



Ocean Discovery

Third Grade

Our Ocean Discovery field trip program helps to meet multiple Florida Standards.
Please see Table of Contents for specific standards.

Ocean Discovery 3rd Grade Activities

Table of Contents

Pre Field Trip Activities

Predators of the Deep

Mathematics (Bar Graphs, Problem Solving) / Science (Empirical Evidence, Record Keeping)

Standards: MAFS.3.MD.2.3, MAFS.K12.MP.1.1, SC.3.N.1.3, SC.3.N.1.7

- Using the provided data chart, students answer questions about a shark's diet over the course of four weeks and create a line graph based on the information.

Whale and Shark

Science (Classification, Scientific Inquiry, Records Keeping)

Standards: SC.3.L.15.1, SC.3.N.1.3

- Using the provided images and information, students will decide which traits are applied to whales, which are to sharks, and which apply to both.

What About Whales?

English Language Arts (Standards in Informational Reading and Writing)

Standards: LAFS.3.L.1.1, LAFS.3.L.1.2, LAFS.3.L.2.3, LAFS.3.L.3.4, LAFS.3.RF.4.4, LAFS.3.RI.3.7, LAFS.3.RI.3.9, LAFS.3.RI.4.10, LAFS.3.W.3.7

- For the first activity, using the provided information and illustrations, students will learn about four species of whales. They will write a short paragraph about each whale containing at least three facts about the species. For the second activity, they are to choose two of the species to compare and contrast in a short essay.

Field Trip Activities

Shark Encounter®: Food for Thought

English Language Arts (Vocabulary Acquisition)/Science (Animal Classification, Food Web)

Standards: LAFS.3.L.3.6, SC.3.L.15.1, SC.3.L.17.2

- Using the provided information, students will learn about predator/prey interactions and the importance of predators in the food web.

Shark Encounter: Count and Identify the Sharks

Science (Adaptations, Communication, Scientific Inquiry, Group Comparisons)

Standards: SC.3.N.1.1, SC.3.N.1.2, SC.3.N.1.3, SC.3.N.1.4, SC.3.N.1.5

- Working in teams and using the provided illustrations and information, students will identify, count and record the number of the different types of sharks inside the Shark Encounter.

Turtle Trek: Massive Migrants

English Language Arts (Vocabulary Acquisition)/ Science (Classification, Seasonal Changes, Migration)

Standards: LAFS.3.L.3.6, SC.3.L.15.1, SC.3.L.17.1

- Using the provided information, students will learn more about manatees and sea turtles and the seasonal migrations they undertake for survival.

Pacific Point Preserve®: Which One is Which?

English Language Arts (Vocabulary Acquisition)/Science (Classification of Animals, Adaptations)

Standards: LAFS.3.L.3.6, SC.3.L.15.1, SC.3.N.1.4, SC.3.N.1.5, SC.3.N.1.6

- First page provides information on taxonomy and classification of seals and sea lions. Second page helps to identify differences between seals and sea lions at Pacific Point Preserve, as well as, instructions for an activity to “classify” the students in the same way that taxonomy classifies organisms.

Shamu Stadium: In the Park

English Language Arts (Vocabulary Acquisition) /Science (Classification, Migration, Seasonal Changes)

Standards: LAFS.3.L.3.6, SC.3.L.15.1, SC.3.L.17.1

- Using the provided information, students will learn about some of the differences between sharks and killer whales and about migration patterns for each animal.

Wild Arctic®: Arctic Animals

English Language Arts (Vocabulary Acquisition) / Science (Adaptations, Seasonal Changes)

Standards: LAFS.3.L.3.6, SC.3.L.17.1

- Using the provided information, students will learn about the adaptations of the animals found at Wild Arctic, as well as, seasonal changes in the Arctic environment.

Post Field Trip Activities

Arctic Artist

Visual Arts (Inspiration for Artistic Expression, Skill Development)

Standards: VA.3.H.3.1, VA.3.S.1.2, VA.3.S.3.1, VA.3.S.3.2

- Students will replicate a drawing using the provided image and grids.

A-maze-ing Manatee Migrations

Science (Migrations, Seasonal Changes)/ Visual Arts (Following Direction, Practice)

Standards: SC.3.L.17.1, VA.3.S.2.2, VA.3.S.3.2

- Students will complete a maze that shows the route a manatee may take to move from cold water to a warm water refuge while avoiding dangers. Students will also color the safe plants for a manatee to eat and draw an image of a manatee inside the warm water spring.

The Legend of the Killer Whale

English Language Arts (Recount Stories, Describe Characters and Situations, Storytelling)

Standards: LAFS.3.L.1.1, LAFS.3.L.1.2, LAFS.3.L.2.3, LAFS.3.RL.1.2, LAFS.3.RL.1.3

- Students will read a short story about how the Tlingit and Haida people believed the killer whale originally came to be. They will answer questions about the story they read and write a short legend of their own.

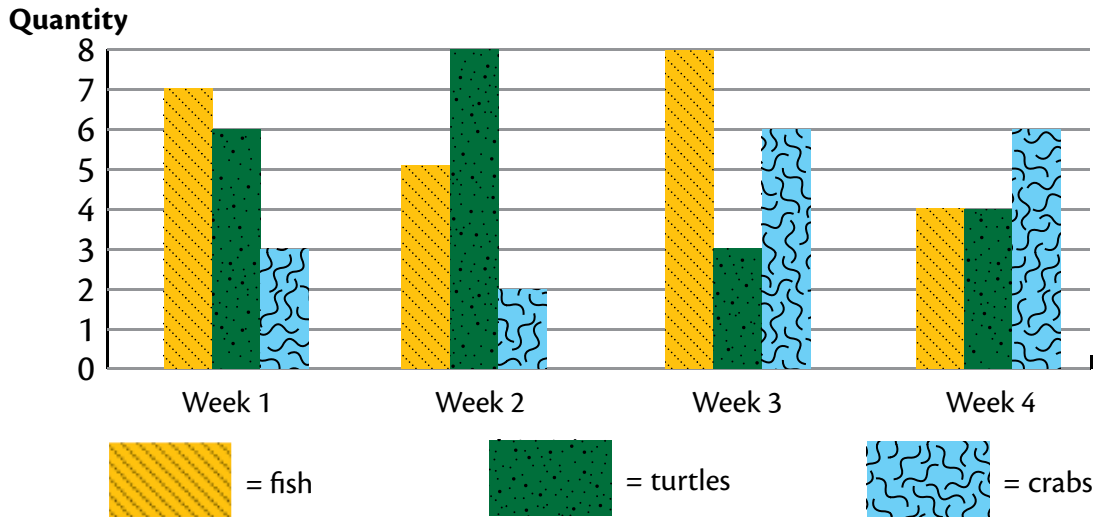
Predators of the Deep

Name: _____

Sharks are predators. Predators are animals that eat other animals to survive. By feeding on weak, ill, injured or dying animals, sharks help to maintain a balance between all of the creatures that share the ocean.

Directions: Use the bar graph below to answer the questions at the bottom of the page.

Shark Diet Over a Four Week Period



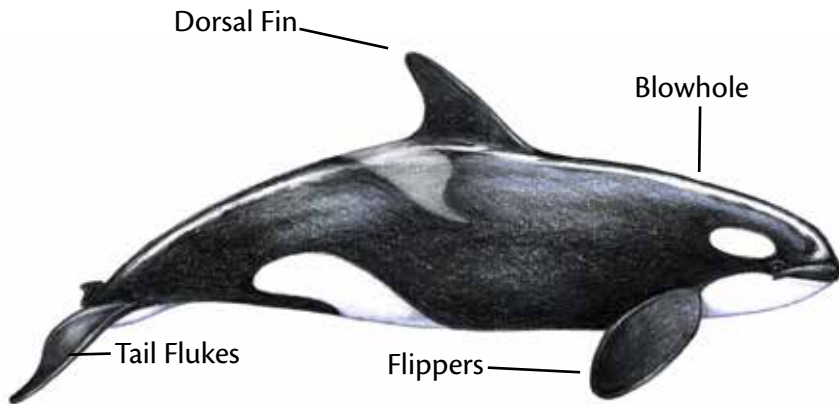
- During what week did the shark eat more crabs than fish?
- During what week did the shark eat the most fish?
- During what week did the shark eat more turtles than crabs, but fewer turtles than fish?
- How many animals did the shark eat each week?
Week 1 = _____ Week 2 = _____ Week 3 = _____ Week 4 = _____
- During what week did the shark eat the most food?
- How many fish did the shark eat during the four weeks?
- How many more fish did the shark eat than crabs during the four weeks?
- Which animal did the shark eat the most during the four weeks?
- Use the information above to construct a horizontal bar graph to show how many animals of each group the shark ate during all four weeks.



Whale and Shark

Name: _____

Directions: Using the provided images and information, decide which traits apply to whales, which apply to sharks, and which apply to both.

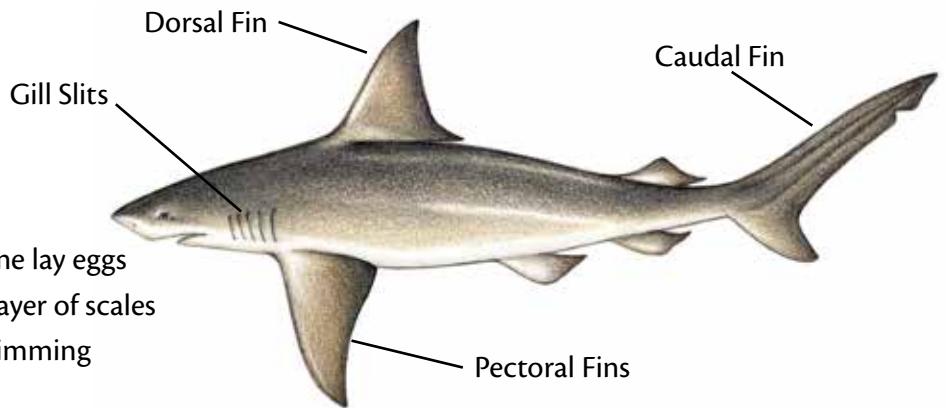


Whale:

- Warm-blooded (Endothermic)
- Breathes air
- Gives live birth
- Produces milk
- Has hair at some time during its life
- Tail moves up and down while swimming

Shark:

- Cold blooded (Ectothermic)
- Gills absorb oxygen from water
- Some species give live birth, some lay eggs
- Skin covered with a protective layer of scales
- Tail moves side to side while swimming



Place a check mark in the box that applies to each statement	Whale	Shark	Both
Lives in the water			
Breathes air			
Body covered with scales			
Swims by moving its tail up and down			
Has a dorsal fin			
Warm-blooded (Endothermic)			
Lays eggs			
Nurses its young			
Has gills			
Cold-blooded (Ectothermic)			
Swims by moving its tail side to side			
Gives live birth			
Has hair at some time during its lifespan			

What About Whales?

Name: _____

Around the world, there are over 80 types of whales. Some are big and some are smaller than the average adult person. All whales have some things that are the same and some things that are different.

Directions: Read about the whales below. Write three facts about each whale in the space given. Be sure to use complete sentences and proper grammar!

Killer Whale (*Orcinus orca*)

- Females - about 15 feet long.
- Males - about 25 feet long.
- Live in all of the oceans around the world.
- Eat fish, marine mammals, sharks and squids.
- Fun Fact - Males are bigger but females lead the group or "pod".



Beluga Whale (*Delphinapterus leucas*)

- Beluga whales - about 10 feet long.
- Males - usually longer.
- Only live in the ocean around the North Pole.
- Eat fish, squid and crabs.
- Fun Fact - Have a dorsal ridge instead of a dorsal fin.



What About Whales?

Name: _____

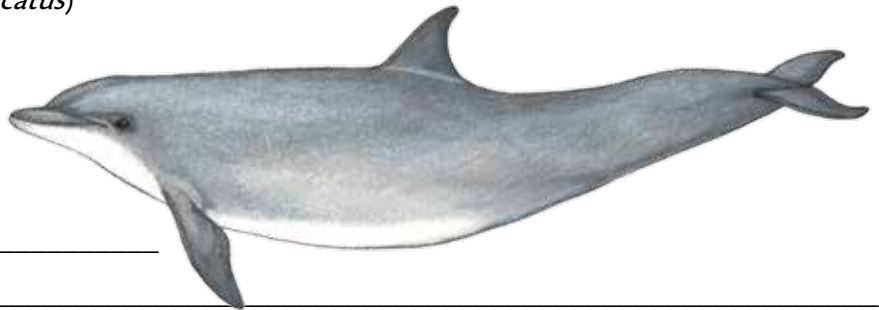
Humpback Whale (*Megaptera novaeangliae*)

- Grow up to 50 feet long.
- Females - usually bigger.
- Live in all oceans around the world.
- Eat small shrimp and very small fish.
- Fun Fact - Sing to each other with special sounds



Atlantic Bottlenose Dolphins (*Tursiops truncatus*)

- Grow up to 8 feet long.
- Males - usually bigger than females.
- Live in warm waters around the world.
- Usually eat fish and squid.
- Fun Fact – Jump up to 16 feet in the air.



2. On a new piece of paper, pick two of the whales and write about three ways they are the same and three ways they are different from each other. You can also use the pictures next to each whale to help you.

Shark Encounter®: Food for Thought

Objective: Students will discover the important role that predators play in the environment.

Teacher and Chaperone Corner: At Shark Encounter, students will encounter some of the most mysterious and misunderstood animals of the sea. Barracuda and sharks all have frightening reputations. However, it's important to remember that every animal plays an important role in the ecosystem.

The Shark Shallows, located near the front of the building, is an excellent place to observe sharks and other species. This area also provides a convenient meeting spot for your group for further discussion or instruction.

Share this information with your students.

- Animals that eat other animals are called **predators**. Animals that are eaten by predators are called **prey**. Some animals, like stingrays, can be both a predator and prey.
- Most predators feed on weak, injured or ill animals that can be easily caught and are less likely to fight back.
- Sharks very rarely attack people. In fact, hippos and cows are more dangerous than sharks. Yet, people hurt and destroy over 100 million sharks every year.
- A **food web** is an organizational chart that depicts which prey animals are eaten by which predator animals. If part of the food web is taken away, the entire web collapses. This means that both predators and prey are important to the survival of the other.
- Predators are often thought of as “bad animals”, but they play an important role by helping to keep overall population of animals healthy. They prevent one type of animal from out numbering the others (**overpopulation**) and help to maintain the health and balance of the natural environment.
- Human activities such as pollution, overhunting and overfishing can harm predators either directly or by hurting the animals they rely on for food.
- Most predators have a good sense of smell that allows them to smell food from miles away. For example, some sharks can smell a concentration of one part of blood per billion parts of water.

Shark Encounter: Count and Identify the Sharks

Name: _____

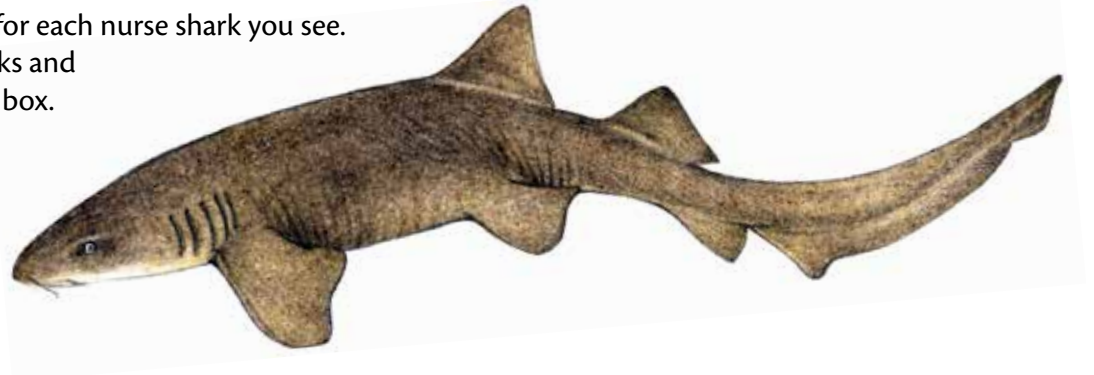
Scientists study animal populations to find out how many animals are present in an environment. As you move through the Shark Tunnel, choose one species of shark and count how many of that species you see. Divide class into teams and each team should count these sharks.

How many of each type of shark can you find?

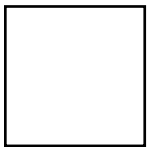
Nurse Shark (*Ginglymostoma cirratum*)

Nurse sharks have a flat body with two whisker-like barbels located to the sides of the mouth. They are often found resting along the bottom of the ocean (or the bottom of the aquarium).

Directions: Make a tally mark for each nurse shark you see. Count the number of tally marks and record the number in the total box.



Tally Marks



= Total number of nurse sharks

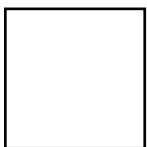
Sand Tiger Shark (*Carcharias taurus*)

Sand tiger sharks have thick bodies with two dorsal fins of approximately the same size and 2 to 5 rows of teeth can be seen protruding from the mouth. It looks like they are smiling or grinning at you.

Directions: Make a tally mark for each sand tiger shark you see. Count the number of tally marks and record the number in the total box.



Tally Marks



= Total number of sand tiger sharks

Deeper Depths

Use a separate sheet of paper to answer the questions below.

What other animals did you see in the aquarium? How many of each animal did you see?
How did you identify the other animals?

TurtleTrek®: Massive Migrators

Objective: Students will learn more about the manatees and sea turtles at Turtle Trek.

Teacher and Chaperone Corner: This information may be shared at the above water viewing area at TurtleTrek. Turtle Trek is home to many animals that came to SeaWorld® as part of the Rescue and Rehabilitation program. Students can learn more and experience life through the eyes of a sea turtle in the underwater viewing area and the 3D TurtleTrek experience. **SeaWorld Educators are located inside TurtleTrek and at the above water viewing area if you would like additional information.**

Manatees:

- Manatees are **mammals**. They have hair, breathe air, are **endothermic** (warm-blooded), give birth to live young and nurse their young.
- Manatees only have a thin layer of fat just under their skin. This fat is not thick enough to keep them warm. Manatees have a high risk of getting cold stress when the water temperature gets too cold.
- Manatees are **herbivores** (plant eaters) and depending on their size, they can eat up to 200lbs of vegetation every day.
- Due to the amount of food they need and the temperature range they can survive in, manatees tend to spend the spring and summer in the warm coastal areas around the southeastern United States. They will migrate in the fall and winter to the fresh water springs around Florida.
- Since manatees frequent the same warm water areas as people do, they are often injured by boats, fishing line and pollution. It is important to keep waterways clean and obey all posted signs when enjoying the outdoors.

Sea Turtles:

- Sea Turtles are **reptiles**. They lay eggs, breathe air and are **ectothermic** (cold blooded.) Most sea turtles are carnivores, eating fish, squid and jellyfish. Green sea turtles are the only **herbivorous** (plant eating) species of sea turtle.
- There are seven **species** and one **subspecies** of sea turtles that are found world wide. Five of those species nest on Florida beaches which include the leatherback, loggerhead, hawksbill, green and Kemp's ridley sea turtles.
- Most sea turtles will migrate between nesting and feeding grounds depending on time of year. Most nesting behaviors occur between May and October. Some turtles may only have to migrate a few miles between sites, while others may migrate thousands of miles.
- Leatherback sea turtles have the longest migration of any sea turtle species. They have been found more than 3,000 miles from their nesting grounds.
- The first year of life after a sea turtle hatches is called the "Lost Year" since no one really knows where they go. It is believed that the hatchlings will ride on floating seaweed and follow the prevailing winds and currents before returning back to coastal waters.
- Because sea turtles cover a wide range of habitats, they can be injured by fishing activities and garbage even far out at sea. Buying sustainably harvested sea food and remembering not to trash where you splash can help protect sea turtles around the world.

Pacific Point Preserve®: Which One is Which?

Objectives: Students will be introduced to the methods scientists use to classify animals. They will also learn ways to identify a harbor seal and a California sea lion.

Teacher and Chaperone Corner: Pacific Point Preserve is home to harbor seals and sea lions. Seals and sea lions are in the Pinniped order which they share with their cousin, the walrus. Pinnipeds are characterized by feather shaped flippers, vibrissae (whiskers) and a semiaquatic lifestyle. Despite these similarities, there are many distinct differences physically, socially and behaviorally that separate the pinnipeds into three distinct families: otariidae (eared seals), phocidae (true seals) and odobenidae (walruses). Students are welcome to purchase fish at the feeder booth to feed the seals and sea lions in this habitat. **SeaWorld® Educators are located at Pacific Point Preserve if you would like additional information.**

Share this information with your students.

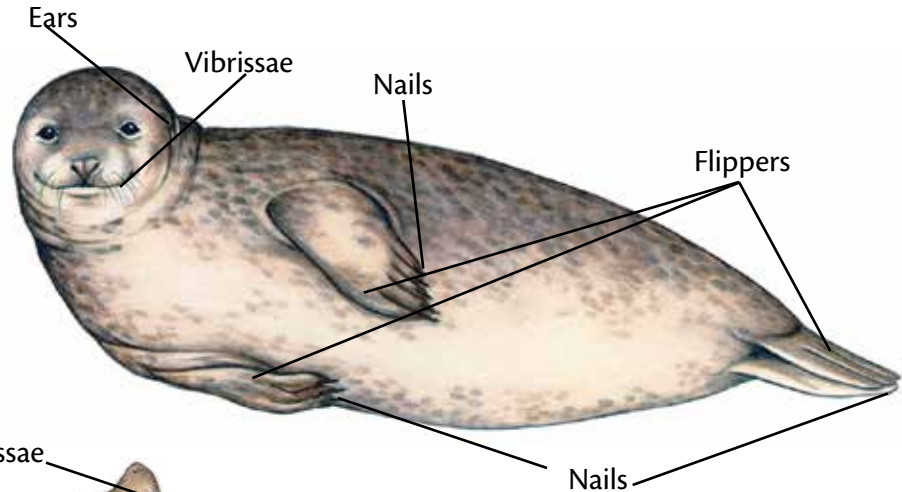
- Seals, sea lions and walruses are all related. They belong to the scientific order of **Pinnipedia**.
- A scientist named Karl von Linne created the scientific system of classifying animals known as **taxonomy**. Classifying animals with Latin names means that no matter what language a scientist speaks or what they call that animal in their hometown, they can still tell another scientist what that animal is by its scientific name.
- Animals that are similar but still have many differences are placed in special groups called **orders**. Animals that are almost the same with just a few differences are further separated into **families**. Finally, animals that are basically the same are separated into **genus** and **species**.
- Pinniped actually means “feather-footed” and refers to the shape of the animal’s flippers. In Latin, “pin” means feather and “ped” means foot.
- Seals, sea lions and walruses are similar in that they all have four flippers, **vibrissae** (whiskers) and a layer of fat called **blubber**.
- Seals have short flippers that they cannot use for walking. They move on land by sliding on their bellies. They have ears but do not have earflaps (**ear pinnae**). They are usually very quiet.
- Sea lions have long flippers in the front and shorter flippers in the back that they can use to walk and climb. They have earflaps (**ear pinnae**) on the sides of their head. They’re usually very loud and can bark, howl and growl.
- Both male and female walruses are very large and have two long tusks protruding from their mouths. They can walk around on all four flippers but swim like a seal using their back flippers. They are vocal and can whistle, knock, grunt and bellow.

Pacific Point Preserve®: Which One is Which?

Harbor Seal

Phoca vitulina

- Short front and hind flippers
- Small ears with no outer ear flaps
- Short rounded body shape
- Spotted coloration of the fur



Vibrissae

Ears

Nails

Flippers

California Sea Lion

Zalophus californianus

- Large front and hind flippers
- Outer ear flaps (ear pinnae)
- Long streamlined body shape
- Solid coloration of the fur

Nails

Flippers

Terrific Taxonomy

Scientists divide animals into different groups based on the characteristics or features they have in common. Animals like seals, sea lions and walrus all belong to one order, based on the characteristics they share. However, they also belong to separate families based on adaptations unique to each group such as flipper size and shape, external ear flaps and tusks.

Directions: For this activity, divide the students into different groups based on what they have in common.

1. All students who go to: state the name of your school.
2. All students who belong to: state the teacher's name class.
3. All students who are wearing sneakers.
4. All students who are carrying a backpack.
5. All students who are wearing a hat.
6. All students who are wearing a red shirt.

Feel free to experiment and have the students come up with their own characteristics. Also, have the students list all of the characteristics they have in common with each other.

Shamu® Stadium: In the Park

Objective: Students will discover the differences and similarities between whales and sharks.

Teacher and Chaperone Corner: This information can be shared while at Shamu Stadium, Shamu Up Close and/or Shark Encounter®. Although sharks and whales both live in the water, they have very little in common. They are physically and behaviorally different. Below are some traits that set them apart. **SeaWorld® Educators are located at Shamu Up Close if you would like additional information.**

Share this information with your students.

Whales:

- Killer whales are **mammals**. They breathe air, have hair at some time in their life, are **endothermic** (warm-blooded), give birth to live young and nurse their young with milk.
- Female killer whales are pregnant for about 17 months. Calves can weigh around 350lbs and can be nearly 7 feet in length.
- **Calves** may stay with their mother for up to 4 years or more as they learn survival skills. Some calves may stay with their mother their whole life. Others may move away as they become an adult.
- While some **ecotypes** (varieties) of killer whales may migrate long distances to follow food, some will stay in the same area for their whole life.
- Killer whales are found in every ocean and are the second most widely distributed mammal. Humans are the most widely distributed mammal.
- Killer whales live in many different places. They eat a wide variety of foods depending on where they live including fish, sharks, seals and even other whales. Because they can eat so many types of animals, they are known as an **apex predator**.

Sharks:

- Sharks are fish with a cartilaginous skeleton. They have gills, are covered in scales and are **ectothermic** (cold-blooded).
- Sharks can either lay eggs, have an egg that the mother keeps inside of her body until it hatches or give birth to live young. When baby sharks are born, they are called **pups** and will vary in size depending on what type of shark they are.
- More than 13 species of sharks use the waters around Florida as nursery habitat for their young.
- Most sharks do not show any signs of care for their young. Young are generally born fully developed and independent.
- Like many carnivores, sharks migrate to follow their food source which means that some sharks may migrate thousands of miles in a year in order to find something to eat. Some sharks will also migrate seasonally to nursery habitats to give birth or lay eggs.
- There are over 450 different types of sharks. They can be found almost everywhere in the ocean, except in the coldest waters around Antarctica.
- While people usually think of sharks as predators, some sharks can be prey too. Smaller species of sharks show special camouflage to help them hide in reefs or other environments away from larger sharks that may think of them as food.

Wild Arctic®: Arctic Animals

Objective: Students will learn about the adaptations of Arctic animals.

Teacher and Chaperone Corner: Entry to Wild Arctic may be gained in one of two ways. Students over 42 inches (106.68cm) in height may ride White Thunder, a helicopter flight simulator ride, for an exciting journey to Base Station Wild Arctic. Students that are uncomfortable or unable to experience the simulation ride may enter the attraction via the walking experience.

Inside the exhibit, you will encounter a variety of animals including beluga whales, harbor seals and walruses. In addition to the animal exhibits, look for interactive elements designed to enhance your visit. Computer terminals featuring animal information, activities and games are located in the Communication Center in the underwater viewing level of the research station.

SeaWorld® Educators are available in the upper level of the Research Station if you would like additional information.

Share this information with your students.

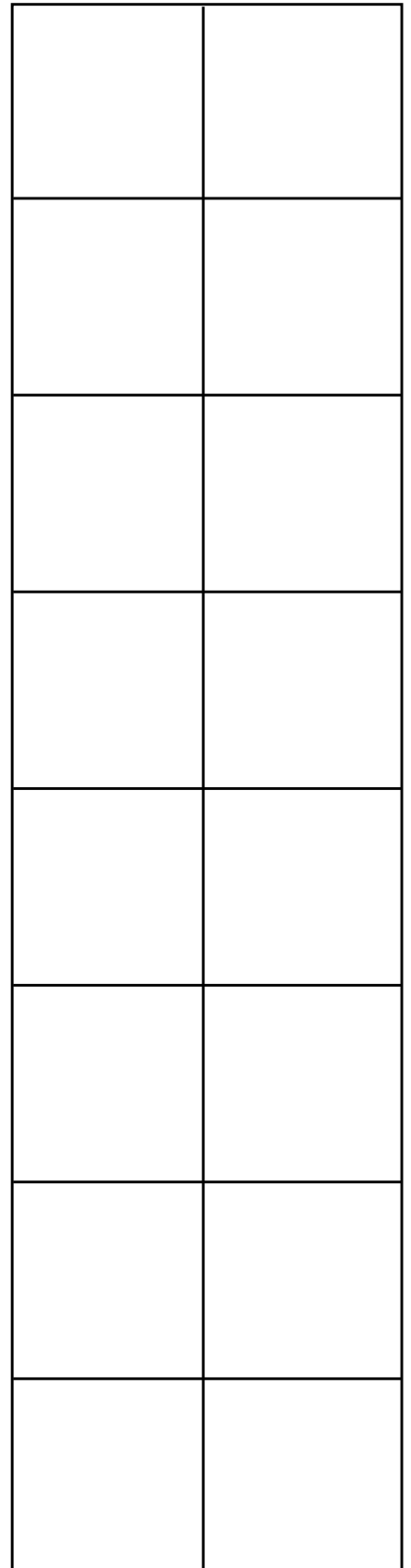
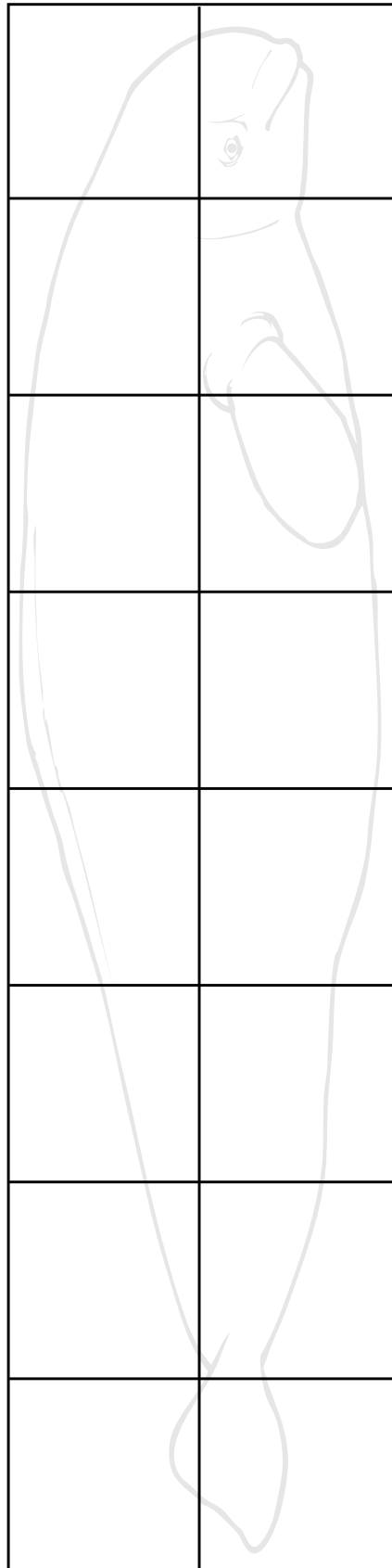
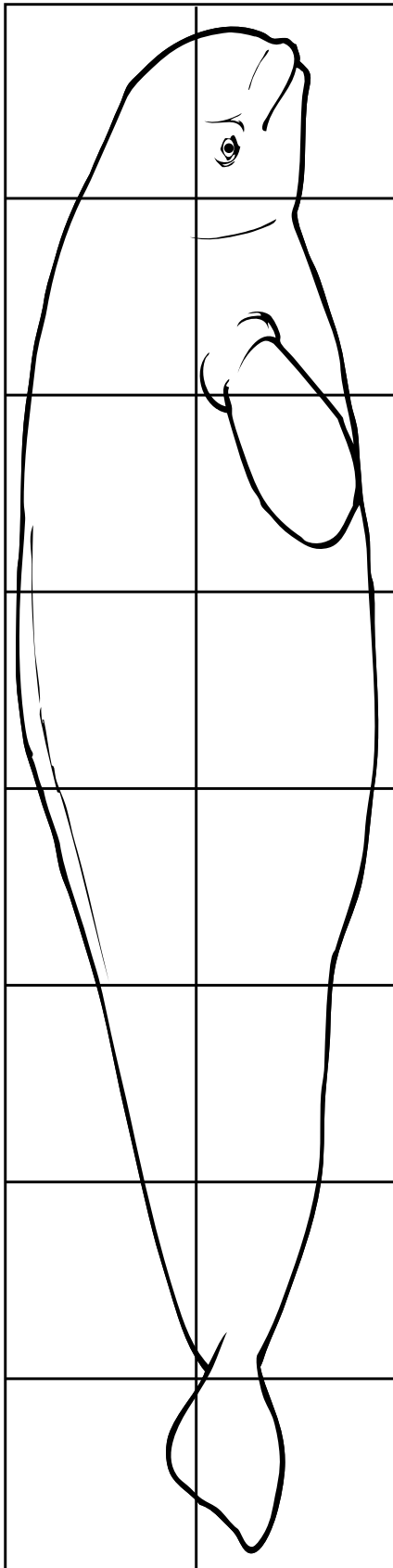
- The Arctic Circle is around the North Pole and includes Greenland, Iceland, parts of Northern Europe, Russia and Alaska.
- The sun may never set in the middle of summer and it may never rise in the middle of winter. Because of this, the Arctic environment experiences very different seasonal changes. During the summer, the ground may be covered in grasses, small trees or bushes and flowers. Some people will even grow large vegetables. But, during the winter, the ground is frozen and usually covered in snow and ice.
- Air temperatures can change from around 90°F in the summer to -90°F in the winter.
- Beluga whales, harbor seals and walruses have a layer of fat called blubber that helps to keep them warm in the winter time. If they cannot find enough food, the blubber layer will get thinner until they are able to find food again, usually in the summer.
- Some animals may migrate or move from one area to another in order to find food and raise their young away from the ice flows.
- Beluga whales have several adaptations that help them survive in the arctic. These adaptations include a dorsal ridge instead of a dorsal fin so they can break through the ice to breathe air. They have a flexible neck that allows them to move their necks side to side so they can look around easier. Their flippers and tail flukes are smaller than other whales of their same size.
- Harbor seals are born silver-grey with spots that help them blend into the rocky sea floor of their habitat. Harbor seals prefer to stay in the sub-Arctic or southern range of the Arctic Circle. Other seals, like hooded seals and harp seals, prefer the Arctic Circle and have a hard time surviving in warmer waters.
- Both male and female walruses have tusks (long pointed teeth) that help them to climb out of the water onto slippery ice. The scientific name of the walrus means “pink tooth walker” because early sailors saw them using those tusks to climb out on to the ice. In the summer time, walruses look pink because they’re trying to cool down. In the winter time, they may look light brown or tan because they’re trying to stay warm.

Arctic Artist

Name: _____

Scientists often sketch or photograph the animals they are studying. A grid is a tool that helps scientists break down an image into a series of lines that are easily reproduced.

Directions: Use the grid below to reproduce the picture of the beluga whales.



A-maze-ing Manatee Migrations Name: _____

Manatees are big grey mammals that live in the warm waters around Florida. They eat plants and can eat over 200 pounds of food every day! Even though they look big and fat, manatees are very muscular. They do not have an effective way to stay warm in cold waters. They have to migrate or move into warm water areas in the winter time.

Directions: Help the manatee below move from the cold water at the beach into the warm water spring. Careful! Manatees can be hurt by boats and fishing lines. Try to avoid these dangers and keep the manatee safe! Color any plants you see that the manatee could eat, but watch out for garbage hiding inside the plants. When you reach the spring, draw and color your manatee enjoying the warm water!



The Legend of the Killer Whale

Name: _____

Objective: Students will read a mythical story and answer questions about the story.

Teacher Preface: Across the world, there are stories told that explain how certain cultures believe animals, people and objects came to be. These stories are passed down from grandparents to parents to children over many years until they become legends. This legend was originally told by the Tlingit and Haida cultures of the Pacific Northwest to explain the beginning of the killer whales.

Once upon a time, there was a man named Natselane who lived in Alaska. He could make statues and hunt for food better than anybody else. All of the people liked him, so they said he would be the chief of the tribe. His brothers were jealous and wanted him gone so that they could be the leaders. One day, they asked Natselane to go on a trip with them to an island. When they got to the island and Natselane got out of the boat, the brothers rowed away. When they got home, they told a story that Natselane was lost at sea after a big wave hit the boat. The brothers said they looked for him, but could not find him. The other people were very sad but decided that the brothers would be the new chiefs.

Back on the island, Natselane was upset at his brothers. He had nothing to eat and no place to live. Then, he saw a big sea otter and was surprised when it said his name. The otter said it would take care of him and give him food to eat. It also brought him wood to make a fire. Natselane was so happy that he made a gift to the otter. He carved a whale out of wood and left it by the water. The next day, the wooden whale was gone and the first real killer whale was in the water. The whale was black and white and said it would help him get home. He climbed on the back of the whale and they swam away.

When he got home, he saw his brothers in their boat. He asked the whale to flip the boat over so they would get wet. The whale flipped the boat and Natselane laughed at his brothers. He then asked the whale not to hurt people but to help them instead.

Direction: Circle the answer to these questions about the story you just read:

1. Why were the brothers jealous?
 - a. They wanted a new boat and someone else got it.
 - b. Natselane got more food than they did.
 - c. They wanted to be the leaders of the tribe.
 - d. It wasn't fair that Natselane could carve a whale.
2. Natselane fell out of the boat when a wave hit the boat. True or False:
3. What type of animal helped Natselane on the island?
 - a. polar bear
 - b. walrus
 - c. killer whale
 - d. sea otter
4. Using a separate sheet of paper, write your own legend to explain things that you see or that happen in your everyday life. For example: What happens to lost socks? Where do cloud shapes come from? Why does time fly when you're having fun?

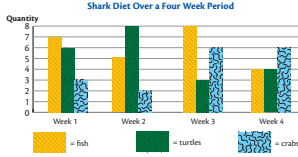
Answer Key

Predators of the Deep

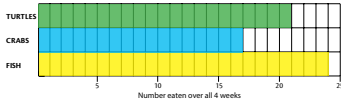
Name: _____

Sharks are predators. Predators are animals that eat other animals to survive. By feeding on weak, ill, injured or dying animals, sharks help to maintain a balance between all of the creatures that share the ocean.

Directions: Use the bar graph below to answer the questions at the bottom of the page.



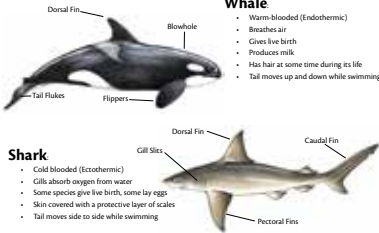
- During what week did the shark eat more crabs than fish? **Week 4**
- During what week did the shark eat the most fish? **Week 3**
- During what week did the shark eat more turtles than crabs, but fewer turtles than fish? **Week 1**
- How many animals did the shark eat each week?
Week 1 = 16 Week 2 = 15 Week 3 = 17 Week 4 = 14
- During what week did the shark eat the most food? **Week 3**
- How many fish did the shark eat during the four weeks? **24**
- How many more fish did the shark eat than crabs during the four weeks? **7 more fish**
- Which animal did the shark eat the most during the four weeks? **fish**
- Use the information above to construct a horizontal bar graph to show how many animals of each group the shark ate during all four weeks.



Whale and Shark

Name: _____

Directions: Using the provided images and information, decide which traits apply to whales, which apply to sharks, and which apply to both.



Whale

- Warm-blooded (Endothermic)
- Breathes air
- Gives live birth
- Produces milk
- Has hair at some time during its life
- Tail moves up and down while swimming

Shark

- Cold blooded (Ectothermic)
- Gills absorb oxygen from water
- Some species give live birth, some lay eggs
- Skin covered with a protective layer of scales
- Tail moves side to side while swimming

Place a check mark in the box that applies to each statement	Whale	Shark	Both
Lives in the water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Breathes air	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Body covered with scales	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Swims by moving its tail up and down	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has a dorsal fin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Warm-blooded (Endothermic)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lays eggs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Nurses its young	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Has gills	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cold-blooded (Ectothermic)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Swims by moving its tail side to side	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gives live birth	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Has hair at some time during its lifespan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A-maze-ing Manatee Migrations Name: _____

Manatees are big grey mammals that live in the warm waters around Florida. They eat plants and can eat over 200 pounds of food every day! Even though they look big and fat, they do not have a way to stay warm in cold waters. They have to migrate or move into warm water areas in the winter time.

Directions: Help the manatee below move from the cold water at the beach into the warm water spring. Careful! Manatees can be hurt by boats and fishing lines. Try to avoid these dangers and keep the manatee safe! Color any plants you see that the manatee could eat, but watch out for garbage hiding inside the plants. When you reach the spring, draw and color your manatee enjoying the warm water!



The Legend of the Killer Whale Name: _____

Teacher Preface: Across the world, there are stories told that explain how certain cultures believe animals, people and objects came to be. These stories are passed down from grandparents to parents to children over many years until they become legends. This legend was originally told by the Tlingit and Haida cultures of the Pacific Northwest to explain the beginning of the killer whales.

Once upon a time, there was a man named Natselane who lived in Alaska. He could make statues and hunt for food better than anybody else. All of the people liked him, so they said he would be the chief of the tribe. His brothers were jealous and wanted him gone so that they could be the leaders. One day, they asked Natselane to go on a trip with them to an island. When they got to the island and Natselane got out of the boat, the brothers rowed away. When they got home, they told a story that Natselane was lost at sea after a big wave hit the boat. The brothers said they looked for him, but could not find him. The other people were very sad but decided that the brothers would be the new chiefs.

Back on the island, Natselane was upset at his brothers. He had nothing to eat and no place to live. Then, he saw a big sea otter and was surprised when it said his name. The otter said it would take care of him and give him food to eat. It also brought him wood to make a fire. Natselane was so happy that he made a gift to the otter. He carved a whale out of wood and left it by the water. The next day, the wooden whale was gone and the first real whale was in the water. The whale was black and white and said it would help him get home. He climbed on the back of the whale and they swam away.

When he got home, he saw his brothers in their boat. He asked the whale to flip the boat over so they would get wet. The whale flipped the boat and Natselane laughed at his brothers. He then asked the whale not to hurt people but to help them instead.

Directions: Circle the answer to these questions about the story you just read.

- Why were the brothers jealous?
 - They wanted a new boat and someone else get it.
 - Natselane got more food than they did.
 - They wanted to be the leaders of the tribe.**
 - It wasn't fair that Natselane could carve a whale.
- Natselane fell out of the boat when a wave hit the boat. True or False? **False**
- What type of animal helped Natselane on the island?
 - polar bear
 - walrus
 - killer whale
 - a sea otter**
- Using a separate sheet of paper, write your own legend to explain things that you see or that happen in your everyday life. For example: What happens to lost socks? Where do cloud shapes come from? Why does time fly when you're having fun?

Check out:

SeaWorld.org for more information

SeaWorldOrlando.com/Teachers for additional resources just for teachers

