

HIBERNATION and MIGRATION



NONFICTION READING & WRITING

2 Migration

When animals migrate, they move between different times of the year. Why do animals migrate?

1. To find a warmer place to spend the winter.
2. To find food and water during the winter.
3. To have their babies or lay their eggs.

Many types of animals migrate, including birds, fish, and mammals. Animals may migrate over land or water.

Animals may migrate a short distance or a long distance. Some animals may migrate a few miles. Other animals may migrate thousands of miles. Sea turtles can travel 10,000 miles a year.

Hibernation and Migration Fact or Opinion

Facts	Opinions
A snake is cold-blooded.	I would rather hibernate than migrate.
Bears and bats are mammals.	Geese honk a lot when they are falling south.
Frogs take oxygen from the water to breathe during hibernation.	Bear cubs are the cutest animal.
Arctic terns migrate further than monarch butterflies.	My sister sleeps more than a hibernating animal.

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1

Habitats

A habitat is a place where plants and animals live. It is their home. There are many kinds of habitats. These include the desert, rain forest, polar region, pond, ocean and prairie.

All living things have needs. These include food, water and shelter. A living thing can only survive in a habitat that meets these needs.

Every living thing needs a specific type of habitat to live. For example, snakes are cold blooded animals. This means they need to live in a warm place to survive. They can not live in a cold habitat like the polar region.

Animals have special features to help them survive in their habitat. A polar bear has thick fur to live in the extreme cold.



1

Reading response questions

1. List 3 different types of habitats.

2. Why would a living thing have to move to a different habitat?

3. Why can polar bears live in a cold habitat?

2

Migration



When animals migrate, they move between two habitats at different times of the year. Why do animals migrate?

1. To find a warmer place to spend the winter.
2. To find food and water during the winter months.
3. To have their babies or lay their eggs.

Many types of animals migrate, including birds, fish, insects and mammals. Animals may migrate over land, in the air or through the water.

Animals may migrate a short distance. Some frogs will move only a few miles. Other animals may migrate over a long distance. Sea turtles can travel 10,000 miles a year as they search for jellyfish.

2

Reading response questions

Move the magnifying glass over the letter of the correct answer.

1. What is the main idea of this passage?

- a. Only birds migrate
- b. Animals migrate in different ways for different reasons
- c. All animals migrate long distances

2. What is one reason animals do not migrate?

- a. To find a warm place to spend the winter
- b. To make sure they have food to eat over the winter months
- c. They do not like the habitat they live in

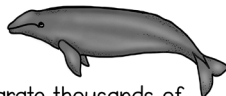
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Monarch Butterflies



Monarch butterflies are orange and black. They fly south from Canada and the northern United States. They head to Mexico and the southern United States where it is warmer, over 2,000 miles. Thousands of butterflies will gather on one tree to protect themselves from the wind and rain. This makes the tree look like bright orange.

Gray Whales



Gray whales live in the Pacific Ocean. They migrate thousands of miles a year, more than any other mammal on the planet. They travel in groups called pods. They leave from the waters of Alaska and travel south toward California and Mexico. Females have their babies during this time and only return north when the babies are ready for the trip.

3

Reading response questions

1. How do monarch butterflies protect themselves from wind and rain?

2. What ocean do gray whales live in?

3. When do gray whales decide to swim back north?



4

Birds



When geese migrate south, they fly in large groups and form a V shape in the sky. They fly this way to save energy which makes it easier for them to fly long distances. When the lead goose gets tired, another goose will take its place. Geese will follow the same path or route every year. If the wind is just right, they can travel 1,000 miles a day.

The arctic tern is a medium-sized seabird that has the longest migration of any animal. It will fly 21,000 miles a year one end of the earth to another. They spend spring and summer in the Arctic. In late August they begin the long journey south to Antarctica. They spend most of their lives in the air and see more daylight than any other animal.

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Reading response questions

1. How do geese save energy during their long journey?

2. What happens when the lead goose becomes tired?

3. Why do arctic terns spend most of their life in the air?

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Animal Hibernation

Some animals sleep through the cold winter months. This is called hibernation. Most animals hibernate because there is not enough food for them to eat over the winter. An animal who hibernates must lower their body temperature. They slow down their breathing and their heartbeat. They do this to save energy. They can live off the fat stored in its body over the winter.

How do animals get ready to hibernate? First the animal will eat a lot, so they have enough fat to last them through winter. An animal can lose half its body weight while it hibernates. Then, the animal will find a place to sleep for the cold months ahead. After their home is ready, they will curl up and wait for spring to arrive.

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Reading response questions

Move the magnifying glass over the letter of the correct answer.

1. What would be a good title for this passage?

- a. How animals hibernate
- b. Signs of winter
- c. List of hibernating animals

2. List two ways animals conserve energy while hibernating.

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Hibernating Mammals



A mammal is an animal that is born live (not from an egg), has fur and whose babies drink their mother's milk. Hibernating mammals include bears, chipmunks, bats, groundhogs and mice.

Brown bears get ready to hibernate by eating. Some bears will gain up to 30 pounds a week. Bears will hibernate in a den or cave. A female bear will give birth to her cubs during the winter. The cubs weigh less than one pound. The cubs will survive by drinking their mother's milk.

Bats will find a cave to spend the winter in. Their heartbeats slow down to just a few beats a minute. They may only breathe once an hour. Bats usually wake up a few times each winter to drink.

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Reading response questions

1. List three characteristics of mammals.

2. Bats and bears are both mammals that hibernate.

List one way their hibernation is the same.

List one way their hibernation is different.

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7

Hibernating Insects

Some insects hibernate to stay warm during the winter, while many others die before the weather becomes cold. Insects usually hibernate in large groups, sometimes in the thousands. These insects include mosquitoes, ladybugs, moths and butterflies. Many insects will come into people's homes to escape the cold or find a cave, burrow or a hollow log. Many insects do not truly hibernate, they stay dormant until the weather warms up. Dormant means they are less active.

- Fire ants tunnel deep underground to stay warm.
- Ladybugs will gather in tree trunks, under leaves or logs.
- Male mosquitoes die at the end of summer. Female mosquitoes will hibernate in hollow logs.



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Reading response questions

Move the magnifying glass over the letter of the correct answer.

1. Which of these words is an antonym for dormant?
 - a. quiet
 - b. resting
 - c. busy
2. What does the word hollow mean?
 - a. not solid, empty
 - b. a flat, grassy area
 - c. the corner of a small room
3. List two places insects hibernate.

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8

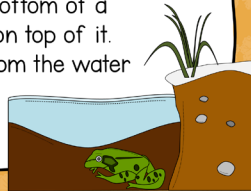
Turtles



Many turtles spend the winter at the bottom of a pond. They will bury themselves underneath the mud and leaves. They slow their breathing down and need very little oxygen to survive. The oxygen they do need they get from the water. It goes into their bodies through their skin. They stay insulated under the mud so they will not freeze.

Frogs

Water frogs will also spend the winter at the bottom of a pond. They do not burrow in the mud but stay on top of it. Unlike turtles they need to take more oxygen from the water to breathe. They may even swim from time to time.



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Reading response questions

1. How do turtles get enough oxygen while they are hibernating?

2. What is one difference between a turtle's hibernation and a frog's hibernation?

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9

Migration Journeys

Animal	Distance
Monarch Butterfly	2,000 miles
Gray Whales	12,000 miles
Arctic Tern	11,000 miles
Caribou (Reindeer)	1,200 miles

Glossary

- **Cold blooded:** an animal that cannot control its body temperature
- **Dormant:** less active
- **Habitat:** where an animal lives
- **Hibernation:** to sleep through the winter
- **Insulated:** prevent a loss of heat
- **Mammal:** animal that has fur, is born live and drinks milk from its mother
- **Migration:** moving from one place to another when seasons change
- **Pods:** a group of whales



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Hibernation and Migration Fact or Opinion

Facts

A snake is cold-blooded.

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Arctic terns migrate further than monarch butterflies.

Opinions

I would rather hibernate than migrate.

Geese honk a lot when they are falling south.

Bear cubs are the cutest animal.

My sister sleeps more than hibernating.



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Migration - KWL Chart

K What I already know about migration	W What I want to learn about migration	L What I did learn about migration

Hibernation - KWL Chart

K What I already know about hibernation	W What I want to learn about hibernation	L What I did learn about hibernation

Hibernation and Migration True or False



Read each statement. Decide if it is true or false. Move your answer.



True	A habitat is where plants and animals live.		Animals are active during hibernation.
	All animals migrate long distances.	False	Monarch butterflies are yellow and black.
	Many insects hibernate in people's homes.		Sea turtles migrate over 10,000 miles a year.
True	Bears and bats hibernate in caves.	False	Geese fly in an X shape in the sky.
False	Gray whales migrate along the Atlantic coast.	True	The arctic tern migrates from one end of the earth to the other.

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Read each statement. What animal does it describe. Move it to the box.

In the winter I sleep in a cave or den.

Bear



I fly south in a group. We form a V shape in the sky.

Geese



I am a cold-blooded animal that sleeps in a log or your home.

Ladybug



I will spend most of my life flying from the North to the South Pole.

Arctic tern



I spend the winter at the bottom of a lake or pond.

Turtle

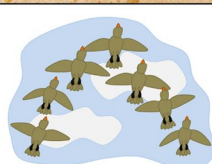
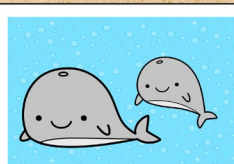


I have the longest migration of any mammal.

Whale



Look at each picture. Write one sentence describing the picture.



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