

## **PLANE Program Planning Toolkit: Ideas for Physical Literacy and Nature Exploration with Children**

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Helping all children succeed for life.



## Table of Contents

1. The Successful Pedagogy and Benefits of PLANE.....	3
2. Putting the Pieces Together .....	4
2.1. Narrative Pedagogy – Creating Documentation of Experience .....	4
2.2. How Young Children Benefit from Being in Nature .....	5
2.3. Best Practices for Early Childhood Nature Exploration .....	6
2.4. Nature Play – Asking “Good Questions” .....	7
3. Planning.....	9
3.2. Nature Collection Template .....	10
3.3. PLANE Sample Lesson Plan: Spiders, Bugs and Things on the Ground .....	11
3.4. Program Planning Considerations for PLANE Sample Lesson Plan .....	13
4. Resources: .....	14
4.1. Picture Books .....	14
4.2. Songs and Finger Plays.....	23
4.3. Group Games .....	26
4.4. Sensory Activities .....	30
4.5. Experiential Activities.....	35
5. Toolbox.....	42
6. What to Bring .....	43
6.1. Essentials (carried by leader in small backpack).....	43
6.2. “Nice to Haves” (preferably carried by another adult in another backpack) .....	43
6.3. Clothing Considerations .....	43
6.4. Behavioural Expectations.....	44
6.5. Safety First .....	45

## 1. The Successful Pedagogy and Benefits of PLANE

Fabulous nature experiences with children happen when we are flexible both in our thinking and in our responses to children. There are a number of pedagogical frameworks that lend themselves well to PLANE including Reggio or Appreciative Inquiry approaches as well as the BC 'ELF' or Early Learning Framework. We must be present and connect: we must "collect" the child. When planning to successfully explore nature with children, it is useful to keep in mind five fundamental Teaching principles or tenets. These are:

**Teach Less Share More** – Share your inner self, talk about what you observe: for example if you say "This is a hemlock tree", there is little opportunity to connect and engage, but if you talk about your inner feelings, your awe and respect for this huge tree, how it survives in times of draught, harsh winds, how its roots find nutrients in the soil you are sure to engage the children and have them respond. By sharing our inner selves and deep thoughts with the children, we teach them about our values and regard for the natural world. Sharing our feelings models trust and inspires the child to explore their own feelings more introspectively as well.

**Be Receptive** – Listen and be aware. Be ready to capitalize on the spontaneous enthusiasm that children bring to the moment. Be sensitive- every question, every comment offers an opportunity to communicate. Respond to the mood, feelings and tone of the group. Expand interests by teaching along the line of the child's own curiosity. When you are in tune with and respect the child's thoughts the time together will flow easily. Be alert to what nature is doing around you at this present moment, something interesting is almost always happening.

**Focus the Child's Attention without Delay** – Set the tone of the outing right at the start. Involve and engage the child, point out interesting things, ask questions, be truly present and interested in the child's findings and observations. Be prepared: don't lose the children's attention by focusing on organizational details that could have been prepared earlier. Some children have not had practice watching nature, and you will need to help them notice all the exciting things going on. Lead them bit by bit into the keen spirit of observation.

**Look First Talk Later** – At times, nature's spectacles will seize the child so completely they are aware of nothing else. Nurture this sense of wonder. We gain a far better sense of things outside ourselves by becoming one with them than from second hand talk. Children seldom forget a direct experience. Don't worry if you do not know all the names of things, this is not the essence of the thing. There is much more to an oak tree than a name and a list of facts. Look, ask questions, Guess! Have Fun. As the children you work with gain an attunement with nature, you will move from the role of teacher-student to fellow adventurer.

**A Sense of Joy should Permeate the Experience** – Joy takes many forms - from exuberance and gaiety to calm attentiveness. Children are naturally drawn to learning if you can keep the atmosphere and spirit enthusiastic. Remember your own enthusiasm is contagious – it is this enthusiasm that is your greatest asset as a Teacher.

**\*Five Tenets from Joseph Cornell's book Sharing Nature with Children**

## **2. Putting the Pieces Together**

### **2.1. Narrative Pedagogy – Creating Documentation of Experience**

Making learning visible: What do we mean by making learning visible? First of all, we need to be careful observers to see what is actually occurring. Secondly, we need to document those observations - not just the outcome or the product, but the whole process of the experience and the learning that comes out of it is important. When we document this process, we make the learning visible. We have a concrete way to discuss and expand our thought processes and experiences, when we reflect on our processes in greater detail, we are able to find ways to further our exploration.

How do we do this? When the children are singing: photograph! When the children are bending down or looking up intently, take a photograph. When the children are sitting down discussing the experience, take a photograph. When they are engaged an activity, take a photograph!

Just about everyone carries a cell phone now: use it to take pictures, email them back to the centre, and print the best ones. Write down interesting bits of what the children say and put these comments, observations and questions and predictions with the pictures. Write down your own thoughts and observations and put them with the pictures. Create a narrative pedagogy by pasting the photographs and comment strips to large sheets of paper. Add whatever artifacts the children may have made. Add diagrams, notes or other embellishments that occur to you. Discuss the documentation with the children, and add this discussion to the poster paper to make the learning visible. Use this rich discussion to plan your next nature exploration.

There are many ways to implement narrative pedagogy - you can make poster boards of each Nature Exploration, you can use custom sized pieces from large rolls of coloured paper for your documentation, you can even make group or individual books to document the experience. This process of making learning visible deepens the experience for everyone.

If you are interested in doing more research on this way of thinking and learning, you might want to look at the work of Carla Rinaldi, Reggio Emilia, and more locally, the BC ELF (see resource section).



## **2.2. How Young Children Benefit from Being in Nature**

- Higher levels of physical activity and increased fitness
- Lower Body Mass Index (BMI)
- Higher levels of Vitamin D
- Better eyesight
- Improved attention and focus
- Development of cognitive skills, such as problem solving, differentiation, and classification
- Better motor skills
- Improved pro-social behaviour
- Improved social skills
- Enhanced emotional development
- Development of empathy for other life forms
- Development of a sense of caring and respect for the natural world (this must be developed within first few years of life)
- Reduced stress levels (a benefit for facilitators, too!)

### 2.3. Best Practices for Early Childhood Nature Exploration

- Begin with simple activities and experiences.
- Provide time, space, and materials for children to engage in *authentic play*, which takes place in natural settings and uses natural materials.
- Make sure experiences are pleasant and memorable.
- Encourage children to touch and experiment so they stay actively involved.
- Provide frequent, positive outdoor experiences. Ongoing simple experiences with the grass, trees, insects and animals in nearby areas are preferable to a one-time trip to a park or nature preserve.
- Encourage children to make connections with the unique sounds, sights, smells, and cycles of *their own place* – the ecosystem in which they live.
- Emphasize *experiencing* rather than *teaching*. Let the children take the lead as much as possible.
- Focus on what the children find interesting instead of competing for their attention with teacher-directed activities.
- Give children interesting opportunities to explore and to investigate their own questions.
- Maintain a warm, nurturing and accepting atmosphere so children can feel secure in their explorations of nature and can also build inter- and intrapersonal skills.
- Demonstrate a personal interest in and enjoyment of the natural world.
- Model caring and respect for the natural environment.
- Introduce culturally diverse experiences and perspectives.
- Go outdoors whenever possible!

**Nature + Play = Nature Play**



## 2.4. Nature Play – Asking “Good Questions”



**Purposely Framed Nature Play:** combine *open-ended unstructured play* (children experience and explore the nature site on their own) with *modeled play* (facilitators illustrate, explore and demonstrate activities or ideas) and *facilitator/child interactions*.

The best and easiest way to make this happen is by asking the children open-ended “good questions” that invite exploration. Eventually we want to encourage the children to ask their own “good questions” about what they’re experiencing and to investigate possible answers.

### Sample “Good Questions”

- How does the wind feel on your face?
- How many colours do you see in that rock?
- What do you hear when you stand very still?
- What does the mud/soil/leaf litter feel like? What does the tree bark feel like?
- How many [natural objects of a particular colour/shape/type] can you find?
- How many things can you find outside that are soft?
- Is that rough or smooth? Cold or hot?
- What shapes do you see in the clouds?
- What does the [flower, rain, soil] smell like?
- What do you think that is?
- What might happen if you blew on that dandelion? [*Base question on item or object the child is discovering or has found.*]
- What could you do with [found natural object]? What else could you do with it?
- What animal do you think made those tracks? Where do you think it was going?
- What can you think of to do with [found natural object]?
- What pictures do you see in the bark of the tree trunks? What do they look like?
- How many insects/spiders can you find? What colours are they? What do they look like? If you don’t see any insects/spiders, why might that be happening? Where might the insects/spiders be? Where do you think the insects/spiders go at night?
- How many different leaves can you find? How many different shapes? Colours? Can you find one just like the one you found? Can you find one that’s different? How is it different?
- Why do you think it’s getting dark earlier/later? How can we find out?
- I wonder why... What do you think?

*You don't need to be a nature expert or have the right answers. Just go along with whatever the children are observing, finding, or doing – and get into the spirit of their play!*





### 3. Planning

#### PLANE Activity Planning Template



Focus: \_\_\_\_\_ Site: \_\_\_\_\_

Activity/Materials	Location	Documentation with Photos and comments	Estimated Time
Song #1:			
“Hook” activity (could also be high-energy activity):			
Looking Up/Down Walk to site:			
Sensory activity at site (seeing, hearing, touching, smelling):			
Song #2:			
Scavenger hunt activity tied to theme:			
Nature Playtime:			
Nature Collections:			
Looking Up/Down Walk back to centre:			
Circle/carpet time:			
Follow-up/extension activity/activities:			



### 3.2. Nature Collection Template



Nature Item English name:	Nature Item English name:	Nature Item English name:
Name in your language:	Name in your language:	Name in your language:
Nature Item English name:	Nature Item English name:	Nature Item English name: Name in your language:
Name in your language:	Name in your language:	
Nature Item English name:	Nature Item English name:	Nature Item English name:
Name in your language:	Name in your language:	Name in your language:
Nature Item English name:	Nature Item English name:	Nature Item English name:
Name in your language:	Name in your language:	Name in your language:



### 3.3. PLANE Sample Lesson Plan: Spiders, Bugs and Things on the Ground

Materials:

- Zip-Loc bags, one for each child
- Egg cartons for Nature Collections (at centre)
- Boundary markers for Nature Playtime (e.g., yellow “crime scene” tape)
- Healthy snacks and water
- Compostable bag for waste (either start a compost bin in centre or take home for Green Bin)
- Books: *The Very Busy Spider* or *The Very Hungry Caterpillar*, both by Eric Carle

Plan Template:

Activities	Logistics
Sing “Itsy Bitsy Spider” with motions, once or twice.	Indoors at centre, ~1 min.
Have children brainstorm things they might see if they looked down at the ground in a forest or during a camping trip.	Indoors at centre, ~3 min.
Have everyone put on appropriate outdoor clothing, and pick up all necessary gear (Prepared ahead of time!), including Zip-Loc bags for Nature Collections. Go over the general behavioural expectations (first four on list). Take a photo of the group before you leave. Let centre staff know where you’re going and when you’re expected back.	Indoors at centre, up to 10 min. (but no longer)
Do a Looking Down Walk to previously selected outdoor site, close to centre. On the way to the nature site, continually ask “good questions”: What colours do you see in the sidewalk/dirt? What kinds of things are you finding on the ground? Are they alive or not alive? How can you tell?	Outdoors, up to 12 min. (but no longer)  <b>Photo documentation, script of children’s comments</b>
Once at the nature site, stop and have the children quietly listen for up to 30 seconds. Ask them what sounds they hear.	Outdoors, ~1 min. <b>Photo documentation, script of children’s comments</b>
Sing “Our Friends on the Ground.”	Outdoors, ~1 min.
Have children go on Spider, Bug, and Leaf Hunts. They can point out any spiders, spider webs, bugs, caterpillars, worms, etc. that they find, but they should be respectful (as the song tells them to be). They can pick up leaves to show you and any other adults who are with the group. If a child immediately finds a leaf, ask him/her to find one just like it, or to find one that’s a different colour or shape.	Outdoors, ~5-10 min.  <b>Photo documentation, script of children’s comments</b>
Gather the children together, review first four behavioural expectations and go over the rest. Emphasize staying within	Outdoors, no more than 3 min.



boundaries. Ask an adult to go with you to use the toilet.	
Have the children engage in Nature Playtime (facilitated unstructured play). If they don't know what to do, start a game, such as Pirate Ship (using a fallen log or stump as the ship) or Hide and Go Seek. You can also have the children connect to each other and move like a caterpillar. Once they begin playing on their own, occasionally circulate and ask more "good questions": Is that tree bark rough or smooth? Where do you think the bugs go at night? What does the dirt smell like? Encourage the children to ask questions as well.	Outdoors, 15-20 min. <b>Photo documentation, script of children's comments</b>
Pass out one Zip-Loc bag to each child and ask him/her to find one or two things on the ground to put in the bag and take back to the centre for the child's Nature Collection.	Outdoors, ~5 min. <b>Photo documentation, script of children's comments</b>
Gather in undercover area to eat healthy snacks. Take another photo of the group (hopefully, all muddy!).	Outdoors, ~10-15 min. <b>Photo documentation, script of children's comments</b>
Return to centre and do a Looking Up Walk on the way: What colour is the sky today? Where are those birds going? What do the clouds look like to you?	Outdoors, up to 15 min. (but no longer) <b>Photo documentation, script of children's comments</b>
Back at the centre, do circle/carpet time read <i>The Very Busy Spider</i> or <i>The Very Hungry Caterpillar</i> and discuss collections and place in egg trays, talk about what everyone saw, heard, felt, or smelled at the nature site. Sing "Itsy Bitsy Spider" again.	Indoors at the Centre, 10-15 min or as long as desired. <b>Photo documentation, script of children's comments</b>

*Note: It is always better to over-plan rather than not to have enough do: thus, there are more than 35 minutes' worth of activities in this lesson plan. Please feel free to pick and choose among the activities in the plan and tailor the lesson to the needs of your centre or group.*



### 3.4. Program Planning Considerations for PLANE Sample Lesson Plan

**Spider, Bug or Leaf Hunt.** For each hunt, allow the children to explore for 2 minutes and then do a show-and-tell with the group. Finish with imaginative play or a mini-game centering on the object of the hunt (e.g., get into a line, put your hands on each other's shoulders, and move up and down like a caterpillar; pretend you're a leaf being blown by the wind; play Spider and Bug Tag). For a spider/bug hunt, have the children point to the area where they found the spider, spider web, caterpillar, worm, insect, etc. and talk about what they saw or found (the children shouldn't disturb the animals or carry them away from their habitat). The children can pick up leaves they find on the ground, put them in plastic bags, and carry them back to the centre to use in further investigations (say, with magnifying glasses) or as art materials.

**Looking Down Walk.** As the children walk to or around a natural area, have them look down at the ground and describe what they see: leaves, soil, twigs, logs, grass, etc. If they don't have anything to say, ask "good questions" to get them started. Continue asking good questions to elicit more sensory experiences. (You can also take the children on a **Looking Up Walk**, perhaps on the way back to the centre.)

**Listen to the Forest.** Have the children stand in a wooded area and quietly listen for 30 seconds to a minute. Ask open-ended questions to get the children to describe what they hear. This is one of several activities inspired by First Nations or Indigenous science. Others include **Orienting to a Place** (look at an object from the four cardinal directions and observe how changing your direction also changes what you see), **Listening to Water** (sit near flowing water and listen for sounds or words: "What is the water saying?"), and **Magnifying the World** (explore an outdoor area using a small hand lens).

**Nature Playtime.** This is basically facilitated unstructured play. If the children don't know what to do or are reluctant to play without adult guidance, start a game such as Pirate Ship (using a fallen log or stump as the ship) or Hide and Go Seek. Once they begin playing on their own, occasionally circulate among them and ask more "good questions." Encourage the children to ask questions as well, and use those questions as springboards for future PLANE sessions.

**Nature Collections.** Have each child collect one or two interesting things on the ground to put in a Zip-Loc bag (one per child). Take these "loose parts" back to the centre and put them in egg cartons (again, one per child). Write the name of the found objects in English on the Nature Collections sheet, cut out each object name, and glue it to an appropriate spot in the egg carton. If possible, have children who speak another language ask their parents to write the names of the collected objects in their home language. (Copy label template).




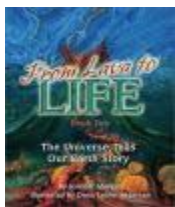
**Follow-up Activities.** (1) Do a group/circle time and talk about what everyone saw, heard, felt, or smelled. (2) Make spiders out of pom-poms, pipe cleaners, and googly eyes. (3) Do or extend dramatic/imaginative play by having children be “leaves in the wind or on the ground”, forming a caterpillar, moving like sow bugs (may have to demonstrate), making a spider web with their bodies, etc.

### Make Learning Visible

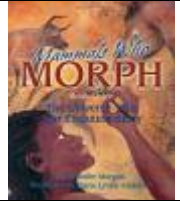
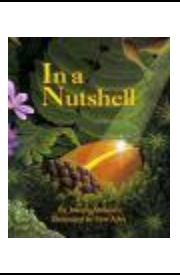


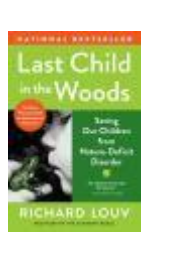
Document the children’s experiences with photographs throughout the session. Email the photos from your phone to your computer when you get back to the centre. Make some notes of comments the children made if you were unable to do so during the session. These notes can be printed and made into “comment strips” After the children leave, you can select photos to print in black and white (control P). The photos will also remind you of the comments the children made and you can make “comment strips” from your memories. The next time the children come for a PLANE session you can start by discussing your last adventure, and pasting the photos, comments and children’s art work on poster boards or pieces of large paper. This kind of narrative pedagogy documents the children’s learning and makes it visible. It also sets the stage for the next act in the children’s learning and allows them to direct, sculpt and be an active part in their own learning.

## 4. Resources:

### 4.1. Picture Books



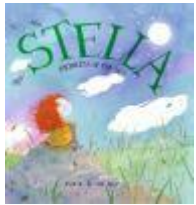

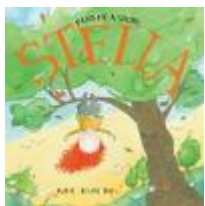
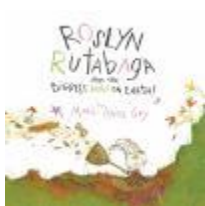
	<p><a href="#">Born With A Bang</a></p> <p>The beginning of the Universe, multiple strands of text allow this book to be shared suitably by many ages and stages. There are fabulous rich pictures for inspiration and discussion.</p> <p>Book One. The Universe Tells Our Cosmic Story By <a href="#">Morgan, Jennifer</a> Book - 2002Barcode: 31383071509189   Call Number: J35231 M84</p>
	<p><a href="#">From Lava to Life</a></p> <p>A great jump off point to look at bacteria and pond life through a microscope. Discussion of the first flowers</p> <p>Book Two, The Universe Tells Our Earth Story By <a href="#">Morgan, Jennifer</a> Book - 2003Barcode: 31383071569274   Call Number: J357683 M84 f</p>
	<p><a href="#">Mammals who Morph</a></p> <p>An in depth look at mammals with multiple strands of text allow this book to be shared suitably by many ages and stages. There are fabulous rich pictures for inspiration and discussion.</p>



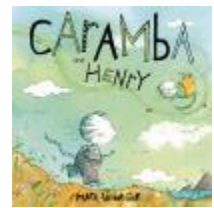
	<p>Book Three, the Universe Tells Our Evolution Story By <a href="#">Morgan, Jennifer</a> Book – 2006 Barcode: 31383078591735   Call Number: J3599038 M84 m</p>
	<p><a href="#">In A Nutshell</a> This lovely picture book details the life journey of an acorn to a mighty oak. By <a href="#">Anthony, Joseph</a> Book - 1999Barcode: 31383083860109   Call Number: J FIC</p>
	<p><a href="#">Sharing Nature with Children</a> An excellent Resource of outdoor games for groups of children The Classic Parents' &amp; Teachers' Awareness Guidebook By <a href="#">Cornell, Joseph Bharat</a> Book – 1998 Barcode: 31383051819368   Call Number: J3577 C81 s</p>
	<p><a href="#">Sharing the Joy of Nature</a> A sequel to “Sharing Nature”, this book provides a fuller development of the <u>flow learning</u> system of nature awareness. Nature Activities for All Ages By <a href="#">Cornell, Joseph Bharat</a> Book – 1989 Barcode: 31383030846235 Call Number: 574.04 C81sj</p>
<div data-bbox="191 1251 354 1377" data-label="Text"> <p>No Image Available</p> </div>	<p><a href="#">Listening to Nature:</a> This is the 3<sup>rd</sup> book in the series and offers reflective activities primarily for teens and adults working on stage 3 of the <u>flow learning</u> system using lovely guided auditory experiences. How to Deepen your Awareness of Nature By <a href="#">Cornell, Joseph Bharat</a> Book - 1987Barcode: 31383027408171 Call Number: 574.04 C81L</p>
	<p><a href="#">Last Child in the Woods</a> A deeply thought provoking discussion of the importance of nature in our development as human beings suggesting the child in nature is an “endangered species”. Saving Our Children from Nature-deficit Disorder By <a href="#">Louv, Richard</a> Book – 2008 ISBN 9781565126053 156512605X Call Number 155.418 L89L1</p>
	<p><a href="#">When Stella Was Very, Very Small</a> A discussion of Stella’s first explorations with the natural world. By <a href="#">Gay, Marie-Louise</a> Book - 2009Barcode: 31383092322018   Call Number: J</p>



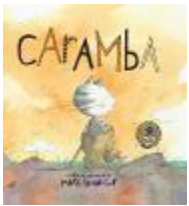







	<p>FIC</p>
	<p><a href="#">Stella, Queen of the Snow</a> A lovely, whimsical discussion between Stella and her little brother Sam about the qualities of snow By <a href="#">Gay, Marie-Louise</a> Book - 2000Barcode: 31383091679152   Call Number: J FIC</p>
	<p><a href="#">Stella, Princess of the Sky</a> Sam and Stella experience the sky together while Stella makes up delightful reasons for Sam's difficult "why?" questions. By <a href="#">Gay, Marie-Louise</a> Book - 2004Barcode: 31383092088247   Call Number: J FIC</p>
	<p><a href="#">Stella, Fairy of the Forest</a> Sam and Stella explore the forest together – Sam likens the wrinkled bark of the huge trees to Grandma's cheek "bark" By <a href="#">Gay, Marie-Louise</a> Book – 2002 Barcode: 31383092089021   Call Number: J FI</p>
	<p><a href="#">Read Me a Story, Stella</a> A great stimulus for exploring a pond and the creatures living near the pond! By <a href="#">Gay, Marie-Louise</a> Book - 2013Barcode: 31383102717728   Call Number: J FIC</p>
	<p><a href="#">Roslyn Rutabaga and the Biggest Hole on Earth</a> A little Rabbits understanding of what and who lives in the ground when she decides to dig the biggest hole ever. By <a href="#">Gay, Marie-Louise</a> Book – 2010 Barcode: 31383093255696   Call Number: J FIC</p>

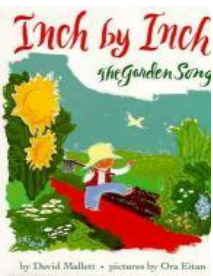
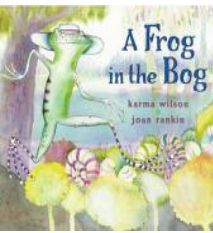

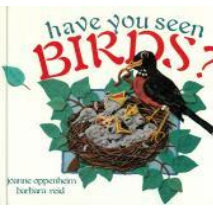
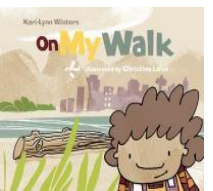


	<p><a href="#">Caramba and Henry</a></p> <p>Caramba helps his brother Henry to fly</p> <p>By <a href="#">Gay, Marie-Louise</a> Book - 2011Barcode: 31383097024460   Call Number: J FIC</p>
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	<p><a href="#">Caramba</a></p> <p>A novel way to discuss seeing the sky and the ocean and being or seeing differently</p> <p>By <a href="#">Gay, Marie-Louise</a> Book - 2005Barcode: 31383075594179   Call Number: J FIC</p>
	<p><a href="#">Rainy Day Magic</a></p> <p>A delightful fantasy of ideas for playing in the basement on a rainy day</p> <p>By <a href="#">Gay, Marie-Louise</a> Call Number: J FIC</p>
	<p><a href="#">All in a Day</a></p> <p>An inspiration to go and out and meet THIS day!</p> <p>By <a href="#">Rylant, Cynthia</a> Book - 2009Barcode: 31383103191402 Call Number: J FIC</p>
	<p><a href="#">Mama, Is It Summer Yet?</a></p> <p>A celebration of nature and change, first signs of spring and ripe berries of summer</p> <p>By <a href="#">McClure, Nikki</a> Book - 2010Barcode: 31383092754889 Call Number: J FIC</p>
	<p><a href="#">Some Bugs</a></p> <p>A fascinating rhyme about the sounds and activities of insects</p> <p>By <a href="#">DiTerlizzi, Angela</a> Book - 2014Barcode: 31383106590121 Call Number: J FIC</p>
	<p><a href="#">When the Wind Blows</a></p> <p>A Rhyming exploration of what happens when the wind blows</p> <p>By <a href="#">Sweeney, Linda Booth</a> Book - 2015Barcode: 31383106482717 Call Number: J FIC</p>



	<p><a href="#">Inch by Inch</a> A lovely inspiration for planting seeds and learning about the seed cycle The Garden Song By Mallett, David Book – 1995 J+FIC</p>
	<p><a href="#">A Frog in the Bog</a> A delightful rhyme about a bog, great for ponds too! by <a href="#">Wilson, Karma</a> Book - 2003J+FIC</p>
	<p><a href="#">Big Fat Hen</a> Visiting a local chicken coup? This could be a great stimulus! by Baker, Keith Book - 1994J+BABES</p>
	<p><a href="#">Have You Seen Birds?</a> Inspirational plasticene illustrations - look outside for birds to photograph! by <a href="#">Oppenheim, Joanne</a> Book – 1986 J598.2 O62h EASY</p>
	<p><a href="#">On My Walk</a> Vancouver on a walking tour by <a href="#">Winters, Kari-Lynn</a> Book – 2009 J+FIC</p>
	<p><a href="#">Little Green</a>(14 c.1)</p>



	<p>A poetic journey through a day in the life of a hummingbird By <a href="#">Baker, Keith</a> Book - 2001Barcode: 31383072003935 Call Number: J+FIC</p>
	<p><a href="#">No Two Alike</a> So many things we see are almost the same, but not quite. By <a href="#">Baker, Keith</a> Book - 2011Barcode: 31383097547429 Call Number: J+BABES</p>
	<p><a href="#">Potato Joe</a> A new dig on an old counting song By <a href="#">Baker, Keith</a> Book – 2008 Barcode: 31383089216678 Call Number: J+BABES</p>
	<p><a href="#">A Bear's Year</a> Bear cubs grow with the seasons By <a href="#">Duval, Kathy</a> Book - 2015Barcode: 31383108802409 Call Number: J+FIC</p>
	<p><a href="#">Horsefly and Honeybee</a> This unlikely pair becomes fast friends By <a href="#">Cecil, Randy</a> Book - 2012Barcode: 31383100815896 Call Number: J+FIC</p>



## Early Learning Framework

B.C.'s Early Learning Framework includes learning principles and key areas of learning for children up to five years old [British Columbia Early Learning Framework](http://www2.gov.bc.ca/assets/gov/education/early-learning/teach/earlylearning/early_learning_framework.pdf) (PDF, 1.20MB)

[http://www2.gov.bc.ca/assets/gov/education/early-learning/teach/earlylearning/early\\_learning\\_framework.pdf](http://www2.gov.bc.ca/assets/gov/education/early-learning/teach/earlylearning/early_learning_framework.pdf)

Supports dialogue and reflection on the importance of the development and learning of young children.

- \*Guides early learning programs and activities.
- \*Encourages discussion with families about their child's early learning.
- \*Shapes professional development.
- \*Creates a shared image of children to guide the promotion of early learning.

## Companion Document

Early learning practitioners will find it useful to refer to this professional development document created to support implementation of the Framework:

[Understanding the British Columbia Early Learning Framework: From Theory to Practice](http://www2.gov.bc.ca/assets/gov/education/early-learning/teach/earlylearning/from_theory_to_practice.pdf) (PDF)

[http://www2.gov.bc.ca/assets/gov/education/early-learning/teach/earlylearning/from\\_theory\\_to\\_practice.pdf](http://www2.gov.bc.ca/assets/gov/education/early-learning/teach/earlylearning/from_theory_to_practice.pdf)







## 4.2. Songs and Finger Plays

<p><u>The Seed</u>  Let's dig a little hole  We'll plan a little seed  We'll pour a little water  And pull an little weed</p> <p><u>I hear thunder</u>  I hear thunder, I hear thunder! Oh, don't you  Oh, don't you?  Pitter Patter raindrops, Pitter patter raindrops  I'm wet thru, I'm wet thru  I see blue skies, I see blue skies  Way up high, way up high  Hurry up sunshine, Hurry up sunshine  I'll soon dry, I'll soon dry.</p> <p><u>Marching in our Boots</u>  Marching in our boots  Tramp, Tramp, Tramp,  Marching in our boots  We won't get damp, damp, damp</p> <p>Splashing thru the puddles  In the rain, rain, rain  Splashing thru the puddles  And splashing home again, gain, gain.</p> <p><u>Beehive</u>  Here is the beehive  Where are the bees? Hidden away where  nobody sees.  Soon they come creeping out of their hive,  1,2,3,4, 5!</p> <p><u>Peapod</u>  5 Little peas in a peapod pressed  1 grew 2 grew and so did all the rest  They grew and they grew and they never,  never, stopped,  Until one day that pea pod popped!</p>	<p><u>Snail</u>  Slowly, slowly, very slowly goes the garden  snail  Slowly, slowly, very slowly up the garden trail  Quickly, quickly, very quickly goes the little  mouse  Quickly, quickly, very quickly into his little  house!</p> <p><u>This Little Bird</u>  This little bird flaps its wings, flaps its wings,  flaps its wings,  This little bird flaps its wings, and flies away in  the morning.</p> <p><u>Apple Tree</u>  Here is the tree with the leaves so green  Here are the apples that hang in between  When the wind blows, the apples fall  Here is a basket to gather them all</p> <p><u>Way up High</u>  Way up high in the Apple Tree  2 little apples smiled at me  I shook that tree as hard as I could  Down came the apples, mmm they were good</p> <p>Substitute: other trees:  *Springtime tree, 2 little green leaves, out  popped the leaves just as they should  *Blossom tree, 2 little blossoms smiled at me,  down fluttered the blossoms, gently as they  could  Peach, Cherry, Pear etc.</p> <p><u>Up Down Turn Around</u>  Up down turn around  Touch the sky  Touch the ground  Wiggle fingers wiggle toes wiggle shoulders  Say HELLO!</p>
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<p><u>Rain is Falling Down</u>  Rain is falling down <i>Splash!</i>  Rain is falling down <i>Splash!</i></p> <p>Falling here, Falling there  Rain is falling down <i>Splash!</i></p> <p>Clouds are blowing round <i>Whoosh!</i>  Clouds are blowing round <i>Whoosh!</i>  Blowing here, blowing there,  Clouds are blowing round <i>Whoosh!</i></p> <p>Sun is peeking out <i>Peek!</i>  Sun is peeking out <i>Peek!</i>  Peeking here, Peeking there  Sun is peeking out <i>Peek!</i></p> <p><u>Butterfly</u>  Flutter, flutter, butterfly  Floating in the summer sky  Floating by for all to see,  Floating by so merrily  Flutter, flutter, butterfly  Floating in the summer sky</p> <p><u>Pretty Painted Butterfly</u>  Pretty painted butterfly  What do you do all day?  I roam about the summer skies  Nothing to do but play  I roam about the summer skies  All the live long day  So fly butterfly fly, dip and swoop and play  Fly butterfly fly, dip and swoop and play!</p> <p><u>Oats Peas Beans and Barley</u>  Oats peas beans and barley grow Oats peas  beans and barley grow,  Not you, not I, nor anyone knows how  Oats peas beans and barley grow</p>	<p><u>Nest for Bluebird</u>  Here is a nest for bluebird  And here is a hive for a bee  Here is a hole for bunny  And here is a house for me</p> <p><u>The Cherry Tree</u>  Once I found a cherry stone  I put it in the ground  And when I came to look at it,  A tiny shoot I found  The shoot grew up and up each day  And soon became a tree  I picked the rosy cherries then  And had them with my tea</p> <p><u>Sleeping Bunnies</u>  See the bunnies sleeping  Till it's nearly noon.  Let us gently wake them  With a merry tune  Oh so still, are they ill?  No! Hop up little bunnies Hop, Hop, Hop!  Hop up little bunnies Hop, Hop, Hop!</p> <p><u>Wiggly Woo</u>  There's a worm at the bottom of my garden  His name is Wiggly Woo  There's a worm at the bottom of my garden  And all that he will do  Is wiggle all night  And wiggle all day  There's a worm at the bottom of my garden  His name is Wiggly Woo. Wiggly, Wiggly,  Wiggly, Wiggly, Wiggly, Wiggly, Woo!</p> <p><u>I know a little pussy</u>  I know a little pussy, her coat is silver gray,  She lives down in the meadow, not very far  away. Although she is a pussy, she'll never be  a cat, for she's a pussy willow, now what do  you think of that!</p>
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<p><u>Bugs</u> The bugs in the air fly up and down , up and down, up and down, The bugs in the air fly up and down , all through the day</p> <p>The spiders on the bush spin a web.... The crickets in the field hop up and down... The bees in the hive go buzz, buzz, buzz....</p> <p><u>Clouds are Floating Swiftly By</u> Clouds are floating swiftly by, darker and darker grows the sky. Pitter patter sounds the rain, splashing on the window pane Wind is blowing whooo-ooo, rattling doors and windows too. My umbrella is so small it does not keep me dry at all. Pouring, pouring hours and hours, lots of water for thirsty flowers. Waiting children say “we fear that the sky will never clear!” but look: sunshine, a little ray, now we can go outside to play!</p> <p><u>Butterfly</u> Roly Poly caterpillar into a corner crept Around and around a blanket spun And into a corner crept. A long time passed and by and by, Caterpillar wakened with wing to fly Now she is a butterfly!</p> <p><u>Trees</u> Oak trees stretch and stretch so wide Their limbs reach out on every side Pine trees stretch and stretch so high They very nearly reach the sky Willows stoop and droop so low Their branches sweep the ground below.</p>	<p><u>Four Seeds</u> It takes four seeds: One to plant One to grow One for the larder And one for the crow.</p> <p>It takes four seeds: One for the blackbird One for the crow One for the soil and One to grow.</p> <p>It takes four seeds: One for the mouse One for the crow One to rot and One to grow.</p> <p><u>The bumble bee</u> Today I heard a buzz, and what do you think it was? It flies through the air without even a care and its tummy is covered with fuzz.</p> <p>It had small black wings, when it sits it can sting. It flies through the air without even a care. It eats out of roses and things</p> <p>So now can you guess with me? Let’s try 1,2,3.  It flies through the air without even a care: it must be a bumble bee!</p> <p><u>Earth Song</u> I take good care of my (sick cat) , that is what I do, Our earth needs as much care as my (sick cat) so I’ll take good care of it too. Oh, I’ll take good care of our earth and my (sick cat) that is what I’ll do. *Collect the children’s contributions for the things they will take care of (...)</p>
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<p><u>Squirrels</u> See the squirrels, see the squirrels Climb the tree, climb the tree Hiding nuts for winter, hiding nuts for winter In the tree, in the tree.</p> <p><u>Tall Trees</u> (an echoe and action song)</p> <p>Tall trees, (Tall Trees) Warm Fires (Warm fires) Cool Breeze (Cool Breeze) Rushing Waters (Rushing Waters) I feel (I feel) It in my body (It in my body) I feel ( I feel) It in my soul (It in my soul) Tall trees (Tall Trees)</p>	<p><u>Garden Song</u> Dig, dig, dig your garden make it smooth and neat. Push, push, push your shovel, push it with your feet.</p> <p>Plant, plant, plant your seeds, push them down an inch, cover your seeds with the soil, you only need a pinch.</p> <p>Water, water, water your seeds, this will help them sprout, sprinkle lightly, let's not pour, and don't let them dry out.</p> <p>Sun, sun, sun will shine, turns our seeds bright green, Carrots, radishes, peppers too, tomatoes and green beans.</p> <p>Watch, watch, watch them grow, wow they grow so tall, Put a scarecrow in the ground to protect them all.</p> <p>Pull, pull, pull the weeds, keep your garden clear, Make your seeds grow up and out to stretch out here and here.</p> <p>Pick, pick, pick your feast, make some veggie soup. You'll have lots and lots to eat, enough to feed the group.</p>
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### 4.3. Group Games

Many of these nature awareness games are sourced from Joseph Cornell's inspiring book **Sharing Nature with Children.** A brief description of group games follows. For more details, please see book. For each of these games, the experience will be augmented by documenting the process with photographs.

**Heartbeat of a Tree** A tree is a living creature. The best time to hear the forest heartbeat is in the spring. Choose a deciduous tree that is at least 6" in diameter. Press a stethoscope firmly against a tree keeping it motionless so as not to make interfering noises. You may need to try



several different places on the tree trunk before you find a good spot. Once you have heard a deciduous heartbeat, try listening to a conifer's heartbeat, try listening to your own and other members of the group's heartbeats!

Materials: Stethoscope

**Adopt a Tree** in a local natural area such as a park or playground. Have the children begin by closely examining the tree's characteristics and asking "I wonder..." questions about what will happen to the tree during fall or winter. Then have the children observe their adopted tree over several seasons. If they wish, the children can construct an indoor tree at the centre and change it to mirror their outdoor observations. They can also draw pictures or make collages to show what "their" tree looks like as the seasons change.

**Dandelion Day** In the spring or summer see how many dandelions the children can find. Have them do a dandelion dance, imitating how dandelions look and move when they're spreading their seeds on the wind. At the centre, children use dandelion "fluff" in their artwork.

**Blindwalk** Introduce this game by sitting in a circle with closed eyes. Pass an object around. Each person is to use their senses to discover and comment on something new about the object. This promotes awareness and comfort for the walk. Each adult leads a child. Remember to emphasize the necessity of being the "eyes" for the other person watching for logs, branches etc! Leader also guides blind partners' hands to feel interesting objects and leads to interesting sounds or smells.

Materials: Pinecone or other object. Blindfolds: 1 for each pair

**Meet a Tree** Blindfold child and lead them to a tree. Give specific suggestions and ask specific questions as to how to get to know your tree. For example: rub your cheek on the bark. Is this tree alive? Can you put your arms around it? Is this tree older than you are? Can you find plants growing on it? Animal signs? Lichens? Lead the child back to the start in a circuitous manner. Without the blindfold, ask if the child can lead you back to "their" tree.

Materials: Blindfolds

**Transformations** Role playing is another way of getting into the natural world. Be a dandelion fluff, a coyote cub, a singing bird, a banana slug, a tiny mouse, a wise old maple tree – you can go through the whole cycle of the maple tree from seedling to sapling to ancient tree, to falling tree, to decomposing tree back to the soil in just a few minutes! The more you can immerse yourself in the role, the more deeply you concentrate, the more empathy and connection to the natural world you can develop. It is often easiest to have everyone play the same creature or plant and then change.



Consider a mime or dance that recreates something the children saw or experienced during the PLANE session – such as acting out the process of a tree growing from an acorn or a little seed, or a bird hatching from an egg.

Do “pretend play” activities on a neighbourhood walk, at the nature site, or at the centre. What does it feel like to be a plant or animal? What would it be like to put yourself in ALL of a centipede’s shoes? Children could also use kaleidoscopes to become bees or other insects with compound eyes, move like slugs or hummingbirds, or to act like baby bats searching for their mothers or even baby birds pecking their way out of eggs.

Materials: Your imagination!

**Sounds and Colours** Children sit or lie on their backs with both fists in the air. Every time someone hears a new bird song they lift a finger in the air. What about insects or frogs? Wind in the trees, falling leaves, rushing water? This is a wonderful way to help children become more aware of the sounds and the stillness of nature. See if you can count to 10 without hearing a bird song! Ask the children to identify all the colours they can see right in front of them without moving from where they are sitting.

Materials: None!

**Duplication** Before assembling the children to play, gather about 10 common natural objects such as rocks seeds cones plant parts and some signs of animal activity. Lay the objects out on a cloth to look at for 30 seconds or so. Ask the children to try and remember everything they saw and to try to find an object like that. Give each child a bag for collecting the duplicates. After 5 minutes of searching call the children back. Dramatically pull objects out of the cloth one at a time and tell an interesting little story about the object. Ask if anyone found an object like that. Make the game harder or easier by adding more or fewer objects. You could also leave the sample objects on display.

Materials: A collection of local flora and fauna, 15 plastic bags for collections

**Micro Hike** A very short expedition guided by a string which is about 3-5 feet long. The “hikers” cover the trail on their bellies viewing such wonders as grass blades, dew drops, a beetle or spider through a magnifying glass. Begin by asking the children to lay out their strings on a piece of ground that look most interesting to them. Ask questions to stimulate their imaginations: “What kind of world are you traveling through right now?” “Who are your nearest neighbors?” “Are they friendly?” “What is the spider going to do?” “What would it be like to be that metallic green beetle?” “How does the beetle spend his day?”

Materials: 15 x 3-5’ strings, 15 magnifying glasses



**Webbing** Children form a circle. The leader stands inside the circle with the ball of yarn and asks “Who can name a plant that grows in this area? ..... Dandelions! Good! Here, Miss Dandelion you hold the end of this string. Is there an animal around here that might eat the dandelion? ..... Rabbits, ah a sumptuous meal! .... Mr. Rabbit, you take hold of the string here; you are connected to Miss Dandelion by your dependence on her flowers for your lunch. Now who needs Mr. Rabbit for lunch? Continue connecting the children with the string as their interdependent relationships emerge. Consider elements such as insects, soil, water etc. When the whole circle is strung together you have created a web of life. Now take away by some plausible means one member of the web. For example, a fire or a logger takes away a tree. When the tree falls, it tugs on the string, anyone who feels a tug on the string gives a tug, and anyone who feels that tug gives another tug. This shows everyone is affected by the death of the tree. Tip: Tie a loop in the end of the string so the first child can put it on their wrist and it does not get dropped.

Materials: Ball of Yarn, scissors

**What Animal am I?** Pin a picture of an animal on a child’s back (Don’t let him see). Have him turn around so the others can see what animal he has become - “animal” asks the group questions to find out who he is. The other children can only answer “yes” “no” or “maybe”.

Materials: Different animal pictures, safety pins

**Find your Age** Each person tries to find a tree their own age. It is easy to estimate the age of a young tree by counting the whorls of its branches. Count the sets of branches. (Rings of branches radiating out from trunk- this method works well up to about 25 years when the branches become too dense and complicated). Conifers grow from the tip up. The tips of the branches also grow, so do the roots, and the trunk gets a little bigger in diameter. The trunk does not grow any higher. (If you attached a board to the trunk, it would not get higher). Write down the age of everyone and as a group look for a tree the approximate age of each player. Study your tree and observe all its characteristics. Look for fire scars, bark scars and other marks, bends in the trunk and so on. Draw a picture or write a letter to your tree. Have everyone share their observations and feelings about their tree.

Materials: paper crayons magnifying glasses

**Scavenger Hunt** Assign scavenger lists that help the children to think creatively and observe closely. Share your finds and discuss them. Notice the differences in children’s findings.

Materials: Scavenger Lists, pencils, bags for each collector pair.





*Sample Scavenger List:*

*(Collect only things that can safely be returned to Nature without Damage)*

*A feather  
One seed blown by the wind  
Exactly 10,25, or 50 of something  
A Maple leaf  
A thorn  
A Bone, 3 different kinds of seeds  
One camouflaged animal or insect  
Something Round  
Part of an Egg  
Something Fuzzy  
Something Sharp  
A piece of Fur  
5 pieces of man-made litter  
Something beautiful  
A leaf which has been chewed on (eg. insect)  
Something that makes a noise  
Something white  
Something soft*





#### **4.4. Sensory Activities**

Taste:





There are so many opportunities for tasting food in the natural world, even in an urban environment! Consider seeds, nuts, roots, herbs, fruits, berries, vegetables, eggs and flowers. Yes Flowers! Flowers have been accenting world cuisines for thousands of years, dating back to the use of chrysanthemums by the ancient Chinese.

With more than 100 types of garden flowers noted as edible, chances are you are already growing an edible flower or two. Imagine the delight of lemonade laced with blue borage flowers, bi-color pansies scattered on a garden-fresh salad, or fiery red nasturtiums sprinkled over a simmering soup. You could even decorate the top of a cake or cheese.



 <p><b>NASTURTIUMS</b> (<i>Tropaeolum majus</i>)</p>	<p>Nasturtiums have a somewhat spicy, peppery tang similar to watercress. (Both leaves and blooms are edible.) Flower colors range from a moonlit yellow to bright yellow, orange, scarlet and red.</p> <p><b>How to use:</b> Sprinkle flowers over salads, vegetables, pastas, stir-fries and meat dishes, or blend with salsas, cream cheese or butter.</p> <p><b>Growing tip:</b> This easy-to-grow, self-seeding annual thrives in most well-drained soils in full sun to light shade.</p>
 <p><b>SQUASH</b> (<i>Cucurbita</i>)</p>	<p>The giant of culinary flowers, all squash flowers are edible -- both winter and summer squash-- though zucchini tends to produce the largest flowers. The texture is somewhat crisp with a sweet zucchini-like flavor, only milder.</p> <p><b>How to use:</b> The large yellow blooms are perfect for stuffing or deep frying.</p> <p><b>Growing tip:</b> Plant this warm-summer annual in deep, rich and well-drained but moist soil containing plenty of organic matter.</p>
 <p><b>LAVENDER</b> (<i>Lavandula</i>)</p>	<p>Blooms accentuate sweet and savory dishes with a sweet mingling of floral, fresh pine and rosemary with citrus notes. English lavender varieties (<i>L. angustifolia</i>) have the best culinary flavor.</p> <p><b>How to use:</b> Its flavor complements a variety of foods -- from fish, poultry and most fruits and vegetables to sauces, marinades and dressings along with beverages, baked goods and desserts. Strip the flowers from the stalk before using.</p> <p><b>Growing tip:</b> Best in full sun and well-drained soil.</p>
 <p><b>BORAGE</b> (<i>Borago officinalis</i>)</p>	<p>Star-shaped blooms with eye-catching appeal in pink, violet or shades of blue. Subtle flavor slightly akin to cucumbers, though some note a grassy undertone.</p> <p><b>How to use:</b> Show off their beauty by freezing the flowers into ice cubes and floating them in a beverage, or sprinkle over soups, salads or dips.</p> <p><b>Growing tip:</b> This self-seeding annual tolerates a wide range of soil conditions and can be grown in full sun to light shade.</p>



 <p><b>PANSIES, JOHNNY-JUMP-UPS and VIOLAS</b></p>	<p>All are similar in taste, sporting a light, floral flavor that some say is suggestive of grape; others note wintergreen.</p> <p><b>How to use:</b> Use the entire flower as a garnish for salads, hors d'oeuvres or decorating cakes.</p> <p><b>Growing tip:</b> Most grow best in partial shade and moderately moist soil, though exposure and moisture needs vary by species.</p> <p>(<i>Viola x wittrockiana</i>, <i>V. tricolor</i>, <i>V. cornuta</i>)</p>
 <p><b>PINKS (<i>Dianthus</i>)</b></p>	<p>Delicate flavor with hint of cloves, though the taste can vary slightly among species.</p> <p><b>How to use:</b> Spice up hot tea or cider, float the flowers in cream soups, sprinkle over fruit salads or bake into cookies.</p> <p><b>Growing tip:</b> Best in full sun and fairly rich, well-drained soil, though exposure and moisture needs may vary by species.</p>
 <p><b>ROSES (<i>Rosa</i>)</b></p>	<p>All rose types vary greatly in flavor -- from full-bodied floral to pleasantly sweet and floral, to slightly metallic or even overtones of ginger -- so it's best to taste-test first.</p> <p><b>How to use:</b> Use petals to flavor honey, beverages, a sorbet or fruit compote or make a classic rose-petal jam.</p> <p><b>Growing tip:</b> Best in full sun to light shade and moderately moist, well-drained soil.</p>
 <p><b>SCENTED GERANIUMS (<i>Pelargonium</i>)</b></p>	<p>This flower has many scents ranging from nutmeg or ginger to citrus, chocolate and peppermint. Best-flavored blooms come from rose, peppermint and lemon-scented varieties.</p> <p><b>How to use:</b> Season ice cream or sorbet, sprinkle over desserts and drinks, or freeze them into ice cubes.</p> <p><b>Growing tip:</b> This tender perennial thrives in full sun to light shade in well-drained soil.</p>



### Tips for safe and tasty dining

Before you begin sampling flowers, first chew on these essential rules:

**Not all flowers are edible**, so make sure that it is before tasting it. (All culinary herb flowers, however, are edible.)

**Always refer to the botanical name** when verifying whether a flower is safe to eat. Check a reference book or visit one of the following websites and search for "edible flowers" for a listing of safe blooms.

**Avoid eating any flower that has been sprayed** with chemicals or pesticides.

**Just because a flower is edible doesn't mean it will taste good!** Some will be more to your liking than others -- it's all a matter of taste. Keep in mind that the stamen, pistil and sepal of some blossoms are bitter and can contain pollen that may detract from the true flavor of the flower. (Viola species are an exception in that these flower parts are bitter-free.) Consuming only the petals will further heighten the appeal factor.

### From garden to table

While an edible flower's flavor profile stays pretty consistent, subtle characteristics and nuances can be altered by varying degrees depending on the growing conditions, location, soil quality and the time and stage of harvest. At times, flowers from the same plant can vary in taste from season to season.

Ideally, the best time to harvest flowers is in the cool of the morning or late afternoon. Avoid any blooms that are wilted, faded or showing signs of insects or disease.

Gently rinse or clean flowers before consuming. If you are unable to use the flowers within a few hours of harvest, keep them fresh by spreading flowers out on damp towels -- blooms facing down -- and refrigerate overnight. Another way to keep flowers fresh for a day or two is to display them in a glass or vase filled with water.

As a general rule, edible flowers are best used as a seasoning or accent to enhance the flavor of food rather than as a main ingredient. Go lightly at first until you get a feel for the flower-to-food ratio. In fact, tasting your flowers before using them in any food is always a good idea.

### Smell

(Adapted from Sweatman & Warner, 2009)

Try using "whiff cups". There are lots of interesting smells in the woods! Give each child a *whiff cup* (yogurt cup) to fill with interesting smells that they find, such as pine cones, leaves, dirt, grass (do not pick living things or litter). To make the objects smell stronger, break or scratch them. Pass around each whiff cup and take in the amazing smells of nature. Decide as a group which one is the sweetest, the grossest, etc. Try blindfolding children and see if they can identify by smell what is in a whiff cup!

Materials: 1 yogurt cup per child, blindfolds.



### Touch

Tree Friends: Gather together in a circle and tell the children they will be getting to know some new friends in the woods/park, but these new friends are shy so we have to wear blindfolds and work with a partner. With lots of adult supervision and in partners, blindfold one partner and carefully take them to a tree to get to know it just using their hands. Once they feel they know it, take them away from the tree, remove the blindfold and ask the children to find the tree with their eyes and hands. Switch roles. Remember safety is first priority in this activity!

Materials: One blindfold per pair

### Sight

Monster Friends: Trees have faces of all shapes and sizes, and children can find them in the knots and bark contours of their trunks. Using a cardboard *viewfinder*, show the children a monster face on a tree trunk, pointing out the eyes, nose and mouth. Ask the children if they can find a face in the trees using their viewfinders. Let them introduce their monster friends to others and comment on the different expressions and feelings that they see in them.

Materials: cardboard viewfinders 1 per child: (8"x4" cardboard, folded in half with 2x2 window cut through both sides)

Leaf Slides: Ask all the children to find an interesting leaf from the ground (this is a great activity in the autumn) to look at close-up using a *leaf slide viewfinder*, look up at the sky through the leaf to see all of its beautiful veins and colours. Pass the leaf slides around the group so everyone can see the differences among them.

Materials: view finder, fold to hold leaf.

Rainbow Chips: Give the group a set of *rainbow chips* (diversely coloured marbles, such as the large flat kind used in fish tanks, coloured squares or small paint chips), displaying them on a piece of white cloth. Go on a hunt for each of these colours in the natural area. If the items are not alive, the children can bring them back to display beside their rainbow chips. If an item is alive (flower, berry), the group can take the rainbow chip to the place where the item is to compare colours and celebrate the discovery.

Materials: A couple dozen rainbow chips

### Sound

Nature Symphony: this is an extension of listening to the forest. Find an area where all the children and adults can sit comfortably. Talk about listening to music (as a preparation activity, listen to part of a symphony in the centre before leaving or play a clip on your phone at sight).



Tell the children that right now there is a concert playing here in the woods/park. Ask them to close their eyes and listen to the sounds in nature for 30 seconds. Talk about what they hear and who made the sounds.

Natures Instruments: Collect found natural objects – twigs, leaves, berries – to make musical instruments outdoors. Bring along some string and elastic bands. Challenge children to make sounds with these items. Pose open-ended questions and comments, such as, “What might happen if you...?” and “Show me what you can do with it.” Create your own nature symphony.

## **4.5. Experiential Activities**

### Art Activities

Sun Photo Paper: also called cyanotype photo paper. This paper is expensive but provides an opportunity to create an actual print from natural objects placed on top of the paper and left exposed to sunlight for a period of time.

Shadow Painting: Put out a roll of butcher paper where the shadow of a bush or tree can be cast on it. Give the children paint and brushes to paint the shadow.



Make Monoprints from Natural items: Salt scales of a fish in advance, paint fish, turn over and press onto paper or cardstock, or even a big rock, a log or a piece of bark!

Cut an apple or potatoe in half. Carve or dig with a knife or a stick to make an image on your “stamper” cover with paint and stamp.





“Magic Paint” Give every child a clear plastic container with coloured water and a brush. (Use just a couple of drops of food colour – a little goes a long way!) Tell them they can paint anything they like, the colour ‘vanishes’ as it is applied! You can also use spray bottle filled with coloured water, observe and discuss how beautiful rocks become when they are wet - all the colours are hiding inside!

Web Prints: If you find an unoccupied web, spray paint lightly (tempera in spray bottle) and gently press paper onto web. (Rice paper works well)

Charcoal Drawing: Collect bits of burnt wood for charcoal. Use your charcoal to draw on large rocks, pathways, logs or stumps.

Clay: If you find a spot where you can dig up natural clay do it! Have buckets and water on hand and allow the children to feel the clay squish through their fingers. You can also buy clay – be sure to show pictures and discuss where clay comes from!

Mud: making mud pies is a perennial favorite! Consider different amounts of water with the mud. Drier mud can allow you to draw or scratch images.



*Don't forget to document the children's work to make learning visible!*





Nature Mural: Gather lots of sticks, flowers, pinecones, small pebbles, leaves etc and make a mural.



*Don't forget to document the children's work to make learning visible!*



**Bark Rubbings:** Use really big wax crayon eggs. Tape, hold or tie the paper to the bark of a tree and start your rubbing to get the bark pattern. Add block tempera water paint to create a wax/watercolour resist.



Create leaf rubbings in the same way from leaves collected during a Leaf Hunt or Leaf Slides activity.

**Make Fairy Houses:**







Make a pathway to a Fairy House...



How about Magic Forest People?



**Dye Eggs:** Put a flower, tiny leaf sprig, or fern tip around an egg. Secure it with a piece of nylon stocking and tie a knot. Use natural vegetable dyes such as purple cabbage (blue) or onion skins (golden yellow) cut up the cabbage or onion skins and put them in a pot. Nestle your eggs underneath and cover cabbage or onion skin with water then boil. The longer you boil the eggs, the more intense the colour will be. If you don't boil them too long, you can even serve them as a 'visual treat' hard-boiled egg snack! Follow the link to a 3 min video below.

<https://www.facebook.com/1509892729319494/videos/1511098432532257/>

Sensorial Recipes:

Herbal Playdough:



2 cups flour  
1cup salt  
1.5 cups boiling water  
2T oil  
A few drops of lemon juice  
(this acts like cream of tartar)  
Handful of herbs, lavender, tarragon, rosemary, thyme, sage, oregano, or mint (anything that smells nice and is not an irritant!)

**Puffy Sand:** shaving cream, food colour, sand

Add the desired amount of shaving cream to each bowl, add a few scoops of play sand along with a few drops of food coloring, and mix. Squirting the shaving cream, squeezing the food coloring, tossing in the sand, and mixing it all together is a big part of the FUN!



Magic Sand: mix together and see what happens!

- Play Sand
- Baking Soda
- Water
- Vinegar (in squirt or squeeze bottle)
- Food colouring (if colour desired)

Sand Slime: mix together and see what happens!

- 2 bottles white glue
- Play Sand
- 1 cup of liquid starch

Quick Sand: mix together and see what happens!

- 1 box cornstarch
- 3 cups sand
- Add water slowly as needed

## 5. Toolbox

It is very helpful to have your “toolbox” packed! The list below is a starting point for you to have basic equipment needed for many of the activities described in this toolkit. As you continue to develop your PLANE curriculum, you will add more materials to this list.

### Toolbox

Camera or cell phone  
Stethoscope  
Set of 15 blindfolds  
Knotted rope  
15 magnifying glasses  
15 kaleidoscopes  
15 pond nets  
15 petri dishes  
15 strings in a container  
Large wax rubbing crayons  
Ball of Yarn  
Microscope  
Buckets  
Picture Books  
Teacher Resource Books  
Exploring Nature with  
children  
Sun photo paper



## 6. What to Bring

### 6.1. Essentials (carried by leader in small backpack)

- Small first-aid kit
- Critical medications (asthma inhalers, Epi-Pens for children with insect sting allergies)
- List of children
- Cell phone (for Narrative Pedagogical documentation and emergencies.)
- Water and healthy snacks
- Extra diapers for children who are not yet toilet-trained, baby wipes, and a travel-size change mat
- Extra clothing: unisex T-shirts, socks for a wet day, mittens for a cold day
- Tissues
- Sun screen, (as needed; apply before leaving centre)
- Materials required for session activities (e.g., Zip-Loc bags for Nature Collections, books to read)

### 6.2. “Nice to Haves” (preferably carried by another adult in another backpack)

- Latex gloves
- Garbage bag
- Hand sanitizer
- Paper towels
- Books related to the session (e.g., bird books)
- Magnifying glasses



### 6.3. Clothing Considerations

- Make sure the children are wearing appropriate clothing or have a change of clothing available at the centre so they can stay outside no matter what the weather is doing.
- Think about where to stow or carry extra clothing before setting out for the nature site.
- Because we are in the Lower Mainland, rain is inevitable; however, we want the children to remain outside as long as possible in all kinds of weather. Ensure that all children have access to good rain gear. Avoid “onesies,” because they are difficult to remove when the children need to use the washroom.



- During cold weather, ensure that the children wear mittens, which are easier to slip on and off wet hands than gloves.
- Ensure that the children have good boots – rubber boots are best, but protective winter boots that the children can get wet and muddy will also work – with extra pairs of warm socks. At the site, encourage the children to move their bodies a lot because even with socks, toes get very cold in boots.

## **6.4. Behavioural Expectations**

For the children:

- Stay together.
- Stand inside boundaries.
- Work as a team on a task.
- No picking, pulling or pocketing (in other words, it's OK to examine or use items that have fallen on the ground, but not to pick flowers, pull leaves off trees, or put objects in your pocket).
- If you need to use the washroom, ask an adult to go with you.
- Don't put anything in your mouth unless an adult says it's OK.
- You can play with a stick, but only if it's no longer than your arm.
- You can climb on things, but only if you can get up on them without help.

Review the expectations before you leave the centre, when you reach the site, and as required during the session. Reminders will probably be necessary.

For the adults:

*Note:* Not all programs will provide opportunities for parents and caregivers to be present during PLANE sessions. However, these guidelines also apply to facilitators😊. Also, enough adults should accompany the group to provide adequate supervision. In general, ensure that adults are adequately prepared for the outdoor experience. Tell them what to expect – especially that a manageable amount of risk will not only be tolerated but encouraged – and assume that they'll be willing to get engaged and try new things.

- Be positive and enthusiastic about the natural world. Don't say "ew" or "ugh" when a child picks up a slug or freak out when a child eats a bug (as will likely happen).
- Don't complain about the weather. Remember, the children follow your lead. To prevent discomfort, dress appropriately.
- Leave your cell phone at the centre or put it in airplane mode during the session. Only the leader of the group should have a cell phone that's turned on and readily available in case of emergency.





- Engage with the children as much as possible. Get involved in their play, ask them questions, and answer their questions. What have the children discovered? Where might their play episodes lead?
- If you do not feel comfortable playing with the children, supervise the boundaries and help deal with physical problems (e.g., those requiring first aid) and meltdowns.



### 6.5. Safety First

Thoughtfully select the nature exploration site ahead of time. Consider the difficulty level, accessibility, and potential hazards of the natural area (rocky terrain, open water). Think about how long the children will stay at the site, how long it takes to get there, and how seasonal and weather conditions may affect the site. In addition, evaluate the availability of protected or undercover areas where children can eat snacks or listen to a story, especially if the weather changes, as well as the proximity of the site to washrooms.

- Do a thorough safety sweep of the nature site before bringing the children there. Watch out for plants such as poison ivy and stinging nettles.
- When you take the children to the site for a UNE session, tell someone at the centre where you're going and when you expect to be back. Make sure the centre has your cell phone number.
- Pin a label to each child's shirt giving the name and phone number of the centre, but never the child's name.
- Make sure at least one of the adults in the group has basic (Level 1) first-aid training.
- Know the name of the closest cross street to the park in case you have to call 911.
- When the children play with sticks, as they inevitably will, tell them it's OK, but only if the stick is "as long as your arm" (for young children, that's a very short stick). If children insist on using sticks as play guns, say, "Let's talk about how we feel about that. If you're playing that you're shooting me and blood is coming out of my head, I don't feel too good about it." After this kind of conversation, the gun activity tends to fade away.
- Don't lift children up to places that they can't get down from (adults can say "you're too heavy for me!"). Tell the children, "I think you can climb up there by yourself. How do you think you can get up there?"
- If an aggressive dog or a coyote approaches, tell the children not to scream, jump, or run; instead, they should stand "tall like a tree." Then an adult should get in front of any child in the immediate proximity of the animal, which will eventually calm down and go away.

