

2nd Grade Lesson Plan

Baleen whales vs. toothed whales

Standards:

Open court benchmark - kindness

Suggested time allotment: 30 minutes

Pressed for time: 15 minutes

Anticipatory Set (Engage):

What is the biggest animal you can think of? What does he eat to be that big? Did you know that the biggest animal on earth, the blue whale has no teeth in his mouth? What could he eat without teeth?

Objective:

Review the 5 characteristics common to all mammals

Introduce and compare the physical differences between baleen and toothed whales.

Experiment with “blubber glove.”

Background:

Baleen whales have hair like plates that are used to eat small animals like plankton. They eat by swallowing lots of water at a time and pushing the water out with their tongue as the food gets trapped in the baleen. The teeth on a toothed whale are used to grab a hold of fish, large animals and maybe even sharks. Since mammals are warm-blooded, they must maintain a constant internal body temperature, Marine mammals, including both toothed and baleen whales have blubber, a thick layers of fat to help them stay warm in cold water. Bowhead whales have the thickest blubber of any mammals at 2 ft.

Materials:

Pictures of sperm whale, orca, dolphin or other toothed whales

Pictures of gray whale, blue whale, humpback or other baleen whales

Blubber Glove :

2 plastic bags filled with Crisco shortening placed in a larger plastic bag

Bucket

Ice

Water

Age-appropriate books about Whales – *For independent student exploration*

Vocabulary:

- Mammals
- Marine Mammal
- Blubber
- Baleen
- Warm-blooded

Modeling:

Introduce the term mammal. Have students to name any animals they know of that are mammals. (whales, dolphin, cow, dog, cat, people)

Highlight the 5 characteristics of mammals. Have 5 student volunteers come to the front and act out each of the following: have hair, drink milk, warm blooded, give live birth, and breathe air.)

Guided Practice:

Have students complete the Whales worksheet (p.2 of the 2nd grade journal) to summarize the characteristics shared by all mammals.

Modeling:

Introduce the terms baleen whale and toothed whale. Brainstorm some differences between the two. Use pictures of whales to help students. If needed, lead students to discuss the following:

How they feed: baleen vs. teeth

What they eat: krill vs. fish and squid

What they have in common: mammals, breathe air, blubber

How they find their food: echolocation

Guided Practice:

Complete the double bubble on Toothed Whale or Baleen Whale handout. (p. 3 of the 2nd grade journal.)

Guided Practice: Blubber Glove experiment

Whales have blubber that helps keep them warm and give them their large size. How does the blubber help whales live in ice cold water? One student will put his hand in ice water; another student will put his hand in the blubber glove which is in the ice water. Which student can last longer? Why?

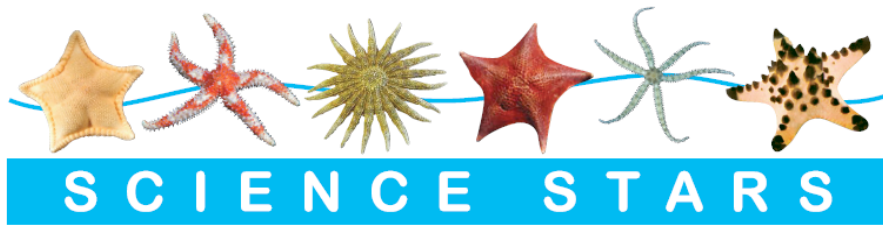
Check for understanding:

Why to whales need to have blubber? How do we stay warm if we don't have blubber? Could a baleen whale eat a squid? Why not?

Independent practice:

Provide student will access to age-appropriate books about whale.

Allow them to complete the Which Whale and Whale Parts worksheet (p. 4 of 2nd grade journal)



Learning Extension:

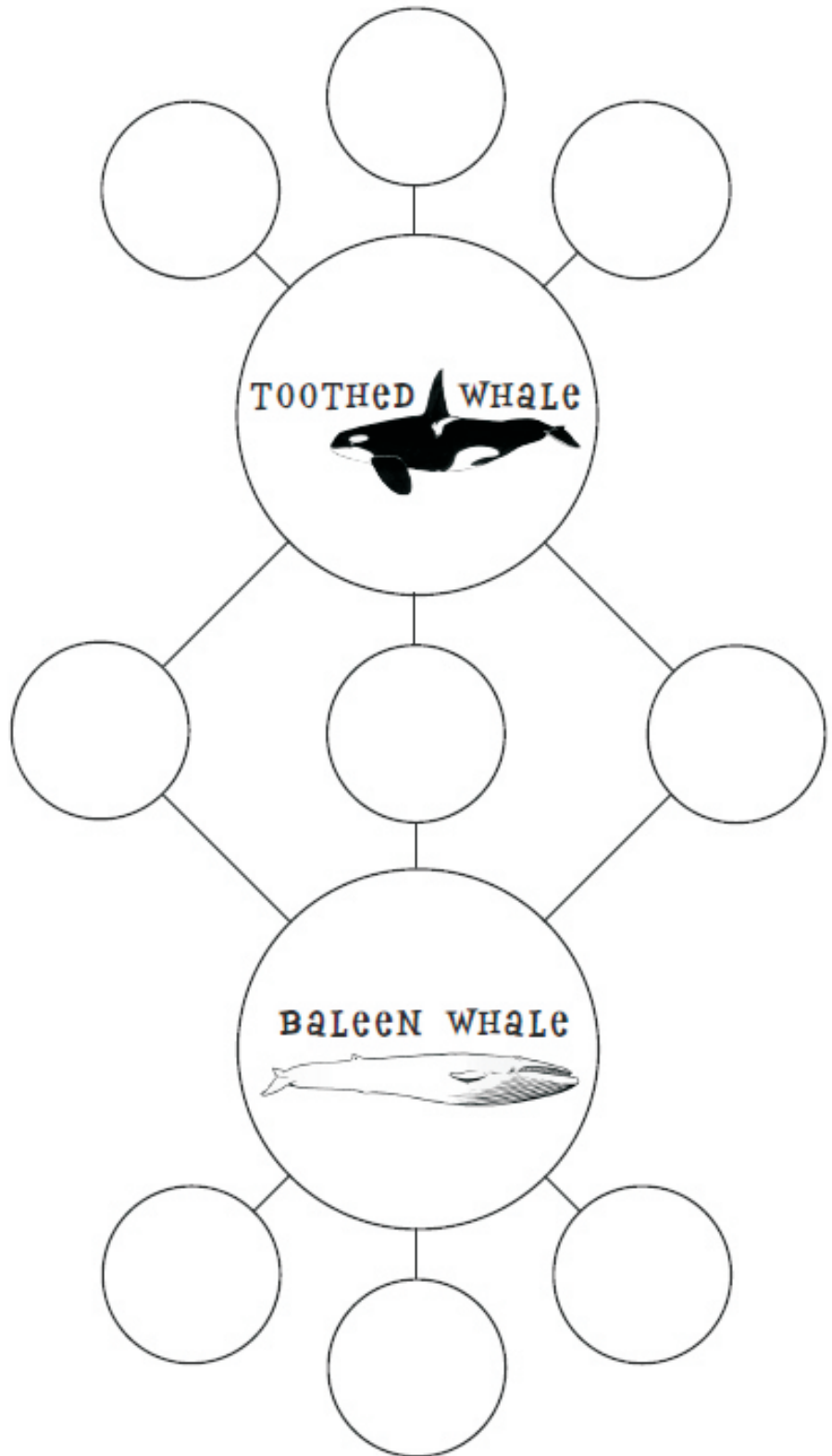
Visit the Aquarium of the Pacific, and have your students complete a marine mammal scavenger hunt using the Aquarium Field Trip Worksheet. (p. 5 of 2nd grade journal)



TOOTHED WHALE OR BALEEN WHALE

Directions: In the bubbles provided below, fill in the characteristics that belong to only baleen whales, only toothed whales or to both.

- Baleen
- Breathes Air
- Teeth
- One Blowhole
- Eats Fish & Squid
- Two Blowholes
- Blubber
- Eats Krill
- Mammal



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