### INTRODUCTION

Ahoy matey! It's the Ocean Blue Crew from Clearwater Marine Aquarium, here to give you some nautical knowledge about our incredible ocean.

Did you know that August is National Family Fun Month? We are celebrating by learning about marine animal families above and below sea level!

Humans aren't the only species known to live and travel in biological or chosen family groups. Family groups are also observed in many other species – including ocean animals!

In this issue, you will learn about flippered families, how they communicate with each other, and ways we can help protect them. Let's dive in!



#### **CAPTAIN'S LOG**

In a previous Ocean Blue Crew issue, you learned about our newest addition to CMA's resident bottlenose dolphin family, Apollo. Since Apollo is only about two years old he was first introduced to PJ, our oldest female dolphin. PJ is estimated to be about 50 years old! Bottlenose dolphins will spend between two and seven years with their mother. In that time, the female will teach her calf all of the skills it will need to survive in the wild. She will teach it how to echolocate, hunt, and avoid predators. While bottlenose dolphins do not stay in a biological family pod for life, they are still very social – and instead form dynamic social groups called "fission-fusion groups". Female dolphins and

their calves will often travel in a type of fission-fusion group, called a maternity group, which consists of other females and mother/calf pairs. Shortly after being introduced to PJ, Apollo met Hope. PJ, Hope, and Apollo's pairing provides the dolphins with a natural social structure!



# Do you know what the largest species of dolphin in the world is If you guessed orca, or killer whale, you're correct!

While there are many marine animals that spend part of their lives with their biological family, orcas take it to another level. Orcas spend their entire lives with their family in groups called matrilines. These groups are maternal, meaning that it consists of an older female and her offspring. Males will stay in the group with the matriarch for life, and while females may leave to have young of their own, they never

go far! Orcas will rarely leave their matriline for more than a few hours. A group of matrilines that travels together is called a pod. Pods share a dialect in their whistles and calls, similar to a language, amongst themselves and sometimes other pods in the region. Calves born into the family will then learn this dialect from









We can help protect marine mammal families, like orcas and other dolphins, by following Dolphin SMART guidelines!

Dolphin SMART is a program created by NOAA to promote responsible viewing of wild dolphins. At Clearwater Marine Aquarium, we follow Dolphin Smart guidelines on our eco-boat tours! SMART is an acronym:





**S** tay 50 yards away

M ove away at signs of disturbance

A lways put engines in neutral

R efrain from feeding, touching, or swimming with wild dolphins

T each others about Dolphin SMART



Orcas have an excellent sense of hearing! Orcas use hearing and echolocation to communicate with their pod, hunt, and navigate their environment. This adaptation works like sonar. The orca sends out high-frequency clicks. The sound wave bounces off the object ahead of them, is received by the orca, and processed through their ears. Some scientists think that orcas may learn how to perfect this skill from their mothers, but this is still being researched. Orcas use whistles and clicks to echolocate and communicate with other family members in their pod. Some experts believe that these sounds allow these cetaceans to identify and locate individuals and their group and to coordinate behaviors. This experiment will help us learn how echolocation works!

#### **YOU WILL NEED:**

- 2 paper towels
- Tin or aluminum par
- Tape
- A friend!





- 1. Tape the pan upright, with the longest side down to a hard, flat surface, like a table
- 2. Place the 2 paper towel rolls at opposite 45° angles on the table facing inwards towards the inside of the pan. Tape in place.
- 3. Whisper through the paper towel roll into the pan. Have your friend listen through the other roll. Your sound should echo off the pan and into the other roll. Whisper messages, jokes, or your favorite dolphin facts back and forth!







We've learned a lot about cetaceans!
Let's continue with this Whale-of-a-Tale Bookmark!

#### **YOU WILL NEED:**

- An adult!
- Construction paper
- Googly eyes
- Scissors
- Coloring utensils
- Glue stick
- 1. Start with a square piece of construction paper. Fold it in half to create a triangle (Figure 1)
- 2. Take the top layer of the bottom corner and fold it up to meet the top edge (Figure 2).
- 3. Take the right and left corners and fold them down to meet the bottom corner (Figure 3).
- 4. Flip the corners underneath the flap created from Step 2 (Figure 4).
- **5.** Give your whale an eye, face, flipper, and tail (Figures 5 and 6)!









Looking for a totally jaw-some snack? Try making this shark-cuterie board for your next family gathering!

#### You Will Need:

- An adult!
- Large serving board or plate
- Cutting board
- Knife
- Your favorite fruits, veggies, and dips, like:
- Goldfish crackers, gummy sharks, pita chips, pretzels, nuts, cheese, apples, strawberries, cucumbers, carrots, hummus, spinach dip, yogurt
- 1. With an adult's help, carefully slice your fruits and veggies and arrange them however you would like on your serving board.
- 2. Get creative! Make patterns and shapes to decorate your shark-cuterie board.
- 3. Serve and enjoy!











There are many different names for groups and families of animals.

Let's test your knowledge with this fun matching game!

**SHIVER** 

**SQUADRON** 

**SCHOOL** 

**HERD** 

**POD** 

**FEVER** 

**BATTERY** 

**SMACK** 

**FISH** 

**ORCA** 

**BARRACUDA** 

**JELLYFISH** 

**SHARK** 

**SEAHORSE** 

**PELICAN** 

**STINGRAY** 





### **Key for Playtime Pelican:**



#### Sources

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