whales: Giants of the Ocean* - **Whale vs. Fish**. It includes content and links to resources that can be used to present the material to students. All resources listed can also be found on the New Bedford Whaling Museum education website at www.educators.whalingmuseum.org/

#### **GUIDING QUESTION(s)**

How are whales and fish similar; how are whales and fish different?

#### BY THE END OF THIS LESSON, STUDENTS WILL BE ABLE TO:

Classify an organism as either a whale or a fish using distinguishing features.



#### **KEY TERMS**

warm-blooded, cold-blooded, hair, scales, lungs, gills, eggs, live birth, fish, whale, backbone

#### BACKGROUND INFORMATION

Whales (and their cetacean cousins - dolphins and porpoises) and fishes all live in water. All of their life processes take place in their watery environment. Some ocean food chains include both cetacean species and fish species. However, these animals that often share the same habitat don't have all of the same characteristics or adaptations. We will learn more about these similarities and differences.



# MATERIALS NEEDED

- <u>Whales</u> handout
- Fish handout
- <u>Both</u> handout
- <u>Characteristics</u> handout
- <u>Think About It</u> handout
- Scissors
- Pencils



#### ACADEMIC STANDARDS

NGSS| LS1.A Cross-Cutting Concepts: Structure and Function; Science and Engineering Practices: Asking Questions and Defining Problems

COMMON CORE| ELA RI.4.4, SL.4.1, SL.4.2, W.4.1, W.4.2, W.4.3, W.4.4

# **LESSON DIRECTIONS**



### INTRODUCTION

- Ask students to share their prior understanding of how whales and fishes are similar and how they are different.
- After they have talked through their prior knowledge, have students read one article or visit one of the following websites

Learn About Cetaceans Facts About Whales Science Kids - Whales

and think-pair-share background information in small groups.

# ACTIVITY

- Print the Whale, Fish and Both headings
- Post the <u>Whale</u>, <u>Fish</u> and <u>Both</u> headings in three different locations in the classroom
- Cut out the large print <u>Characteristics</u> and give one to each student or student pairs.
- The students must decide whether the characteristic they have belongs to a whale, a fish or both. Give them time to decide.
- When directed, have the students move to the location where their characteristic should go.
- Once students have stopped moving have them choose one READER under their heading. Each heading group gives their READER the features and that students reads aloud:
- "I am a whale and I...", "I am a fish and I...", "I could be a whale or a fish because I..."
- Have students discuss the characteristics and make corrections if necessary, assisting where needed. Encourage "SCIENCE TALK" in which a student says "I disagree with (the feature)\_\_\_\_ placement because...(giving their evidence or reasoning)."

# WRAPPING UP

After they have completed this activity have them answer the questions in the <u>Think About It</u> section.



Learn a little more about the specifics of whales and fish external anatomy.

- Venn Diagram Whale, Fish, Both
- Label a Whale
- Label a Fish



Ready for the next lesson? Lesson 4 <u>How Big Are Whales?</u>

