# WEATHER, WE LIKE IT

A Field Study for Division 2 Students

# FISH CREEK ENVIRONMENTAL LEARNING CENTRE

#### FishCreek.Education@gov.ab.ca

www.Fish-Creek.org





# Introduction

This is a curriculum-connected, full day study with multidisciplinary preparatory and post-visit resources. The intent is to offer a hands-on experience for students that naturally immerses them in the field study components from the Grade 5 & Grade 6, Alberta Elementary Science Curriculum and the vision of Alberta's Plan for Parks.

Fish Creek Provincial Park is one of Canada's largest urban provincial parks, stretching from the western edge of the city to the Bow River. The park has a strong vision within its visitor services program plan to support and foster environmental and cultural education.

Alberta Parks acknowledges that Fish Creek Provincial Park is part of the traditional territory of Treaty 7 region in Southern Alberta, which includes the Blackfoot Confederacy (comprising Siksika, Piikani and Kainai First Nations), the Tsuut'ina First Nation, and the Stoney Nakoda First Nation. The City of Calgary is also home to Metis Nation of Alberta, Region III.

5

7

# Table of Contents

#### FACILITY & RULES

- The Facility 3
- Lunch Break Procedures 4

#### **BEFORE THE VISIT**

- Preparation
- Teacher Checklist 6
- Key Messages
- Pre-Field Trip Activities
   8

#### YOUR DAY AT THE PARK

- Field Trip Activity Summary 9
- Program Equipment
   I0
- Information Booklets

#### AFTER YOUR FIELD STUDY

Post Trip Activities
 12

#### **APPENDIX**

- Vocabulary
   AI
  - Word Search A2
  - Crossword A3
  - Crossword Answers A4
  - In The Clouds
     A5
  - My Human Impact A7
  - Student Journal
     A8
  - Volunteer Letter AI6
  - Map to Fish Creek PP AI7

# Facility & Rules

# THE FACILITY

The Fish Creek Environmental Learning Centre (13931 Woodpath Road SW) is located at the west end of the park and offers five indoor classrooms, bathroom facilities, an outdoor picnic area, an accessible trail system and an extensive variety of natural ecosystems: an old growth spruce forest, grasslands, riverine forests, a creek and several wetlands as well as disturbed (urban) areas.

- I. Each teacher will be given a classroom to use as a home base for the day's activities.
- 2. Some equipment for the day's activities will be available at the Park. It is your responsibility to count all equipment and return it at the end of the day. There is a fee charged for missing or broken equipment.
- 3. Washrooms and water fountains are located in the building. There are no vending machines or coffee/tea available.
- 4. A short orientation (about 15 minutes) will be provided to the entire group upon arrival to welcome and introduce everyone to the park, its rules, the program for the day and what the students may discover outside.
- 5. A snack break will take place *after* the group orientation. Please ensure that the students are supervised by teachers during this time.
- 6. Volunteers will have a separate orientation (~10 minutes) on the day of the field trip during student snack break. This will introduce them to the equipment provided, a map of the activity area (maps provided), the general flow of the day and answer any questions that they may have.
- 7. There are NO indoor activities available. Please bring your own activities and/or DVDs when planning for inclement weather.





# LUNCH BREAK PROCEDURES

Please challenge your class to bring a litter-less lunch to the park for their program. See the Pre-Field Trip Activities section of this manual for more information and how this relates to the field trip topics of study.

#### **INSIDE THE BUILDING**

Your class may eat inside the facility, within their assigned room.

- Students must be supervised by an adult at all times while they are in the building (including classrooms, washrooms and hallways).
- Classes from other schools and parks staff may be in the facility at the same time as your class(es). Please respect them and keep noise to a minimum, especially in the washrooms and common areas.
- Help us keep the Learning Centre clean. There are garbage and recycling containers in the brown built-in cabinets in each room.
- Leftover fruit and vegetable materials, such as banana peels and apple cores, are collected in a white compost bucket in each room.

#### **OUTDOOR FACILITIES**

There are several picnic tables and a fire pit behind the Fish Creek Environmental Learning Centre. This area is available on a first-come, first-served basis. Plenty of additional picnic tables are available just north of the Learning Centre building about a 2 minute walk up the trail.

- Students must be supervised by an adult at all times.
- Fish Creek Provincial Park is a public park and the facilities in an around the Learning Centre are for everyone to use. Please respect other park users.
- Leave no trace: All garbage, recycling and compost must be put in appropriate bins (outside or in the building)
- DO NOT FEED OR DISTURB WILDLIFE.
- If you choose to use the fire pit you must bring your own firewood. Do
  not use branches or deadfall from the park. Have a bucket of water
  nearby and check that the fire is out before leaving the fire pit area.

# Before the Visit

# PREPARATION

The following steps and materials will assist you in preparing for your field trip to Fish Creek Provincial Park. Please take the time to review the following pages carefully.

## Site Visit Teacher Orientation

Attending a teacher orientation prior to your class visit is mandatory and essential for familiarizing yourself with the facilities and the surrounding trails. Returning teachers are not obligated to attend but are welcome. Dates for the teacher orientations will be sent to you via email so you can register for an orientation on a date of your choice.

2 Preparation Checklist

A full, detailed teacher checklist for your field trip preparation is available on the next page.



Program start and end times are flexible to accommodate bus availability and travel distance to the park. In general, programs start between 9:30- 10:00 am and finish between 1:45- 2:00 pm.



Field Trip at a Glance

Group Orientation (15 minutes)	Overview of park rules, safety and behaviour expectations for the day.
Student Snack Break Parent Volunteer Orientation (10-15 minutes)	Overview of program activities for adult volunteers.
Educational Activities	Class 1: Students explore the park with small volunteer-led groups. Class 2: Weather Walk in small volunteer led groups
Compare and Predict (10-15 minutes)	Classes gather inside to compare recordings and make initial weather predictions for the day and week.
LUNCH BREAK	
Educational Activities	Class 2: Students explore the park with small volunteer-led groups. Class 1: Weather Walk in small volunteer led groups
Groups return to the Learning Centre for Program Wrap-up	Debrief by staff educator and final compare.Washroom break, head count, and gather personal belongings.

# Program Wrap-up should take place at least 20 minutes prior to the scheduled bus departure.

# TEACHER CHECKLIST: Preparing for Your Day at the Park

## Prepare yourself

- Read the teacher package thoroughly: phone 403-297-7926 if you have any questions.
- **General Register for and attend a Teacher Orientation date on site before your field trip.**
- □ Book your bus(ses).
- Give every driver including the bus driver a copy of the route map (found in the Appendix). Make sure all drivers know you are coming to the west end of the park, near Woodbine!
- Check student health forms, looking for allergies in particular to bee/wasp stings
- Bring a first aid kit and a few band aids with each adult.

## Prepare the students

- Discuss how Fish Creek Provincial Park is a wild environment.
  - Do not feed or disturb wildlife: Quietly observe all wildlife from a comfortable distance.
  - Leave only footprints: Share discoveries, but leave everything as they found it.
  - Pitch in: Litter should be placed in the rubbish bins provided or in a pocket.
- Discuss behavioural expectations. Explain that the field study will be another school day, just at a different place. All the school rules apply.
- Discuss the purpose of provincial parks and protected areas. Have the class make a list of ways they can show respect for living things during their visit to the park. *Possibilities include:* 
  - Stay well back from the banks of Fish Creek
  - Leave ant hills, nests and rotting logs alone and intact. They are animal homes.
  - Walk with care and mindfulness to minimize your impact.
- Discuss outdoor safety. Students need to:
  - Stay with an adult all times.
  - Walk, do not run.
  - Keep feet on the ground: no climbing.
  - Leave dead branches on the ground:
- Discuss what to wear on the field trip
  - Hats, sunscreen, insect repellent.
  - Runners, comfortable boots (no sandals/high heels). Dress in layers and bring extras.
- □ Complete some preparatory activities, either the ones in the next section of this package or your own.

## Prepare the adults

Please follow the recommended adult to student ratios as outlined in your school board regulations.

- Provide the following to adult volunteers and review with them: Key Messages, Chaperone Letter, Maps.
- Emphasize the following: There is nowhere to buy anything here, including coffee.
- □ Ensure adult volunteers are aware that their role is to lead a small group of students for the day and supervise students during and lunch period.

# FISH CREEK PROVINCIAL PARK: Key Messages

Please review and be sure everyone understands the following information before your visit to the park.

- Our vision: Alberta's parks inspire people to discover, value, protect, and enjoy the natural world and the benefits it provides for current and future generations.
- Alberta Parks acknowledges that Fish Creek Provincial Park is part of the traditional territory of Treaty 7 region in Southern Alberta, which includes the Blackfoot Confederacy (comprising Siksika, Piikani and Kainai First Nations), the Tsuut'ina First Nation, and the Stoney Nakoda First Nation. The City of Calgary is also home to Metis Nation of Alberta, Region III.
- Alberta's parks and protected areas belong to all Albertans and contain many different natural landscapes that are home to numerous plant and animal species as well as significant cultural and historic resources. The province's network of parks and protected areas helps to ensure that Alberta's natural and cultural heritage is preserved for future generations.
- There are a wide variety of visitors and users of our parks. Everyone must respect and share the park and its facilities and resources.
- Stay on designated trails while moving through the park and participating in group activities. Staying on designated trails reduces impact to the natural habitats of the park. Please share the trail with other users.
- Feeding wildlife is prohibited. The park's ecosystems provide all the food and habitat wildlife require for their basic needs. Feeding wildlife can cause wildlife to associate humans with food. Quietly observe wildlife from a safe and comfortable distance so as not to disturb them or put them or you at risk.
- Everything in the park living and non-living is protected. Students are welcome to share their discoveries, but must remember to leave everything as they found it. Do not remove anything natural from the park.
- Litter must be placed in garbage cans or packed out.
- Use only designated fire pits. The collecting and burning of park vegetation is not permitted. You must ensure fires are fully extinguished before leaving them.



# PRE-FIELD TRIP ACTIVITIES

Preparatory activities will enhance your students experience and learning at the park.

#### Vocabulary

#### RESOURCE: Appendix p.AI-A4

Review science vocabulary with the class. This could be done in any number of ways:

- Have students create a rap or new lyrics for a popular song using vocabulary
- The terms can be introduced through games such as Snowflakes and Raindrops
- Photocopy the crossword puzzle or word search from the appendix. Distribute to the students. A fun way to test their knowledge!
- Play Vocabulary Bingo. You call out the definitions and students have the words on their Bingo sheets.

#### Snowflakes and Raindrops

This game (adapted from Joseph Cornell "Owls & Crows") offers a good organisational format that can be used repeatedly with a wide variety of topics. Once they understand how the game is played the format can be used to teach and informally evaluate many topics.

Divide the group into two equal teams, the Snowflakes and the Raindrops. Have the teams line up along a line facing each other. About 3 metres behind each team designate a "home base" area for that team.

Make a weather related statement out loud. If the statement is true the Snowflakes chase the Raindrops trying to catch them before the they can reach their home base. If the statement is false Raindrops chase the Snowflakes. Anyone that is caught before reaching their home base must join the other team.

If the students are not sure of the answer Snowflakes and Raindrops may run towards each other. Remain silent and neutral and reveal the answer once the students settle.

#### In the Clouds

#### RESOURCE: Appendix p. A5-A6

Clouds play a major role in both temperature regulation (climate) and the active weather we experience on earth.

In this experiment you and your students will attempt to make a cloud!

The experiment will help students understand how clouds form, what they are made of in addition to the process of scientific experimentation.

#### My Human Impact

#### **RESOURCE:** Appendix p.A7

This activity will help students to consider how human actions can potentially effect the natural environment, climate and weather.

Students will chose a piece of packaging from their lunch and research the potential carbon footprint of that piece of packaging. This will involve looking at the manufacturing process, materials used, transportation and entire "life cycle" of that package.



# Your Day At the Park

# FIELD TRIP ACTIVITY SUMMARY

The following outdoor field trip activities are curriculum-connected and intended to connect learning in an experiential way to the natural world.



Weather Walk

Completed in small, adult volunteer led groups following a designated route to make weather related observations for half the day.



Activity Summary: Groups will walk a designated route to a viewpoint and make 4 stops along the way to make and record their observations related to weather predictors and weather lore. Students will also:

- Use anemometers to measure wind speed and wind chill.
- Observe the position of the sun throughout the day and relate it to weather and temperature findings as well as create hypothesis about season and climate.
- Record weather data from the weather station and barometer twice during the course of the day.
- Record observations regarding precipitation.



Small Group Study

### Completed in small, adult volunteer led groups working in the Blue and Orange Program Trail Areas for half the day.

Activity Summary: Students will explore weather and its effects on the park on a small group exploration.

- Students will search for different signs of weather all around them using a weather themed scavenger hunt.
- Students will observe, name and record characteristics of clouds that appear in the sky throughout the day by using the Cloud Catcher provided by the Environmental Learning Centre.
- Students will use thermometers to measure the ambient temperature in a variety of locations and throughout the day.
- Students will observe the position of the sun throughout the day and relate it to weather and temperature findings as well as create hypothesis about season and climate.
- Students will record weather data from the weather station and barometer twice during the course of the day.

## Be sure to divide each class into smaller groups and assign an adult volunteer to each group.



# PROGRAM EQUIPMENT

The Learning Centre will provide your groups with the following equipment and resources to utilize during the day.



Scavenger Hunt

During their small group walks students will attempt to complete the weather themed scavenger hunt.



Thermometer

The students will measure ambient temperature indoors and outdoors using the thermometer.



Weather Station

The students will record various data twice during the day from the station monitor at the front counter.



Compass

The compass will assist the students in determining wind direction and also the relative position of the sun during different times of the day.

All equipment must be returned prior to departure. **PLEASE NOTE:** There is an additional fee for broken or missing equipment.



The Cloud Catcher will assist students in identifying some common types of clouds and relate them to current weather.



Anemometer

Students will use digital anemometers to measure wind speed and wind chill.



Barometer

The students will record barometric pressure twice during the day from the barometer located at the front counter.

# **INFORMATION BOOKLETS**

The Learning Centre will provide your adult volunteers with an information booklet that contains an outline and explanation of the activities they will assist their group of students with.



These booklets have pictures and information that will support and enhance your students' learning.

Important Notes:

- Please do not print these booklets for your volunteers. By providing laminated copies at the park, we hope to reduce the amount of wasted paper.
- Please do not distribute the information booklet PDFs . These resources are specifically developed for use in Fish Creek Provincial Park within Alberta Parks programs.
- We greatly appreciate all feedback to strengthen our resources; please let us know if you have any recommended changes.

# After Your Field Study

# POST TRIP ACTIVITIES

In addition to a class discussion about trip highlights and favourite activities, students may need class time to complete data sheets or to share information about their discoveries.

#### Weather Lore

Using their knowledge of weather phenomena and forecasting weather have students come up with their own weather saying or proverb. You may do a class search on the internet for "Weather Lore or Weather Proverbs" for examples and ideas.

This should be a short rhyme or memorable phrase which can help others remember what weather may be coming.

The weather saying or proverb should also include an explanation of what it means or why it is true and if possible a diagram/image to help explain.

For Example:

Red sky at night, sailor's delight Red sky in the morning, sailor's warning



This is one of the best known weather proverbs. It is generally true because for a red sky to occur it must be cloudy on the side of the sky where the sun is not and clear where the sun is. If there is a red sky in the evening it would be clear in the west where the sun is setting, which should mean the weather is improving as most weather systems come from the west.

#### Forecasting and Tracking



Expanding on their experiences observing and measuring weather phenomena in the park over one day, students can track and forecast weather in a chosen location over a longer period of time.

Depending on what will work best for your class to record and track the weather a variety of charts and schedules can be established.

A large graph or chart, a prediction box, or a class weather book are some examples of ways to record some or all of the following:

- Daily weather predictions
- High and low temperature
- Precipitation kind and duration
- Clouds
- Position of the sun seasonal, daily
- Wind direction, speed
- Air pressure



# WEATHER VOCABULARY

<u>Air pressure</u>: The weight of the air above a particular point. Measured with a barometer.

<u>Atmosphere</u>: The envelope of gases surrounding the earth held in place by gravity.

<u>Climate</u>: The average weather at a place over a period of time (usually averaged over 30 years).

<u>Condensation</u>: The process by which water vapour in the air is changed into liquid water.

<u>Convection</u>: The transfer of heat between areas of different temperature by the movement of a fluid (liquid or gas).

Front: A narrow zone that separates cold and warm air masses.

<u>Greenhouse gases</u>: Gases in the air that trap energy from the sun. The most common being water vapour, carbon dioxide, and methane.

<u>Heat retention</u>: The amount of heat an object or material can store over time.

Humidity: Describes the amount of water vapour or water molecules in the air.

Insulator: A substance/material which does not readily allow the passage of heat.

Precipitation: The water deposited/falling on the earth in the form of hail, mist, rain, sleet, or snow.

Temperature: A measurement of the degree of heat present in a substance or object.

<u>Thermal radiation</u>: The process by which heat (energy) is given off by an object. Thermal radiation is emitted by all objects above absolute zero (-273.15 °C).

<u>Troposphere</u>: The troposphere is the lowest layer of earth's atmosphere. We live in the troposphere. Weather happens in the troposphere, and almost all clouds are found in this layer

UV index - The strength of the sun's ultraviolet (UV) radiation

<u>Water (hydrologic) cycle</u>: The continuous movement of water on, above and below the surface of the earth.

<u>Weather</u>: The state of the atmosphere with respect to heat/cold, wetness/dryness, calm/storm, clearness/ cloudiness.

<u>Wind</u>: The movement of air across the earth's surface, produced by differences in air pressure (gradients) between one place and another.

Wind speed - Describes how fast the air is moving past a certain point

# WEATHER WORD SEARCH

W	0	Ν	S	W	D	Н	С	Х	R	J	А	R	S	Ζ	В	В	Т	L	W
А	V	J	Ι	Е	Е	0	S	S	F	J	В	Ρ	V	0	L	С	Μ	Х	Q
В	V	Ν	L	G	R	0	R	R	R	L	Ζ	U	В	0	U	Q	R	Κ	Q
K	D	Т	В	L	U	U	Ν	0	Ι	Т	А	Т	Ι	Ρ	Ι	С	Е	R	Ρ
I	G	F	G	F	Т	Т	S	В	М	D	Ν	0	Т	V	G	J	D	S	G
0	Н	Q	Ι	В	А	J	R	S	Η	М	Q	S	Y	Х	D	Е	Е	Х	J
Е	С	F	Η	Κ	R	В	Ι	U	Е	F	0	Q	0	D	В	J	Т	Q	S
Е	U	0	Е	А	Е	Е	W	Ν	Ρ	R	L	U	U	J	S	Ι	U	В	J
С	Т	G	Ι	Е	Ρ	Т	W	Μ	F	Q	Ρ	I	0	U	U	Ι	V	Ι	0
Е	S	Ν	L	R	Μ	А	D	W	Y	А	V	U	Т	Κ	U	R	Ρ	Ρ	W
S	Т	J	Y	W	Е	L	G	G	Ι	S	L	А	W	V	W	В	S	Q	V
А	L	А	0	Υ	Т	U	С	А	В	Е	R	W	С	D	F	С	W	Κ	Ι
W	W	Е	Ι	S	Е	S	С	В	U	Т	Ζ	С	Е	L	S	Ι	U	S	F
J	Μ	Κ	Е	D	V	Ν	W	R	S	R	С	U	Н	С	А	М	U	Х	Μ
Q	С	D	Е	Т	А	Ι	Ν	0	J	Ζ	S	Μ	Х	Т	В	R	С	Н	S
U	F	W	U	Ν	Т	R	В	Q	Х	W	Н	U	L	Ρ	R	0	G	Ρ	J
Κ	D	L	Н	0	Т	М	Κ	F	Х	U	Н	L	Е	Ι	U	Т	S	U	Μ
Х	Х	Μ	F	Κ	Ι	0	D	Μ	D	Н	Ζ	U	С	Y	Υ	L	S	Н	G
Ζ	S	W	А	Ν	Ζ	D	K	Κ	F	Ρ	Ν	S	Т	А	С	L	Ρ	G	Е
Ζ	В	0	Ζ	К	Q	G	Х	F	W	L	W	G	Μ	S	Х	G	D	Ρ	L

CELSIUS	INSULATE	SLEET
CIRRUS	NIMBOSTRATUS	SNOW
CUMULUS	PRECIPITATION	SUN
DEW	PRESSURE	TEMPERATURE
FOG	RADIATE	WIND
FROST	RAIN	

A2 | FISH CREEK ENVIRONMENTAL LEARNING CENTRE

# WEATHER CROSSWORD



## **CLUES ACROSS**

3. Predict or estimate a future event or trend.

5. Falling balls of ice.

6. We live in this "layer', so do clouds and weather.

7. It is all around us.

9. You are studying it & it can make you change your clothes.

II. A type of cloud that is piled high & means rain is coming.

14. Describes the amount of water vapour or water molecules in the air.

## **CLUES DOWN**

I. The process by which water vapour in the air is changed into liquid water.

- 2. Repeated, recurring, predictable.
- 4. Provides heat and light.
- 8.A measure of how much heat something has.

10. Look up at something made of water droplets and/or ice crystals.

12. Rainy snowy ice pellets.

13. The average weather of a place over time.

# WEATHER CROSSWORD ANSWER KEY



## **CLUES ACROSS**

3. Predict or estimate a future event or trend.

5. Falling balls of ice.

6. We live in this "layer', so do clouds and weather.

7. It is all around us.

9. You are studying it & it can make you change your clothes.

II. A type of cloud that is piled high & means rain is coming.

14. Describes the amount of water vapour or water molecules in the air.

## **CLUES DOWN**

I. The process by which water vapour in the air is changed into liquid water.

- 2. Repeated, recurring, predictable.
- 4. Provides heat and light.
- 8.A measure of how much heat something has.

10. Look up at something made of water droplets and/or ice crystals.

12. Rainy snowy ice pellets.

13. The average weather of a place over time.

# IN THE CLOUDS

Clouds are a major component of the weather. In this experiment you and your students will attempt to make a cloud!

The following experiment will help students understand how clouds form and what they are made of, in addition to experiencing and understanding the process of scientific experimentation.

## Materials

- A large glass jar with a lid (taller is better)
- About I/3 cup of very hot water (blue food dye optional)
- Oven mitts or gloves for handling hot water and jar
- Ice
- Aerosol Hairspray or Air Freshener
- Dark paper or material

### Procedure



- 1. Pour the hot water into the jar and swirl it around to warm up the sides of the jar.
- 2. Turn the jar lid upside down and place it on top of the jar. Place 2 or 3 ice cubes on the lid.
- 3. Get the aerosol product ready and quickly lift the ice filled lid and spray a small amount into the jar. Replace the lid as quickly as possible to trap everything in the jar.
- 4. Put the dark paper or material behind the jar to create contrast and watch to see the cloud form.
- 5. You can remove the lid after the cloud has formed and watch it escape.

## Answers for Student Worksheet

A cloud is a large collection of very tiny droplets of water or ice crystals. The droplets are so small and light that they can float in the air. Clouds are created when water vapor, an invisible gas, turns into liquid water droplets. These water droplets form (condense) on tiny particles, like dust, that are floating in the air.

Experiment	Nature	Function
Jar Atmosphere Keeps air (water vapour), particulates contained		Keeps air (water vapour), particulates contained.
Hot water	Water vapour	Provides the moisture that creates clouds.
lce	Cold temperature	Causes the condensation of water vapour.
Aerosol spray	Dust/particulate	A surface for water vapour to condense on.

# IN THE CLOUDS - Student Worksheet

Name:

Date:

Before the experiment, write down what you already know about clouds. Are all clouds the same? When can we see clouds? What are clouds made of/how do clouds form?

Observations	
Write down what you saw during the experiment.	
	Draw a picture of what you observed.

Fill in the chart below. What would each material in the experiment be in nature and what is its function?

Experiment	Nature	Function
Jar		
Hot water		
lce		
Aerosol spray		

# MY HUMAN IMPACT - Student Worksheet

Name:

Date:

Pick one piece of packaging (something holding food or beverage) from your lunch today. Describe the package and research what kind of energy and resources it would have taken to make it. By doing this you will get an idea of the carbon footprint of your chosen packaging.

A carbon footprint is defined as the total amount of greenhouse gases, usually CO<sub>2</sub>, produced to directly and indirectly support human activities.

Package Description

	What material(s) is it
	made of?
	Is it one time use or
	re-usable?
	ls it recyclable?
	Where in the world
	did it come from?
Picture/drawing	

Describe the manufacturing process (raw material to final product)

How much (distance and types) transportation was involved in getting this package into your lunch? Don't forget picking it up from the store and getting it home.

# WEATHER, WE LIKE IT

A Field Study for Division 2 Students

# STUDENT JOURNAL

www.Fish-Creek.org

Name:

Date:







# Sun Tracking

Mark the position of the sun in the sky at three different times during the day on the charts below. Also, record the time of day when you record the sun's position.





# Taking Temperature

Using the thermometer provided take the temperature in the same spot, both inside and outside, at 3 different times during the day. Also, find what you think is the coldest and warmest spot outside and record the temperatures and describe the spot.

TIME:	Inside		Outside
		Morning	

TIME:	Inside		Outside
		Midday	

	Inside	$\cap =$	Outside
TIME:			
		Afternoon	

OUTSIDE COLD SPOT		
Temperature:	Description:	
OUTSIDE WARM SPOT		
Temperature:	Description:	
PREDICTION:		
Day's High (Max) Temperature:		Day's Low (Min) Temperature:

AI0 | FISH CREEK ENVIRONMENTAL LEARNING CENTRE

-0	Catching Clouds						
	Using your cloud catcher record what kind of clouds are in the sky. If there are no clouds, you should still record it and answer the questions.						
	Draw the clouds that you see.						
	TIME:						
Type of cloud(s):							

Weather indications (What do the clouds tell you about the current weather?):

Weather predictions (What do the clouds tell you about the weather that is coming?):

#### WEATHER | GRADE 5 & 6 FIELD STUDY

$-\infty$	Catching Clouds			
	Using your cloud catcher record what kind of clouds are in the sky. If there are no clouds, you should still record it and answer the questions.			
	Draw the clouds that you see.			
	TIME:			
Type of cloud(s):				

Weather indications (What do the clouds tell you about the current weather?):

Weather predictions (What do the clouds tell you about the weather that is coming?):

# Wind, Precipitation and Pressure

Record the results of your readings/observations from both morning and afternoon.

Time	Direction	$\sim$	Speed	
	A.M.			
	P.M.	с О		
Wind (Measured with Handheld Anemometer & Compass)				

Time	Rate (Light, Moderate, Heavy)		Туре	
	A.M.	000		
	P.M.			
		Precipitation		
	Morning		Afternoon	

Morning		Afternoon		
Atmospheric Pressure (kPa)				

## Weather Station

FORECAST (A.M./P.M.):					
Wind Speed	A.M.	P.M.	Dew Point	A.M.	P.M.
Current Temperature			Max Temperature		
Humidity			<b>Min Temperature</b>		



# Weather Predictors, Weather Lore

Review the observation list below. Record if you observed any of these during the Weather Walk (see associated map for walk and stop areas). Use the predictors after your field trip to try and predict the weather of the coming days to be "Fair" or "Foul".

<b>Observation Made</b>	Yes	Νο	Fair/Foul
Red Sky in Morning			
Smoke Rising Straight Up			
Birds Flying High			
A West Wind			
A Rainbow in the Morning			
A Ring Around the Sun or Moon			
Rising Air Pressure			
Chinook Arch			
Black Clouds in the North			

# Weather Walk Map



- Viewpoint (With Benches, from here return the way you came)
  - Paved Trail to Viewpoint
- Weather Observation and Recording Stops (Weather Predictors, Weather Lore)

Watch for other pathway users and share the pathway.

Dear Adult Volunteer,

Thank you for volunteering for a field trip to Fish Creek Provincial Park! This excursion allows students to explore, discover and learn in one of the largest urban parks in North America.

Here are a few tips that may help you enjoy your visit:

- Pack a hearty and healthy lunch (snacks and water too!). There are no vending machines or stores onsite to purchase food.
- Please dress appropriately for the weather. We will run our programs rain, snow or sunshine.
- Ensure that you are aware of what part of Fish Creek the program is taking place. We host educational programs at the WEST end (near Woodbine) in the Shannon Terrace Day Use Area and the Environmental Learning Centre.

Our staff will be available throughout the day to ensure that you and your group have a safe and educational experience in the park.

You are not expected to be a naturalist or history expert, but a positive attitude goes a long way!

Thank you again, we are very excited to see you in the park soon.

Warmest regards,

Environmental Education Team





