

How Do Objects and People Move?



Focus: Students identify living and non-living things that move and describe the different movements.

Specific Curriculum Outcomes

Students will be expected to:

- 1.0 pose questions that lead to exploration and investigation [GCO 2]
- 2.0 communicate using scientific terminology [GCO 2]
- 38.0 investigate different patterns of movement [GCO 1/3]

Performance Indicators

Students who achieve these outcomes will be able to:

- pose questions about the motion of objects
- describe examples of movement for objects and living things

NOTES:

Attitude Outcome Statements

Encourage students to:

- be sensitive to the needs of other people, other living things, and the local environment [GCO 4]

Cross-Curricular Connections

English Language Arts

Students will be expected to:

- communicate information and ideas effectively and clearly, and to respond personally and critically [GCO 2]
- interpret, select, and combine information using a variety of strategies, resources, and technologies [GCO 5]

Getting Organized

Components	Materials	Before You Begin	Vocabulary
• Science Card 1 • Anchor Video: <i>Relative Position and Motion</i> • BLM <i>Neighbourhood Walk</i> • Science Card 2 • IWB Activity 1 • IWB Activity 2 Literacy Place: • <i>Justin's New Bike</i> (Guided Reading, Level F)	• students' Science Folders • variety of objects from the Curiosity Centre	• Select music to which students can move in various ways. • Invite an Elder or an Indigenous Knowledge Keeper to visit the classroom and explain traditional ways to observe, respect, and interact with wild animals. This person could discuss how to use knowledge about the different ways animals move to hunt or trap them.	• movement • motion • direction • pattern

Safety

- Review school safety rules before students go outside for an investigation.

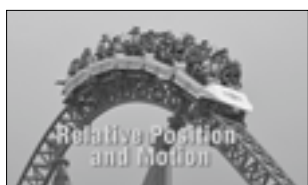
Science Background

- We can describe how something moves by saying how fast it is going and what sort of path it takes. This is a pattern of movement.
- Animals and objects move in many different ways: they move in air, on land, or in water.

Possible Misconceptions

- Young students may think that only living things move. Participating in the Neighbourhood Walk activity will help students to realize that both living and non-living things move.
- Students may think of movement as big changes in position and may not realize that even an almost imperceptible change in position is also movement.

ACTIVATE



What Moves?

Ask students what they know about how things move. Invite students to share examples of objects they have seen move and demonstrate the movement. Display Science Card 1 and have students examine the photos of objects on the card and identify what moves and how it moves. Ask:

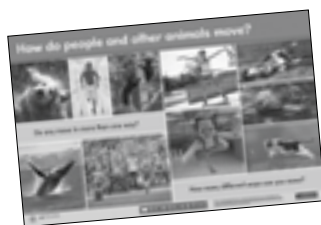
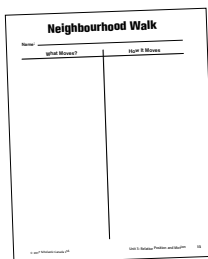
- Do all the pictures show something that is moving?
- How do we know something is moving?

Write the words “movement” and “motion” on the Word Wall. Then invite students to record any questions they have about movement. Add these questions to the I Wonder Wall.

Anchor Video

Play the Anchor Video: *Relative Position and Motion* which is located on the Teacher’s Website. Set a focus for viewing by asking students to think about different types of movement and how movement can be affected or changed. You may choose to pause the video to allow students to answer questions or to discuss any questions which students may have.

CONNECT



Neighbourhood Walk

Take students on a neighbourhood or school walk to identify objects that move. Provide copies of BLM *Neighbourhood Walk* for students to record their observations. Upon returning to the classroom have students participate in a question circle about their observations. Provide prompts such as:

- What objects did you see and how did they move?
- Which objects moved in more than one way?
- How did you move?

Have students store their completed BLMs in their Science Folders.

How We Move

Show students Science Card 2 and discuss the different ways that people and animals move. Ask:

- How many different ways can we move?
- What is the biggest movement you can make?
- What is the smallest movement you can make?

Invite students to take turns imitating the ways in which animals move. The other students guess the animal being portrayed and come up with a verb to describe the movement such as hop, fly, slither, crawl, etc. Create a Ways to Move chart on the IWB or on chart paper and add the terms students suggest.

IWB Activity:

- Have students label the way objects and living things move using Activity 1: *How does it move?* (see the Teacher’s Website).



Move to the Music

Play some music and invite students to move in different ways around the room (e.g., in a circle, forward/backward, side-to-side, up and down, spin, jump, etc.). Choose a variety of students to demonstrate various movements and ask them to use one or two words to describe how they moved. Ask:

- **What direction did you move in?**
- **Was there a pattern to the movement?**



Add “direction” and “pattern” to the Word Wall. Add any new terminology related to movement to the Ways to Move chart.



Literacy Place Connection:

Share *Justin's New Bike* (Guided Reading, Level F) with students and help them to identify the movement in the illustrations (e.g., up, down, around, over).

CONSOLIDATE

IWB Activity:

- Challenge students to sort the movements according to each living thing using Activity 2: *Many ways to move* (see the Teacher's Website).



Illustrating Movement

Have students draw a picture to depict different types of movement and have them label the movements in the picture. Encourage students to use arrows to indicate the direction of the movements.

How Things Move

Invite students to choose two or three objects from the Curiosity Centre and explain to a partner how they move.

Animal Movements

Invite an Elder or an Indigenous Knowledge Keeper to visit the classroom and explain traditional ways to observe, respect, and interact with wild animals. This person could discuss how to use knowledge about the different ways animals move to hunt or trap them.

EXPLORE MORE

Movement Words

Students can choose a movement word such as “glide,” find out what it means, report back to the class, and add the word to the class Ways to Move chart.

Neighbourhood Walk

Name: _____