Ocean Discovery

Kindergarten

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

Ocean Discovery Kindergarten Activities

Table of Contents

Pre Field Trip Activities

How Many Animals Do You See?

Mathematics (Counting from 1, Identifying Quantity in a Group)

Standards: MAFS.K.CC.1.3, MAFS.K.CC.2.4, MAFS.K.CC.2.5

- Students count the animals and determine how many are in each set. They record the number numerically and in word form.

All Kinds of Animals

Science (Alike and Different)/Visual Arts (Skill Development)

Standards: SC.K.L.14.3, VA.K.S.2.1

- Students determine which animals match a given description and identify them with color.

Animal Alphabet

English Language Arts (Letter identification, Pronunciation)/Visual Arts (Skill Development)

Standards: LAFS.K.RF.1.1, VA.K.S.2.1

- Students find and color in the animals whose names begin with the letters that are found in the word "SHAMU®".

Field Trip Activities

Shamu® Stadium: Whales and Sharks

Science (Five Senses, Alike and Different, Observational Learning)

Standards: SC.K.L.14.1, SC.K.L.14.3, SC.K.N.1.2, SC.K.N.1.5

- Teachers and chaperones will share the provided information about killer whales and sharks while at Shamu Stadium or Shark Encounter®.

Pacific Point Preserve®: Which One is Which?

Science (Five Senses, Alike and Different, Observational Learning)

Standards: SC.K.L.14.1, SC.K.L.14.3, SC.K.N.1.2, SC.K.N.1.5

- Teachers and chaperones will share the provided information about seals and sea lions while at Pacific Point Preserve. The second page explains taxonomy and includes fun ways to help build the students understanding of classification.

Wild Arctic®: Arctic Animals

Science (Five Senses, Alike and Different, Observational Learning)

Standards: SC.K.L.14.1, SC.K.L.14.3, SC.K.N.1.2, SC.K.N.1.5

- Teachers and chaperones will share the provided information about beluga whales, harbor seals and walruses while at Wild Arctic.

Shark Encounter: Food for Thought

Science (Alike and Different, Observational Learning)

Standards: SC.K.L.14.3, SC.K.N.1.2, SC.K.N.1.5

- Teachers and chaperones will share the provided information about predators while at Shark Encounter.

TurtleTrek®: Manatees and Sea Turtles

Science (Alike and Different, Observational Learning)

Standards: SC.K.L.14.3, SC.K.N.1.2, SC.K.N.1.5

- Teachers and chaperones will share the provided information about manatees and sea turtles while at TurtleTrek.

Post Field Trip Activities

Whale and Shark

English Language Arts (Basic Print)/ Science (Body Parts, Alike and Different, Behavior)

Standards: LAFS.K.RF.1.1, SC.K.L.14.1, SC.K.L.14.3, SC.K.N.1.2

- Using the provided images, students will trace the letters to form the appropriate word for various body parts on a killer whale and a shark. Students will also learn some of the differences between sharks and whales.

Arctic Artist

Science (Create a Visual Representation)/ Visual Arts (Skill Development)

Standards: SC.K.N.1.4, VA.K.S.2.1, VA.K.S.3.1, VA.K.S.3.2

- Students will replicate drawings of walruses while using the provided images and grids.

Shark Scientist

Mathematics (Counting and Identifying Quantity) / Science (Create a Visual Representation) / Visual Arts (Creation of Art by Memory, Practicing Artistic Skills)

Standards: MAFS.K.CC.1.3, MAFS.K.CC.2.4, MAFS.K.MD.2.3, SC.K.N.1.4, SC.K.N.1.5, VA.K.O.2.1, VA.K.O.3.1, VA.K.S.3.2

- Students will be able to represent the number of people they found in the Shark Encounter® tunnel by using a provided image of the Shark Encounter to draw their own underwater scene.

Sea Turtle Connect the Dots

English Language Arts (Alphabet Recognition)/Science (Create a Visual Representation)

Standards: LAFS.K.RF.1.1, SC.K.N.1.4

- Students will draw a sea turtle by connecting the dots by following the letters of the alphabet from A to Z.

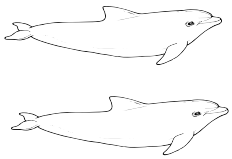
How Many Animals Do You See? Name: _____

Directions: Count how many animals are in each picture. Trace over the number in word form. In the box, write the number. Use the number line for help.

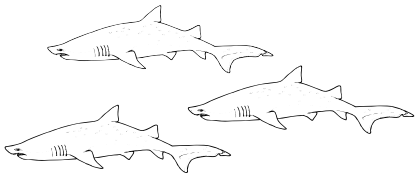
1	2	3	4	5	6	7	8	9	10
One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten

1 

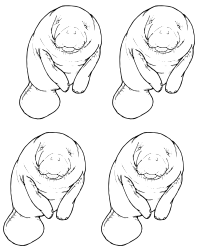
One KILLER WHALE

2 

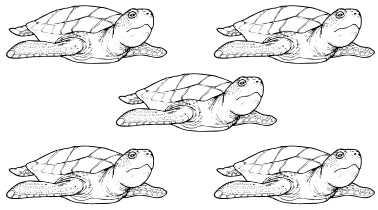
Two DOLPHINS

3 

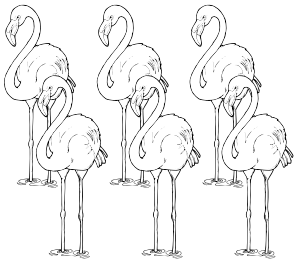
Three SHARKS

4 

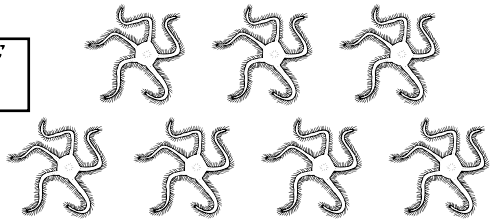
Four MANATEES

5 

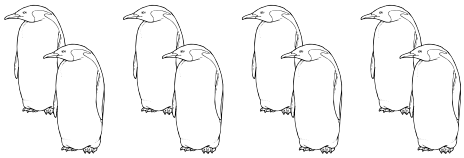
Five SEA TURTLES

6 

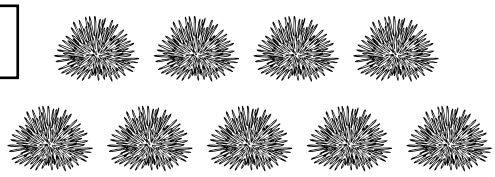
Six FLAMINGOS

7 

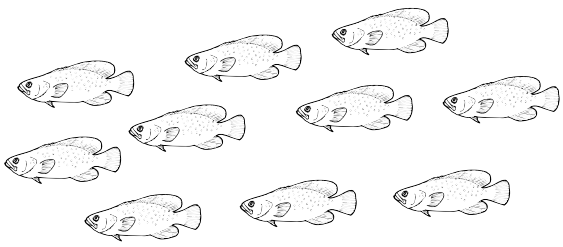
Seven SEA STARS

8 

Eight PENGUINS

9 

Nine URCHINS

10 

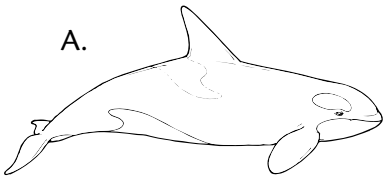
Ten FISH

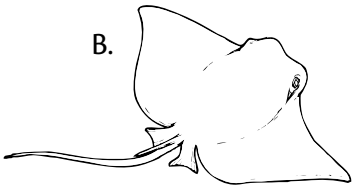
All Kinds of Animals

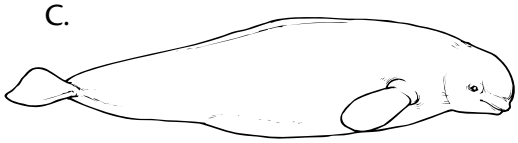
Name: _____

Directions: Use crayons or markers to color in any animals that match the descriptions for each group.

1. Animals that are whales

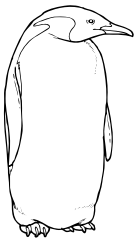
A. 

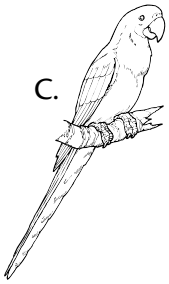
B. 

C. 

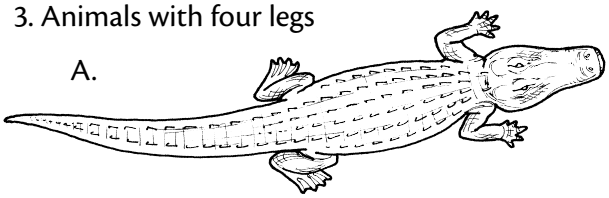
2. Animals that are birds

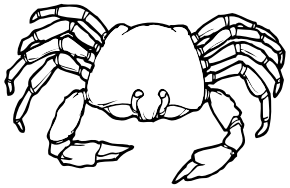
A. 

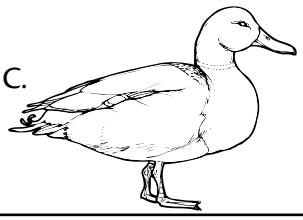
B. 

C. 

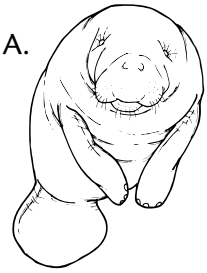
3. Animals with four legs

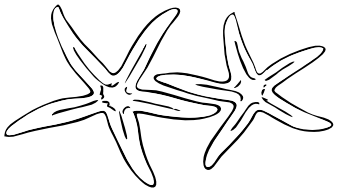
A. 

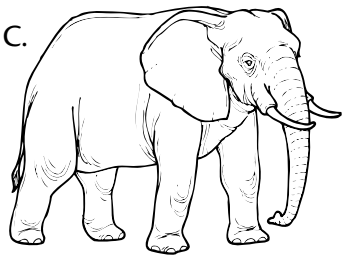
A. 

C. 

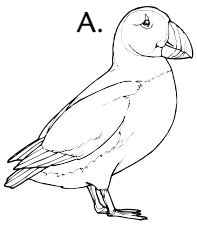
4. Animals that live in the water

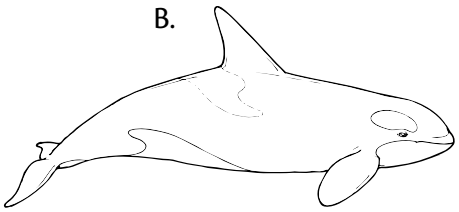
A. 

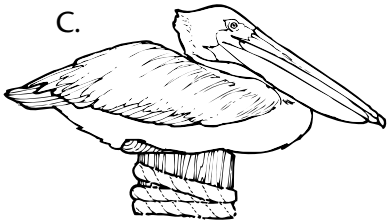
B. 

C. 

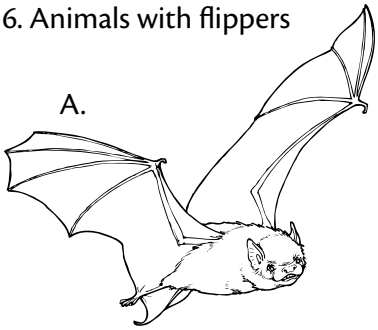
5. Animals with wings

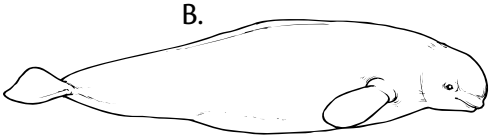
A. 

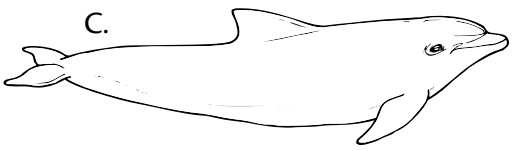
B. 

C. 

6. Animals with flippers

A. 

B. 

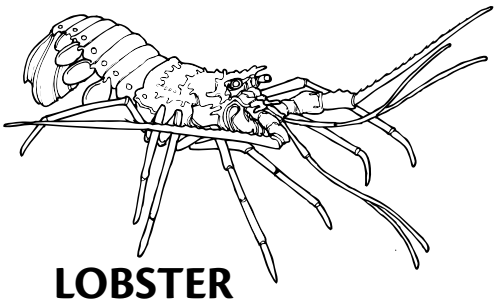
C. 

Animal Alphabet

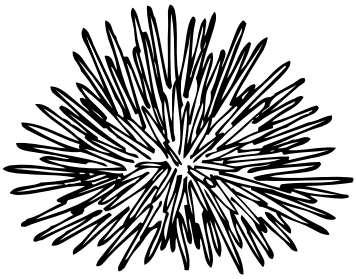
Name: _____

Directions: Find and circle the animals whose names begin with any of the letters found in the word "Shamu®." Color the animals that you circle. Use a different color for each letter.

SHAMU COLOR CODE
S = green
H = yellow
A = red
M = orange
U = blue

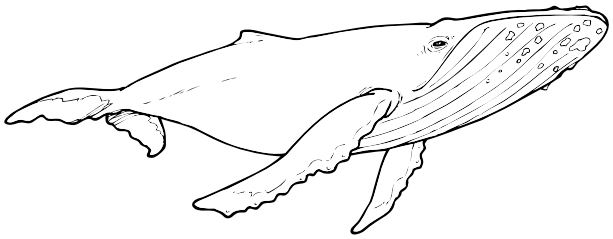


LOBSTER

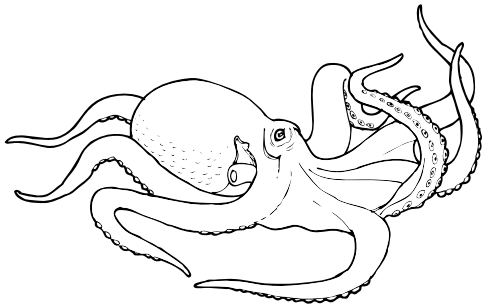


URCHIN

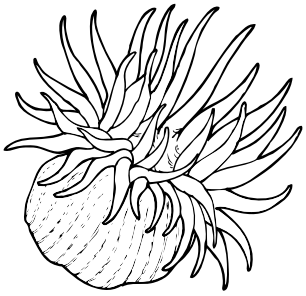
MANATEE



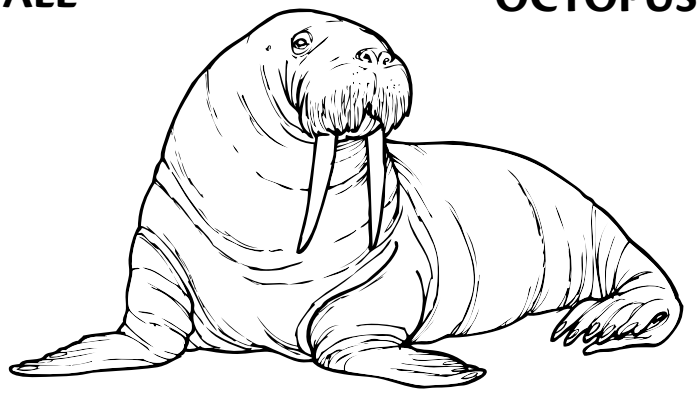
HUMPBACK WHALE



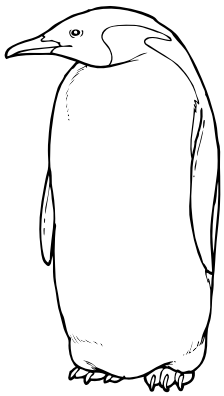
OCTOPUS



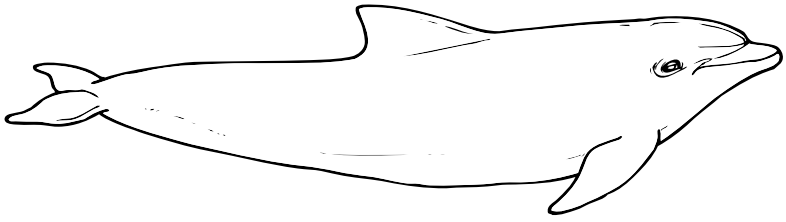
ANEMONE



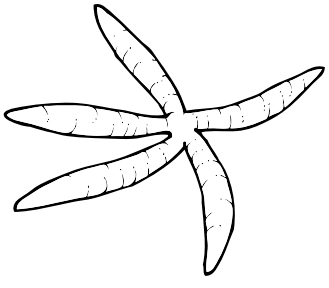
WALRUS



PENGUIN



DOLPHIN



SEA STAR

Shamu® Stadium: Whales and Sharks

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

Teacher and Chaperone Corner: This activity may be conducted at Shamu Stadium or Shark Encounter®. Although sharks and whales both live in the water, they have very little in common. Whales share the same characteristics as humans and other mammals. Whales are warm-blooded, breathe air, give live birth and nurse their young. Sharks are cold-blooded and have a variety of reproduction types including laying eggs. **SeaWorld® Educators are located at Shamu® Up Close if you would like additional information.**

Share this information with your students.

Killer Whales:

- Killer whales are mammals. **Mammals** are animals that have hair at some time during their life, give birth to live young, nurse their young, are warm-blooded and breathe air.
- All whales move using an up and down motion of the tail.
- Killer whales have **tail flukes**, a **dorsal fin** and **two pectoral flippers**. Flippers have bones inside them while fins do not have bones.
- Whales breathe using a **blowhole** on top of their head. They have a very good sense of touch, sight and hearing. However, it is believed that they have no sense of smell and only a little sense of taste.

Sharks:

- Sharks are a type of fish. **Fish** have scales on their body and can either lay eggs or give birth to a live young. They normally do not take care of their young. They are cold blooded and breathe using gills.
- Sharks and other fish move using a side to side motion of the tail.
- Sharks have 1 or 2 **dorsal fins**, **pectoral fins**, **pelvic fins** and a **tail fin**. Sharks do not have any bones in their bodies.
- Sharks breathe through 5 to 7 **gill slits** on the sides of their head. They have a very good sense of touch, sight and smell. They may have a sense of taste. However, they do not have ears. Instead, they can pick up vibrations in the water around them through the **lateral line** that runs down both sides of their body.

Pacific Point Preserve®: Which One is Which?

Objective: Students will learn about the similarities and differences between seals and sea lions while visiting Pacific Point Preserve.

Teacher and Chaperone Corner: Pacific Point Preserve is home to harbor seals and California sea lions. Seals and sea lions are in the Pinniped order along with 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 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.

Sea Lions:

- Sea lions are part of the **eared seal** family. They have small ear flaps on the sides of their heads. These ear flaps are called **ear pinnae** (pin-nay).
- Sea lions are very vocal and can be heard barking, howling and growling. This is called **vocalization**. They use these sounds to communicate or talk to each other. Mother sea lions will use these noises to find their babies (**pups**). Big male sea lions will bark to claim a beach as their own. Sometimes, sea lions will make noise at people to tell them they would like a fish!
- Sea lions are **social** and like to be together in big groups.
- Sea lions have long front flippers and can bend their back flippers under their body so they can walk around on land using all four flippers.
- Sea lions are usually solid brown, but they can also appear darker or lighter depending on their fur color and whether they are wet or dry.

Harbor Seals:

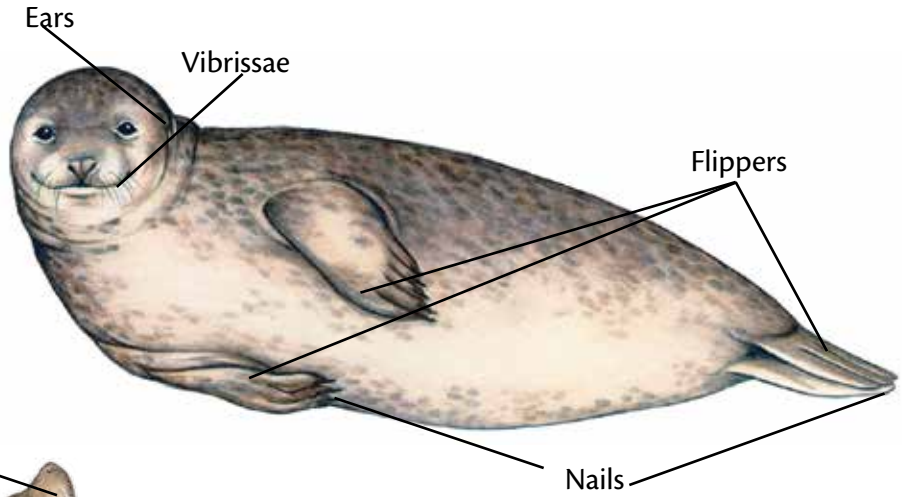
- Harbor seals are part of the **true seal** family. They do not have ear flaps on their head, but they do have ears that look like dents or small holes behind their eyes.
- Harbor seals are usually very quiet and may grunt, growl, hiss or sneeze. They communicate by these sounds and with body language.
- Harbor seals are **solitary** and prefer to be by themselves or in a small group.
- Harbor seals have short front and back flippers. They cannot use their flippers for walking so they will bounce or wiggle to move around on land.
- Harbor seals are born silvery-grey with spots and grow up to be golden-brown with dark spots. This coloring helps them hide in the water.

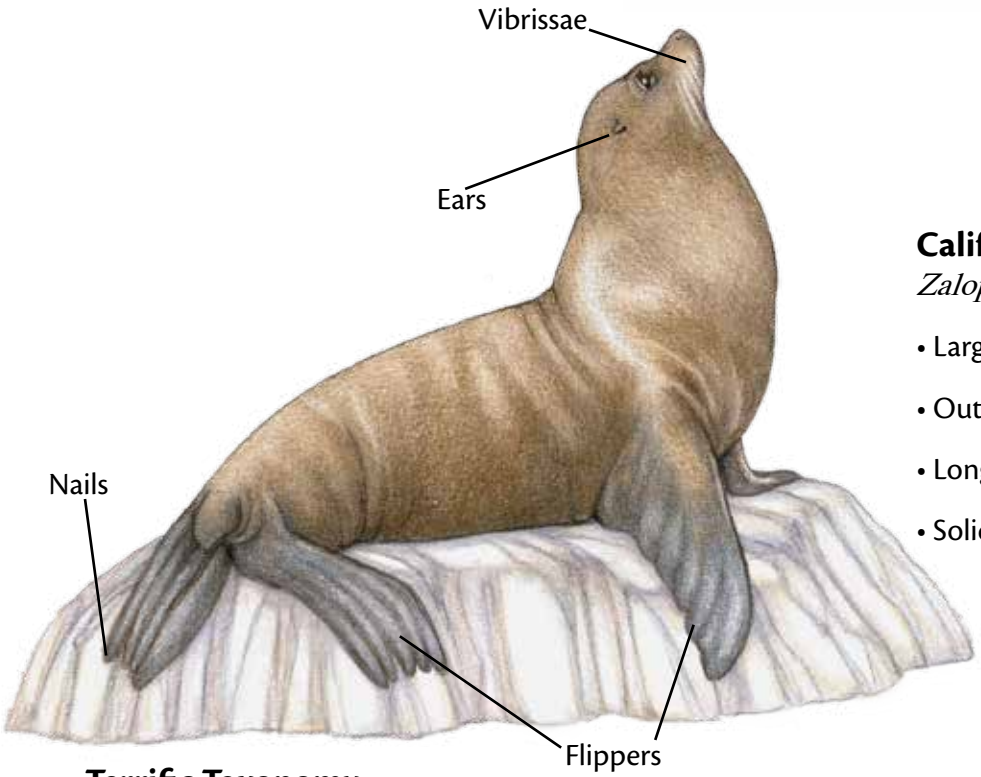
Which One is Which?

Harbor Seal

Phoca vitulina

- Short front and hind flippers
- No outer ear flaps, small opening to inner ear
- Short rounded body shape
- Spotted coloration of the fur





California Sea Lion

Zalophus californianus

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

Terrific Taxonomy

Scientists divide animals into different groups based on the characteristics or features they have in common. Animals like seals, sea lions and walruses 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.

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.

Wild Arctic®: Arctic Animals

Objectives: 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 (106.68 cm) in height may ride White Thunder, a flight simulator ride, for an exciting journey to Base Station Wild Arctic. Students that are uncomfortable or unable to experience the ride may enter the attraction via the footpath.

Inside the exhibit, you will encounter a variety of animals including harbor seals, beluga whales 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 on the lower level of the research station.

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

Share this information with your students.

Belugas:

- Beluga whales' light coloration helps them blend in with the snow and ice of the arctic environment.
- Beluga whales move with an up and down motion of the tail flukes and are the only species of whale that can swim backwards.
- Belugas and other toothed whales possess a biological form of sonar known as **echolocation**. Sound is produced inside the blowhole and focused through the forehead (also called a melon). The sound travels through the water and strikes an object, at which point some of the sound waves bounce back to the whale. By listening to the returning sounds, the whale may be able to determine where objects such as fish are located in the environment.

Harbor seals:

- Harbor seals have spots which help them hide underwater.
- Harbor seals spend most of their time in the water. They don't move easily on land. They normally bounce or wiggle to move on land.
- Harbor seals rarely vocalize although they can grunt, growl and hiss. They use their **vibrissae** (whiskers) for touching and feeling, just like the walrus.

Walruses:

- Walruses have pinkish-brown skin that helps them blend in with the rocky beaches.
- Walruses swim with a side-to-side motion of the hind flippers, while the front flippers are used for steering. On land, the walrus slides across the ice or walks using its front and hind flippers.
- Walruses have a thick group of whiskers (**vibrissae**), which are used for touching and feeling objects. These vibrissae are especially useful for finding food like shellfish along the sandy, ocean bottom.

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 both have frightening reputations. However, 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 fish 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 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 to people than sharks. Yet, people hurt and destroy over 100 million sharks every year.
- A **food web** is a chart that shows 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 populations of animals healthy. They help to prevent one type of animal in their environments from outnumbering 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 indirectly 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 one part of blood per billion parts of water.

TurtleTrek®: Manatees and Sea Turtles

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

Teacher and Chaperone Corner: This activity may be conducted at the above water viewing area at TurtleTrek. TurtleTrek 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.**

Share this information with your students.

Manatees:

- Manatees are related to elephants. Like elephants, they have a grey color, short hairs all over their bodies and flat nails on the end of their limbs. Unlike elephants, they do not have tusks, big ears or four legs.
- Manatees like warm water and cannot live in cold water for very long. Some people mistake them for a walrus, but walruses live in the cold Arctic Circle and cannot survive in warm waters.
- Manatees are **herbivores**; this means they eat plants. They have flat teeth in the back of the mouth that are called marching molars. **Marching molars** are replaced throughout the manatee's life as they get worn out. This is very unusual for mammals!
- Manatees are a **threatened species**, which means there are not many of them left. They have no natural predators, so one of the few things that can hurt them is human activities like boats and pollution. It's important to make sure that we keep waterways clean and safe for manatees to live in.

Sea Turtles:

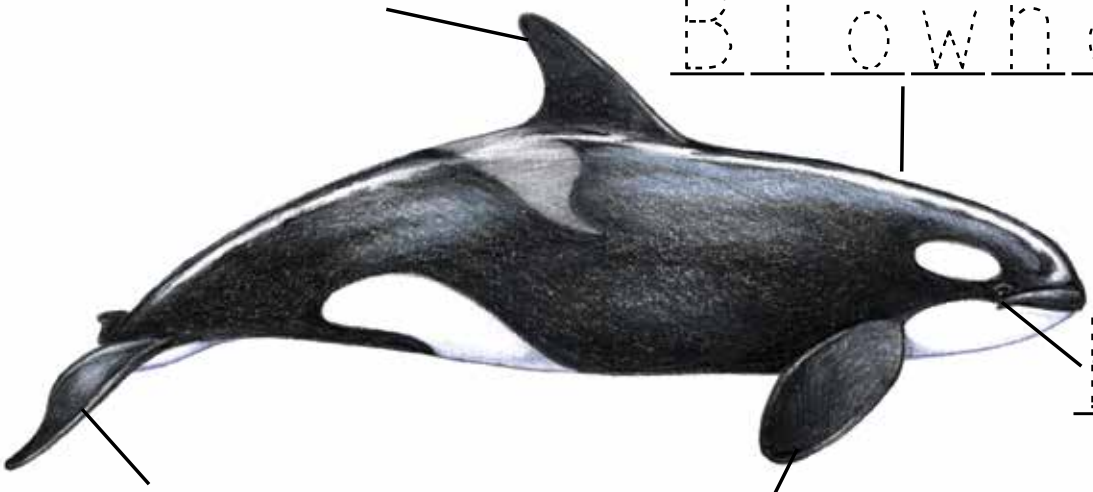
- There are seven **species** and one **subspecies** of sea turtles found around the world. Of those, five species nest on Florida beaches.
- The biggest species of sea turtle is the **leatherback** and it can grow to over 6 feet long and over 1000lbs.
- Most sea turtles have a hard shell to help protect them. It helps to make them more **hydrodynamic** which means it's easier for them to move through the water.
- Sea turtles cannot pull their head and flippers into their shell (called a **carapace**) like many land turtles can. They have too much muscle inside their shell and no room for their limbs and head.
- Sea turtles come ashore to lay eggs in a nest. A mother sea turtle can lay anywhere from 50 to over 200 eggs in the nest. The temperature of the nest decides if the baby sea turtles (hatchlings), will be boys or girls. The warmer the nest, the more girl turtles will hatch and the cooler the nest the more boy turtles will hatch.
- All species of sea turtles are either **threatened** or **endangered**. Garbage at the beach is very dangerous to adult sea turtles and to sea turtle **hatchlings**. It's important to make sure that sea turtle nests are not bothered so the hatchlings can develop safely.

Whale and Shark

Name: _____

Directions: Trace in the letters to label the animals.

Whale



Dorsal Fin

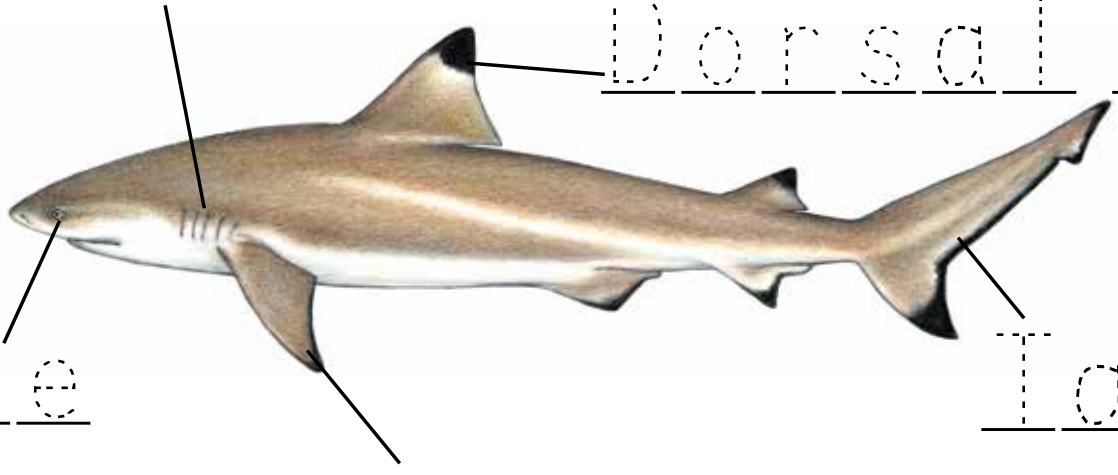
Blowhole

Eye

Tail

Flippers

Shark



Gill Slits

Dorsal Fin

Eye

Tail

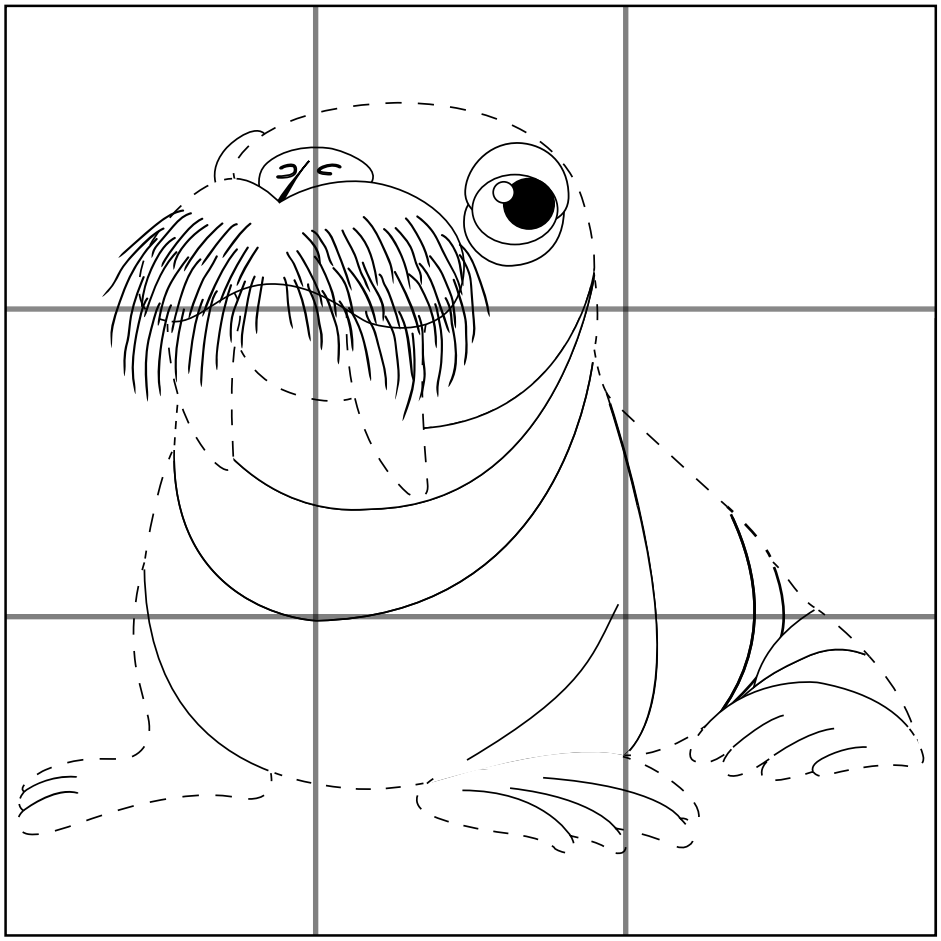
Pectoral Fin

Name: _____

Arctic Artist

Draw like a scientist.

Directions: Use the dotted line to draw the picture of the walrus.



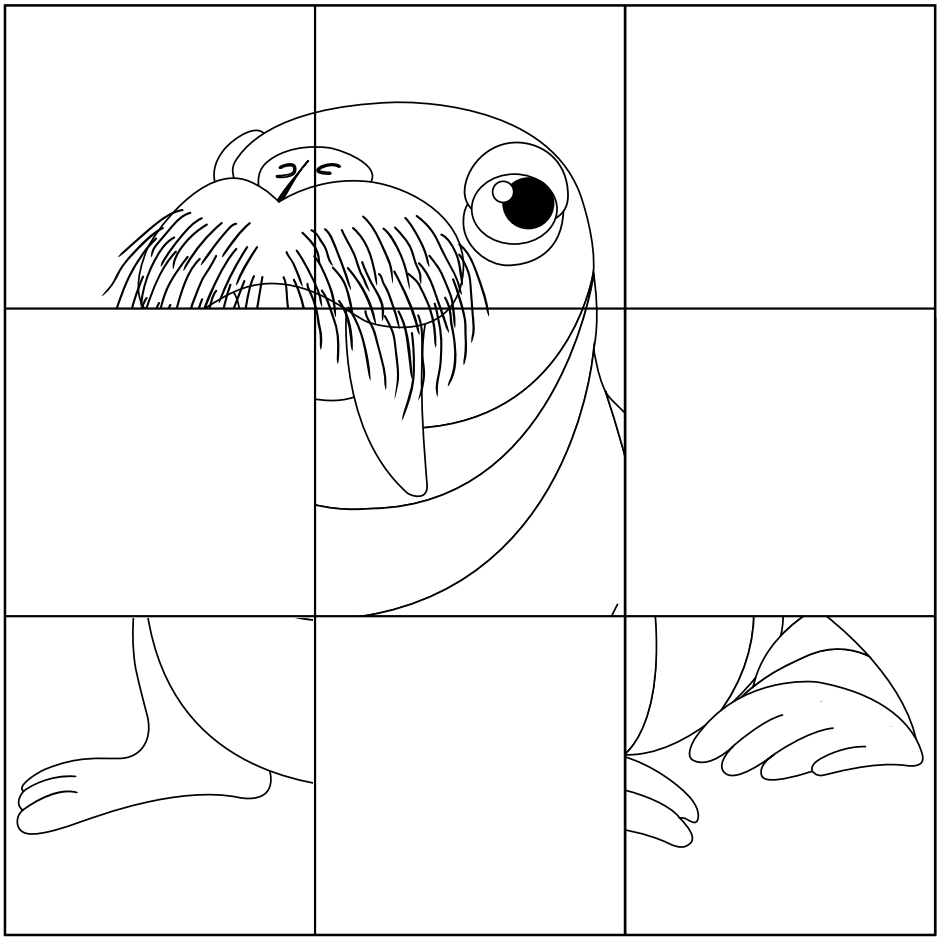
Walrus have tusks (or big teeth) that are used for climbing on to the ice.

Arctic Artist

Draw like a scientist.

Directions: Draw what is missing in the empty squares.

Walrus feel with their whiskers (vibrissae).



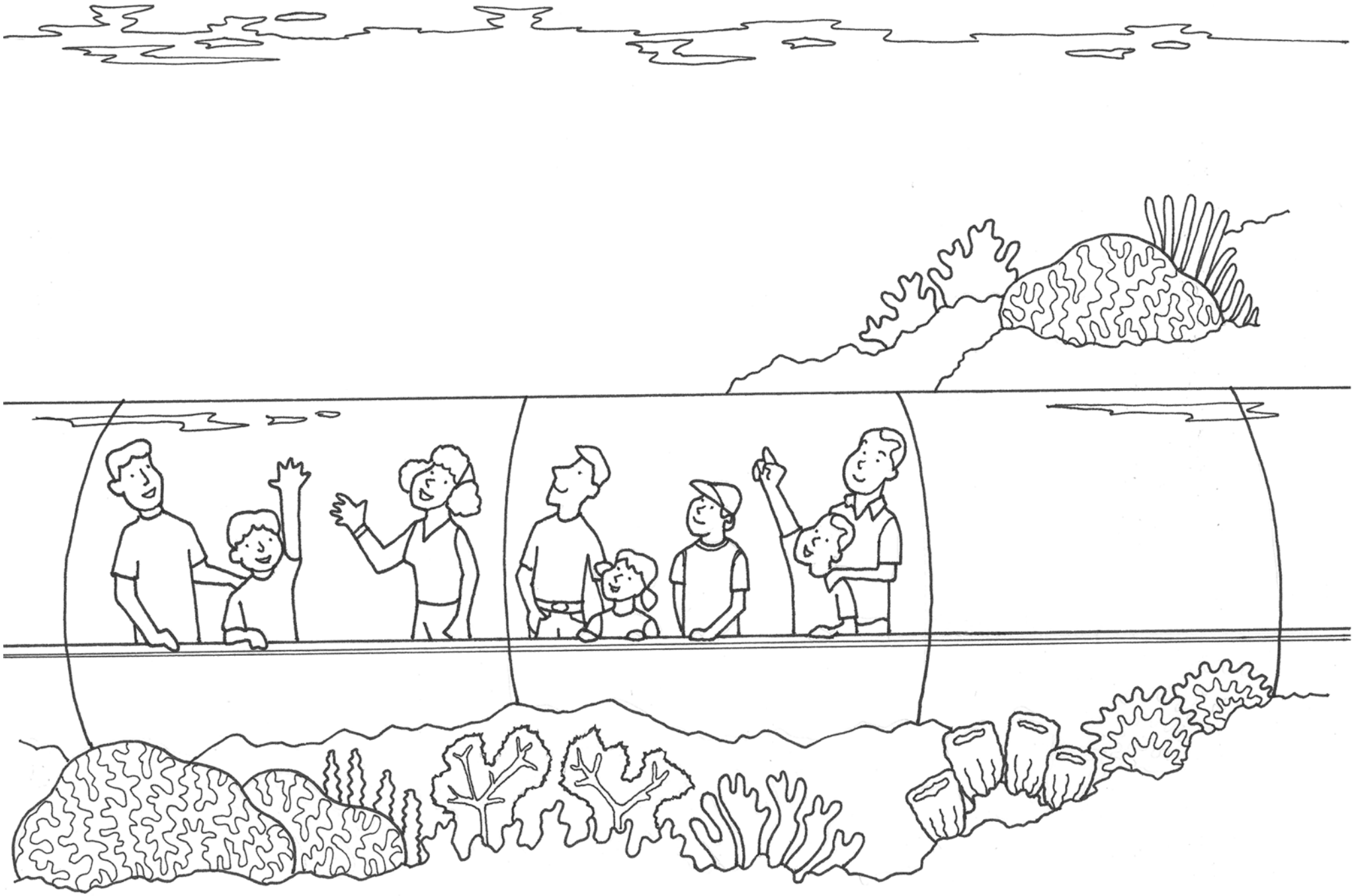
Shark Scientist

Name: _____

Scientists study animals in the ocean. They want to know how many animals there are. Pretend to be a scientist as you move through the Shark Tunnel at SeaWorld®, count the number of sharks that you see.

Directions: Draw yourself inside the tunnel. Draw 1 shark and 5 fish in the reef. Color the picture.

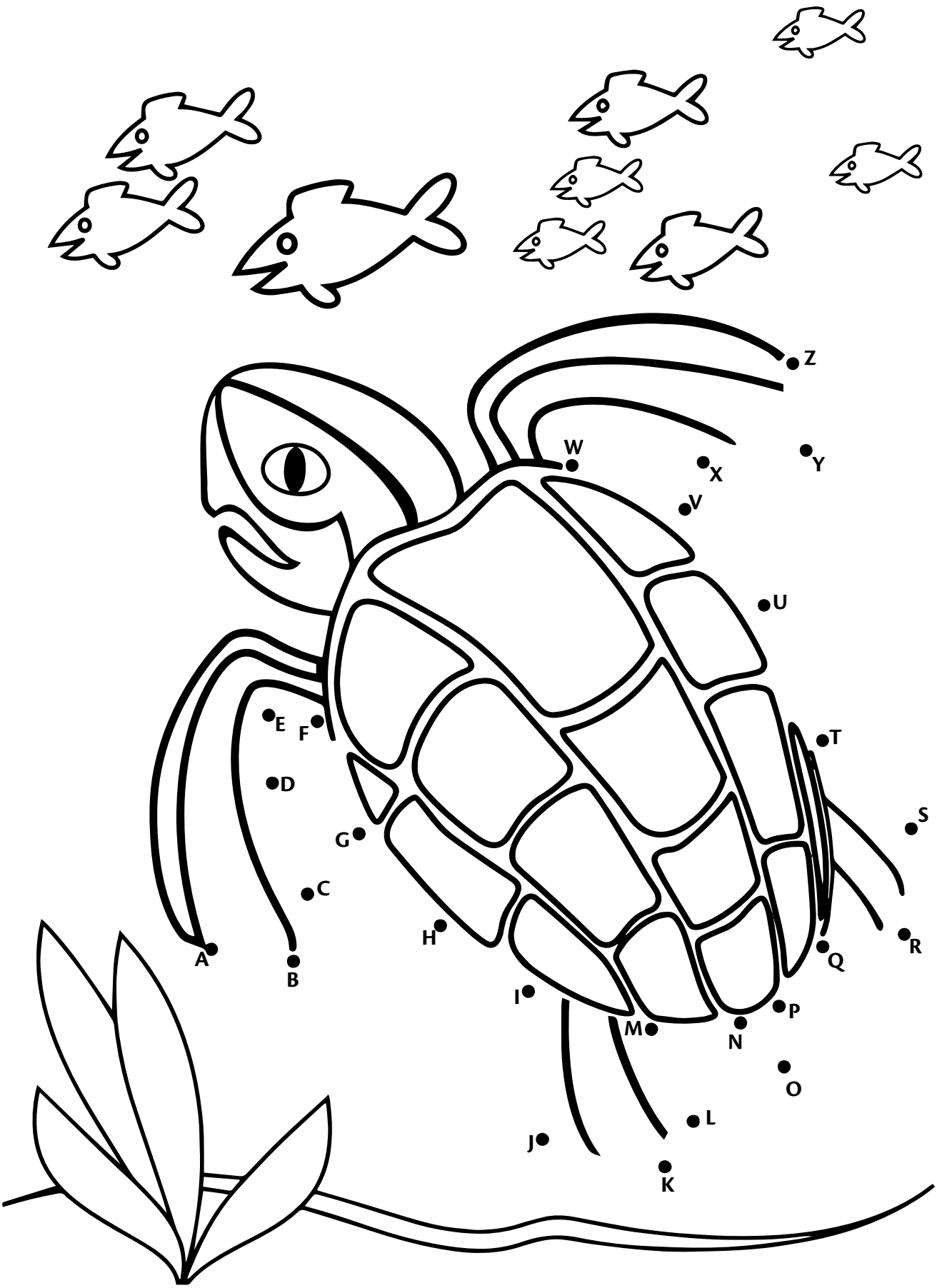
How many people are in this picture? ☐



Sea Turtle Connect-the-Dots

Name: _____

Directions: Connect the dots from A to Z. Color the picture.

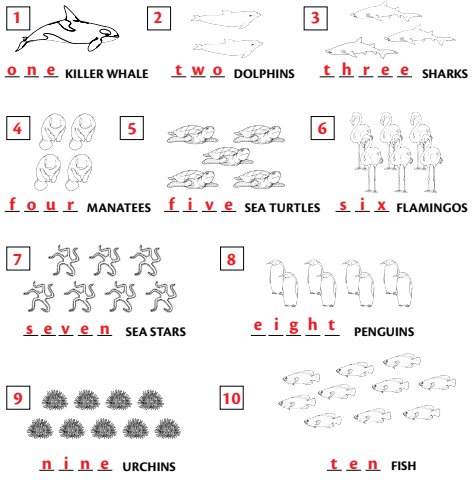


Answer Key

How Many Animals Do You See?

Directions: Count how many animals are in each picture and fill in the blanks with the correct number in word form. In the box to the left of each set of animals write the number in numeric form. Refer to the number line for help.

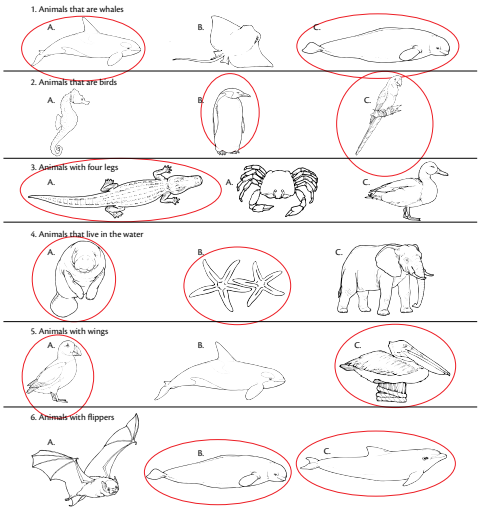
1	2	3	4	5	6	7	8	9	10
One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten



All Kinds of Animals

Name: _____

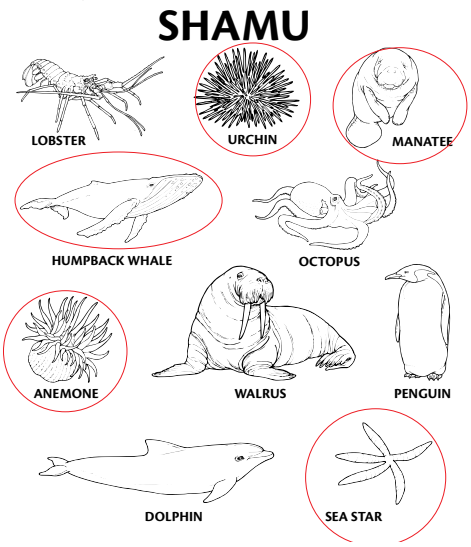
Directions: Use crayons or markers to color in any animals that match the provided descriptions.



Animal Alphabet

Name: _____

Directions: Find the animals whose names begin with any of the letters found in the word "Shamu." Color in any animals which begin with the letters s, h, a, m or u. Use a different color for each letter.

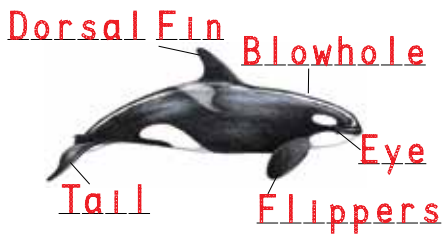


Whale and Shark

Name: _____

Directions: Trace and fill in the letters to label the animals.

Whale



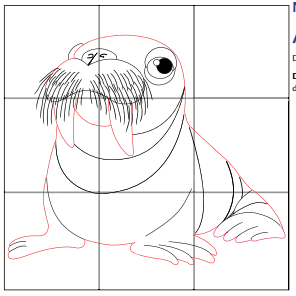
Shark

Name: _____

Arctic Artist

Draw like a scientist.

Directions: Use the dotted line to draw the picture of the walrus.

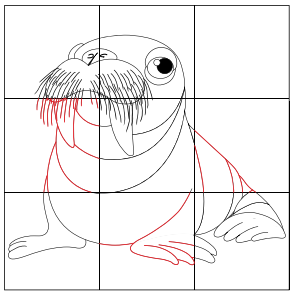


Walrus have tusks (or big teeth) that are used for climbing on to the ice.

Arctic Artist

Draw like a scientist.

Directions: Draw what is missing in the empty squares.



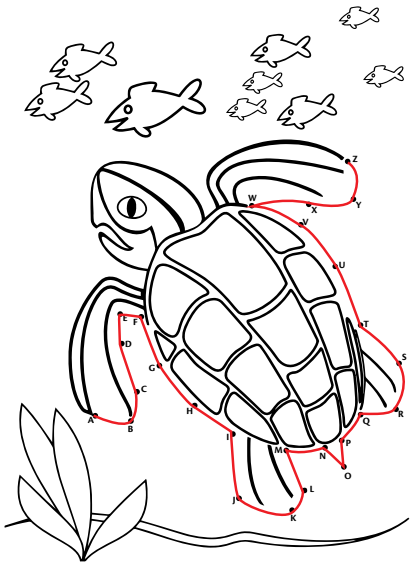
Walrus feel with their whiskers (vibrissae).

Kindergarten

Sea Turtle

Name: _____

Directions: Connect the dots from A to Z. Color the picture.



Check out:

SeaWorld.org for more information

SeaWorldOrlando.com/Teachers for additional resources just for teachers

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