



Look inside for information on cold- and warm-blooded animals!



# Jr. Animal Scientist

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Are you  
**COLD**  
OR

Are you  
**WARM?**



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Whether it is sunny and hot outside or there is a snowstorm and it is very cold, warm-blooded animals have body temperatures that usually stay the same.



Photos: iStock / LuCaAr

# What is the difference between a cold-blooded and warm-blooded animal?

## Warm-blooded animals

- Warm-blooded animals have to keep their temperature the same no matter how cold it is outside.
- They have to eat food to generate heat for themselves.

## Cold-blooded animals

- Cold-blooded animals do not have to maintain their temperature because they use the environment to keep warm.
- With the exception of birds and mammals, who are warm-blooded, most of the animal kingdom is cold-blooded.

# How do animals stay warm in the winter?



**Warm blooded animals** use energy from what they eat to keep themselves warm when it's cold outside. So it is really important that animals have enough food to maintain their body weight and keep themselves warm.

**The moose** is a warm blooded animal that lives across the northern hemisphere. They have a large body that helps keep the heat in and help them stay warm. In addition, the moose will seek shelter in softwood areas from the wet snow and frigid wind. Although they may be cold, they still have to eat throughout the winter. Their long legs allow them to browse through snow as high as 36 inches!

**Cold-blooded animals** are not capable of generating energy from eating. They use the sun to keep them warm and give them energy.

**The lizard** is a cold blooded animal and live in all parts of the world. The lizard that lives in the cold, snowy areas must do something to keep warm during the winter. Because they cannot regulate their body temperature on their own, and require help from the environment, the lizard will hide under ground or a tree during the winter. During this time they will enter a state of dormancy called brumation or hibernation.



Lizard partially exposed during hibernation



Cold-blooded animals, like reptiles, amphibians, and fish, become hotter and colder, depending on the the temperature outside. For example, when the sun sets at night, their bodies are cooler because it is less warm outside. When the sun is out, however, their bodies soak up the heat and become warmer.



Photo: Shallotte River Swamp Park

**Fun Fact:** Alligators can live in the water when it freezes. They stick their noses out of the frozen water so that they can breathe and go into a type of hibernation called brumation!



## What is hibernation?

Both warm-blooded and cold-blooded animals hibernate. When an animal hibernates, their entire body slows down so that they don't use energy that is needed to stay warm. A lot of body fat has to be stored by the animal to hibernate for a long time.



Photo: iStock / steverts

## Do all animals need blankets?

Because warm-blooded animals can keep themselves warm by eating more food, most of them do not need a blanket. Although, sometimes there are a few animals that don't grow very much fur and may need the extra warmth from the blanket.



# Why is water so important during the winter?

If an animal doesn't drink enough water, then they will eat less food. Because we know they need extra food to keep warm, it is important that they also have enough water to keep them hydrated.

**Fun Fact:** Did you know that if the water is warmer that an animal will drink more? If the temperature of the water goes down even 5°C they will decrease how much water they drink!



Photo: iStock / Lemanieh

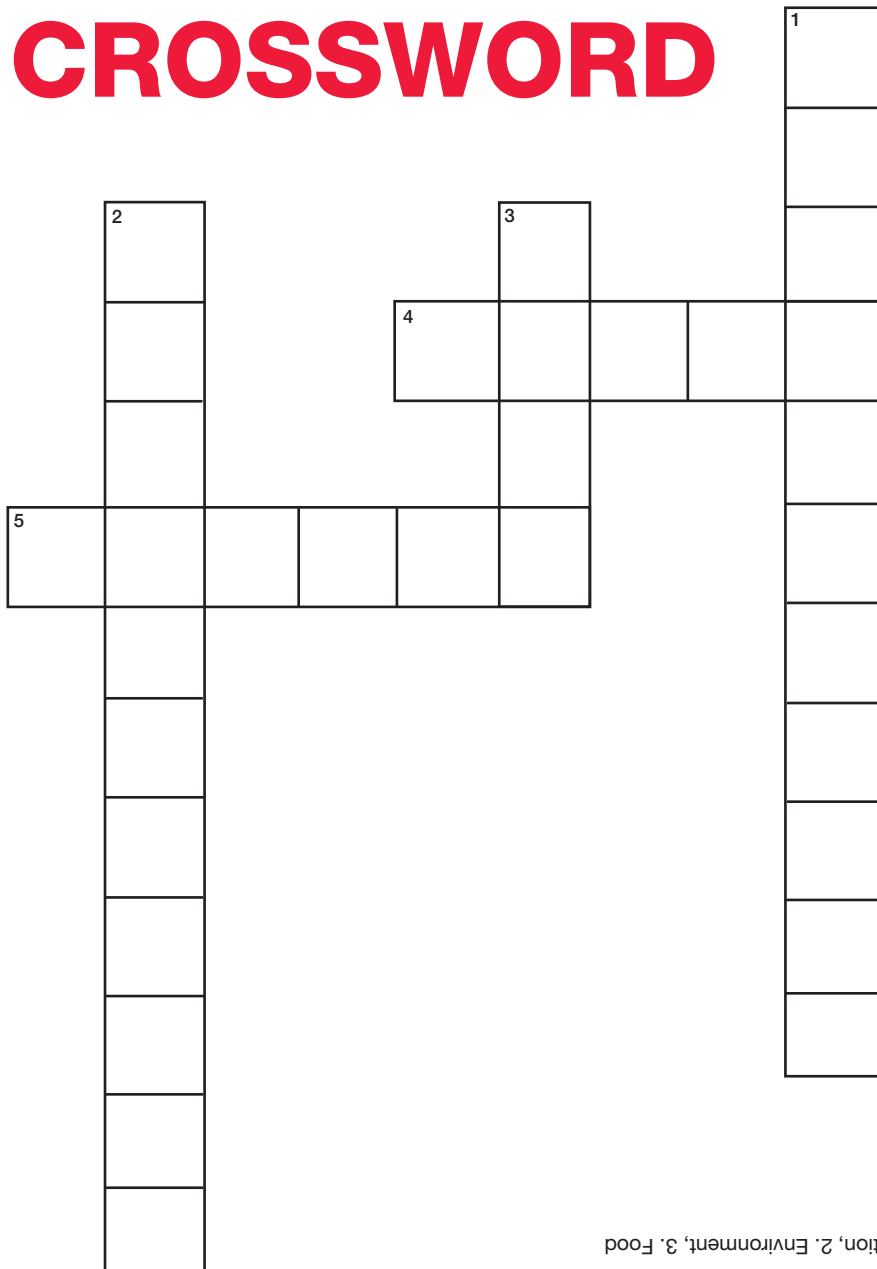
# Can you guess which animals are warm-blooded and which are cold-blooded?

Write your answer below the animal



Photos:  
iStock / GlobalP (horse, frog, snake, cow)  
iStock / amwu (turtle); iStock / anankml (kangaroo)  
iStock / GroblerduPreez (elephants)

# CROSSWORD



## Across

- This animal has long legs that allow them to browse through snow
- This animal must hide under ground or in a tree during winter to stay warm

## Down

- During this time an animals entire body slows down to conserve energy
- Cold-blooded animals must use this to keep warm
- What a warm-blooded animal uses to generate heat for themselves

ANSWERS Across: 4. Moose, 5. Lizard, Down: 1. Hibernation, 2. Environment, 3. Food



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