

SIGNS OF FALL

A Teacher Conducted Field Study
for Grade 1 Students

FISH CREEK
ENVIRONMENTAL LEARNING CENTRE

FishCreek.Education@gov.ab.ca

www.Fish-Creek.org

CONNECTING PEOPLE WITH PARKS

FISH CREEK
ENVIRONMENTAL
LEARNING CENTRE


Alberta Parks

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 of *Topic B: Seasonal Changes*, *Topic D: Needs of Plants and Animals* from the Grade 1 Alberta Elementary Science Curriculum components 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.



Table of Contents

FACILITY & RULES

- The Facility 3
- Lunch Break Procedures 4

BEFORE THE VISIT

- Preparation 5
- Teacher Checklist 6
- Key Messages 7
- Pre-Field Trip Activities 8

YOUR DAY AT THE PARK

- Field Trip Activity Summary 9
- Program Equipment 10
- Information Booklets 11

AFTER YOUR FIELD STUDY

- Post Trip Activities 12

APPENDIX

- Classroom Tree A1
- Salt Colour Painting A2
- Sign Language A3
- Student Journal A4
- Volunteer Letter A8
- Access Map A9

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.

1. 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, to a map of the activity area (maps provided), to 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 and 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.

1 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.

3 Program Start and End

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.

4 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	Students explore the park in small, volunteer led groups. An Environmental Educator will be available to answer questions and provide support during your lunch break and at the end of the day.
LUNCH BREAK	
Educational Activities	Students continue to complete curriculum connected activities with their volunteer leaders.
Groups return to the Learning Centre for Program Wrap-up	Debrief by staff educator. Final washroom break, head count, and gather personal belongings.

Program Wrap-up should take place at least 15-20 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.
- ☐ Register for and attend a Teacher Orientation date on site before your field trip.
- ☐ Book your bus(es).
- ☐ 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, access map, information booklets will be provided to volunteers on the day of the trip to assist them in leading groups.
- ☐ 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 part of the day and supervise students during the lunch period.

FISH CREEK PROVINCIAL PARK: Key Messages

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

Changing Colours

In the fall, the leaves on some plants start to lose their green colour. The chlorophyll in the leaves breaks down allowing the other colours to finally shine through and show their beautiful reds, yellows, and oranges.

Materials:

- 3 green leaves (from the same tree)
- Rubbing alcohol
- Jar
- Spoon or muddler
- Plastic bag or plastic wrap
- Paper coffee filter (cut into a long strip)
- Small bowl or pan
- Hot water

1. Instruct students to break the leaves into small pieces and put them in a jar
2. Pour rubbing alcohol over the leaf pieces until they are just covered.
3. Mash and stir the leaves vigorously until the alcohol turns slightly green
4. Cover the jar with plastic wrap. Put the jar in a bowl and pour hot water in the bowl.
5. Leave the jar for 30-45 minutes. The alcohol should be dark green.
6. Place the coffee filter strip in the jar with one end in the water one end taped to the rim of the jar and leave it for about an hour to let the liquid travel up the filter and then evaporate leaving the separated colours (green and yellow/red/orange)

Classroom Tree

RESOURCE: Appendix p.A1

This art project will be a collaborative effort of the students. Using the template provided or by drawing your own tree, encourage your students to carefully put their thumb prints on the branches of the tree. Stamp pads or non-toxic paints work best. Direct the students to label their thumb print with their name. Hang the picture in the classroom and refer to it when discussing seasonal changes.

Window Field Trip

Go on a “Window Field Trip” to develop students’ observation and inference skills. On a sheet of large drawing paper, ask the students to draw what they see out their window. This could be done at home or at school. Guide their observations and inferences with some questions:

- Is it hot or cold out today?
- Where is the sun?
- Are there any shadows?
- Is it windy? Can you tell from which direction the wind is blowing?
- Are there clouds in the sky?
- Do the shapes of the clouds remind you of anything?
- Can you see the moon?
- Can you see any buildings?
- Can you see any animals?

As a class, discuss their field trip to the window and share their observations and inferences. Repeat the process a week later and compare the results. Discuss why some things have changed and others did not.

Salt Colour Painting

RESOURCE: Appendix p.A2

This preparatory art project explores colour mixing. Students will create designs on construction paper with glue, then add salt to the glue. With a small amount of diluted food colouring or watercolour paint, students will add colour to the salt, causing the colours to spread.

Encourage your students to create the shapes of fall or what they may see on their visit to Fish Creek Provincial Park. Examples could include: leaves, cones, clouds, bushes, trees, berries, etc.

For detailed instructions, see the resource in the Appendix.

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.

1

Nature Orchestra

Students will listen for, and then describe different living and non-living things in the park.

2

Colour Search

Students will identify colours in a variety of natural objects; compare, contrast and order those colours.

3

Smells

Students will compare and contrast different smells (dead grass/living grass, cone/needles, bark/sap, coniferous/deciduous trees, buds on different bushes, damp/dry soil).

4

Wanted: Dead or Alive!

- Students will discuss the value and role of leaves and how other animals use the leaf litter as shelter.
- Students will brainstorm lists to explain what leaves do alive and what they provide when dead.

5

Seasonal Changes

Students will identify and describe examples of plant and animal changes that occur on a seasonal basis (changes in form, appearance, location, and activity.)

6

Sleeping Buds

- Students will discover the function of a plant bud.
- Students will draw their bud as observed through their magnifying glass.

7

Faces of the Forest

- Students will compare leaf shapes and colours (fallen leaves and leaves on the trees).
- Students will explore a branch and examine the areas where leaves were attached.

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 students with the following equipment and resources to utilize during the day.

1 Seasonal Scavenger Hunt

Students will seek signs of the changing season with kinesthetic, auditory and visual objectives. This is not meant to be a competition, rather it is a fun way for students to hone their observation skills.

2 Colour Palette

Students will work in pairs to try and match the colours on the palette to shades in nature.

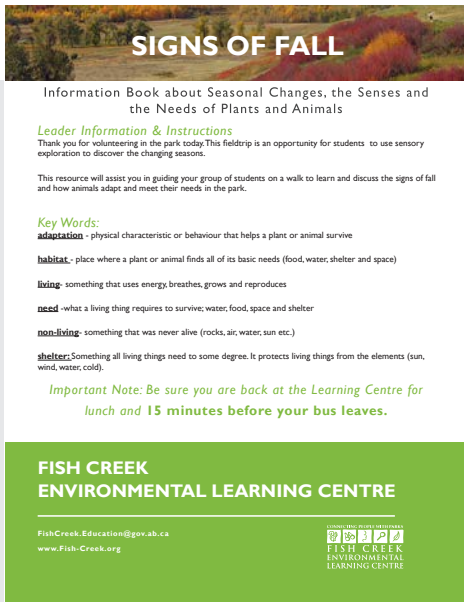
3 Magnifying Glasses

- Students will use the magnifying glasses to examine signs of animals preparing for winter, like the red squirrel. Evidence of animals such as tracks, signs of feeding, and droppings will be discovered.
- Students will also use the magnifying glasses to look more closely at leaves and other signs of fall.

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

INFORMATION BOOKLETS

The Learning Centre will provide your adult volunteers with an information booklet to help guide them on the outdoor exploratory activities which they will lead their smaller group of students on.



The Learning Centre will provide your adult chaperones with an information booklet with all of the field trip activities outlined and explained in full detail. These booklets will have pictures and information that will support and enhance your students' learning.

These booklets will be provided at the Park for your field trip.

Important Notes:

- 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 their journals or to share information about their discoveries.

Experience Chart

Develop a class experience chart. Have each student contribute something they experienced at the Park to the list. Begin by asking “What did you see, hear, smell and touch at the Park?”

Reinforce the concept of seasonal change by asking each student, when they give their responses, to indicate how their discovery would change as the seasons change.

To support the math curriculum, have the students, using the Experience Chart, classify their discoveries in a variety of ways. Possibilities for categories include: senses used, colour, size, natural or man-made, living or non-living.

Activity

Have the students dramatize some of the fall “happenings” they discovered at the park. Using creative movement and their imaginations, have them transform themselves into:

- a leaf dancing in the wind
- a squirrel storing cones for the winter
- a migrating bird
- a hitchhiker seed
- a ground squirrel going into hibernation
- a tightly curled bud

Sign Language

RESOURCE: Appendix p.A3

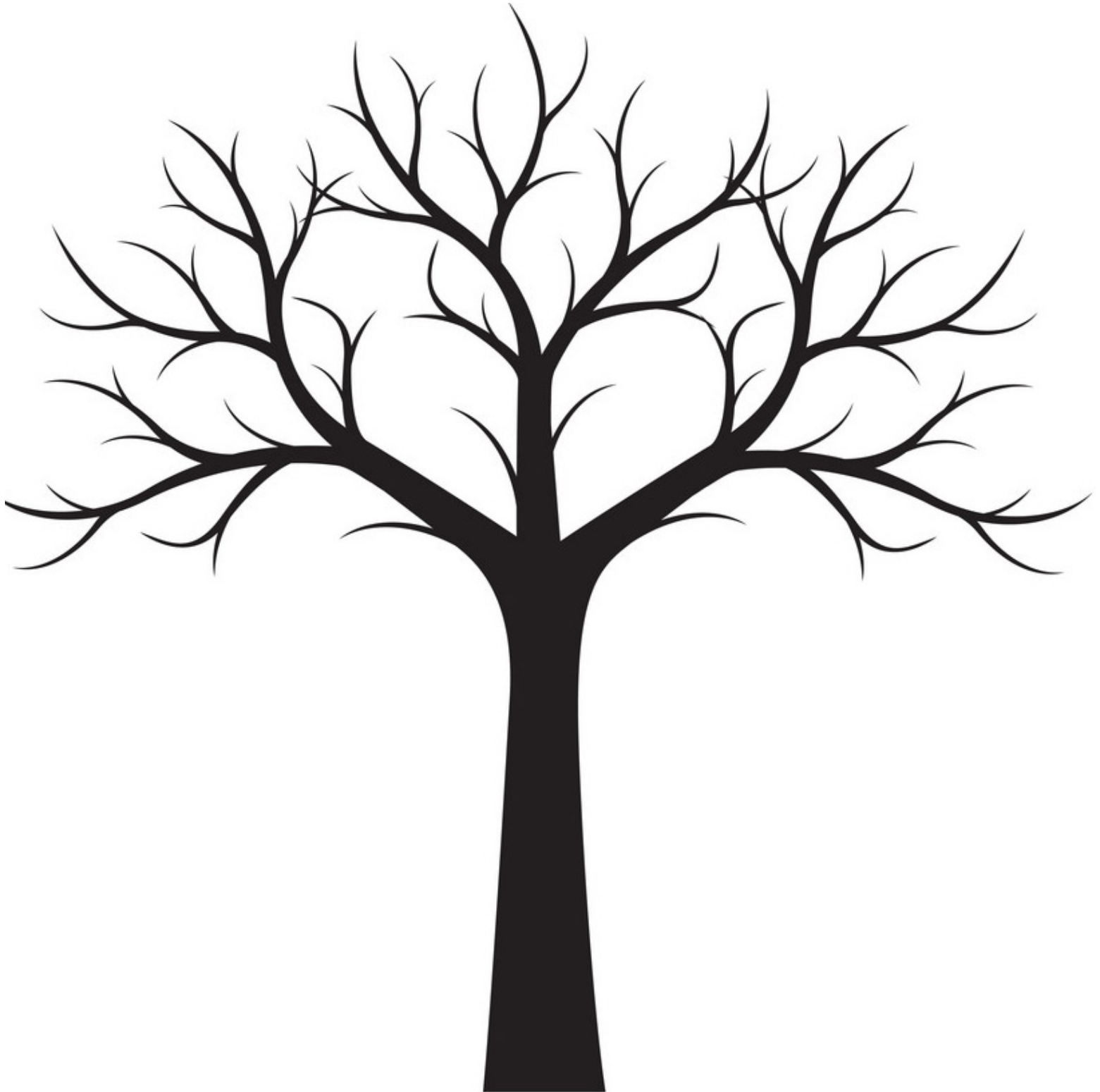
This activity can be used to further explore the senses and how different organisms can use them.

Explain to your students that humans use senses to communicate (eg. mouth makes sounds for ears to hear; sense of touch to hug or high-five friends to comfort them, facial expressions and body language are seen with our sense of sight).

However, not everyone uses their five senses in the same way. Using images in this manual and the internet, teach your students a few of the sign language signals for seasonal changes or animals that they saw in the park.

Appendix

CLASSROOM TREE



SALT COLOUR PAINTING

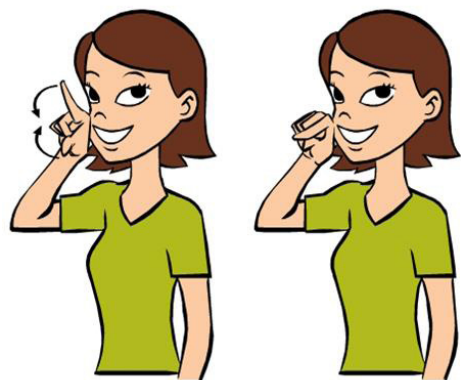
MATERIALS:

- White Glue
- White pencil crayons/crayons
- Food Colouring
- Plastic-reusable containers
- Table salt
- Paintbrushes
- Black or blue construction paper
- Two large trays or bins

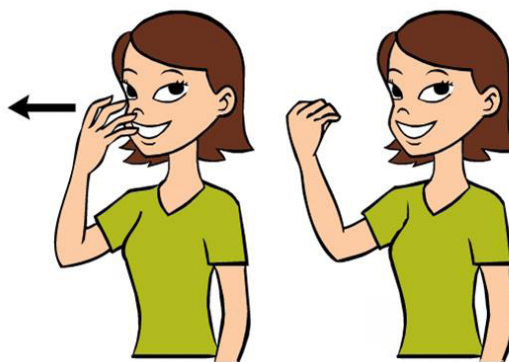
INSTRUCTIONS:

1. Using a white writing utensil, write the name of the participant on the back of the black piece of paper.
2. Dip the paintbrush in the white glue. Draw swirls, stars or planets on the black piece of paper with the white glue.
3. Carefully walk with your painting to the Salty Station. Gently place your painting in the tray and shake the salt on to the glue.
4. Shake off any excess salt into the second tray.
5. Using the paintbrushes and water colours at the tables, carefully add a SMALL amount of colour to the salt painting.
6. Shake off any extra salt in the second tray before you leave. Enjoy your artwork!

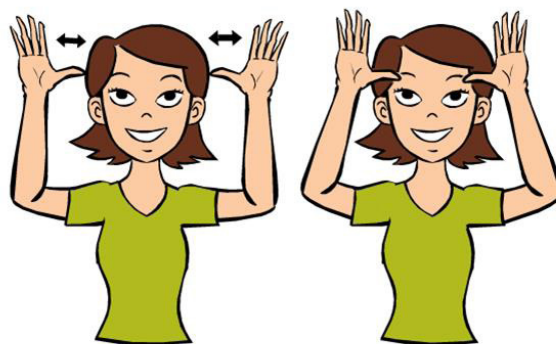
SIGN LANGUAGE - ANIMALS



Bird



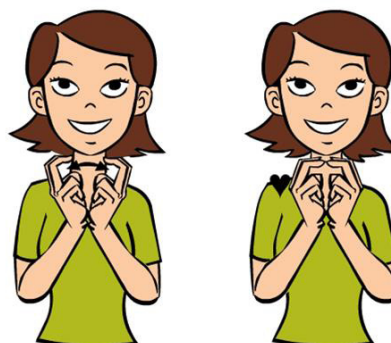
Dog (Coyote)



Deer



Hare



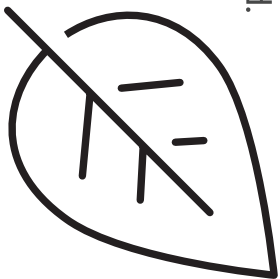
Squirrel

For more information and for Image Credit, visit

<http://www.babysignlanguage.com/flash-cards/>

Faces of the Forest

Draw three different leaves you found.



SIGNS OF FALL

A Teacher Conducted Field Study for
Grade 1 Students

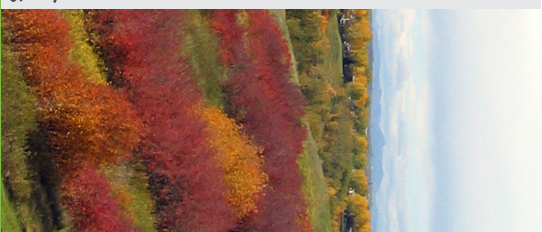
STUDENT JOURNAL

www.Fish-Creek.org



Name: _____

Date: _____



Nature Orchestra

Draw or write about the sounds of fall.



Sleeping Buds

Draw buds on the branches.

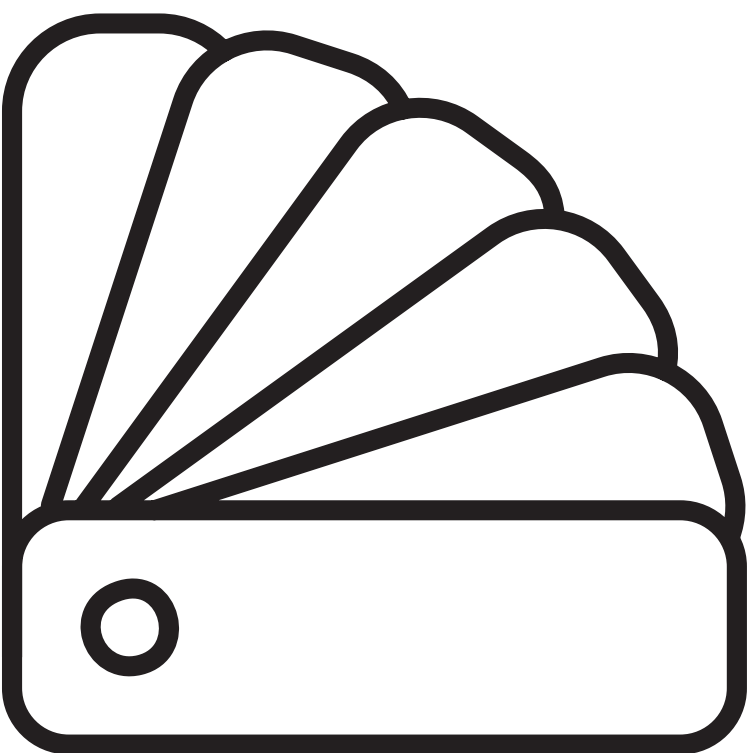


Seasonal Changes

Draw or write about the signs of fall.

Colour Search

Fill in the colour swatch with the different colours you found in the park



Draw or describe your favourite colour and where you found it.

Smells

Draw or write about the smells of fall.



Wanted: Dead or Alive!

Dead leaves do this:

Alive leaves do this:

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 on-site 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) and the EAST end (near Deer Run)

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



Access Map - Fish Creek Environmental Learning Centre

13931 Woodpath Road SW, Calgary, Alberta



DIRECTIONS

From Anderson Rd SW heading west:

- Follow signs to Tsuut'ina Trail and follow exit onto Buffalo Run Blvd

From south of 130 Ave SW on northbound Tsuut'ina Trail:

- Take the 130 Ave SW exit and keep right at top of ramp onto eastbound 130 Ave SW

