



Lesson 3: Researching Whales and Dolphins

Objective: Students will play a modified game of Bingo to learn information about different types of whales

You will need:

- Copies of cetacean fact sheets (one copy of each fact sheet)
- Bingo sheets (pages 3-3 to 3-32; one per student) and bingo markers (you could use small foam pieces or paper cutouts—anything that the students can use to cover the squares on their bingo sheets; if bingo sheets are laminated, dry erase markers or washable markers could be used. A sheet of “bingo chips” is provided on page 3-33; this can be copied and given to students to cut out and use to cover the squares on their bingo sheets)
- Bingo call sheet (page 3-34 and/or page 3-35)
- Optional: PowerPoint bingo presentation (there are two versions, corresponding to call sheets 1 and 2) and ability to project this.
- Optional: “Only One Ocean” CD (by the Banana Slug String Band) and ability to play the “Cetacea” song.

Vocabulary:

Cetacea—the group of animals that includes whales and dolphins.

Baleen—instead of teeth, some whales have baleen which hangs down in their mouths and lets them catch tiny animals to eat.

Beak—the pointy part of a whale or dolphin’s head (usually where its mouth is).

Callosities—rough patches of skin on a right whale’s head. These are usually white in color.

Cookie cutter shark—a small shark that lives in deep water. It takes circle-shaped bites out of whales’ and dolphins’ skin.

Endangered—plants and animals that there are not many of. It is possible that endangered plants and animals could become extinct (all gone).

Flipper—instead of arms, whales and dolphins have flippers.

Plankton—often tiny plants and animals that float around in the ocean.

Squid—a type of ocean animal that is related to the octopus. (There are some good photographs of squid at <http://www.nefsc.noaa.gov/rcb/photogallery/mollusks.html>)


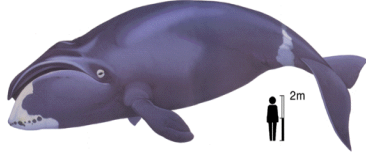


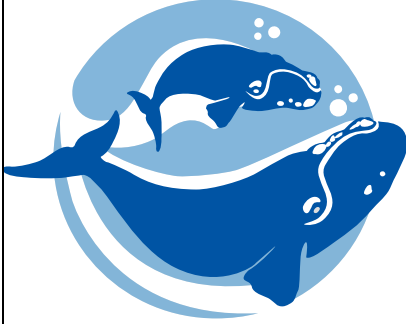






Strategy:

1. Optional: Play “Cetacea” by the Banana Slug String Band. If you play this a couple of times, students will start to catch on to names of some of the whales and may sing along. The 15 whales used in this Bingo game are all mentioned in that song.
2. Review vocabulary words that may be new for students.
3. Give each student one of the cetacean fact sheets. If there are fewer than 15 students or groups, some students/groups should be given two fact sheets so all fact sheets are distributed. If there are more than 15 students, you can either group the students or make additional copies of fact sheets.
4. Give each individual one of the bingo sheets (and one of the bingo chip sheets, page 3-33, if desired. If bingo chip sheets are used, give students time to cut out the individual squares before starting the game.)
5. Explain that the class will be playing a game of bingo, but with a twist. Instead of the caller (the teacher) simply calling out the name of a whale or dolphin, they will be calling out a clue. The students will need to read their fact sheets to see if the clue matches the whale or dolphin on their fact sheet. If it does, they need to raise their hand and tell the class the name of their whale or dolphin. At that time, anyone who has that animal on their bingo cards can cover it.
6. Explain that the first objective is to get three whales lined up in a row. Once someone has 3 in a row (horizontally, vertically or diagonally), they should call out “Bingo.” You can then continue the game until someone has their entire card covered (all 9 spaces.) Alternately, you can play until each person has achieved a Bingo.
7. Use the clues until someone calls out “Bingo.” It may be best to use the provided PowerPoint presentation(s) in addition to the list—the presentations allow the students to see the information that is being read and also to see a picture of the cetacean. Once someone calls “Bingo,” check that the whales that they have covered to make their row have actually been called as answers to clues. Remind everyone not to uncover their cards yet, and continue with the clues until someone has achieved the next bingo pattern.
8. Note that there are 30 unique bingo cards for this activity, and two unique “call lists” in case the class wishes to repeat the game (or if the teacher wants to offer to repeat it as a reward for the class later in the school year!)



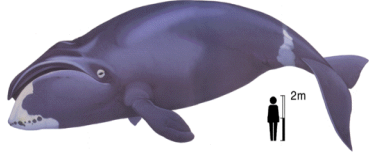

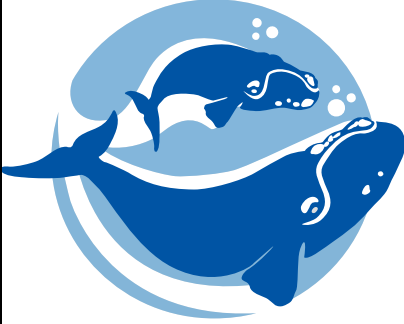






CARD #1

WHALE BINGO		
<p>Sperm whale</p> 	<p>Bowhead</p> 	<p>Narwhal</p> 
<p>Blue whale</p> 		<p>Orca</p> 
<p>Gray whale</p> 	<p>Right whale</p> 	<p>Dolphin</p> 





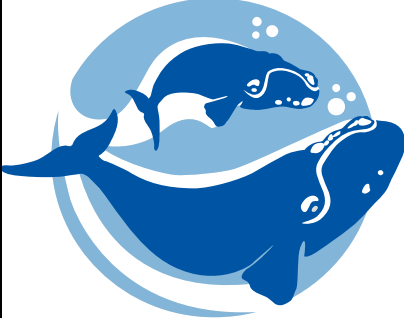






CARD #2

WHALE BINGO		
<p>Minke whale</p> 	<p>Sperm whale</p> 	<p>Bowhead</p> 
<p>Beluga whale</p> 		<p>Gray whale</p> 
<p>Sei whale</p> 	<p>Pilot whale</p> 	<p>Fin whale</p> 





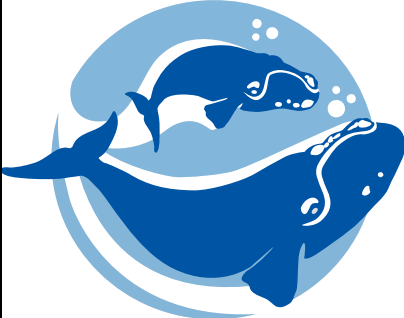

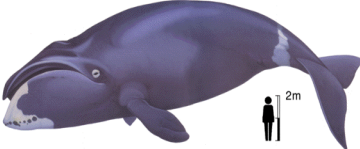




CARD #3

WHALE BINGO		
<p>Beluga whale</p> 	<p>Pilot whale</p> 	<p>Sei whale</p> 
<p>Blue whale</p> 		<p>Minke whale</p> 
<p>Narwhal</p> 	<p>Orca</p> 	<p>Fin whale</p> 


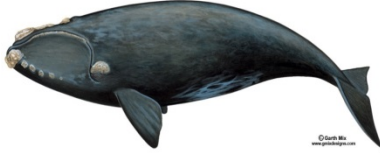


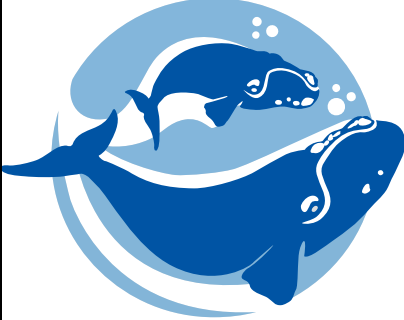



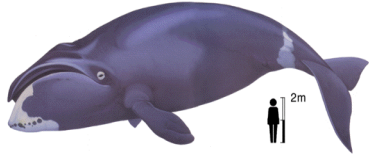


CARD #4

WHALE BINGO		
<p>Blue whale</p> 	<p>Sei whale</p> 	<p>Fin whale</p> 
<p>Sperm whale</p> 		<p>Right whale</p> 
<p>Bowhead</p> 	<p>Pilot whale</p> 	<p>Dolphin</p> 


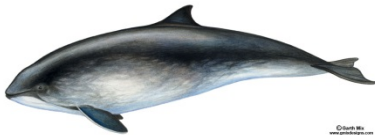
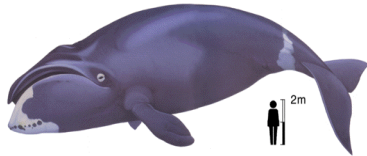

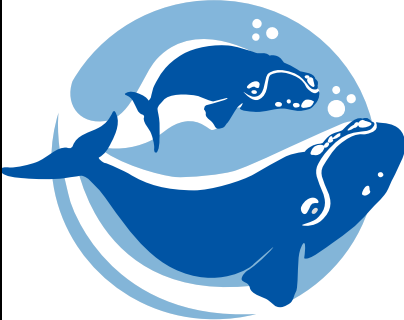

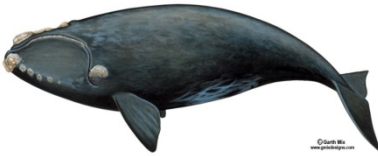




CARD #5

WHALE BINGO		
<p>Dolphin</p> 	<p>Right whale</p> 	<p>Humpback whale</p> 
<p>Blue whale</p> 		<p>Sperm whale</p> 
<p>Gray whale</p> 	<p>Beluga</p> 	<p>Bowhead</p> 





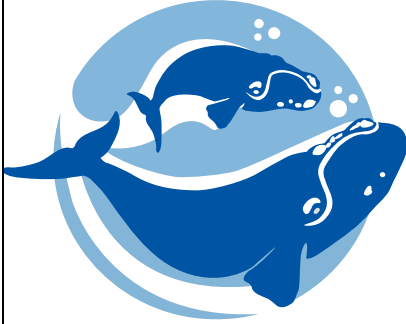

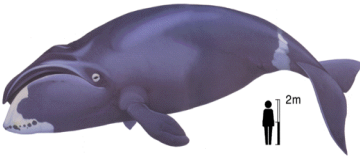




CARD #6

WHALE BINGO		
<p>Minke whale</p> 	<p>Porpoise</p> 	<p>Bowhead</p> 
<p>Fin whale</p> 		<p>Beluga</p> 
<p>Right whale</p> 	<p>Gray whale</p> 	<p>Sperm whale</p> 

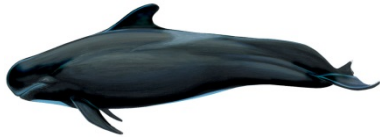



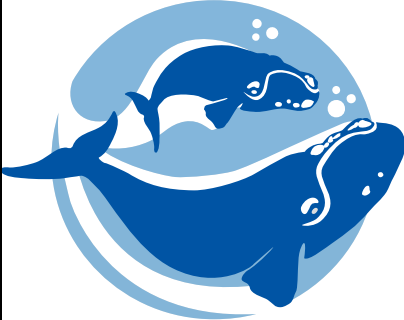






CARD #7

WHALE BINGO		
<p>Sei whale</p> 	<p>Porpoise</p> 	<p>Orca</p> 
<p>Blue whale</p> 		<p>Gray whale</p> 
<p>Bowhead</p> 	<p>Minke whale</p> 	<p>Narwhal</p> 





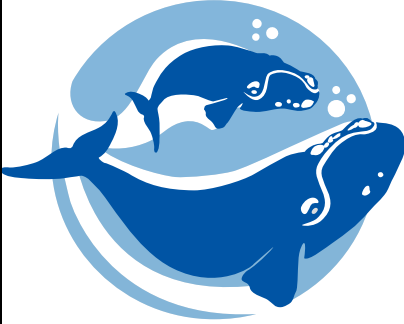






CARD #8

WHALE BINGO		
<p>Pilot whale</p> 	<p>Narwhal</p> 	<p>Sei whale</p> 
<p>Gray whale</p> 		<p>Dolphin</p> 
<p>Orca</p> 	<p>Porpoise</p> 	<p>Fin whale</p> 





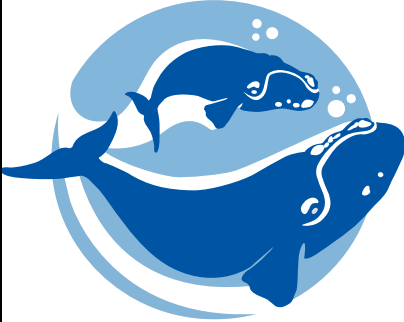






CARD #9

WHALE BINGO		
<p>Porpoise</p> 	<p>Pilot whale</p> 	<p>Sei whale</p> 
<p>Fin whale</p> 		<p>Narwhal</p> 
<p>Gray whale</p> 	<p>Right whale</p> 	<p>Humpback whale</p> 





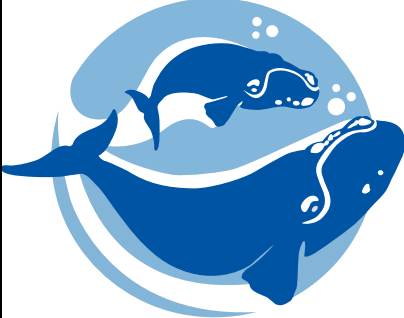






CARD #10

WHALE BINGO		
<p>Pilot whale</p> 	<p>Right whale</p> 	<p>Sei whale</p> 
<p>Beluga whale</p> 		<p>Porpoise</p> 
<p>Bowhead</p> 	<p>Humpback whale</p> 	<p>Narwhal</p> 


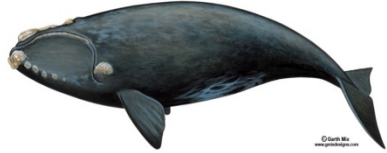


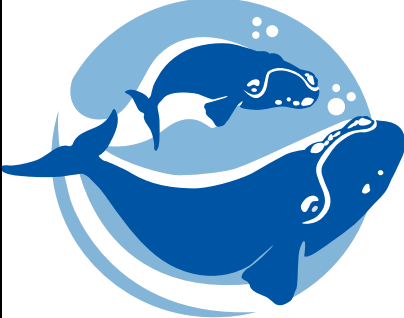






CARD #11

WHALE BINGO		
<p>Humpback whale</p> 	<p>Dolphin</p> 	<p>Fin whale</p> 
<p>Sperm whale</p> 		<p>Gray whale</p> 
<p>Blue whale</p> 	<p>Bowhead</p> 	<p>Pilot whale</p> 





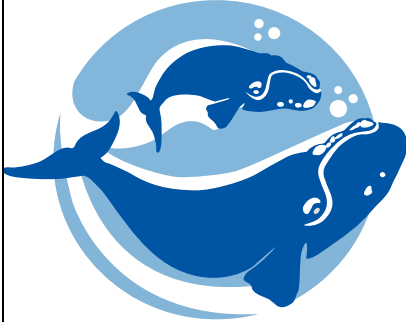

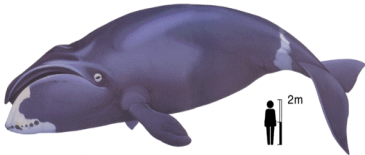




CARD #12

WHALE BINGO		
<p>Gray whale</p> 	<p>Right whale</p> 	<p>Dolphin</p> 
<p>Humpback whale</p> 		<p>Bowhead</p> 
<p>Sei whale</p> 	<p>Porpoise</p> 	<p>Pilot whale</p> 


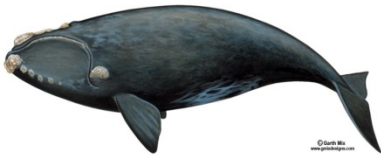


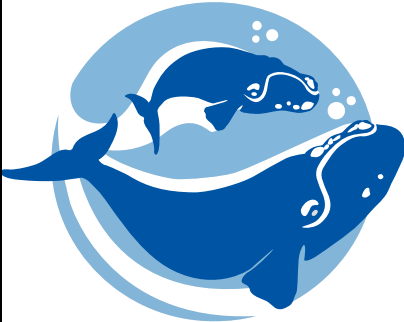



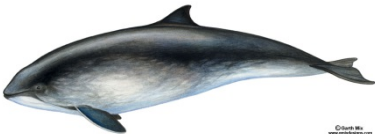


CARD #13

WHALE BINGO		
<p>Humpback whale</p> 	<p>Blue whale</p> 	<p>Porpoise</p> 
<p>Narwhal</p> 		<p>Fin whale</p> 
<p>Bowhead</p> 	<p>Sei whale</p> 	<p>Orca</p> 





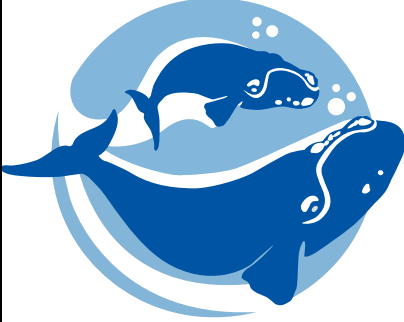






CARD #14

WHALE BINGO		
<p>Humpback whale</p> 	<p>Right whale</p> 	<p>Beluga</p> 
<p>Pilot whale</p> 		<p>Sperm whale</p> 
<p>Orca</p> 	<p>Sei whale</p> 	<p>Porpoise</p> 


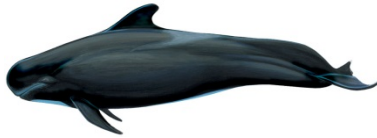


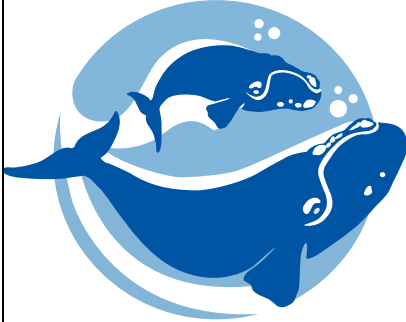






CARD #15

WHALE BINGO		
<p>Humpback whale</p> 	<p>Right whale</p> 	<p>Blue whale</p> 
<p>Sperm whale</p> 		<p>Minke whale</p> 
<p>Dolphin</p> 	<p>Porpoise</p> 	<p>Beluga</p> 



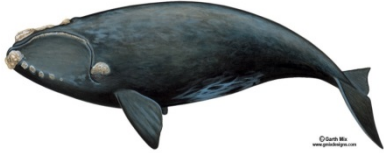

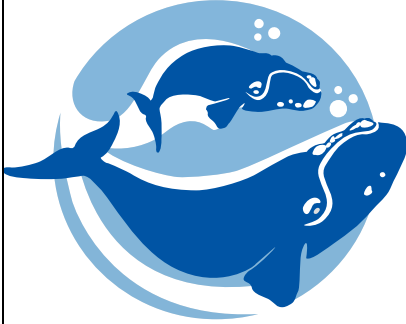






CARD #16

WHALE BINGO		
<p>Humpback whale</p> 	<p>Pilot whale</p> 	<p>Sei whale</p> 
<p>Narwhal</p> 		<p>Sperm whale</p> 
<p>Fin whale</p> 	<p>Porpoise</p> 	<p>Beluga</p> 





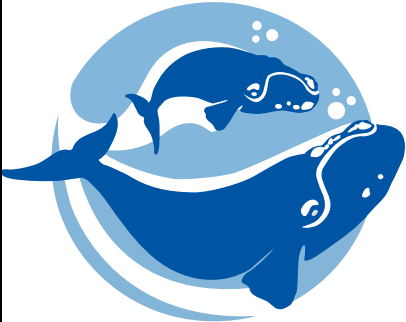
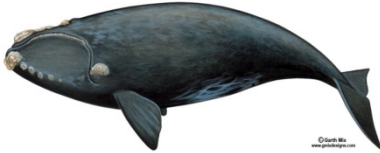


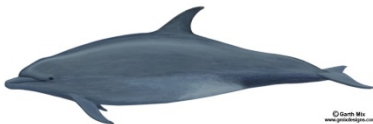


CARD #17

WHALE BINGO		
<p>Sei whale</p> 	<p>Sperm whale</p> 	<p>Right whale</p> 
<p>Minke whale</p> 		<p>Orca</p> 
<p>Fin whale</p> 	<p>Porpoise</p> 	<p>Humpback whale</p> 


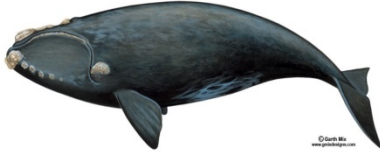


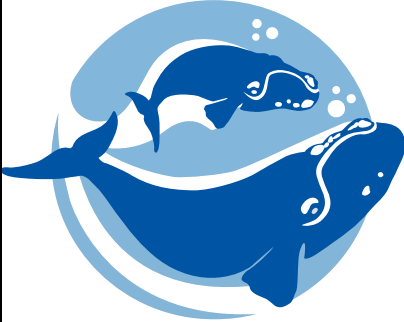






CARD #18

WHALE BINGO		
<p>Sei whale</p> 	<p>Sperm whale</p> 	<p>Blue whale</p> 
<p>Porpoise</p> 		<p>Right whale</p> 
<p>Humpback whale</p> 	<p>Beluga</p> 	<p>Dolphin</p> 





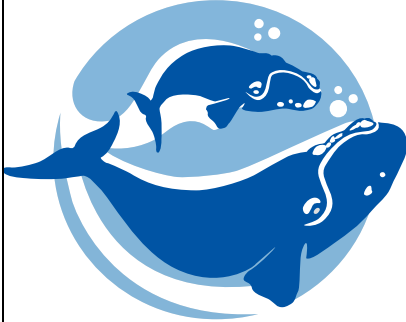


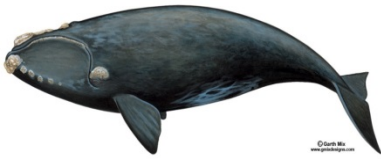



CARD #19

WHALE BINGO		
<p>Sei whale</p> 	<p>Right whale</p> 	<p>Narwhal</p> 
<p>Orca</p> 		<p>Sperm whale</p> 
<p>Dolphin</p> 	<p>Beluga</p> 	<p>Blue whale</p> 


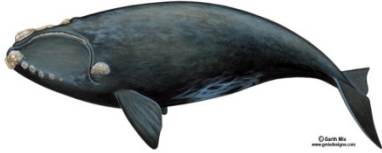

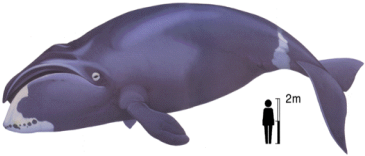
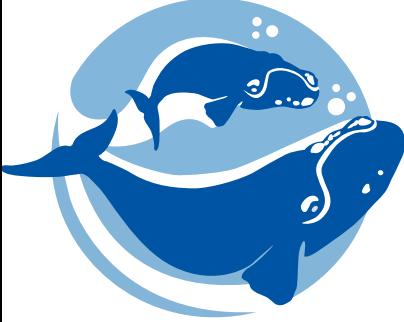






CARD #20

WHALE BINGO		
<p>Humpback whale</p> 	<p>Orca</p> 	<p>Blue whale</p> 
<p>Dolphin</p> 		<p>Porpoise</p> 
<p>Beluga</p> 	<p>Right whale</p> 	<p>Narwhal</p> 





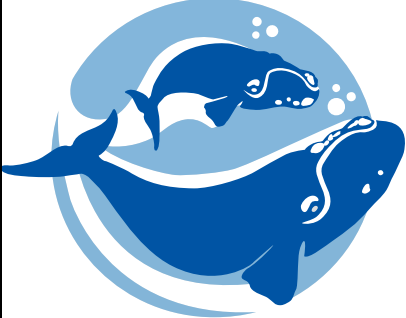






CARD #21

WHALE BINGO		
<p>Blue whale</p> 	<p>Right whale</p> 	<p>Sei whale</p> 
<p>Bowhead</p> 		<p>Humpback whale</p> 
<p>Fin whale</p> 	<p>Narwhal</p> 	<p>Pilot whale</p> 





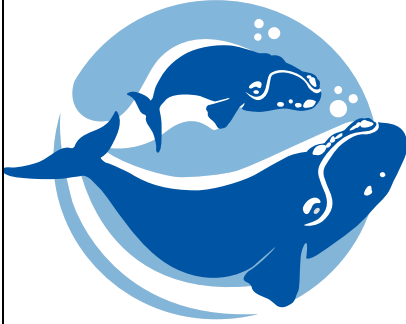

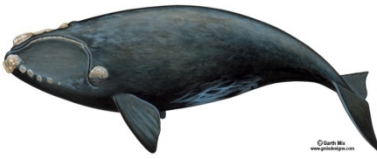




CARD #22

WHALE BINGO		
<p>Sei whale</p> 	<p>Dolphin</p> 	<p>Orca</p> 
<p>Porpoise</p> 		<p>Humpback whale</p> 
<p>Minke whale</p> 	<p>Bowhead</p> 	<p>Pilot whale</p> 

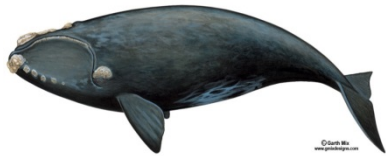


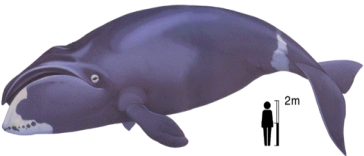
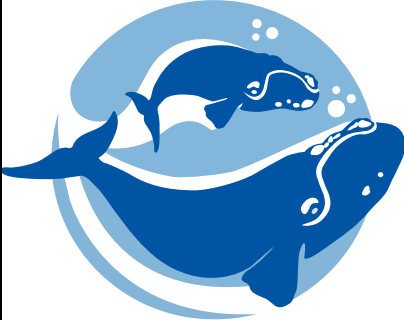






CARD #23

WHALE BINGO		
<p>Humpback whale</p> 	<p>Minke whale</p> 	<p>Orca</p> 
<p>Gray whale</p> 		<p>Beluga</p> 
<p>Right whale</p> 	<p>Fin whale</p> 	<p>Porpoise</p> 





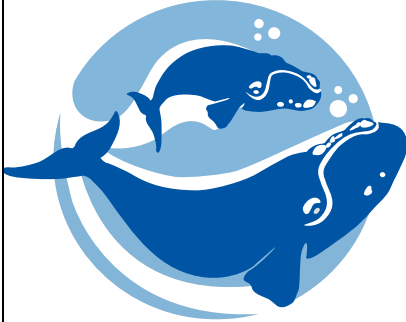






CARD #24

WHALE BINGO		
<p>Right whale</p> 	<p>Beluga</p> 	<p>Sperm whale</p> 
<p>Bowhead</p> 		<p>Humpback whale</p> 
<p>Dolphin</p> 	<p>Porpoise</p> 	<p>Gray whale</p> 





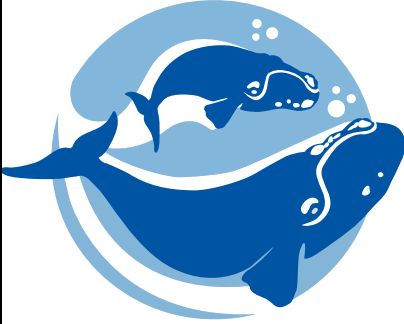






CARD #25

WHALE BINGO		
<p>Humpback whale</p> 	<p>Dolphin</p> 	<p>Orca</p> 
<p>Minke whale</p> 		<p>Right whale</p> 
<p>Narwhal</p> 	<p>Sei whale</p> 	<p>Beluga</p> 





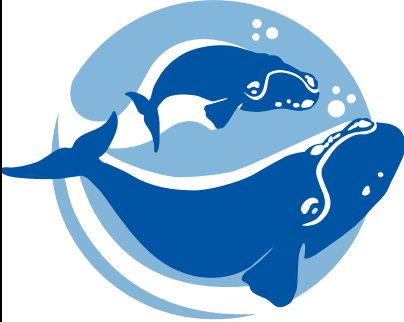


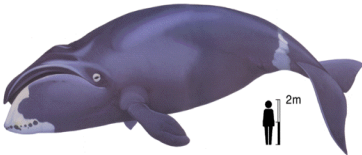



CARD #26

WHALE BINGO		
<p>Orca</p> 	<p>Gray whale</p> 	<p>Dolphin</p> 
<p>Humpback whale</p> 		<p>Porpoise</p> 
<p>Narwhal</p> 	<p>Fin whale</p> 	<p>Sei whale</p> 





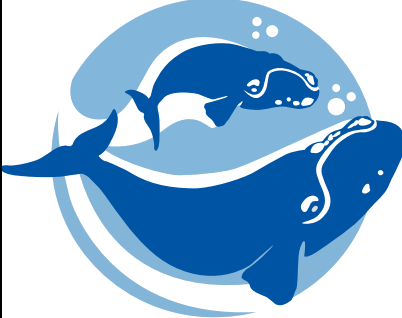






CARD #27

WHALE BINGO		
<p>Beluga</p> 	<p>Humpback whale</p> 	<p>Sperm whale</p> 
<p>Pilot whale</p> 		<p>Dolphin</p> 
<p>Orca</p> 	<p>Bowhead</p> 	<p>Fin whale</p> 

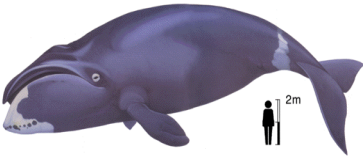

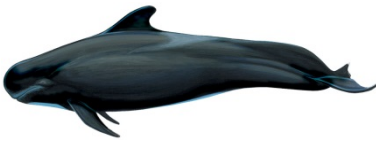

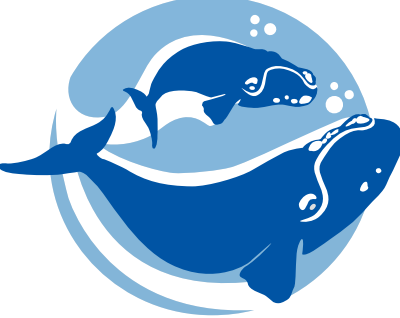



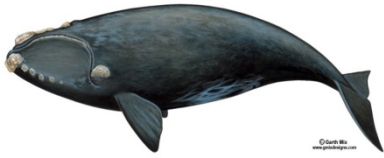


CARD #28

WHALE BINGO		
<p>Sei whale</p> 	<p>Sperm whale</p> 	<p>Narwhal</p> 
<p>Pilot whale</p> 		<p>Bowhead</p> 
<p>Gray whale</p> 	<p>Orca</p> 	<p>Minke whale</p> 

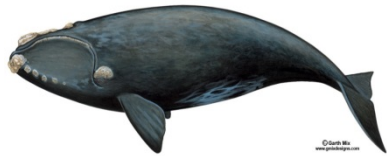



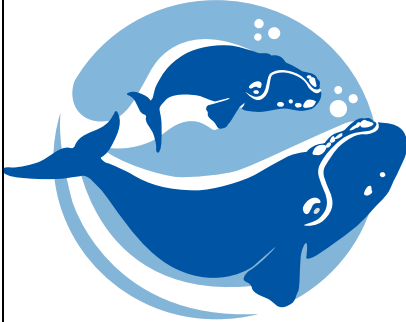

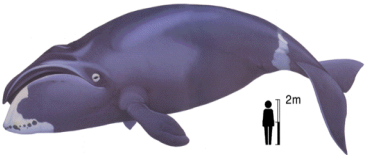

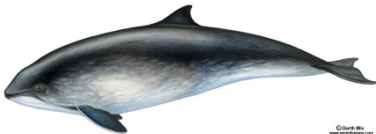


CARD #29

WHALE BINGO		
<p>Bowhead</p> 	<p>Fin whale</p> 	<p>Pilot whale</p> 
<p>Gray whale</p> 		<p>Dolphin</p> 
<p>Orca</p> 	<p>Sei whale</p> 	<p>Right whale</p> 

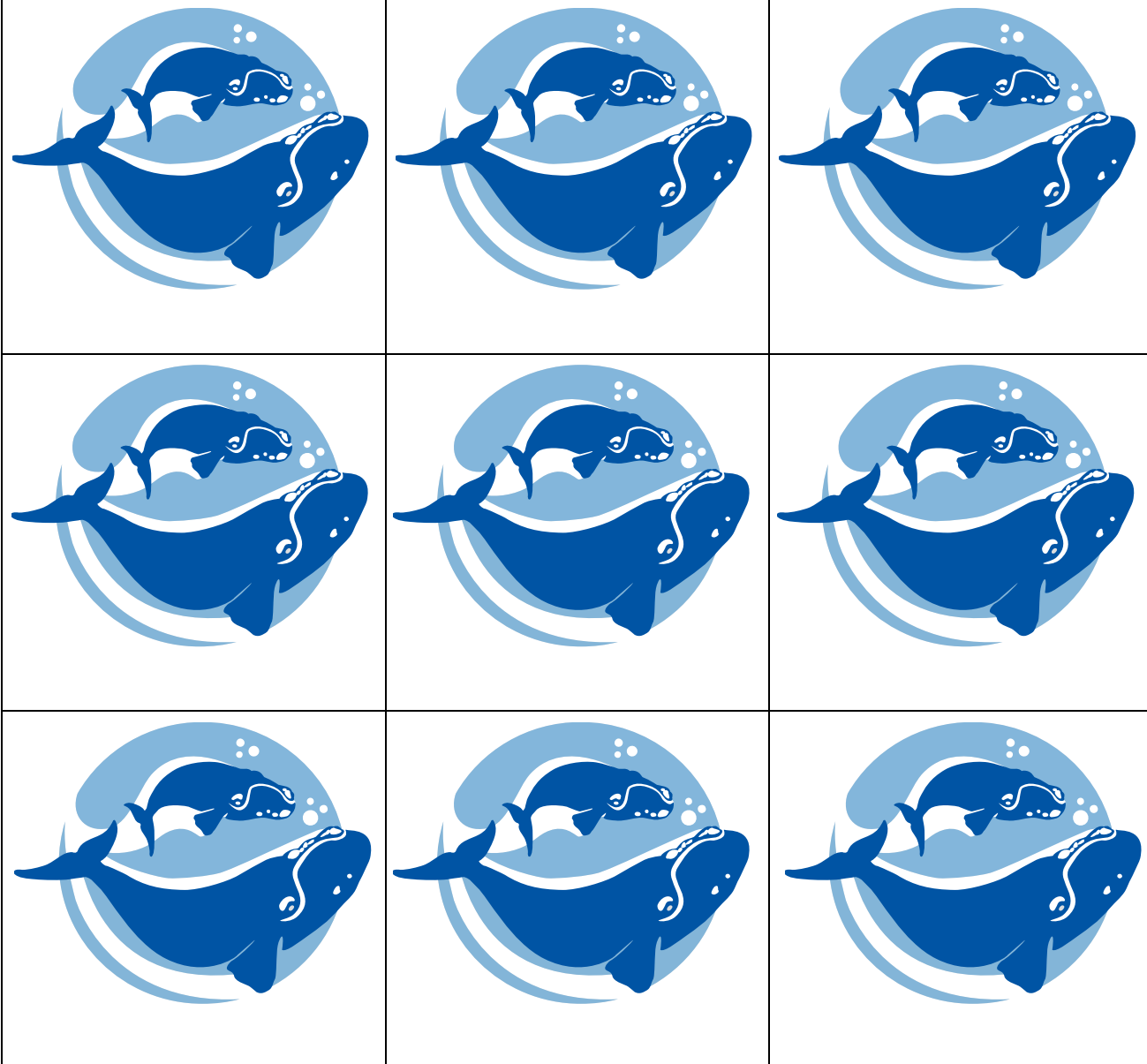


CARD #30

WHALE BINGO		
<p>Right whale</p> 	<p>Dolphin</p> 	<p>Narwhal</p> 
<p>Orca</p> 		<p>Pilot whale</p> 
<p>Bowhead</p> 	<p>Minke whale</p> 	<p>Porpoise</p> 



WHALE BINGO





CALL LIST FOR CETACEAN BINGO GAME

LIST 1:

1. These whales have been called “devil fish.” [Answer: Gray whale]
2. This whale comes to warm Florida waters to have its babies (calves) every winter. [Answer: Right whale]
3. These baleen whales can swim very fast. [Answer: Minke (*MIN-key*) whale]
4. Each of these whales has a different white pattern under its tail fluke. [Answer: Humpback whale]
5. These toothed whales are sometimes called “puffing pigs.” [Answer: Porpoise]
6. This whale is sometimes called a finback whale. [Answer: Fin whale]
7. This whale is the biggest animal in the world. [Answer: Blue whale]
8. This whale is born dark gray but becomes snowy white as it grows up. It is often called “the white whale.” [Answer: Beluga (*buh-LOO-guh*) whale]
9. This marine mammal looks like it is smiling. [Answer: Dolphin]
10. This whale has a white chin. [Answer: Bowhead whale]
11. These whales have one long tooth that grows out of the front of their jaws. [Answer: Narwhal (*NAR-wull*)]
12. This toothed whale has a large, round head. [Answer: Pilot whale]
13. This whale is the largest toothed whale. [Answer: Sperm whale]
14. This whale is also called “killer whale.” [Answer: Orca]
15. These whales are often bitten by cookie cutter sharks. That leaves circle-shaped scars on their skin. [Answer: Sei (*SAY* or *SIGH*) whale]



CALL LIST FOR CETACEAN BINGO GAME

LIST 2:

1. These small whales can be nine feet long. They can hold their breath for 8 minutes. [Answer: Dolphin]
2. This whale's scientific name means "northern winged whale." [Answer: Sei (*SAY* or *SIGH*) whale]
3. These whales can be recognized by the big white growths ("callosities") on their heads. [Answer: Right whale]
4. These whales have long white flippers. [Answer: Humpback whale]
5. Babies of this whale can grow 2 inches a day. [Answer: Blue whale]
6. This whale's tongue is half white and half black. [Answer: Fin whale]
7. These whales grow to be 33 feet long. They can hold their breath for 15 minutes. [Answer: Minke (*MIN-key*) whale]
8. Animals that look like little orange crabs live on these whales' skin. [Answer: Gray whale]
9. This whale can hold its breath up to two hours. [Answer: Sperm whale]
10. These whales have thick blubber. They eat fish, squid and shrimp. [Answer: Narwhal (*NAR-wull*)]
11. These whales have rounded heads with a very short beak. They can be 5 to 8 feet long. [Answer: Porpoise]
12. These whales use their big head to break through ice. [Answer: Bowhead whale]
13. This small toothed whale usually travels in large groups of up to 100 animals. [Answer: Pilot whale]
14. These whales are sometimes called "the wolves of the sea." [Answer: Orca]
15. This is the only whale that can move its neck. It can move its head up and down, and side to side. [Answer: Beluga (*buh-LOO-guh*) whale]



Image sources:

Pacific white-sided dolphin:

http://www.nmfs.noaa.gov/pr/species/mammals/cetaceans/whitesideddolphin_pacific.htm

Northern right whale dolphin:

http://www.noanews.noaa.gov/stories2009/20090526_dolphins.html

Bowhead whale: http://www.nmfs.noaa.gov/pr/pdfs/education/kids_times_whale_bowhead.pdf

Vaquita: <http://vaquita.tv/blog/category/latest-conservation-news/>

Beluga Whale: <http://en.wikipedia.org/wiki/File:Beluga03.jpg>

Narwhal: http://www.noanews.noaa.gov/stories2010/images/narwhal_pod_hires.jpg

Gray whale: http://www.nmfs.noaa.gov/pr/images/cetaceans/graywhale_afsc-merrillgosho.jpg