

## The Night Sky (p. 3)

Exhibit: Hidden Worlds - One Sky, Many Astronomies

Find the big star wheel. What images can you see in the sky?

Answers will vary. (Bear, turtle, people, etc)

Why do you think the view of the sky changes throughout the night and throughout the year?

The sky appears to move during the night because the Earth is rotating.

The part of the sky that is visible each night changes throughout the year because the Earth moves around the sun.

## Winter Fun (p. 4)

#### Exhibit - Artifact Alley - Winter Display

Which season do you think is represented by this display? How can you tell?

Winter. The pictures show snow on the ground. The artifacts are for winter activities.

Find and list activities shown in this exhibit that can only be done in the winter.

Skiing, sledding, snowmobiling, etc.

Why do you **think** we can't do these activities during other times of the year?

The weather is too warm and there is no snow.





## Outdoor Recreation (p. 5)

Exhibit: Into the Great Outdoors – Bicycles and Snowshoes

**Find** an activity that usually *cannot* be done in the winter. Why do you **think** we can't do it all year round? Riding a bicycle. It's hard to ride a bike in the snow. (Some bikes are designed or modified for winter riding, however.)

**Find** an activity that usually can *only* be done in the winter. Why do you **think** we can't do it all year round? Snowshoeing. It's only cold enough to have snow in the winter time.

Test the snowshoe interactive. Why do you **think** snowshoes are useful for walking in the snow? Which shape do you **think** is the best?

Snowshoes help us walk on top of the snow instead of sinking in. They spread our weight over more of the ground.







# **Dressing for Winter (p. 6)**

Exhibit - Wearable Tech - Get Connected

Find a piece of wearable technology designed to help us in winter. How do you think it works?

Smart Parka. Outer layers are designed to keep snow and water out. Inner layers are designed to keep our body heat from getting out. Fur on hood helps to keep wind out of our faces.

Why do you **think** you wouldn't want to use it in the summer?

It's too hot outside in the summer. We don't need a coat to keep our heat in, we need to let our heat escape stay cool.

#### **Curriculum Connections**

#### **Ontario: Kindergarten**

#### Kindergarten

- 1. Communicate with others in a variety of ways, for a variety of purposes, and in a variety of contexts
- 13. use the processes and skills of an inquiry stance (i.e., questioning, planning, predicting, observing, and communicating)
- 14. demonstrate an awareness of the natural and built environment through hands-on investigations, observations, questions, and representations of their findings
- 18. recognize, explore, describe, and compare patterns, and extend, translate, and create them, using the core of a pattern and predicting what comes next
- 29. demonstrate an understanding of the natural world and the need to care for and respect the environment

#### **Grade 1 – Science and Technology**

# E. Earth and Space Systems Daily and Seasonal Changes

#### E1. Relating Science and Technology to Our Changing World

E1.1 assess the impact of daily and seasonal changes on human outdoor activities, and identify innovations that enable people to engage in various activities year-round

E1.2 assess ways in which daily and seasonal changes have an impact on society, the environment, and living things in the natural environment

#### Quebec: Elementary Cycle 1 - Science and Technology

#### Earth and Space - D. Systems and interaction

- 1. Light and shadow
  - a. Describes the influence of the apparent position of the sun on the length of shadows
- 2. System involving the sun, the Earth and the moon
  - a. Associates the sun with the idea of a star, the Earth with the idea of a planet and the moon with the idea of a natural satellite
- 4. Seasons
  - a. Describes the changes to the environment throughout the seasons (temperature, amount of daylight, type of precipitation)
  - b. Explains the sensations experienced (hot, cold, comfortable) with regard to temperature measurements.