

Epic Animal Journeys

TEACHER'S GUIDE

Animal migrations are some of the most epic journeys on Earth, with some animals traveling thousands of miles (kilometers) and overcoming extreme obstacles. Epic Animal Journeys is an engaging series that examines extraordinary animal migrations on land, in water, and by air, as well as some unusual or unintended journeys made by invasive species or animals wandering far from their usual habitats. Each book highlights surprising facts about each animal's journey and examines how humans impact their routes.

The lesson plans in the Epic Animal Journeys Teacher Guide are tailored towards students in grades four to six. These lessons require that students work both independently and collaboratively to develop an understanding of the migration patterns of animals in the world around them. Students will learn how animals migrate by air, land, and water, and will also explore other unusual migration journeys animals may take. Students will be able to share their new learning with their classmates in a variety of different ways as they progress through each lesson.

The lesson plans in this guide follow a sequential order that works to scaffold student understanding. Reproducible worksheets and assessment tools accompany each lesson plan. The titles in *Epic Animal Journeys* include:

Epic Migrations by Air
Epic Migrations by Land
Epic Migrations by Water
Unusual Animal Journeys

PACING CHART AND VOCABULARY

Lesson Plan Title	Pacing	Vocabulary
Moving by migration	1 class period*	habitat migration
How do animals migrate?	2-3 class periods	beneficial climate change ecosystem endangered generations habitat migration migration corridor predators prey reproduce sustainably
Show what you know about animal migrations!	3-4 class periods	beneficial climate change ecosystem endangered generations habitat migration migration corridor predators prey reproduce sustainably

* 1 class period = 40-60 minutes

ACCOMMODATION STRATEGIES

Accommodations provide equal access to learning and equal opportunity to demonstrate what is learned. Accommodations allow a student access to the subject or course without any changes to the knowledge and skills the student is expected to demonstrate.

Educators are encouraged to adapt the instructional approach, activities, and assessments included in this guide to best meet the diverse interests, needs, and abilities of their students. Possible accommodations may include:

Instructional Strategies

- Break tasks into parts with accompanying time lines
- Provide extra time for processing of oral information.
- Pair oral instructions with visual ones (writing or symbols)
- Pre-teach new vocabulary and regularly review previously taught vocabulary
- Provided model of completed work
- Frequently check with the student to get him/her started
- Provide oral and visual instructions and examples
- Provide a checklist of tasks for the student

Environmental Strategies

- Proximity to teacher
- Strategic seating
- Flexible or mixed-ability grouping
- Provide an alternative setting for learning that is free from visual and auditory distractions.

Assessment Strategies

- Build in extra time to allow student to process questions asked and answers given
- Provide written instructions and rubrics for assignments
- Offer a choice of assessment activities so that the student can choose one suited to their strengths
- Space out or extend assignments to prevent student feeling overwhelmed
- Reduce the number of tasks used to assess skill or concept
- Allow students to use assistive devices or technology

LESSON 1

Moving by migration

Curriculum Correlations

Common Core State Standards

RI.4.4
RI. 5.1, 5.2, 5.3, 5.4
RI. 6.1, 6.4

Ontario Language Arts

Grade 4 - Reading
Overall Expectations: 1, 3
Specific Expectations: 1.1, 1.4, 1.5, 1.6, 3.1, 3.2, 3.3
Grade 5 - Reading
Overall Expectations: 1, 3
Specific Expectations: 1.1, 1.4, 1.5, 1.6, 3.1, 3.2

Materials

- Chart paper and markers
- Epic Animal Journeys series:
Epic Migrations by Land, pg. 4-7
Epic Migrations by Air, pg. 4-7
Epic Migrations by Water, pg. 4-7
Unusual Animal Journeys, pg. 4-7
- *Moving by Migration Exit Card*

Setting the Stage

Begin the lesson by organizing students into groups of approximately 3-4 students. Ask each group to find a spot somewhere in the classroom where they can work collaboratively.

Once students are seated with the rest of their group members, provide each group with a piece of chart paper and some markers. Each piece of chart paper will have the word "migration" written in the middle of the page. Using the markers provided, ask students to record words, phrases and images in a word web that they can use to try to explain/define the word migration.

Once students have had time to brainstorm, ask each group to share one or two ideas that they recorded from their discussion. As students share their ideas, compile a large word web of responses encompassing all of their ideas. Once each group has had time to share, explain to students that **migrations are regular journeys made by animals for a variety of different reasons.**

Activity

In their same groups, ask students to turn to the blank side of their chart paper and divide it into two separate columns. In the first column, ask students to record animals in their local habitat that migrate. In the second column, ask students to record animals in the greater world community that migrate. Once students have recorded their ideas, have a class discussion about the different animals that migrate. Without labelling any categories, record the animal names that they share by grouping animals that travel by land, air, and water separately. If the names of animals that do not fit into any of the three categories are shared, group those together.

Ask students to look at the lists of animals. Draw their attention to each category and ask why you may have grouped the animals in this way. If needed, prompt students to consider the way that these animals migrate. Guide students in identifying that the animals listed migrate by land, air, or water. For the last category, explain that some animals migrate in their own way, and that they will have the opportunity to explore some of these unusual migration patterns in the upcoming lessons (if being completed sequentially as recommended).

Objectives

Students will be able to:

- Define and give examples of migration
- Identify animals in their local community that migrate (if applicable)
- Identify animals across the globe that migrate
- Understand different methods by which animals migrate

Extensions

- ▶ If students are having difficulty identifying animals in the local habitat and global community, students can use technology to aid them in their research. If students complete their reading in advance of the rest of the class, they can choose another book from the series to learn more about another type of migration.
- ▶ You can also ask students to discuss what migration type is most prominent in their local community (if applicable). Ask students to brainstorm why this might be (and highlight geographical features that may impact migration patterns of animals in your local community).

Wrap-Up

Pass out one book from the Epic Animal Journeys series to each student in the class, ensuring that there is approximately the same number of each title being passed out. Once the books have been passed around, ask students to independently read pg. 4-7 in their assigned book from the series.

Once they have finished reading their assigned section, ask students to complete the *Moving by Migration Exit Card* about today's lesson.

Assessment

Assess student understanding during group work task through observation. Travel around the classroom to each group to ensure students are on task, and that students understand the content being addressed. Clarify misunderstandings as needed. Collect *Moving by Migration Exit Card* from each student and check for completion.

Name: _____ Date: _____

Moving By Migration Exit Card

The type of migration that I read about: (circle one)

Land Air Water Unusual

Two interesting facts I learned about this type of migration are:

1. _____

2. _____

Thank you!

Name: _____ Date: _____

Moving By Migration Exit Card

The type of migration that I read about: (circle one)

Land Air Water Unusual

Two interesting facts I learned about this type of migration are:

1. _____

2. _____

Thank you!

LESSON 2

How do animals migrate?

Curriculum Correlations

Common Core State Standards

RI. 4.2, 4.3, 4.9, 4.10

RI. 5.1, 5.2, 5.3, 5.4, 5.9

RI. 6.1, 6.4, 6.5

Ontario Language Arts

Grade 4 - Reading

Overall Expectations: 1, 3

Specific Expectations: 1.1, 1.4, 1.5, 1.6, 3.1, 3.2, 3.3

Grade 5 - Reading

Overall Expectations: 1, 3

Specific Expectations: 1.1, 1.4, 1.5, 1.6, 3.1, 3.2

Grade 6 - Reading

Overall Expectations: 1, 3

Specific Expectations: 1.1, 1.4, 1.5, 3.1, 3.2

Materials

- Chart paper and markers
- *Migrating Animals Card*
- *Gallery Walk Handout*
- *Gallery Walk Checklist*
- Epic Animal Journeys series:
 - Epic Migrations by Land*, pg. 8-27
 - Epic Migrations by Air*, pg. 8-27
 - Epic Migrations by Water*, pg. 8-27
 - Unusual Animal Journeys*, pg. 8.27
- Classroom Decorations/Costumes (if applicable)

Objectives

Students will be able to:

- Understand how different animals migrate.
- Create a visual display of their learning.
- Recognize the benefits and challenges of different migration patterns.

Setting the Stage

Ask the class to think back to the last lesson and to try to remember the definition of migration. Ask students to raise their hand and share what they remember. Record the definition of migration on the board.

Ask students if they remember the different ways that animals may migrate. Ask students to raise their hand and share their ideas until “land”, “air”, “water”, and “unusual” have been identified. Based on their reading in the last class, ask students to share what they know about each type of migration until each has been described. Record this information under each category.

Activity

Ask students to find a partner. Once they have found a partner, have them stand beside their partner somewhere in the classroom. Once all students have a partner, hand out a *Migrating Animals Card* to each partnership. Once they have been assigned an animal, students must each get a copy of the Epic Animal Journeys book affiliated with their animal. Explain to students that this is the animal they will be researching with their partner for this lesson.

Explain to students that they can find more information about their assigned animal by looking them up in the table of contents to find the pages that tell more about their animal’s journey. Explain to students that they will read through their assigned section with their partner, and will create a summary of the information about their animal and its migration journey.

Explain to students that they will each be given a piece of chart paper to record the important information about their animal. Their chart paper must include the following information about their animal:

- Name, photo, type of migration, time/season of migration, location of migration, and obstacles faced.

Allow students to work independently with their partner on completing their summary. Travel around the classroom to answer any questions that students may have, and to ensure that students are on task.

Extensions

- ▶ To make the gallery walk more engaging, students can dress up like explorers, or you can decorate the classroom to reflect the environment that some of the animals being displayed might live in. You could also rename the gallery walk as a “Zoo Tour”, and have each summary display classified as an “exhibit”. Be creative!

Wrap-Up

Once all groups have finished their summaries, display the chart paper around the classroom so that students can participate in a gallery walk. Be sure to group summary displays with the same migration method in the same area.

Each student will be given an *Gallery Walk Handout*, on which they must record information about one animal from each of the other three migration categories (i.e. if a student researched an animal who migrates by air, they must complete the *Gallery Walk Handout* using an animal that migrates by water, by land, and an animal with an unusual migration method).

Ask students to imagine that they are observing this animal’s migration pattern as they complete their gallery walk. On their *Gallery Walk Handout*, ask students to identify the following information:

- Name of the animal, migration method, where the animal migrates to and from, reason(s) why the animal migrates, and an obstacle that the animal must overcome when they migrate.

Students will then submit their completed *Gallery Walk Handout* to be evaluated for completion.

Assessment

Collect each *Gallery Walk Handout* and assess for completion/understanding.

Migrating Animals Card

Monarch Butterfly
Epic Migrations by Air



Bar-tailed Godwit
Epic Migrations by Air



Marmalade Hoverfly
Epic Migrations by Air



Whooping Crane
Epic Migrations by Air



Canada Goose
Epic Migrations by Air



Porcupine Caribou
Epic Migrations by Land



Red Crab
Epic Migrations by Land



Blue Wildebeest
Epic Migrations by Land



Emperor Penguin
Epic Migrations by Land



Pronghorn
Epic Migrations by Land



Leatherback Turtle
Epic Migrations by Water



Humpback Whale
Epic Migrations by Water



Northern Elephant Seal
Epic Migrations by Water



Chinook Salmon
Epic Migrations by Water



American Eel
Epic Migrations by Water



Australian Plague Locust
Unusual Animal Journeys



Grey Squirrel
Unusual Animal Journeys



Barred Knifejaw
Unusual Animal Journeys



Snowy Owl
Unusual Animal Journeys



Saltwater Crocodile
Unusual Animal Journeys



Zebra Mussel
Unusual Animal Journeys



Red Crossbill
Unusual Animal Journeys



Gallery Walk Handout

Name: _____ Date: _____

Gallery Walk #1

Name of Animal: _____

Migration Method: _____

Where does the animal migrate to and from? _____

Reason(s) why the animal migrates: _____

Obstacle the animal must overcome when migrating: _____

Gallery Walk #2

Name of Animal: _____

Migration Method: _____

Where does the animal migrate to and from? _____

Reason(s) why the animal migrates: _____

Obstacle the animal must overcome when migrating: _____

Gallery Walk #3

Name of Animal: _____

Migration Method: _____

Where does the animal migrate to and from? _____

Reason(s) why the animal migrates: _____

Obstacle the animal must overcome when migrating: _____

Gallery Walk Assessment Checklist

Student's Name: _____ Date: _____

Criteria	Yes	No
Student identified 3 animals with different migration methods.		
Student identified the location of each migration route.		
Student explained the reasons why each animal migrates.		
Student considered one or more obstacles encountered by each migrating animal.		

Additional comments:

Gallery Walk Assessment Checklist

Student's Name: _____ Date: _____

Student identified 3 animals with different migration methods.		
Student identified the location of each migration route.		
Student explained the reasons why each animal migrates.		
Student considered one or more obstacles encountered by each migrating animal.		

Additional comments:

LESSON 3

Show what you know about animal migrations!

Curriculum Correlations

Common Core State Standards

RI. 4.2, 4.3, 4.9, 4.10

RI. 5.1, 5.2, 5.3, 5.4, 5.9

RI. 6.1, 6.4, 6.5, 6.7

Ontario Language Arts

Grade 4 - Reading

Overall Expectations: 1, 3

Specific Expectations: 1.1, 1.4, 1.5, 1.6, 3.1, 3.2, 3.3

Grade 5 - Reading

Overall Expectations: 1, 3

Specific Expectations: 1.1, 1.2, 1.4, 1.5, 1.6, 3.1, 3.2

Grade 6 - Reading

Overall Expectations: 1, 3

Specific Expectations: 1.1, 1.2, 1.4, 1.5, 1.6, 3.1, 3.2

Grade 6 – Oral Communication

Overall Expectations: 1, 2

Specific Expectations: 1.1, 1.2, 1.3, 2.3, 2.4, 2.7

Materials

- Class set of computers with Internet access
- Copies of articles, encyclopaedias, and/or magazines about animal migrations
- *Show what you know Rubric*
- Epic Animal Journeys series:
 - Epic Migrations by Land*, pg. 8-27
 - Epic Migrations by Air*, pg. 8-27
 - Epic Migrations by Water*, pg. 8-27
 - Unusual Animal Journeys*, pg. 8.27

Objectives

Students will be able to:

- Understand the migration patterns of a specific animal
- Independently research their chosen topic
- Share their learning through the development of a creative informational tool
- Present their work in an engaging way

Setting the Stage

Ask students to write down the names of three different animals they have learned about recently that interest them. Ask students to share a few of their answers.

Explain to students that this next activity will require that they do some independent research, and that they think creatively! Ask students to choose one animal that migrates (can be from their list or another animal they think of) that they would like to learn more about. This will be the animal they research for their project.

Explain to students that they have creative control over how they complete this assignment. Students can choose an animal from the Epic Animal Journeys book series, or they can choose another animal that migrates.

Activity

Students must create an informational tool that includes important information about their chosen animal. It is up to each student how they would like to share their information. For example, students could create a newspaper or magazine article, a poster, a pamphlet, a video, or a photo series. If you would like to allow for other alternatives, advise students that they must first have their idea approved by you.

Students will independently research their chosen animal. Like the task in the previous lesson, their informational piece must include the following information:

- Name, photo, type of migration, time/season of migration, location of migration, reason for migration, and obstacles faced.

Remind students they cannot use the same animal previously researched with a partner! The difference with this task is that students are now expected to work independently, and practice their research skills!

Extensions

- ▶ If students are struggling to choose an animal, they can use the Epic Animal Journeys Book Series as a starting point. If you are concerned that a student may have difficulty completing independent research, allow them to use one of the books from the series to find their information. If students have not yet learned about the components of informational texts and/or videos, you will need to take 1 period to review with students.

Wrap-Up

Once students have completed their projects, allow two to three periods for presentations to take place. Students can read their articles aloud, or play their videos for their classmates.

Assessment

Projects will be assessed using the *Show what you know Rubric*.

Show What You Know Rubric

Student's name: _____ Date: _____

Migration: _____

	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding; Application	Student demonstrates little understanding of the migration pattern of their chosen animal.	Student demonstrates some understanding of the migration pattern of their chosen animal.	Student demonstrates good understanding of the of the migration pattern of their chosen animal.	Student demonstrates thorough understanding of the of the migration pattern of their chosen animal.
Organization	Informational tool is disorganized and difficult to follow.	Informational tool is somewhat disorganized and difficult to follow.	Informational tool is well organized and easy to follow.	Informational tool is very well organized and easy to follow, with a high level of attention to detail.
Communication	Student does not present information on their topic in a clear and concise manner.	Student presents some information on their topic in a clear and concise manner.	Student presents most information on their topic in a clear and concise manner.	Student presents information on their topic in a clear and concise manner.
Thinking	Student is unable to respond to questions posed by audience about their topic.	Student responds to some questions posed by audience about their topic.	Student responds to most questions posed by audience about their topic.	Student responds to most questions posed by audience about their topic.

Additional comments:
