

## GLOBAL SKILLS

Learning to learn/self-awareness and self-direction;  
Collaboration

## INITIATIVES & INTEGRATED LEARNING

[A. STEM Skills and Connections](#)

## SAFETY STANDARDS

Chart paper  
Markers  
Scooter Boards  
Notebooks  
Pens/Pencils

# HIKE N TUBE

Intermediate (Grade 7-8) Level

## ACTIVITY DESCRIPTION

A gentle introduction to the Mountain, snow tubing provides students with an authentic downhill experience in a safe outdoor environment without the speed and equipment associated with skiing and snowboarding. This physical activity is a great introduction to other winter sports such as downhill and cross-country skiing.

## CURRICULUM CONNECTIONS

[Science and Technology 2022](#)



Ontario  
Curriculum



### Science and Technology:

#### D. Structures and Mechanisms; Form, Function, and Design of Structures

**D2. Exploring and Understanding Concepts:** demonstrate an understanding of the relationship between structural forms and the forces acting on them.

### BEFORE YOU GO

#### Learning Goal

Student will learn about the components of a mechanical system and factors that can affect the system efficiency.

#### Minds On Activity:

- Lead the class in a 'Word Wall' activity to build an understanding of key mechanical system words. Ask students to identify the key words that impact the function of a mechanical system (e.g. mechanical advantage, input, output, friction, gravity, force).
- Using chart paper, record the identified key words and lead a group discussion around their meaning.
- Have students record the words and definitions in their notebooks. Then encourage students to utilize the identified words as part of their vocabulary in both oral and written communication.

#### Action Activity

- In pairs or small groups, have students explore travelling in a seated or lying position on a scooter board.
- Encourage students to make adjustments to their input in order to see how quickly they can travel (e.g. push, no push, push with one hand, add friction).
- Students should record their observations and be able to explain the changes to speed, force and distance travelled in relation to their adjustments.

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### WHILE YOU ARE THERE

#### At Blue Mountain Resort

While participating in the Hike N Tube Activity, students will attempt new methods of travelling in the tube, making adjustments to increase or decrease speeds.

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### ONCE YOU GET BACK

#### Consolidation Activity

- Lead a class discussion around the Blue Mountain Hike N Tube experience. Ask students to share their experiences as a group by discussing the strategies they used to travel faster and slower on the hill. Have the students turn to their elbow partner and discuss the following:
  - *Explain the relationship between work, force and distance travelled in a simple system like tubing.*