MAMMALS, REPTILES AND MORE

Classify your favourite animals into groups

What you'll need:

- Plastic or stuffed toy animals (optional)
- Toilet paper rolls
- Coloured paper
- A pencil
- Pencil crayons, markers or paint (and a paintbrush)
- Scissors
- Glue

Create:

1. Use toy animals for this activity, or follow these steps to create your own animal friends out of toilet paper rolls and other craft materials.
2. Gather a toilet paper roll from your recycling bin to use for the body of your animal.
3. Think about what kind of animal you'd like to make before you get started. Do you want to create a dog? A turtle? A penguin? There are so many animals to choose from!
4. Once you've decided which animal to create, think about what features your animal needs. How many legs does it have? Does it have wings or a tail? What about big ears or a beak? Draw the shapes of these features on your paper.
5. Use pencil crayons, markers or paint to decorate your animal's body (the toilet paper roll) and the pieces you just drew. Draw fur, scales or feathers, depending on what type of animal you're making, or add other features.
6. Cut out the paper pieces and glue them to your animal's body. Add any finishing touches you'd like!
7. Repeat as many times as you want to create more animal friends to classify.
8. Make room on your work surface to sort your animals into six categories: mammals, birds, reptiles, amphibians, fish and insects.

   Optional: Create labels for the different categories.

Play:

It's time to play biologist! A **biologist** is a scientist who studies living things, like animals and plants.

Read the features of each animal group in the Learn section and think about the animals you created (or your toy animals). Then, try to sort your animals into groups based on the clues.

The fun doesn't need to end once you've categorized your animals! Now that you know what type of animals they are, have fun playing with your toys or creations. Make them run, swim, fly or climb, or create more friends to play with!

ONTARIO SCIENCE CENTRE
An agency of the Government of Ontario

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Learn:

There are many different types of animals all over the world. Scientists sort (or **classify**) animals in groups in order to organize and make sense of them. Animals can be classified by **how they look**, **what they eat**, **where they live** and **how their babies are born**.

Scientists classify animals into six major groups:

1 Mammals

There are over 5,000 species of **mammals**. An animal may be a mammal if it:

- is **warm-blooded** (it creates its own body heat and maintains the same temperature in any weather)
- has hair or fur
- has lungs to breathe oxygen
- lives on land
- gives birth to live babies and produces milk to feed its babies
- walks on four legs (humans are the only exception)
- is an **herbivore** (eats plants), **carnivore** (eats other animals) or **omnivore** (eats plants and other animals)

Humans are mammals, and so are common pets like dogs, cats, rabbits and hamsters, as well as familiar animals like squirrels, raccoons, deer and coyotes.

2 Birds

There are approximately 10,000 different **bird** species. An animal may be a bird if it:

- is warm-blooded
- has feathers
- has lungs to breathe oxygen
- lives on land (and spends some time in the water)
- lays hard-shelled eggs
- has wings
- eats seeds, fruit, nuts, aquatic plants, eggs, insects, aquatic invertebrates, other birds, small mammals, fish and even dead animals

Birds are the only animals on Earth that have feathers. The largest bird in the world is the ostrich, which also lays the largest eggs. An ostrich can run at a pace of approximately 70 km/hr!

3 Reptiles

Reptiles can be harder to spot than mammals or birds, particularly in Ontario, where many reptiles live in the water. An animal may be a reptile if it:

- is **cold-blooded** (it relies on the sun to stay warm)
- has dry skin
- is covered in scales or **scutes** (bony plates)
- has lungs to breathe oxygen
- lives on land or in water
- lays soft-shelled eggs on land
- eats insects, birds, frogs, mammals, fish or other reptiles, and sometimes eats leaves, grass and even cactus

Snakes, turtles and lizards are all reptiles. Dinosaurs, which lived on Earth more than 65 million years ago were also reptiles. Today, reptiles of different sizes can be found all over the world, except in very cold areas.

4 Amphibians

Amphibians live partially on land and partially in the water. An animal may be an amphibian if it:

- is cold-blooded
- has thin, moist skin
- has lungs and/or **gills** (special organs that let the animal breathe underwater)
- has webbed feet
- lives on land and in water
- lays soft-shelled eggs in water
- eats insects, spiders, snails, slugs and earthworms

Frogs, toads, salamanders and newts are all amphibians. Because amphibians are cold-blooded, they enjoy wet conditions with lots of trees to provide shade and keep them cool.

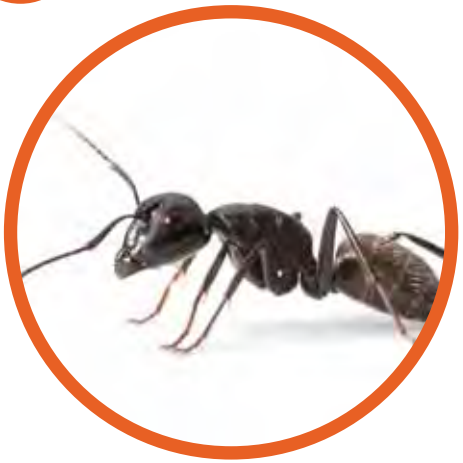
5 Fish

There are about 24,000 different species of **fish** in the world's lakes, rivers and oceans. An animal may be a fish if it:

- is cold-blooded
- has scales and/or slimy skin
- has gills to breathe underwater
- lives in water
- lays eggs
- eats small insects, leeches, worms, zooplankton, algae, crustaceans and smaller fish

There are many species of fish in Ontario's lakes and rivers, including the lake sturgeon. Female lake sturgeons can live up to 150 years. The biggest fish ever caught was a lake sturgeon weighing 76 kg!

6 Insects



There are more **insects** in the world than every other animal group combined—over 1,000,000 different species! An animal may be an insect if it:

- is cold-blooded
- has three main body parts: a head, thorax and abdomen
- has six legs
- has wings and antennae
- lives on land or in water
- lays eggs
- eats plants and other insects, blood (like mosquitoes and blackflies) and nectar from plants

Flies, beetles and ants are all examples of insects. The Monarch butterfly is an insect commonly seen in Ontario in the summer months. You may have noticed these butterflies flying around and landing on milkweed flowers to lay their eggs.