

If a Dolphin Were a Fish

Join Delfina the dolphin as she imagines that she becomes other sea animals – a fish with gills, a sea turtle laying eggs, a pelican with feathers, an octopus without bones, a shark with a sense of smell, or even a vegetarian manatee. The incredible "morphing" illustrations will have children laughing as they learn about the real differences between animals!

It's so much more than a picture book . . . this book is specifically designed to be both a fun-to-read story and a launch pad for discussions and learning. Whether read at home or in a classroom, we encourage adults to do the activities with the young children in their lives. Free online resources and support at www.ArbordalePublishing.com include:

- For Creative Minds as seen in the book (in English & Spanish):
- * The Dolphin Family—Who is Who?
- * Mammal Characteristics
- ° Dolphin Fun Facts
- ° Dolphin craft
- · Teaching Activities:
 - *Reading Questions * Mathematics *Language Arts * Geography
- *Science *Coloring Pages
 Interactive Quizzes: Reading Comprehension,

For Creative Minds, and Math Word Problems

- · English and Spanish Audiobooks
- · Related Websites
- · Aligned to State and Core Standards
- · Accelerated Reader and Reading Counts! Quizzes
- · Lexile and Fountas & Pinnell Reading Levels

eBooks with Auto-Flip, Auto-Read, and selectable English and Spanish text and audio available for purchase online.

Thanks to educators at the South Carolina Aquarium for reviewing the accuracy of the information in this book.

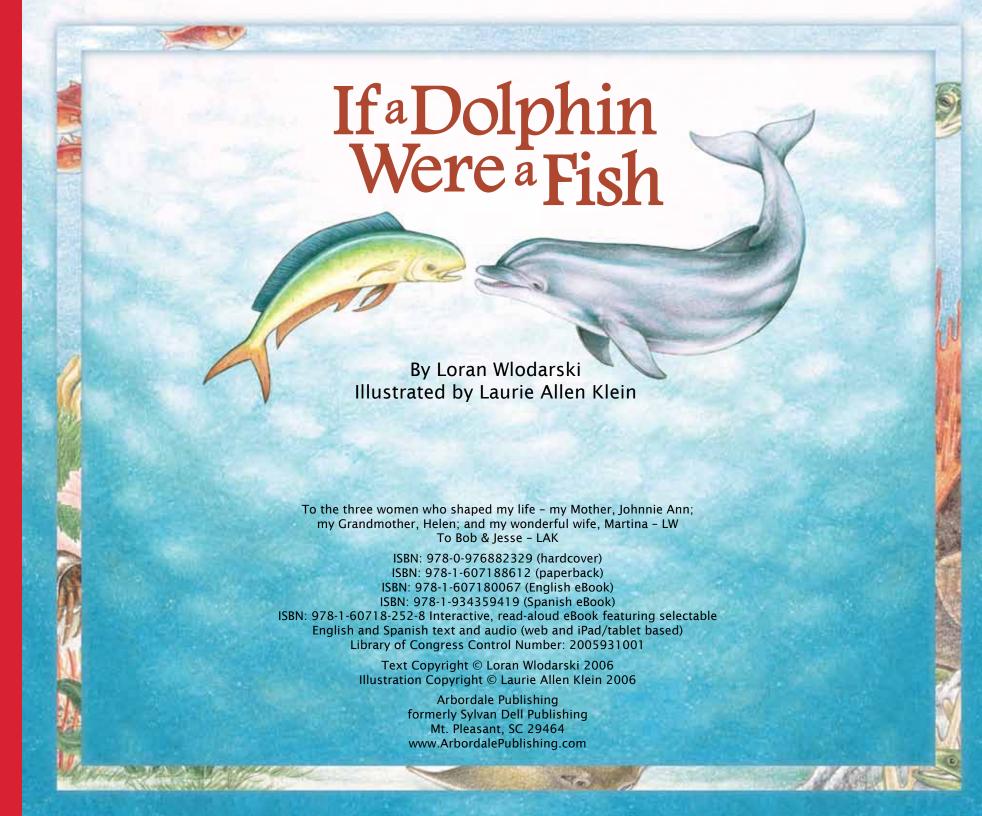
Loran Wlodarski is the author of the awardwinning If a Dolphin Were a Fish and Felina's New Home for Arbordale, as well as Wild Careers!: Working with Animals. Sharks!: From Fear to Fascination; and Killer Whales: Creatures of Legend and Wonder. He has been published in sources such as *Grolier's Encyclopedia for* Children and The Marine Mammal Encyclopedia. In addition, he has served as a scientific consultant for Ask Magazine, Animal Planet, Ripley's Believe It Or Not, and "Who Wants to be a Millionaire." Loran has raised animals his entire life. One of his early jobs at SeaWorld's education department was to raise some of their animals newly hatched sharks, macaws, turtles, tropical fish, and iguanas. Loran lives with his wife and child in Florida.

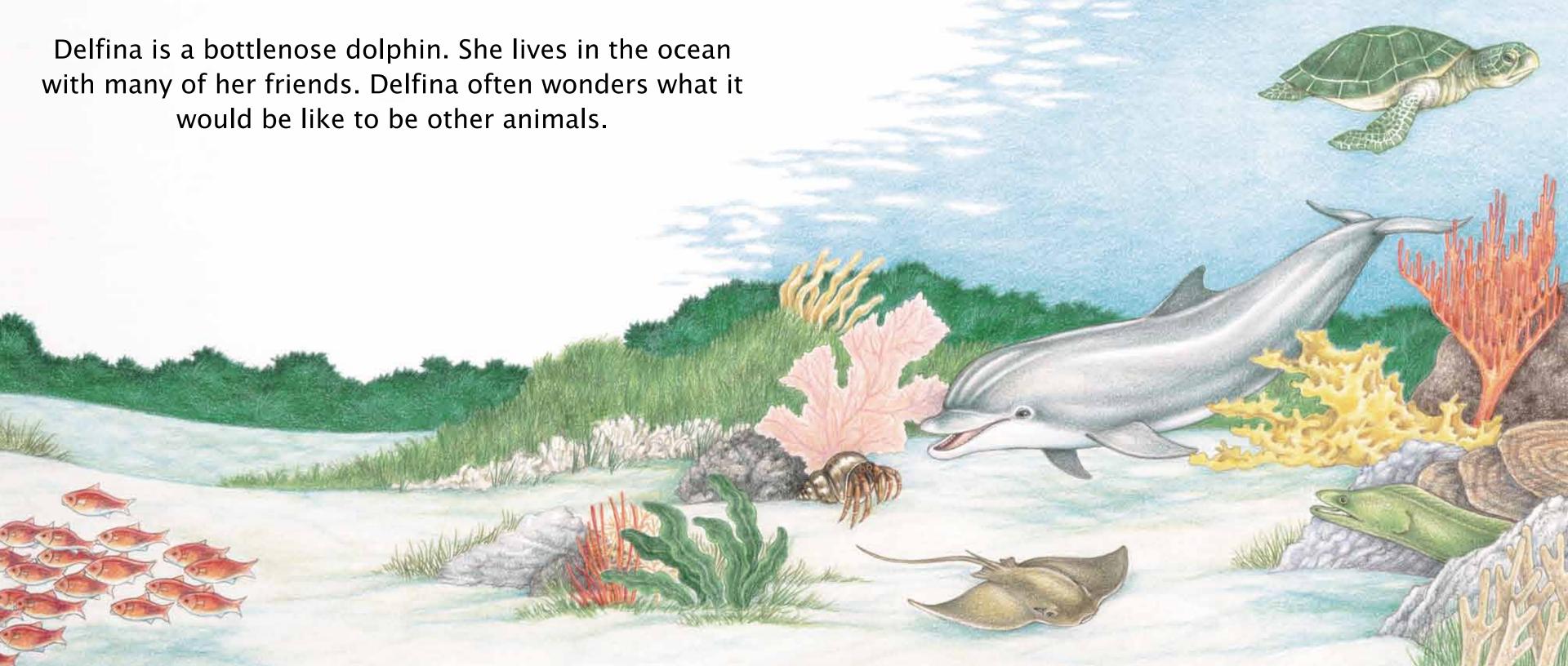
Laurie Allen Klein has been a freelance artist for nearly 20 years. Over the last several years, she has worked as the on-staff artist for a marine park, where she does everything from painting life-size sea animal murals, to illustrating children's activity books. Laurie illustrated Solar System Forecast, Meet the Planets, Furs and Feathers, Where Should Turtle Be?, the award-winning Little Skink's Tail, and If a Dolphin Were a Fish for Arbordale. Laurie lives in Florida.

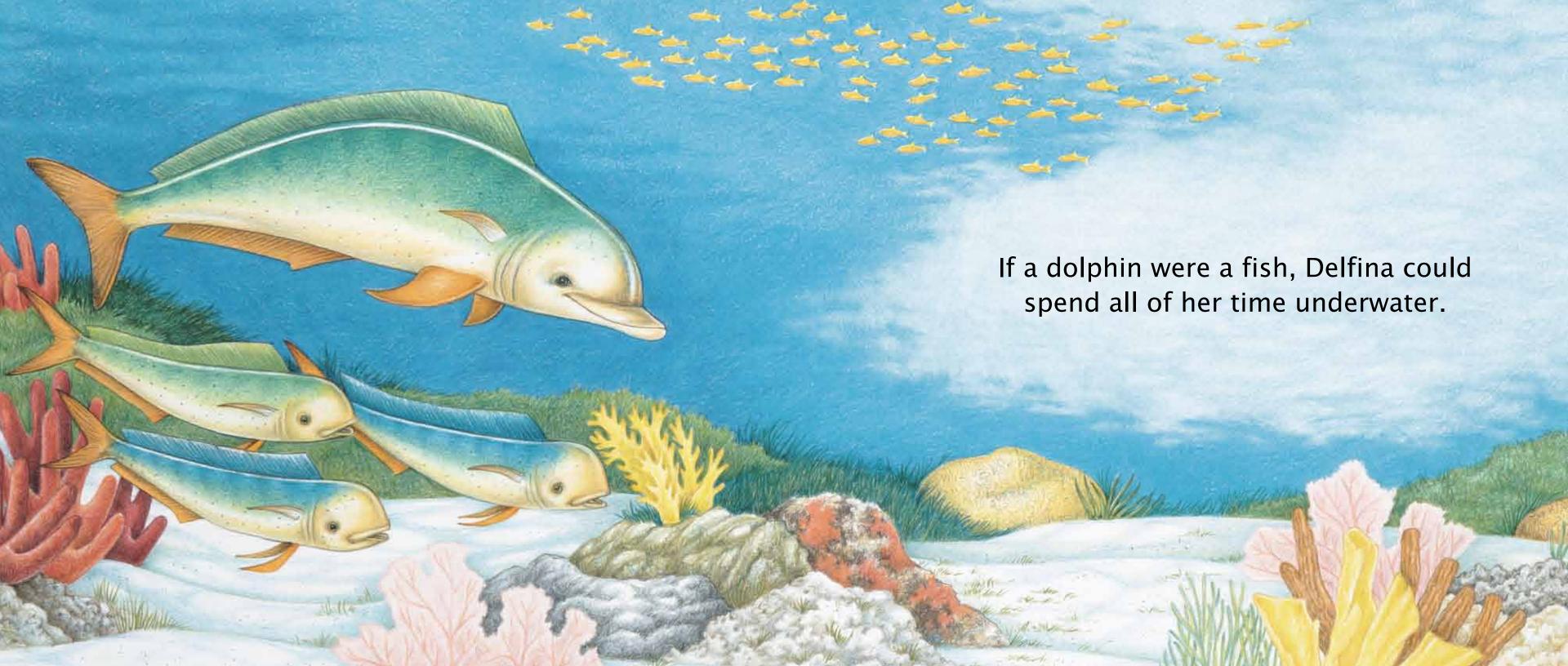


Loran Wlodarski

Laurie Allen Klein

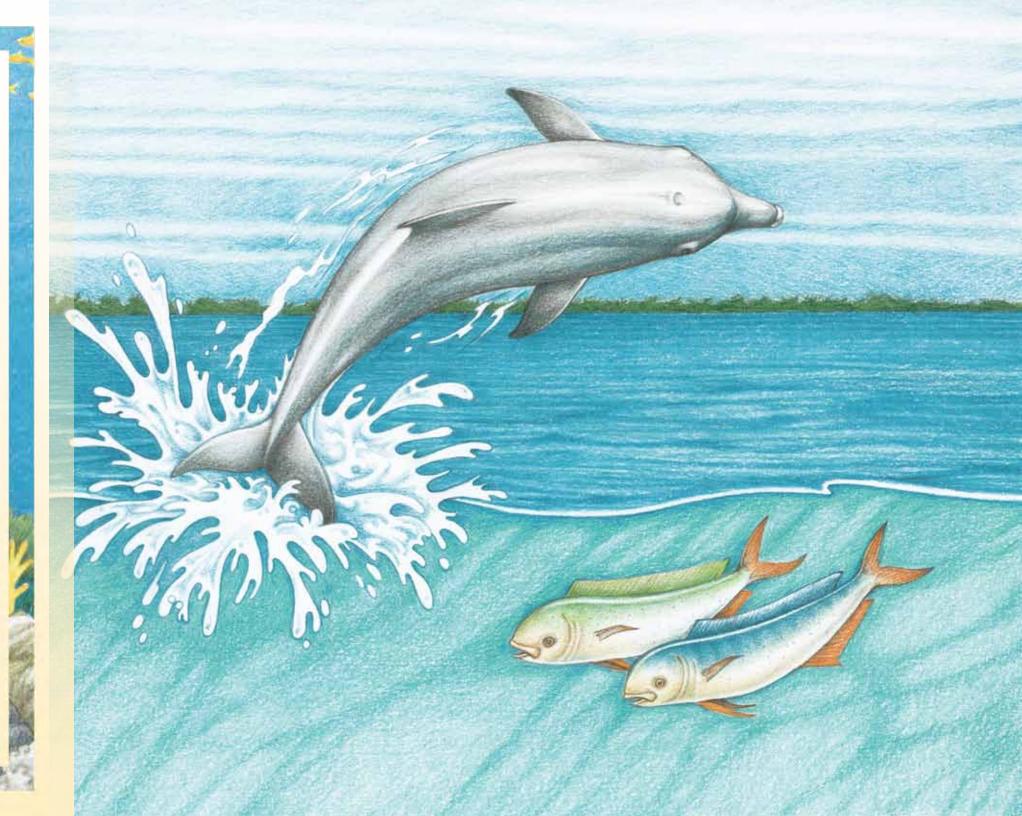


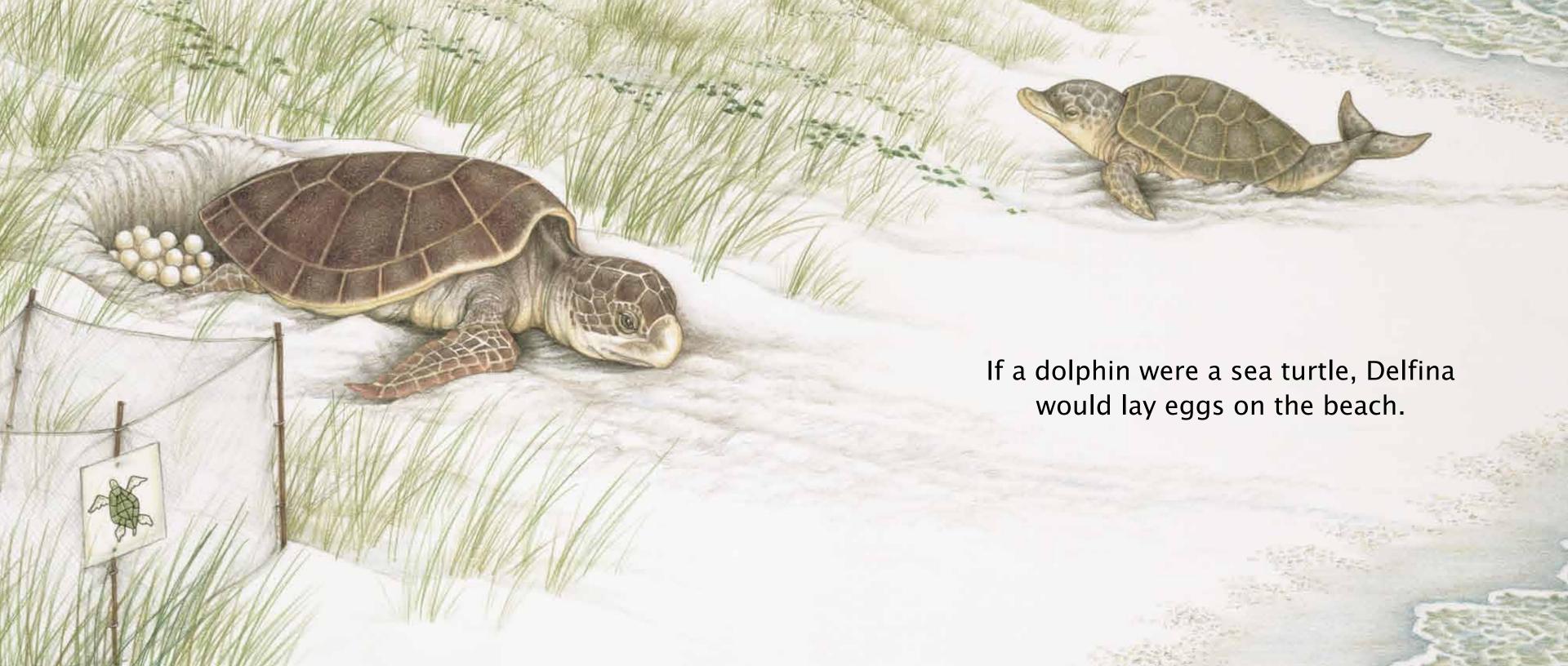


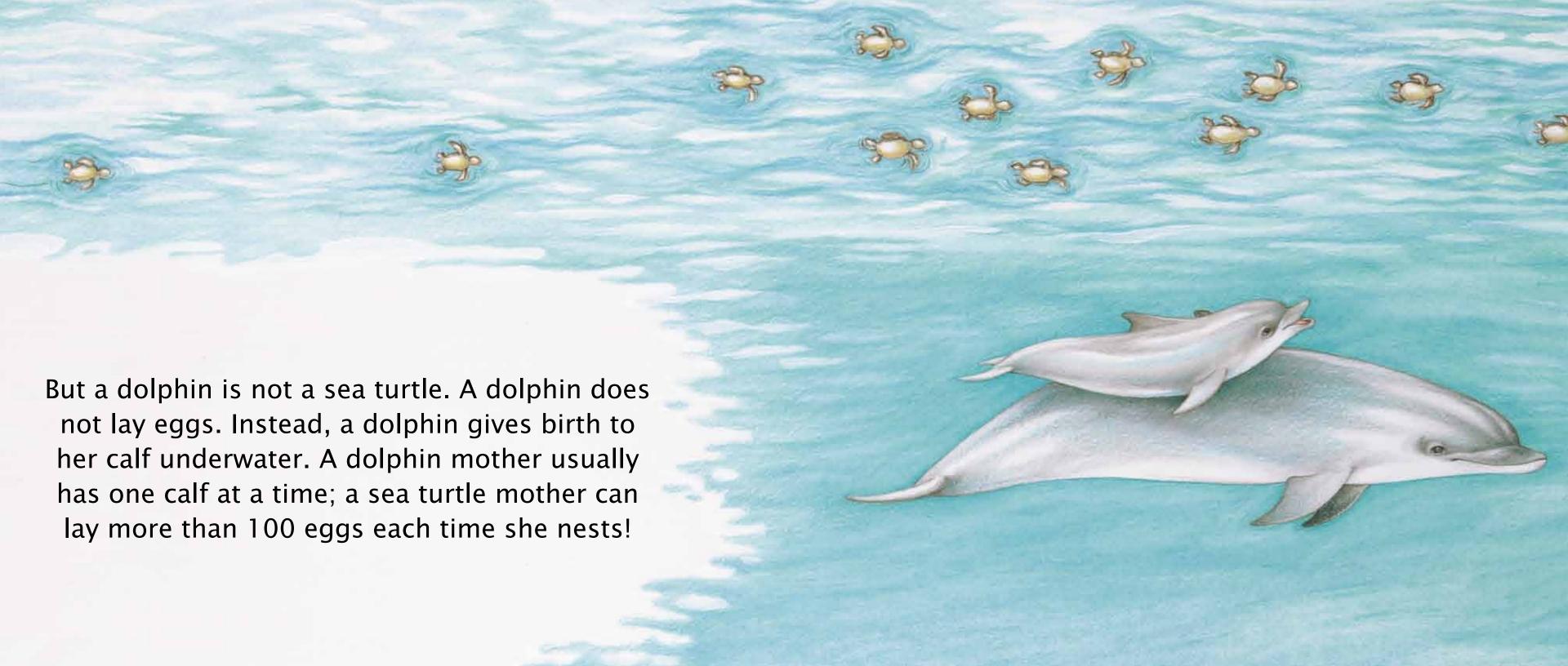


But a dolphin is not a fish. A fish uses gills to breathe underwater. Delfina comes to the water's surface to breathe air through a blowhole on top of her head. Instead of gills, a dolphin breathes air with a pair of lungs.









For Creative Minds

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The Dolphin Family – Who is Who?

The world is a big place, filled with many types of animals. But, which ones are related to bottlenose dolphins? The closest relatives to dolphins are whales and porpoises. In fact, all dolphins, porpoises, and whales are grouped together in the order **Cetacea**. Cetacea is just a word that means "whale," so dolphins and porpoises are really just small types of whales.

The biggest relative of a bottlenose dolphin happens to be one of the largest animals that has ever lived on our planet — the blue whale. Blue whales can measure up to 110 feet long. Only a few dinosaurs were believed to be bigger. Even baby blue whales, which are about 23 feet at birth, can be larger than a school bus!

How tall are you now?

How many inches long were you at birth?

Sometimes people call dolphins **porpoises**, but that is not correct. There are about six types of porpoises in the sea. Yet there are more than 30 types of dolphins in the oceans and five types that live in rivers. The easiest way to tell them apart is by looking at their teeth.

Dolphins have pointed teeth that look like ice cream cones.



Porpoises have teeth that are flatter and not as pointed.

There are many more animals related to bottlenose dolphins and they are called **mammals**. All mammals share certain characteristics or traits.

- They have hair on their bodies at some point in their lives. But wait, where is the hair on a bottlenose dolphin? Actually, it all falls off right around the time they are born. Bottlenose dolphins are bald! If you have the chance to look around their snouts (the "bottle" shape at the front of their faces), you'll see little black dots. That's where they used to have hair sort of like a moustache. Being "bald" helps the dolphins swim very fast through the water. Instead of having hair, birds have feathers in fact birds are the only animals that have feathers!
- Mostly all mammals have **live birth** instead of laying eggs. The duck-billed platypus is one of the few examples of an egg-laying mammal. Birds and many reptiles (like turtles) lay eggs.
- Mammals drink milk from their mothers when they are born. Milk helps mammal babies grow up big and fast. Remember the blue whale baby? A blue whale calf drinks about 130 gallons of milk a day. The calf drinks so much milk that it puts on about 200 pounds of weight each day when it is growing that's about eight pounds an hour! Bottlenose dolphin babies (calves) drink milk from their mothers for about one year, before eating nothing but solid foods such as fish.

How long does it take your family to drink one gallon of milk? How long do you think it would take your family to drink 130 gallons of milk?

- All mammals have bones or a skeleton. Our skeleton is inside our body where we don't see it. Some animals, like the octopus or worms don't have any skeleton at all.
- Mammals, birds, and reptiles have lungs and breathe air. Fish use gills to breathe underwater. Bottlenose dolphins breathe through a blowhole on the top of their head. They can stay underwater for 8 to 10 minutes.

How long can you hold your breath while under water?

Mammals and birds are "warm-blooded" or endothermic which means that they make their own body heat and maintain a constant body temperature. In humans, that constant body temperature is usually 98.6° F unless the human is sick. Reptiles are "cold-blooded" or ectothermic which means they use outside sources (like sitting in the sun) to warm themselves. Some mammals also use fur or blubber to stay warm; birds use feathers to stay warm.

What do you use to stay warm in cold weather?

Do you know any other mammals besides bottlenose dolphins? Cats, dogs, bats, elephants, mice, bears, deer, horses, kangaroos, monkeys, manatees, rabbits, seals, walruses, cows, and sheep are all examples of mammals. Do you want to see another mammal? Look in the mirror! You are a mammal too; so you are a relative of bottlenose dolphin too!

Fun Facts

Dolphins "hear" by using echolocation. They push sounds out through their melon (between their eyes and their blowhole). If you are in or around the water when a dolphin does this, you'll hear what sound like clicks. The sound bounces back off or reflects off another object and returns to the dolphin's lower jaw. Dolphins can identify fish, boats and other objects using this special "hearing."

In fact, this "hearing" is so good that they can tell different types of fish apart! Our **sonar technology** is based on dolphin echolocation. Bats, the only mammals that fly, also use a form of echolocation to hear.

Animals that eat only meat are called **carnivores**; those that eat only plants are called **herbivores**. Animals that eat both meat and plants are called **omnivores**.

What are you - do you eat only meat, only plants, or both?

Bottlenose dolphins use their tails to jump as high as 15 feet into the air.

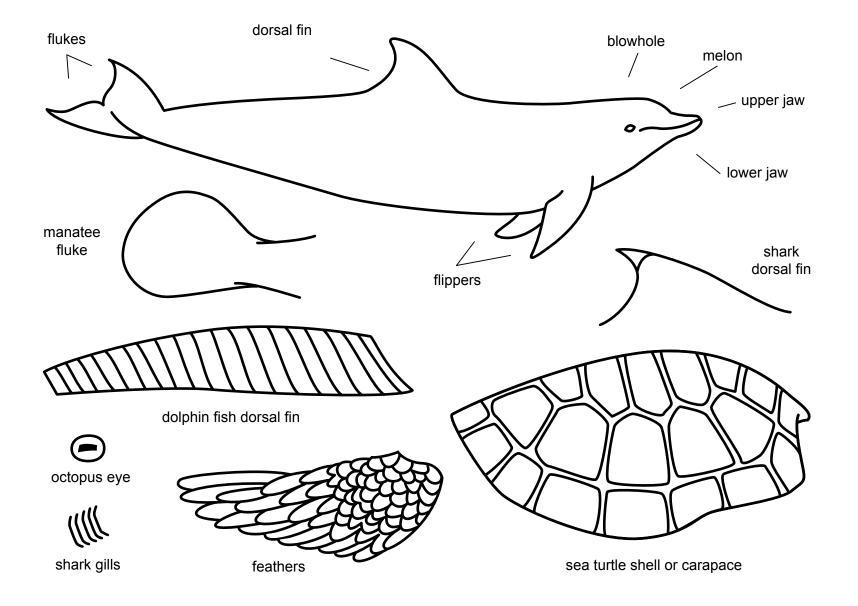
Using chalk on your driveway, sidewalk or playground, measure and draw a 15-foot line.

How many times do you have to lie down (head to toe) to measure 15 feet?

Stand at one end of the line and jump forward. Measure how far you can jump.

Dolphin Adaptation Craft

Copy or download this page from www.ArbordalePublishing.com and color. Tape or glue the various "adaptations" to the dolphin as desired.



If you enjoy this book, look for other Arbordale books about animal classification:



Includes 3 pages of
learning activities.

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