



Living Things: Animals

MRVED 3rd Grade Science

e-Curriculum

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You will see this symbol when you are going to investigate or do an activity.



Click on this symbol to do an internet activity, view a video, or learn a new song!



You will see this symbol when you should share/compare with a science buddy.

All words highlighted in **yellow** are vocabulary words and their definitions can be found on the Vocabulary Investigation page.

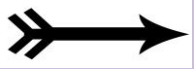
Minnesota Standards

Standard	Benchmark	Code
Living things are diverse with many different characteristics that enable them to grow, reproduce and survive.	Compare how the different structures of plants and animals serve various functions of growth, survival, and reproduction.	3.4.1.1.1
	Identify common groups of plants and animals using observable physical characteristics, structures and behaviors.	3.4.1.1.2
Offspring are generally similar to their parents, but may have variations that can be advantageous or disadvantageous in a particular environment.	Give examples of likenesses between adults and offspring in plants and animals that can be inherited or acquired.	3.4.3.2.1
	Give examples of differences among individuals that can sometimes give an individual an advantage in survival and reproduction.	3.4.3.2.2

Cross Curricular Standards

Standard	Benchmark	Code
Use information gained from illustrations (e.g. maps, photographs) & the words in text to demonstrate understanding of the text.	(Reading Standard under Integration of Knowledge and Ideas)	3.2.7.7

WHAT DO I NEED TO KNOW?



I can sort animals into groups based on their characteristics.



I can explain how baby animals are the same as their parents, and also how they may be different.



I can explain what characteristics animals have that help them live in their habitat.



I can give examples of adaptations animals have to make them more likely to survive than others.

Hypothetically Thinking

- What do you know about animals and what they need to survive?
- What do you know about animal groups and what the animals in each group have in common?
- What do you wonder about animals with backbones (vertebrates) and animals without backbones (invertebrates)?
- What do you know about the characteristics of animals and how they help them grow and survive?

VOCABULARY INVESTIGATION

Adapt - change

Acquired - traits that are from experiences in the world - they are not inherited or passed on (examples: scimathmn.org)

Carnivore- an animal that eats meat

Characteristics - a special quality or appearance that makes an individual or group different from others (www.wordcentral.org)

Cold Blooded: the temperature of a cold blooded animal will change with the temperature around the animal. The temperature of the animal is cooler when it is cool and warmer when it is warm.

Features - parts or details that stand out (Merriam Webster Word Central - Student Dictionary)

Herbivore - an animal that eats plants

Inherited - traits that are passed down from parents

Invertebrates - animals without backbones

Migrate - to move from one place to another based on the seasons

Omnivore- an animal that eats plants and meat

Reproduction - when plants make more plants like themselves or animals make more animals like themselves

Species -a group of animals or plants that are similar and can produce young animals (Merriam Webster)

Survive - continue to live

Trait - a quality that sets one plant or animal apart from another

Vertebrates- animals with backbones

Warm Blooded: the temperature of a warm blooded animal stays about the same all the time. The temperature does not change with the temperature outside the animal.

Living Things



Living Things

What is a living thing?



Living Things

Are all living things the same? What are two main groups of living things?



Click here to find out what you know about categorizing living things:



Plants and Animals



Plant and Animal Differences



00nz/gam animaldif.ht



Characteristics are ways to describe something. What are some **characteristics** that animals have?

Record your ideas in your science notebook.

Animals



With your partner, brainstorm the names of as many animals as you can in a minute. Are there any ways you can group the animals?

Record them in your science notebook.



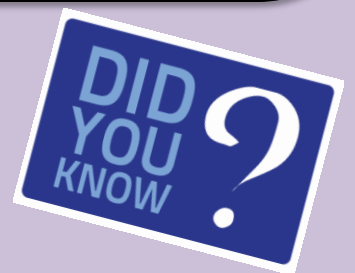
Animal Classification

Online option: This interactive site has two parts - the first gives facts about each animal group and what makes them unique. The second is a sorting activity which gives facts about the animal groups. There are two settings - one is the African Savannah (no fish or amphibians) and the other is the North American Forest (no fish).



Animal Sort -

Sort a stack of animal cards or pictures into groups. Label the groups. (This could be preceded by a brief introduction of the 6 animal groups or it could be done to see what students know about the animal groups, or to discover what they choose to sort by - legs, color, animal group, etc.)



There are over 1,000,000 different kinds of animals on our planet. One way to classify animals is into groups that have certain **characteristics**.

Animal Classifications



Click here for a Brainpop Jr. video on classifying animals.

The six groups we will study are: Mammals, Reptiles, Amphibians, Birds, Fish, and Insects.

Another way to classify animals is to decide if they are vertebrates or invertebrates. Mammals, Reptiles, Amphibians, Birds, and Fish are vertebrates? Since almost all animal groups are made up of vertebrates, it is amazing that there are far more invertebrates in the world. How can this be? Keep wondering and investigating and see if you can answer this question at the end of the chapter.



Click to see a Scholastic Study Jam on vertebrates. This slide show gives information on the five vertebrate groups and a test yourself online quiz.

There is vocabulary - when you click on the word it gives the definition.



Scholastic Study Jams Invertebrates- this does not introduce insects, but does introduce worms, jellyfish, etc. It is a slide show with a test yourself section following it. Vocabulary words are included - when you click them, it gives the definition.

Mammals-

What makes a mammal a mammal?

Mammals have these **characteristics** in common:

1. Most mammals have live babies.
2. Mammals are **warm blooded**.
3. Mother mammals give milk to feed babies.
4. Mammals have fur or hair.
5. Most mammals have teeth.

The blue whale is the largest mammal



The bumblebee bat (Kitti's Hognosed Bat) is the smallest mammal.

There are 4,000 to 5,000 species of mammals.



Mammal Video
(Discovery Channel 3:45)



Click here to learn
more about
mammals.

Reptiles

What makes a reptile a reptile?

Reptiles have these characteristics in common:

1. Reptiles are cold blooded.
2. Reptiles have scales.
3. They hatch from eggs.
4. Many people think that reptiles are slimy, but this is not the case. They have dry skin.

Reptiles can be as small as one inch long, like the dwarf gecko.



Reptiles can weigh as much as a ton, like the saltwater crocodile.



Reptiles include snakes, crocodiles, alligators, turtles, and lizards. They are found on every continent except Antarctica.



There are more than 8,000 species of reptiles.



Click here to learn more about reptiles.



Click here to view a video on reptiles.

(Discovery Channel 3:45)

Amphibians

What makes an amphibian an amphibian?

Amphibians have these **characteristics** in common: Amphibians are **cold blooded** animals. They hatch from eggs. They are often thought of as having two lives. This is because they are born in water, and end up living on land. They start out breathing through gills, and then develop lungs. They also start out with fins and tails, and then grow legs. They can breathe through their skin, which is moist and bumpy. The adults are mainly **carnivores**, while the larvae are mainly **herbivores**. They are **vertebrates**. There are over 7,000 amphibian **species**.

Types of Amphibians: Frogs (toads are a type of frog), Salamanders, Caecillians



[Click here to view/hear an amphibian song \(1:10\)](#)



[Click here for information on amphibians and animals from all animal groups](#)

There are also many videos on individual amphibians on National Geographic for Kids.

BIRDS



What makes a bird a bird?

Birds have these **characteristics** in common:

They are the only animal group with feathers. They also have wings and hollow bones. Can you guess what these **characteristics** help birds do? Yes! They help them fly. Penguins, Kiwi, and Ostriches (the biggest birds) are exceptions and do not fly.

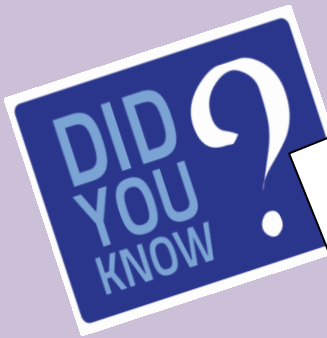
Birds lay eggs and are **warm blooded**. They are also **vertebrates**. They have two legs. They also have beaks. There are about 7,000 bird **species**.

Many birds **migrate**, which means they move from one place to another based on the seasons. Some carry messages, and some even help people hunt.



[Click here to learn more about birds.](#)





A group of fish is called a school!

A seahorse is a fish.



Fish

What makes a fish a fish?

Fish have these **characteristics** in common:

Fish are cold blooded vertebrates that spend their whole life in the water.

Fish breathe through gills.

There are around 3,000 species of fish.



Click here to learn more about fish.



Click here for National Geographic Fish videos.

Insects

have more species than any other type of animal.

There are over one million (and some experts believe there may be as many as 30 million).



Insects have these characteristics in common: They are invertebrates, so they have a hard external covering instead of a skeleton.

They also have three body parts, a head, a thorax, and an abdomen.

They have antennae on their heads. They have 6 legs. Some have wings.



Butterflies, beetles, flies, grasshoppers, centipedes, moths, bees, wasps, ants, and termites are all insects.



[Insect Video \(with captions\) 3:54 - general -traits of insects](#)



[Insect Video - 3:35 - specific information on insects](#)

Differences in Animals That Help Them Survive

Animals may have advantages in survival based on the color of their covering. If an animal has coloring that blends in with its environment, it has a better chance of surviving than a similar animal with a coat that doesn't blend in. An example would be a fawn - if its coat blends into the brush around it, it has a good chance of being safe. If that same fawn is albino (its fur is white), it can be more easily seen by an animal looking for lunch.



In this picture, you can see how the fawn blends into the trees and grass better than the doe (mother deer).

Animals may have advantages for **survival** based on their physical **characteristics**. If an animal is able to run or swim faster than other animals of the same kind, it has a better chance of **surviving** than one that runs more slowly.

There are many **characteristics** that baby animals **inherit** from their parents. These could include their scales, shell, wings, color of their fur or skin, and/or how many legs they have.

There are also characteristics that baby animals **acquire** as they grow. These could include their weight.

Try one or more of these activities again. What did you learn about animals?
Please record your thoughts in your science notebook.



Animal Sort -

Sort a stack of animal cards or pictures into groups. Label your groups.



Animal Classification Online option: This interactive site has two parts - the first gives facts about each animal group and what makes them unique. The second is a sorting activity which gives facts about the animal groups



With your partner, brainstorm the names of as many animals as you can in a minute. How many ways you can group the animals?

Record them in your science notebook.

CONCLUSIONS

What do you know about...

✓ why there are more
invertebrates than vertebrates?



✓ how to sort animals into groups based on their traits?

✓ why animals have different adaptations?

✓ what traits of animals can help them survive?

What do you wonder...

ADDITIONAL RESOURCES

Animal videos from Learn 360:

Amphibians: Frogs, Toads, and Salamanders

Birds

Diversity

First Films: Mammals

Fish

Insects

Reptiles

Science: Animals with Backbones

What's an Animal?

Trade Books:

How Animal Babies Stay Safe - Mary Ann Frasier

I Didn't Know that Whales Can Sing - Kate Petty

One Tiny Turtle - Nicola Davies

Snakes are Hunters - Patricia Lauber

Amphibians, Water-to-Land Animals - Laura Purdie Salas

Amphibians - Melissa Stewart

Growing Frogs - Vivian French

From Egg to Chicken - Dr. Gerald Legg

What's It Like to Be a Fish? - Wendy Pfeffer

Survival of the Salmon (Adventures of Riley) - Amanda Lumry and Laura Hurwitz

Bugs are Insects - Anne Rockwell

Ant Cities - Arthur Dorros

From Caterpillar to Butterfly - Deborah Heiligman

Are You a Dragonfly?, Are You a Ladybug? Are You a Grasshopper-Judy Allen and Tudor Humphries

The Magic School Bus - Explores the World of Bugs - Nancy White

Caterpillars and Butterflies - Stephanie Turnbull

MN [Frameworks](#) for Science: This site includes vignettes, common misconceptions, suggestions for assessment and differentiation, along with the standards and benchmarks. It is very helpful and has suggestions for adapting activities for all students. It also explains the standards very well and offers connections to other subject matter.

SCIENCE NOTEBOOK PAGE

[illegible]