

Lets
build a
Zoo

Brought to you by the Grimsby Museum

Mammals –

Can you name any mammals?

People are mammals. So are dogs, cats, horses, duckbill platypuses, kangaroos, dolphins and whales. What do all these animals have in common, you ask? The answer is – MILK! Animals that have hair on their bodies and drink milk from their mothers are classified as a mammal.

Mammals are one of the 6 main classes of animals. Animal classes are groups of animals that scientists consider to be alike in some important ways. Mammals are the animal class that people belong to.

There are approximately 4,000 different kinds of mammals. This may sound like a lot, but mammals are a pretty small class when compared to the 21,000 different kinds of fish and a whopping 800,000 different kinds of insects!

Here are some of the ways that mammals are alike!

Mammals' bodies are built to maintain just about the same temperature all the time. Warm blood lets the mammals be very active and live in a wide variety of places. Polar bears live in very cold areas. Camels live in hot areas. Moles live under the ground. Bats live in caves and fly in the air. Dolphins live in the oceans. Fur and fat help protect mammals who live in the cold. Mammals sweat or pant to release extra heat if they live somewhere toasty.

Reptiles

Can you name any reptiles?

Reptiles are a class of animal with scaly skin. They are cold blooded and are born on land. Snakes, lizards, crocodiles, alligators and turtles all belong to the reptile class.

So what makes a reptile a reptile?

The two biggest clues are:

- 1) They are cold-blooded, and
- 2) They are covered in scales.

Being cold-blooded means that their bodies react to the temperature of their surroundings. When they get too warm, they can go into the water or shade to cool off.

When they get too cold, they can hang out in the sun to warm themselves up.

Scales protect their bodies.

Scales can be hard or soft, large or small.

Reptiles are born on land and are born with strong instincts, so they are on their own at birth. Just think, no parents to nag them about cleaning their rooms!

Amphibian

Amphibians are born in the water. When they are born, they breathe with gills like a fish. However, when they grow up, they develop lungs and can live on land.

The word amphibian means two-lives. Amphibians spend their lives in the water and on land.

All amphibians begin their life in water with gills and tails. As they grow, they develop lungs and legs for their life on land.

Amphibians are cold-blooded, which means that they are the same temperature as the air or water around them.

There are more than 4,000 different kinds of amphibians. Members of this animal class are frogs, toads, salamanders, newts, and caecilians or blindworms.

Invertebrates

You live with them almost everyday, even in the very cold winter months! They are everywhere and are the largest animal phylum (a group of related living things (as animals or plants) that ranks above the class and below the kingdom in scientific classification) -- about 85% of all known animals in the world are part of this class.

There are far more species of arthropods (See below) than there are species in all the other groups combined.

They are spiders, insects, centipedes, mites, ticks, lobsters, crabs, shrimp, crayfish, krill, barnacles, scorpions and many, many others.

The easiest way to tell an arthropod from any other animal is to see if they have:

- 1) A segmented body. This means that they will have a body made up of more than one part. Spiders have two segments and flies have three segments
- 2) Many jointed legs or limbs. Spiders have 8 legs, millipedes can have... Hundreds!
- 3) An exoskeleton. This is an external skeleton. Like armor, it protects the arthropods body. When arthropods are born the exoskeleton is soft but hardens quickly and it can be shed as the creature grows. Arthropods are invertebrates; which means that they do not have a backbone.
- 4) Cold blooded. Arthropods are cold blooded -- which means, their body temperature depends on the temperature of the environment surrounding them.

Arthropods are some of the most interesting animals in the world!

They fly, they creep, and they crawl. They live on land, in ponds and in the ocean. From ants to bumblebees, crabs to crayfish, spiders to centipedes -- which are your favorites?

Fish

Fish are vertebrates that live in water and have gills, scales and fins on their body. There are many different fish and many of them look very odd indeed. There are blind fish, fish with noses like elephants, fish that shoot down passing bugs with a stream of water, fish that glow in the dark and even fish that crawl onto land and hop about!

What distinguishes fish from the other animal classes?

Fish are a class of aquatic vertebrates. The combination of gills, fins and the fact that they live only in the water make fish different from all other animals.

Fish spend all of their lives in the water and are cold-blooded with the exception of Tuna family and the Mackerel shark family.

Scientists believe that there are more than 24,000 different species of fish in the world.

They range in size from the largest, Whale shark at 16 m (51 ft) long, to the smallest the 8 mm (1/4 in.) Stout Infantfish.

Most fish have a skeleton made of bone but some, like sharks, have a skeleton made of cartilage.

Birds

Birds are animals that have feathers and that are born out of hard-shelled eggs. Some people think that what makes an animal a bird is its wings. Bats have wings. Flies have wings. Bats and flies are not birds. So what makes an animal a bird? Do you know what makes a bird different from other animals?

Is it the pretty colours? No -- other animals, like fish and insects, come in all sorts of beautiful colours too.

Is it the bill or beak? No -- other animals, like the duck billed platypus (a mammal), have bills too.

Is it the eggs? No -- other animals, like fish, amphibians, reptiles, insects and even some mammals, hatch from eggs as well.

Is it the wings? No -- other animals, like insects and some mammals, have wings.

The answer is feathers!

All birds have feathers and birds are the only animals that do. The feathers on a bird's wings and tail overlap. Because they overlap, the feathers catch and hold the air. This helps the bird to fly, steer itself and land.

Feathers do many jobs for birds. Soft down keeps them warm, wing feathers allow flight and tail feathers are used for steering.

The colour of the feathers can be used to hide the bird or to help the bird find a boyfriend or a girlfriend!

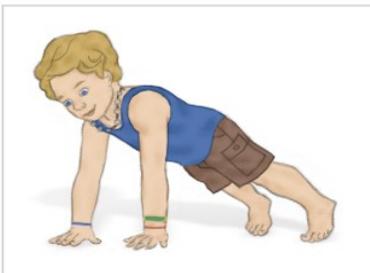
2. Yoga

Let's try to be the animals (<https://www.kidsyogastories.com/zoo-animals-yoga/>)



1. Elephant – Wide-Legged Standing Forward Bend

From standing, step your feet hip-width apart, bend your upper body, clasp your hands together, and sway your arms like the trunk of an elephant.



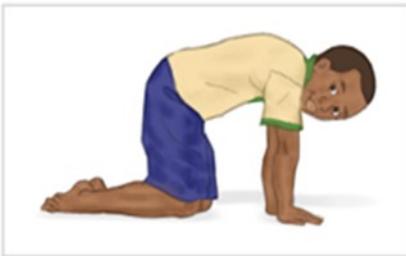
2. Crocodile – Plank Pose

Come down to a plank on your hands and toes like a crocodile.



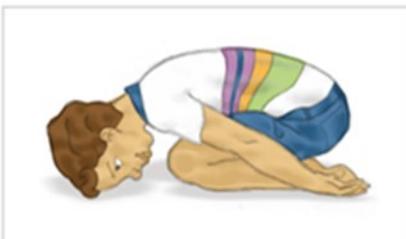
3. Bear – Bear Walk or Downward-Facing Dog Pose

Come back to hands and feet in an upside-down V shape then walk like a bear.



4. Tiger – Cat Pose

Come down to all fours, tuck your chin into your chest, and round your back like a tiger.



5. Hippo – Child's Pose

Come to sitting back on your heels, slowly bring your forehead down to rest in front of your knees, rest your arms down alongside your body, and take a few deep breaths.

Pretend you are a hippo resting in the water.

3. Crafts

Paper plate Crafts

Fish Plate (<https://www.craftymorning.com/paper-plate-snake-craft-using-rolling-pin/>)

- (Prep) cut out fins

Paint plate and fins. Add Glitter. Let dry then glue together



Paper Plate Giraffe (<https://www.craftymorning.com/giraffe-paper-plate-craft-kids/>)

Prep - Cut out horns and tops Circle Sponges cut out muzzle and ears google eyes



Paint plate paint ears and horns let dry

One plate is dry sponge on spots

Paper Plate Frog

(<https://www.gluedtomycraftsblog.com/2015/04/paper-plate-frog-kid-craft.html>)

Prep - Cut out eyes and black; Cut out tongue, let kids draw mouth Cut out tissue squares

Glue squares let dry

Glue on eyes and draw mouth glue on tongue



Snake paper plate

(<https://www.craftymorning.com/paper-plate-snake-craft-using-rolling-pin/>)

Prep - Bubble wrap around rolling pins - Cut out tongue google eyes

Roll pin in paint roll over plate let dry -- cut out snake glue on eyes and tongue



Chicken paper plate

(<https://www.thejoysharing.com/2017/07/cock-doodle-doo.html?m=1>)

Prep - Cut out crown and chin and beak - Google eyes cut out tails

Glue all together



Ladybug paper plate

(<https://www.mymommystyle.com/15-ladybug-crafts-preschoolers/>)

Prep - cut out circles stripe and head and antennae

Paint plate let dry glue on spots

4. Science experiment

How do animals stay warm in winter?

Thinking about how Arctic animals stay warm in such frigid conditions is mind-boggling.

Animals such as whales, seals, polar bears, and penguins have developed many adaptations that allow them to thrive in subzero weather. One of those adaptations is a thick layer of blubber underneath their skin that provides insulation and warmth. To show how effective blubber is at keeping an animal warm do this simple hands-on winter science experiment.

In addition to reading books about Antarctica and the Arctic, also watch the BBC production Frozen Planet. Here are a few interesting to be learned:

- Polar bears live in the Arctic while penguins live in Antarctica. So while we often think of these two animals living in the same place, they actually live half a world a world away from each other!
- Blubber can also be a source of stored up energy if the animal ever finds itself without an immediate food source. Some whales, for example, only eat for a few months out of the year and then live on their blubber the rest of the year.
- There is a caterpillar called the banded woolly bear caterpillar that eats frantically during the summer and then freezes solid during the winter. Because the summers are so short in the Arctic it takes up to 14 years for the caterpillar to get big enough to pupate and turn into a moth!

This simple science experiment will demonstrate how blubber keeps animals warm in cold weather

What do you need

Large bowl

Ice and water

Plastic bags

Shortening (Crisco)

First, place bare hands in the ice water, count how many seconds they can leave their hands in before it was too uncomfortable.

Next, Put hand in plastic bag coat Cover hand and wrist with a thick layer of shortening to simulate blubber (on the bag). Some animals only have a couple of inches of blubber covering their bodies, while some large whales can have a layer of blubber over a foot thick! It's no wonder these Arctic animals stay warm! Once their hands are covered in shortening have the kids immerse them again into the ice water.

5. Story time

Read the Story the Hungry Caterpillar (<https://www.youtube.com/watch?v=75NQK-Sm1YY>)

Hungary caterpillar craft

(<https://www.craftymorning.com/egg-carton-hungry-caterpillar-craft/>)

Egg carton and paint google eyes pipe cleaner



The Very Hungry
Caterpillar