

For Creative Minds

The For Creative Minds educational section may be photocopied or printed from our website by the owner of this book for educational, non-commercial uses. Cross-curricular teaching activities, interactive quizzes, and more are available online. Go to www.ArbordalePublishing.com and click on the book's cover to explore all the links.

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.

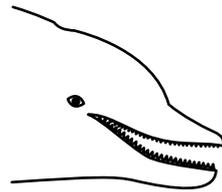
The biggest relative of a bottlenose dolphin happens to be one of the largest animals that has ever lived on our planet — the blue whale. Blue whales can measure up to 110 feet long. Only a few dinosaurs were believed to be bigger. Even baby blue whales, which are about 23 feet at birth, can be larger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

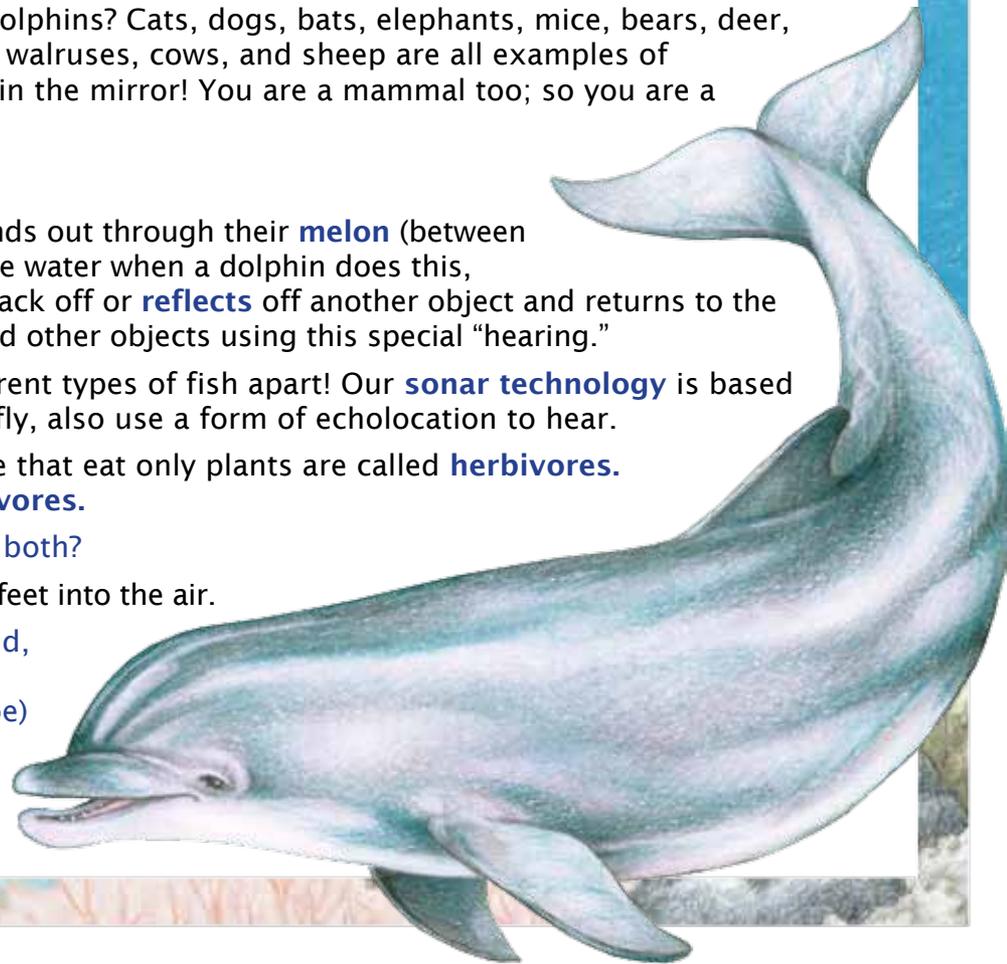
Bottlenose dolphins use their tails to jump as high as 15 feet into the air.

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.

