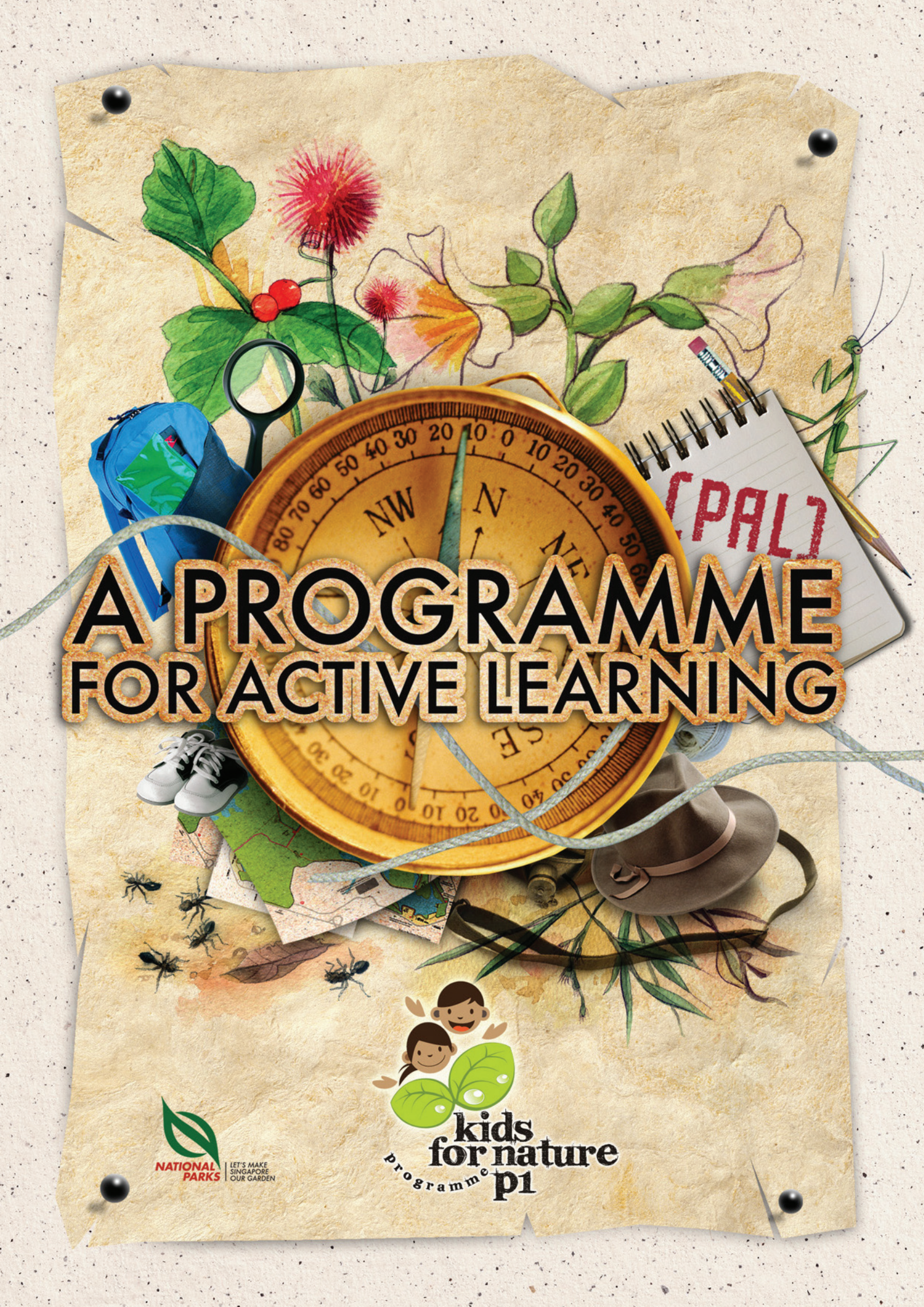
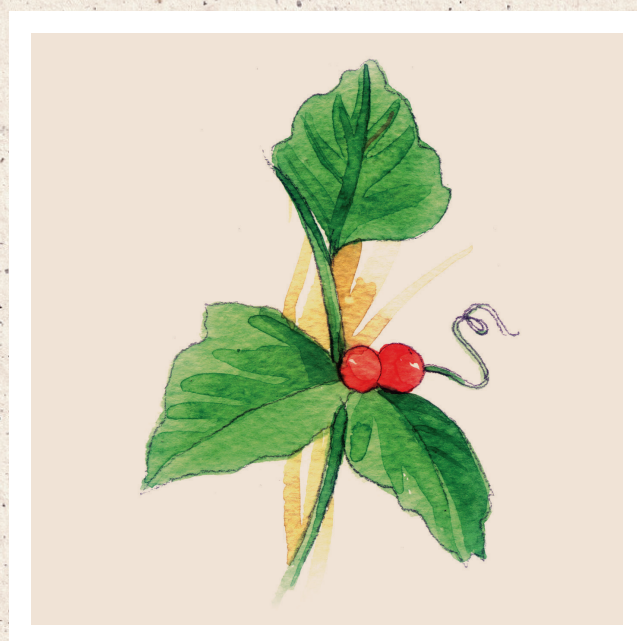




A PROGRAMME FOR ACTIVE LEARNING

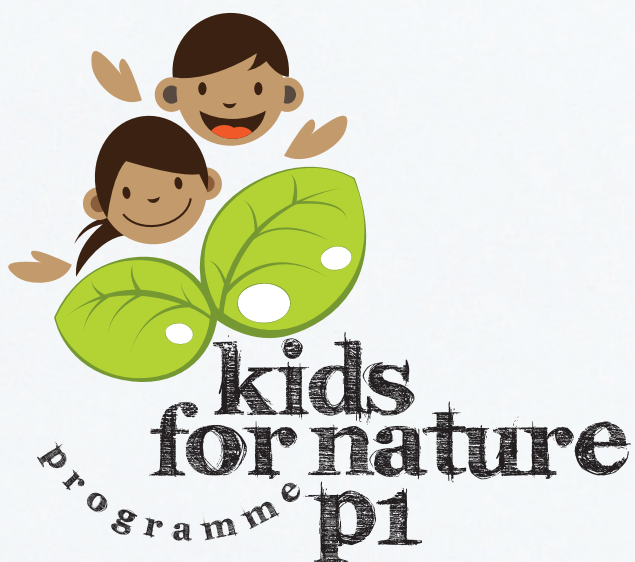

NATIONAL PARKS | LET'S MAKE
SINGAPORE
OUR GARDEN


**kids
for nature**
programme **p1**



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[PAL]
A PROGRAMME
FOR ACTIVE LEARNING

A Word from NParks

Kids For Nature Primary One Programme is designed to:

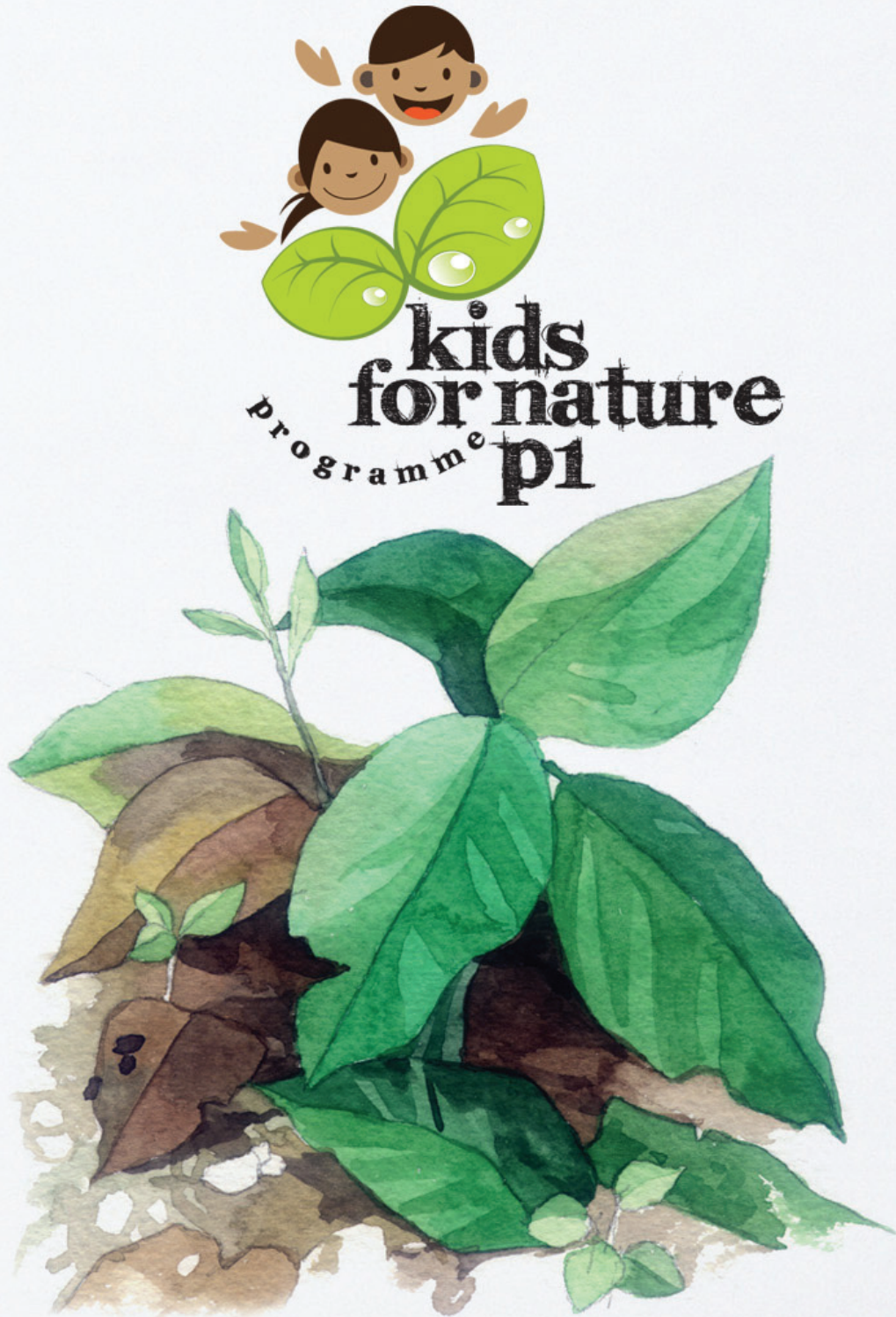
- *Equip children with relevant skills and knowledge to be safe and comfortable in the outdoors*
- *Cultivate a sense of ownership for the environment, encourage and provide opportunities for pupils to take action to sustain the Garden City*
- *Shape a child's character and attitudes through experiential learning in their immediate outdoor setting*

(Text by Tan Wee Lee in consultation with Horticulture and Community Gardening Division and Conservation Division)

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Note: The duration of each session is 1 hour. This is to cater to time-tabling restrictions.

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General Tips Before An Outdoor Lesson

Here are some tips which will help you in conducting and managing your outdoor lesson:

1. Weather

Outdoor activities cannot be carried out effectively if there is heavy rain in the area. It is unsafe to bring students into the outdoors if there is a lightning risk.

Check the weather before any outdoor activity or field trip. You could

- Visit the NEA website, <http://www.weather.gov.sg>
- Call the Lightning Advisory number at 62826821

2. Conduct A Briefing

Brief students before the activity (preferably in the classroom or a day before, where there are fewer distractions and where it is easier for students to hear you)

- What the class is going to do – activities and tasks for the lesson
- What to bring
- Ground rules
 - Stay together as a class/team. If you need to go to the toilet, inform your teacher.
 - Respect the plants and animals. Do not damage or hurt them, or take them home. Some students might be allergic to plant sap, therefore, it is important to remind the students not to pluck any leaf flower or branch.
 - Leave stones where they should be. Do not throw stones, twigs or sticks at one another.
 - Do not push or pull one another.
 - Do keep your volume low so that you do not disturb the animals and the other visitors.
 - Keep the school, park or nature reserve clean – throw your rubbish properly in a bin or bring them back to school to throw.
 - Keep your food in your bags at all time until the teacher tells you to do otherwise.
 - Do not stray off the trails or boardwalks.
- Safety
 - Students should check grassy areas around trees and on tree trunks for red ants before carrying out an activity near the tree.
 - If the students should see any potentially dangerous animal (red ants, bees, wasps, centipedes, snakes etc), they should move away immediately and inform you.
 - If the students are injured, stung, bitten, cut or feeling unwell, they should inform you.
 - They should not misbehave around ponds, wells, streams etc.
 - Have a first aid kit on hand and take note of students with medical conditions.

3. Capture the Moments!

Always bring along a camera to take photographs of students carrying out the activities, happy faces of the students, interesting plants and animals that your class may encounter.

Go through the photographs with your students a week or two after the lesson and recap the fun (and learning)

Tips for Planning PAL Field Trips

The recommended venue for the field trips in this programme will be a nearby park. The duration of the field trip is 2 hours, inclusive of travelling time. During the field trip, the students will

- Do nature activities within the park
- Enjoy a picnic within the park.

Pre-field Trip Preparation:

1. Schedule the field trip dates.
2. Conduct a site reconnaissance (preferably with teachers/parents who are going for the trip)
 - Plan the route/locations for your activities
 - Location of toilets
 - Location of buildings/shelters for pupils should it rain
 - Nearest route to the main road (In the case of an emergency)
 - Any potential safety problems (eg. Nearby pond, slope, busy road, insect's nest etc..)
 - The plants/animals you are likely to see
3. Complete the Risk Assessment Management (RAMS) form.
4. Book transport.
5. Schedule teachers and ask for help from parent volunteers.
6. Photocopy and distribute letters and other information to parents and guardians.
7. On the field trip day, conduct a briefing.
8. Check if there are any students who are feeling unwell. Do not allow students who are ill to go for the field trip.
9. Bring along substantial numbers of first aid kits.

Suggested What-to-Bring List Pupils

1. A fieldtrip bag (small bags for the items below)
2. Umbrella/Poncho (in case of rain)
3. Water bottle
4. Snacks
5. Insect repellent
6. If needed: personal medication (eg. inhaler)



Summary of PAL Lessons

	Title of Lesson	Highlights of Activities	Learning Outcomes	SEL
1.	In And Out Of The Window	This lesson helps students realise that there are many things to be discovered outdoors, such as nature, clouds, sun and wind, which cannot be found indoors. Students will be divided into teams to create cardboard windows, which will be used for observation activities.	• Appreciate both outdoor and indoor settings • Work in groups and understand the importance of teamwork • Carefully observe their surroundings using the window as a tool	• Self Awareness: Identifying and recognising emotions and needs. • Self Management: Self discipline • Social Awareness: Perspective taking, respect for others • Relationship Management: Working cooperatively. • Responsible Decision-Making: Personal responsibility
2.	Mr Sun And Ms Wind	In this lesson, students learn more about the properties of the sun and the wind through interactive and fun activities. Students will identify sun-lit areas in their schools, where they will make shadows shapes, both individually and as a group. Students will also make a pinwheel, and use it to learn how to identify areas where there is wind.	• Be more aware of two elements in our environment - the sun and the wind • Be more comfortable carrying out outdoor activities	• Self Awareness: Identifying and recognising emotions and needs • Self Management: Self motivation and discipline • Social Awareness: Perspective taking, respect for others • Relationship Management: Working cooperatively, communication, social engagement and relationship building • Responsible Decision-Making: Personal responsibility
3.	I Will Take This And That	This lesson teaches students the importance of advance preparation for outdoor trips, in order to make the experience a fun and safe one.	• Know what to wear and how to pack for an outdoor trip • Know what to expect on an outdoor trip	• Self Awareness: Identifying and recognising emotions and needs, self efficacy • Self Management: Self motivation and discipline • Social Awareness: Perspective taking, respect for others • Relationship Management: Working cooperatively, communication, social engagement and relationship building • Responsible Decision-Making: Personal responsibility

4.	Can You See What I See?	This lesson allows students to familiarise themselves with the school surroundings. Using the window and a magnifying glass, students will note down nature-related observations (both indoors and outdoors) in a nature journal. Students will also learn to understand basic directions and orientation.	• Be familiar with the use of the window as an observation tool. • Know the school compound and appreciate its unique features	• Self Awareness: Identifying and recognising emotions and needs, self efficacy • Social awareness: Perspective taking, respect for others • Relationship Management: Working cooperatively, communication, social engagement and relationship building • Responsible Decision-Making: Personal responsibility
5.	We Are Not Alone	In the school environment, there are actually more living things than we imagine. They can be easily spotted, if only we slow down and pay attention to our surroundings. Students will go on a tour around the school to find and identify different kinds of living things. Students will observe the variety of flora and fauna in the school, and use language, verbal, visual and kinaesthetic skills to explore the diversity of nature through a nature scavenger hunt.	• Be more aware of some of the living things that share the same environment • Feel comfortable being outdoors	• Self Awareness: Identifying and recognising emotions and needs • Self Management: Discipline • Social awareness: Perspective taking, respect for others • Relationship Management: Working cooperatively, communication, social engagement and relationship building • Responsible Decision-Making: Personal responsibility
6.	It's A Small World	This lesson builds on the knowledge learnt in the previous lesson. Students will learn that as part of a bigger world, their actions and decisions will affect the environment and the other living things in it. There will be a brief and enjoyable activity in which students walk quietly down a trail, looking for objects not found in nature. This will help them develop observation skills, and also allow for a discussion on the problem of littering. Students will learn proper behaviour in the outdoors, as well as some "dos and don'ts".	• Understand that their actions affect the environment • Abide by a certain code of conduct when outdoors.	• Self Awareness: Identifying and recognising emotions and needs, self efficacy • Self Management: Self discipline • Social awareness: Perspective taking, respect for others • Relationship Management: Social engagement • Responsible Decision-Making: Personal responsibility



7.	<i>Gifts From You To Me</i>	This lesson helps students to look at plants in a new light, recognising that plants give us many useful things like shade, wood and food. Students will go around the school grounds to identify useful plants, and then proceed to make a fruit/vegetable salad in preparation for their trip next week.	• Recognise the importance of plants to people, and their role in our environment • Appreciate that plants make our life better • Make simple meals like salad • Be more aware of personal hygiene	• Self Awareness: Identifying and recognising needs, self efficacy • Self Management: Self motivation and discipline • Social awareness: Perspective taking, respect for others • Relationship Management: Working cooperatively, communication, social engagement and relationship building • Responsible Decision-Making: Personal responsibility
8.	<i>My Friends & I</i>	Fascinate your students with the large variety of plants in your school/neighbourhood park. Students will, through observation, understand that plants support other life forms, including other plants and animals. In the park, students will enjoy the picnic in the outdoors.	• Appreciate both outdoor and indoor settings • Work in groups and understand the importance of teamwork • Know what to expect and what to bring on an outdoor trip • Be more appreciative and respectful of nature • Be comfortable with elements in the outdoors. • Know how to tie a simple knot	• Self Awareness: Identifying and recognising emotions and needs, self efficacy • Self Management: Self motivation and discipline • Social awareness: Perspective taking, respect for others • Relationship Management: Working cooperatively, communication, social engagement and relationship building • Responsible Decision-Making: Personal responsibility



Topic 1: In And Out Of The Window (Part 1)

Specific Instructional Objectives for Environmental and Outdoor Education:

At the end of the lesson, students should be able to:

1. Appreciate both outdoor and indoor setting
2. Keep movement to the area designated by teachers
3. Carefully observe their surroundings using the window as a tool

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs
- Self Management: Self discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively
- Responsible Decision-Making: Personal responsibility



Activity	Time (mins)	Materials / Resources	Remarks
Preparation: • Mark out a sizeable area in the school field using four cones of different colours. • Link the cones up with some ropes, to form a rectangle on the ground. • Students should be in their PE attires.		• Colour cones • Ropes	
• Talk to students about what they see on their way to school. • Ask students to look outside while sitting down and ask them what they can see. Then, ask if they can see the outdoor scenery clearly, and if not, how they think they can get a better view.	10 mins		
• Bring the student out to the field	10 mins		
• In the field, get the students to gather in the rectangle and inform them that they will play a simple game • Tell them that you will call out a colour and they are supposed to run and touch the cone. However, anyone who crosses the rope and run out of the rectangle will be asked to sit out.	10 mins		
• After a few rounds, shrink the size of the rectangle and get them to repeat the game. • Do reflection at short intervals to highlight good and rude behaviours. • During the course of the game, remind the students that for the game to be fun, they must always remember to stick to the rules and keep within the designated area. • Shrink the rectangle again to make the game pace faster. • Take this opportunity to point out safety and discipline issues like pushing around and running wild. Let students know that such behaviours are not tolerated during outdoor education lessons and they will have to sit out from the game.	10 mins		

- Choose a few existing objects like trees and signpost to form your area. Repeat the game and point out those who did it right - Remind students that setting limits area help them to know where to focus.	10 mins		
- Gather the students together. - Explain that you will count "1, 2, 3!" and they should then point to a tree. It is likely that each student will point to a different tree. - Explain that in order to know what tree the other students are pointing to; we need to have something to help us focus, just like the rectangle on the ground.	10 mins		

Topic 1: Out Of The Window (Part 2)

Specific Instructional Objectives for Environmental and Outdoor Education:

At the end of the lesson, students should be able to:

1. Appreciate both outdoor and indoor setting
2. Keep movement to the area designated by teachers
3. Carefully observe their surroundings using the window as a tool

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs
- Self Management: Self discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively
- Responsible Decision-Making: Personal responsibility



Activity	Time (mins)	Materials / Resources	Remarks
Preparation: Before bringing the students out, remind them to take along their craft materials.		- Each group to have two long cardboard strips, two short cardboard strips. - Scissors - Markers - Masking Tape - Decorative items such as glitter, stickers etc. - Colour pencils	
- Inform students that every group will now make a cardboard window that they can bring around and use to view things. - Divide the class into groups of 5. Get each group to assign the following roles – Leader, Timekeeper	10 mins	Annex 1 – Window frame template	Teachers can also choose to use premade windows, or transparency sheets.
- Distribute two long cardboard strips, two short cardboard strips and some tape to each student. - Demonstrate the step-by-step process of making the cardboard window. - Each group will follow these steps to make their own window.	10 mins		Toilet rolls can also be used to form binoculars.

Inform students that they will move in groups keeping within the area designated by the teacher and the window to frame out what they think is interesting.	15 mins		
- Students will draw what they observed on to a piece of paper - Use a mobile to display their work in the classroom.	25 mins		

Topic 2: Mr Sun and Ms Wind (Part 1)

Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Be more aware of two elements in our natural environment - the sun and the wind
2. Be more comfortable carrying out outdoor activities

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs
- Self Management: Self motivation and discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility

Activity	Time (mins)	Materials / Resources	Remarks
- Bring the class to an outdoor area in the school, which should preferably have both sunlight and concrete flooring. An assembly area may be ideal. - Along the way, ask students to point out areas that are sunlit and areas that are shaded. - Ask students why these areas are different (Sunlit areas get sunlight shining on them; shaded areas are formed when sunlight is blocked by a building, tree or large, tall object). - Explain that shadows are formed when sunlight (or any light) is blocked.	10 mins	Journal	
- Let the students stand in the sunlight for a short period at the beginning of this activity." - Ask students to put the journal over their heads, and ask if they feel better." - Ask students how they think they can protect themselves from the sun when they are outdoors. - Point out to students that they can use sun block, umbrellas and caps to protect themselves.	10 mins		

- At the field, explain how the students can make shadows on the ground by blocking the sunlight. - Demonstrate a shadow of a butterfly. - Inform the students that they will now make shadows on the ground. - Announce the shadows to be made, one at a time. Give students sufficient time to figure out how to make them: a quacking duck, a flying bird or butterfly, a ball, a lollipop, etc.	15 mins		
- Let the students stand in the sunlight for a short period at the beginning of this activity." - Ask students to put the journal over their heads, and ask if they feel better." - Ask students how they think they can protect themselves from the sun when they are outdoors. - Point out to students that they can use sun block, umbrellas and caps to protect themselves.	10 mins		
- At the field, explain how the students can make shadows on the ground by blocking the sunlight. - Demonstrate a shadow of a butterfly. - Inform the students that they will now make shadows on the ground. - Announce the shadows to be made, one at a time. Give students sufficient time to figure out how to make them: a quacking duck, a flying bird or butterfly, a ball, a lollipop, etc.	15 mins		
- Explain that students will now work in teams to make larger and more complex shadows. When you announce the shadow to be made, teams will be given five minutes to discuss and then make the shadow. Some of the shadows they can make are a monster, an imaginary animal, a plant, etc. - Each group should have a representative to present their work and explain the rationale behind it. - Praise students for their creativity in creating interesting shadows.	15 mins		Optional: take photographs of the shadows made
- Debrief - Incorporate SEL by highlighting how more complex shadows can only be created through teamwork. Some topics for the debrief can include: - How shadows are formed (when sunlight is blocked). - When can we play the game (on sunny days), and when can the game not be played (on rainy or cloudy days)? - What caused the areas in the schools to be shaded? (Buildings or trees blocked the sunlight)	10 mins		

Topic 2: Mr Sun and Ms Wind (Part 2)

Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Be more aware of two elements in our natural environment - the sun and the wind
2. Be more comfortable carrying out outdoor activities.

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs
- Self Management: Self motivation and discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility

Activity	Time (mins)	Materials / Resources	Remarks
• Preparation:		• Photocopy Handout 1 onto colour paper (one for each student + a few extras) • Box of small fasteners • 1 Bubble tea straw for each student • 1 hole puncher for each group • 1 pair of scissors for each group	
• For this activity, bring students to a shaded area with tables.	5 mins		
• Ask students how they know if there is wind. Acknowledge answers like "I can feel it" and "The leaves will move", etc. • Tell students that each of them will be making a wind detector. • Give each student instructions on making a pinwheel, using the template provided. Students to sit in their groups and help one another. Distribute Annex 2.	10 mins	• Annex 2 - Pinwheel template	
• Get students to: - Cut out the square and decorate it with their markers on both sides. - Cut along the diagonal lines. Take care to stop cutting where the line ends. - Go to the teacher to get the holes punched out. - Punch a hole at the top of the straw and cut off the sharp end of the straw. - Punch holes at the corner of the slits and the centre of the pinwheel. - Gently fold over each corner to line up all the punched holes with the centre hole. Do not fold down the crease. - Put a fastener through all the holes, and then through the hole of the straw. Fasten it to keep the pinwheel in place. • Remind students to be careful of the sharp ends on the fasteners.	20 mins		Decide beforehand if students should use scissors. Tearing the paper with the help of a ruler is also possible



- Ask students to find a spot where they think there is wind, and hold up their pinwheel to detect wind. - Get students to find a spot where it is not windy, and use the pinwheel to test if there is wind. - Get students to look around their surroundings and explain the lack of wind.	10 mins		
- During the debrief, ask students: - How else can we make the pinwheel move? (By blowing or running with it) - Why is this so? (When air moves, there is wind.) - How else can we know that there is wind? (By watching the movement of the trees and grass)	5 mins		
- Concluding points to highlight: - Sunlight and wind are important elements that we find in the outdoors. Light from the sun helps plants to make food and provides light for animals to see. - The wind makes things move and also helps to keep us cool. - It is fun being in both sunny and windy areas. But we need to protect ourselves in the sunlight by using sun block, umbrellas or caps, and wearing extra clothing when it is very windy.	10 mins		

Topic 3: I Will Take This and That (Part 1)

Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Know what to wear and what to pack for an outdoor trip
2. Know what to expect on an outdoor trip

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs, self efficacy
- Self Management: Self motivation and discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility



Activity	Time (mins)	Materials / Resources	Remarks
Preparation: - Prepare the back of the classroom or a corner of an open space. - Preparation area should contain different types of clothing and footwear (Note: These can be photographs or cut-outs, if the actual item is not available.)		- Clothing and footwear, such as windbreaker, winter jacket, t-shirt, hat/cap, singlet, shorts, skirt, pants, socks, slippers, track shoes, leather boots, hiking boots, gloves, poncho, umbrella, towel - Labels for Leader, Packer 1, Packer 2, Timekeeper and Note-taker.	Display the actual item if possible

• Give a simple introduction of the lesson. • Inform students that they will be going on an adventure at the end of the lesson. However, preparations will have to be made beforehand.	5 mins		
• Introduce a game called "Going on a picnic". • Have everyone sit in a circle. The first player says, "I'm going on a picnic, and I'm going to bring ----." (The player must say something that will be useful for a picnic). The next player has to repeat the first player's sentence, and add on what he/she is bringing. For example, he/she could say, "I'm going on a picnic and I'm going to bring an apple and a ball." The game continues with players naming items beginning with each letter of the alphabet. You will be amazed by how much the students can remember! • Highlight the items that are really needed for a picnic.	20 mins		
• Ask the students if there is anything else they need before they go on their adventure, and how they intend to carry all these items. • Prompt students on the need for a backpack to hold some of these items, as this will help to keep their hands free.	5 mins		
• Divide the class into groups of five. Get each group to assign the following roles to its members – Leader, Packer 1, Packer 2, Timekeeper and Note-taker.	10 mins	• Labels for Leader, Packer 1, Packer 2, Timekeeper and Note-taker.	
• Get Packer 1 to collect Annex 3 – Checklist for clothing from the teacher, and pass it to the leader.		• Annex 3	
• Ask children to look out of the window, and determine the current weather. • Each group has to decide on four or five items that they will wear for a field trip and explain why. The note-taker will mark these items on the checklist.	10 mins		
• Provide other weather scenarios. Ask students what they will wear if it is sunny, rainy or windy.	10 mins		

Topic 3: I Will Take This and That (Part 2)

Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Know what to wear and what to pack for an outdoor trip
2. Know what to expect on an outdoor trip

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs, self efficacy
- Self Management: Self motivation and discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility

Activity	Time (mins)	Materials / Resources	Remarks
Preparation: • Prepare the back of the classroom or a corner of an open space. • Preparation area should contain different types of clothing and footwear (Note: These can be photographs or cut-outs.) • Prepare four different cards with pictures of the various kind of weather (eg. sunny, rainy, windy, winter).		• Clothing and footwear, such as windbreaker, winter jacket, t-shirt, hat/ cap, singlet, shorts, skirt, pants, socks, slippers, track shoes, leather boots, hiking boots, gloves, poncho, umbrella, towel • Backpack • Weather cards	
• Divide the students into five groups for a tele-match, and explain the rules: - About six to eight metres in front of each group will be a pile of items. - At any point of time, only one student can go up to the pile and pick something to be put backpack. He/She will then run back and touch the hand of the next group member who can then run to the pile to get the next item. - The group which have nothing move they want to collect can sit down • Remind student that the winning group is not the one that is fastest, and the one that is most prepared.	30 mins	• Clothing and footwear, such as windbreaker, winter jacket, t-shirt, hat/ cap, singlet, shorts, skirt, pants, socks, slippers, track shoes, leather boots, hiking boots, gloves, poncho, umbrella, towel • Backpack	
• Take out the weather cards and pick one to be the lucky day. • Give students time to reconsider the items they want to keep in the backpack. Are there any changes they would like to make? • Get students to take out items from their backpacks that they think are not suitable for that particular weather. • Let them run over to the pile to take whatever extra they might need. • Facilitate discussion on why changes may be necessary. • Try other lucky days.	25 mins	• Weather cards	

• Debrief • Do a recap with students: - It is important to know where we are going before we begin packing. - It is important to learn about the place and your own needs (Self-Awareness). - It is important to pack according to the conditions of the place and how long you will be there (Responsible Decision-Making). - It is important to dress appropriately for a field trip (Responsible Decision-Making).	5 mins		
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Topic 4: Can You See What I See? (Part 1)

Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Be familiar with the use of the window as an observation tool
2. Know the school compound and appreciate its unique features

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs, self efficacy
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility



Activity	Time (mins)	Materials / Resources	Remarks
Preparation: • Remind students to bring their window frame from lesson 1.		• Window frame from Topic 1 • Zoom in and Zoom out pictures	
• Bring students for a walk around the school. • Before leaving the classroom, ask students to look out of the window to determine the weather. Ask them to consider what items they should bring along, based on the weather. • If it's hot, they should bring a cap and drinking water. If it looks like it may rain, they should bring along an umbrella or raincoat.	10 mins	• Window frame	Remind students to bring their window frame
• As the group is walking along, identify a plant or tree that is unique — a tree with an odd shape, for example — and shout "Freeze! - Close your eyes!" • Say, "Without opening your eyes, point at (the plant or tree mentioned in step 1). Suggest that they point to "something natural". This prevents clever students from pointing to their own clothes or a car in the parking lot!	15 mins		

- Once all the students are pointing to an object, ask them to open their eyes to see if they pointed in the right direction.
- One possible call is to "point at the sun", because on a sunny day, students can actually feel their way to it. (The first impulse is usually to point straight up, but they may figure out that the warmth actually comes from an angle.) If you use the sun, please be careful. Tell students "without opening your eyes, first look down while you keep your hand up, and only then open your eyes."
- Repeat this particular game several times throughout the lesson and see how students' impromptu observation skills improve.

- Recap with students the use of the window to help them focus and identify a certain object (refer to topic 1).
- Get all students to sit down facing the same direction.
- Introduce the idea of using simple directions to identify an object.
- Get Student 1 to identify an object that is in front of him/her.
- Student 2 will hold the frame, while Student 1 gives directions to identify the object. By looking through the frame, the other students will take turns to guess the object that Student 1 has identified.
- To move the frame, Student 1 can give instructions like "Move the frame to the right/left." and "Move the frame up/down."
- Repeat the process while rotating the roles of the students.

- Repeat the activity, but this time, allow students to choose anything in any direction. Give students some time to try it out.

- Take out close-up (zoom in) pictures that only show a part of a nature object, let students guess what it is.
- Then show some zoom out pictures of the same object, revealing more parts of the object. Let student guess again
- Finally show the picture of the whole object.
- Repeat with a few more objects and ask students whether the object looks the same close-up and from far.
- Highlight that things look differently from the different views, and since we have seen some objects from far, and we will now observe them close-up.

15 mins

10 mins

10 mins

- Zoom in and Zoom out pictures



Topic 4: Can You See What I See? (Part 2)

Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Be familiar with the use of the window as an observation tool
2. Knows the school compound and appreciate its unique features

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs, self efficacy
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility

Activity	Time (mins)	Materials / Resources	Remarks
Preparation:		• Magnifying glass for each student • Journal	
• Prepare a magnifying glass for each student.			
• Gather all students in a shaded outdoor area and divide them into groups of five.	5 mins		
• Divide the 360-degree surroundings into 6 parts, giving each group a general direction (like a left and right limit marker, eg: the area between the hall and the flag pole). • Let each group decide on an area or an object that they want to frame and focus on. Remind students that the area framed can also be on the ground. • Students will spend some time writing/ drawing in their journals what they observe in the window.	20 mins	• Journal	
• Students in the group can share about what they observe.	10 mins		
• Each group will go to the area or object that they have framed (eg: a tree or plot of grass) [if any group choose the sky, let them choose another area or object that they can observe at a close range] Students then chooses an area within the window frame area to focus, using the magnifying glass. • Students are to observe the area or object through the magnifying glass and write down or draw their observations in their journals.	15 mins	• Magnifying glass	
• Let students share what they observed, including the difference between what they observed through the frame, and what they observed through the magnifying glass. • As this activity aims to allow students to observe and explore independently, do not tell them what to observe, and what is right or wrong. If they move out of their designated areas, ask questions on why (the reason), what (do they hope to see) and how (they think they can see well), instead of correcting them.	15 mins		

Topic 5: We Are Not Alone (Part 1)

Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Be more aware of some of the living things that share the same environment
2. Feel comfortable being outdoors

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs
- Self Management: Discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility

Activity	Time (mins)	Materials / Resources	Remarks
Preparation:		• Journals • Big piece of paper • Rocks • Markers • Empty egg cartons with lid intact • Ballpoint pens	
• Before leaving the classroom, ask students to look out of the window to determine the weather. Ask them to consider what items they should bring along based on the weather. • If it's hot, they should bring a cap and drinking water. If it looks like it may rain, they should bring along an umbrella or raincoat.	10 mins		
• Bring students out to a field or garden. • Give students an egg carton, and a spare egg carton lid. • Hold up a rock and ask, "What's the word that best describes this?" • Let students shout their answers out loud and write the describing words on the white board or paper. • Tell student to secretly write six different describing words on the flat lid of the inside of the egg carton, in the spot corresponding to each egg.	15 mins	• Rocks • Markers • Empty egg cartons with lid intact • Ballpoint pens	
• Tell students to look for any natural item, the size of their baby fingernail or smaller, to represent each of the adjectives on their lid. Sets a boundary area (field or garden) that students are not supposed to go out of. • Brief students on the collecting guidelines: - Only use natural items from the leaf litter. - If an item is abundant, such as grass, they may pick one blade; otherwise collecting live material is not permitted. • Walk with the group around the boundaries for the activity. • Give them time to find the items. • After 15 minutes, ask each student to cover the written adjectives with the spare lid, and then find a partner.	10 mins		

Leaving the words covered, the goal is for students to correctly guess their partner's adjectives, just by observing or touching the natural items. The partner "in the know" can give hints.	10 mins		
- Get students to choose one item from the items they have collected, and tape it to his/her journal. - Get students to write about the item. They can include things like where they found the item, what is the colour and how does it feel like.	10 mins	Journal	Students can also have a class nature museum with items collected from this exercise

Activity adapted from five Minute Field trips, Canadian Parks and Wilderness Society

Topic 5: We Are Not Alone (Part 2)

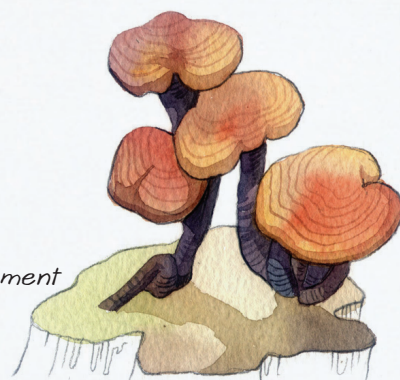
Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Be more aware of some of the living things that share the same environment
2. Feel comfortable being outdoors

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs
- Self Management: Discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility



Activity	Time (mins)	Materials / Resources	Remarks
- Bring students out to the field to play the Nature Scavenger Hunt. - Divide the students into groups, and get them to nominate a leader. Each group has to find and cross off as many of the objects on the checklist (Handout 3) as possible. - Hand out the checklist to each group leader. - Every student in the group must observe and feel the object before they can move on to the next object. - Unlike a normal scavenger hunt where items are collected. Students will see, touch, and feel the objects, but not collect them (unless they are lying loose, like pine cones). - Tell students that the Nature Scavenger Hunt is not a race! During the hunt they are to be calm, relaxed, and observant. - Ask them not to run, and to stay with their own groups.	25 mins	- Annex 4 - Nature Scavenger Hunt checklist - Journal	
- Each group will then present their findings to the whole class. - Students are encouraged to question why the group members think that certain objects match the description on the checklist.	20 mins		
Let students spend time writing/ drawing their observations in their journals.	15 mins	Journal	

Activity adapted from five Minute Field trips, Canadian Parks and Wilderness Society

Topic 6: It's A Small World (Part 1)

Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Understand that their actions affect the environment
2. Abide by a certain code of conduct when outdoors

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs, self efficacy
- Self Management: Self discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Social engagement
- Responsible Decision-Making: Personal responsibility

Activity	Time (mins)	Materials / Resources	Remarks
Preparation • Identify a well-defined trail that students will be able to follow. The school garden or a path seldom used by students would be ideal. • The trail should already have existing litter. If necessary, earmark a corner of the school and ask the cleaner not to clean the area for a few days. • If this is not possible, "plant" some litter along the trail. Common items found in school compounds like plastic bags, ice-cream sticks and bottle caps can be used.		• A bag containing ~ 15-20 objects collected from the classroom. • Colours of objects should range from neutral (crayon) to fluorescent (highlighter); from small (eraser) to big (book) • Journal	
• Before leaving the classroom, ask students to look out of the window to determine the weather. Ask them to consider what items they should bring along, based on the weather. • If it's hot, they should bring a cap and drinking water. If it looks like it may rain, they should bring along an umbrella or raincoat.	10 mins	• Journal	
• Gather students at the beginning of the trail, and explain that someone passed through this trail yesterday. • Ask students how they would know if someone has passed by, just by looking around. • Tell them that there could be some unnatural objects spread along the trail, and that their challenge is to find as many of them as possible. Explain that they should look for items that do not belong to the natural environment, like plastic bags and bottles. • Divide the class into groups of five. • Ask students to walk slowly and look carefully. They should not point out items to students from other groups, as this is a friendly competition. Students can use their fingers to keep a count of the objects they have spotted. • Get students to note down the location of the natural objects, eg: five steps to my right.	15 mins		



Then, lead the way on the trail. Walk very slowly and quietly, to show students how they should behave along the trail.	15 mins		
- Gather students at the end of the trail, and ask, "If you saw more than three objects, put up your hand." Next, ask them if they spotted five, then seven objects, etc, until the number exceeds the number of items on the trail. - Ask students, "If you saw the [one item or animal that is not in the trail, put up your hand." This will tell the teacher which students are being overly imaginative!	10 mins		
Ask students why they think the items are there and where the items should be instead.	10 mins		

Activity adapted from five Minute Field trips, Canadian Parks and Wilderness Society

Topic 6: It's A Small World (Part 2)

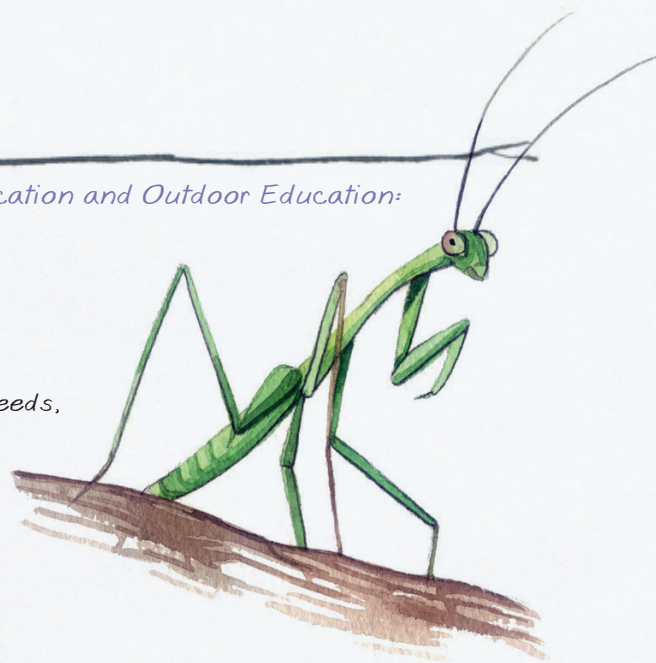
Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Understand that their actions affect the environment
2. Abide by a certain code of conduct when outdoors

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs, self efficacy
- Self Management: Self discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Social engagement
- Responsible Decision-Making: Personal responsibility



Activity	Time (mins)	Materials / Resources	Remarks
- Gather students at the beginning of the trail, and tell them that they have missed out something. - Tell students that when humans move through an area, we leave behind more than just unnatural items. - Let them know that the challenge is to find clues of people walking through the trail, and record them in their journal. - The aim of this exercise is to help the students understand that we can sometimes affect nature without even noticing it.	5 mins	- Journal - Drawing materials like paper, crayons/ colour pencils - Portable whiteboard/ paper	
Then lead the way on the trail.	10 mins		

• Get students to call out the clues they have spotted. The teacher can record them on a portable whiteboard or on paper. • Point out grass patch there is trampled, and plants with broken branches. • Let students talk about what caused the damage, how it affects us and how we can prevent it. Plastic bags, for example may cause people to slip and fall, while broken branches can cut the next person who walks pass, and cause harm to the plants. • Ask students how we can walk around in nature areas without causing harm to them. • Ask students about the "dos and don'ts" when outdoors. Facilitate and encourage answers like "Do not litter", "Do not pluck flowers" and other anti-social behaviour.	20 mins	• Portable whiteboard/ paper	
• Ask students what they would do if they see these unnatural items. • Allow students to go and pick up the items.	5 mins	• Journal	
• Get students to design a "Do Not Litter" poster for the school by drawing the items they have collected.	20 mins	• Drawing materials like paper, crayons/ colour pencils	

Activity adapted from five Minute Field trips, Canadian Parks and Wilderness Society

Topic 7: Gifts From You To Me (Part 1)

Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Recognise the importance of plants to people, and their role in our environment.
2. Appreciate that plants make our life better
3. Make simple meals like salad
4. Be more aware of personal hygiene

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising needs, self efficacy
- Self Management: Self motivation and discipline
- Social awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility

Activity	Time (mins)	Materials / Resources	Remarks
• Recap that a variety of plants was seen growing in the school. • Ask students why do they think plants are useful	10 mins	• "The Giving Tree" Story book	
• Read the story using a big book "The Giving Tree"	20 mins	• Annex 5,- Gifts From You To Me	



• Bring the class to the school garden and show them a few plants that are useful to people, eg: a tree can give us wood, and a lady's finger plant can provide us with vegetables. • Distribute Annex 5 and explain the activity. • In their groups, students need to find plants in the garden that can give them the things written on the cards (wood, shade, vegetables, and fruits).		• "The Giving Tree" Story book	
• Divide the class into groups of five and start the activity.	20 mins		
• Gather the class to discuss their findings, and follow-up with debrief. • During the debrief, the following topics can be discussed: - Name some plants in the school garden and their uses. Some suggested answers: ~ Trees cool the environment, give shade, and provide wood to make furniture and paper. ~ Brinjal, lady's fingers, long beans, corn, cucumber, sweet potatoes and yam provide us with vegetables. ~ Mango, starfruit, banana, papaya, rambutan and lime can be eaten as fruits. - Highlight that some plants may have more than one use.	10 mins		



Topic 7: Gifts From You To Me (Part 2)

Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Recognise the importance of plants to people and their role in our environment
2. Appreciate that plants make our life better
3. Make simple meals like salad
4. Be more aware of personal hygiene

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising needs, self efficacy
- Self Management: Self motivation and discipline
- Social awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility

Activity	Time (mins)	Materials / Resources	Remarks
Preparation: • Prior to the lesson, ask students to bring some edible vegetables to class. • Cut the vegetables/fruits into bite-sized pieces. Place each ingredient on a separate plate. Leave these plates on one or two tables before the class.		• Edible vegetables eg cucumber, tomatoes, lettuce • Ingredients for salad, such as thousand Island dressing, lettuce, cherry tomatoes, cucumbers, apples, grapes, sunflowers seeds, raisins, etc. • Salad bowls/plates • Non-disposable plates and cutlery	• Teacher can also choose to let students prepare lime juice
• Briefly ask students to list some things we can get from plants. Highlight food as a contribution from plants and nature. • Tell the class that they are going to make something from plants. • Divide students into groups of five. Explain that each group can choose to make a special salad using the ingredients provided, as well as the vegetables that they have brought. • Before the students move off in their groups, stand near the table with ingredients and observe which groups move in the direction of the sink, and which groups move towards the table with the ingredients. • Stop any groups that are moving towards the table with ingredients, and ask if there is anything that they forgot to do. • For groups that moved towards the sink to wash their hands, ask them why they did so, and how this would affect them. • Through discussions, highlight that students should wash their hands as part of personal hygiene, before touching any food.	10 mins		• This activity should take place in a location that has a sink

- Name the ingredients on the table, eg: lettuce, cherry tomatoes, cucumbers, apples, grapes, sunflower seeds, raisins, thousand island salad dressing, butter, bread, etc. - Encourage students to use vegetables and fruits of different colours and arrange them in an interesting way, eg: in a certain pattern or shape.	10 mins	Salad bowls/plates	
- Give each group time to discuss what ingredients they want and how they plan to make the salad. - Groups can start to make their salad. Let students choose their ingredients and arrange them on a salad bowl or plate.	25 mins		
- Distribute plates and cutlery to each student, and allow them to sample the salads made by other teams. - Get students to share how they think they can improve on their salads by using other ingredients. - Students can also suggest improvements to salad made by other groups.	10 mins	Non-disposable plates and cutlery	
- During the debrief, the following topics can be discussed: - What did you learn about plants in the first activity? (Plants are important to people. They give us food and materials). - From all the activities, we can see that plants are very helpful. Are you helpful too? Give some examples of how you are helpful. - Did you have fun creating things with plants as a group? What did you like about the cooking activity? How well do you think your team performed?	5 mins		

Topic 8: My Friends & I

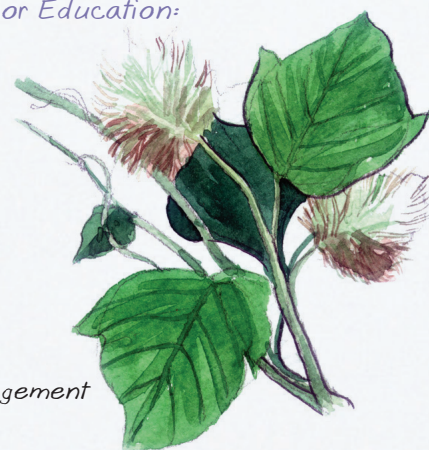
Specific Instructional Objectives for Environmental Education and Outdoor Education:

At the end of the lesson, students should be able to:

1. Appreciate both outdoor and indoor settings
2. Work in groups and understand the importance of teamwork
3. Know what to expect and what to bring on an outdoor trip
4. Be more appreciative and respectful of nature
5. Be comfortable with elements in the outdoors
6. Know how to tie a simple knot

Objectives for Social-Emotional Learning:

- Self Awareness: Identifying and recognising emotions and needs, self efficacy
- Self Management: Self motivation and discipline
- Social Awareness: Perspective taking, respect for others
- Relationship Management: Working cooperatively, communication, social engagement and relationship building
- Responsible Decision-Making: Personal responsibility



Activity	Time (mins)	Materials / Resources	Remarks
Preparation - Inform students one week in advance that they will be visiting a nearby park. - Encourage students to make salad and sandwiches at home to be brought for the trip. - Encourage students to recall what they have learnt in previous lessons, and tell them to ensure that they bring what is necessary.		- Groundsheet - Extra water - Journal - Wet tissues - Trash bags	Encourage students to bring camera

• Bring students to a neighbourhood park. • Do not do a check on the items that students are supposed to bring, before going to the park.	15 mins		
• Get students to put down their things on a groundsheet or table/bench and then go for a walk. • Let student record down anything they found that is interesting. • Give students time to take photographs.	20 mins	• Journal • Groundsheet	• If possible to get a parent volunteer to guard the belongings. • If there is no one to guard the belongings, students to bring their bags with them. • Nature Scavenger Hunt can be played here.
• Start the picnic, but before the students begin eating, ask them what they need to do (wash their hands). • Let students wash their hands at a toilet or water point (if any), or use water from their water bottles to do so, or wet tissues. • Get students who finish their food first to draw any interesting things they see in their journals.	40 mins	• Wet tissues	
• After the picnic, ask students what they think should be done with the rubbish. • Get students to help clear the rubbish they have generated. They should also clear any existing litter left behind by others. (Remind students that doing their part for nature. They are doing what is right, and it does not matter whether they are the one who litter) • Watch out for students who pack the rubbish bag too full, until the extent when it is difficult to tie the bag. Use it as a teaching point. • Show students how to tie the knot for the rubbish bag. • Get students to tie the bags.	20 mins	• Trash bags	
• Before they leave the place, tell the students that there is something they must always do before they leave a place? • Tell students that once they go off, other people will use the area and if they left anything behind, they might not find it again • Remind students to always check their belongings and the surrounding before leaving. • Remind students that as a group, they should watch out for one another.	10 mins		
• During the debrief, the following topics can be discussed: - Why we need to protect nature. - Understand that nature and humans depend on each other. - Nature is our friend.	15 mins		



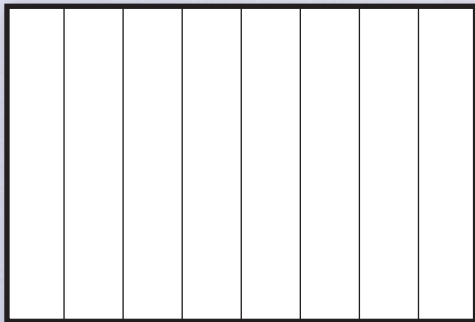


Annexes

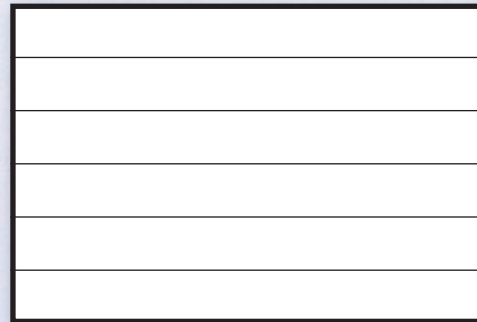
Annex I : Window Frame Template

- Collect the cardboards (backing of drawing blocks) from students one or two weeks before the lessons

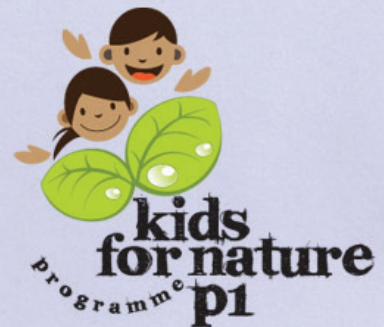
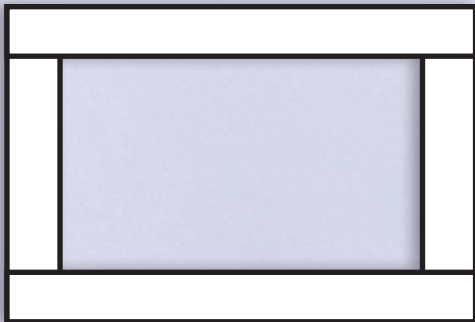
For some drawing black cardboard backings, cut as many strips – 3 cm thick breadth wise:



For some drawing black cardboard backings, cut as many strips – 3 cm thick length wise:



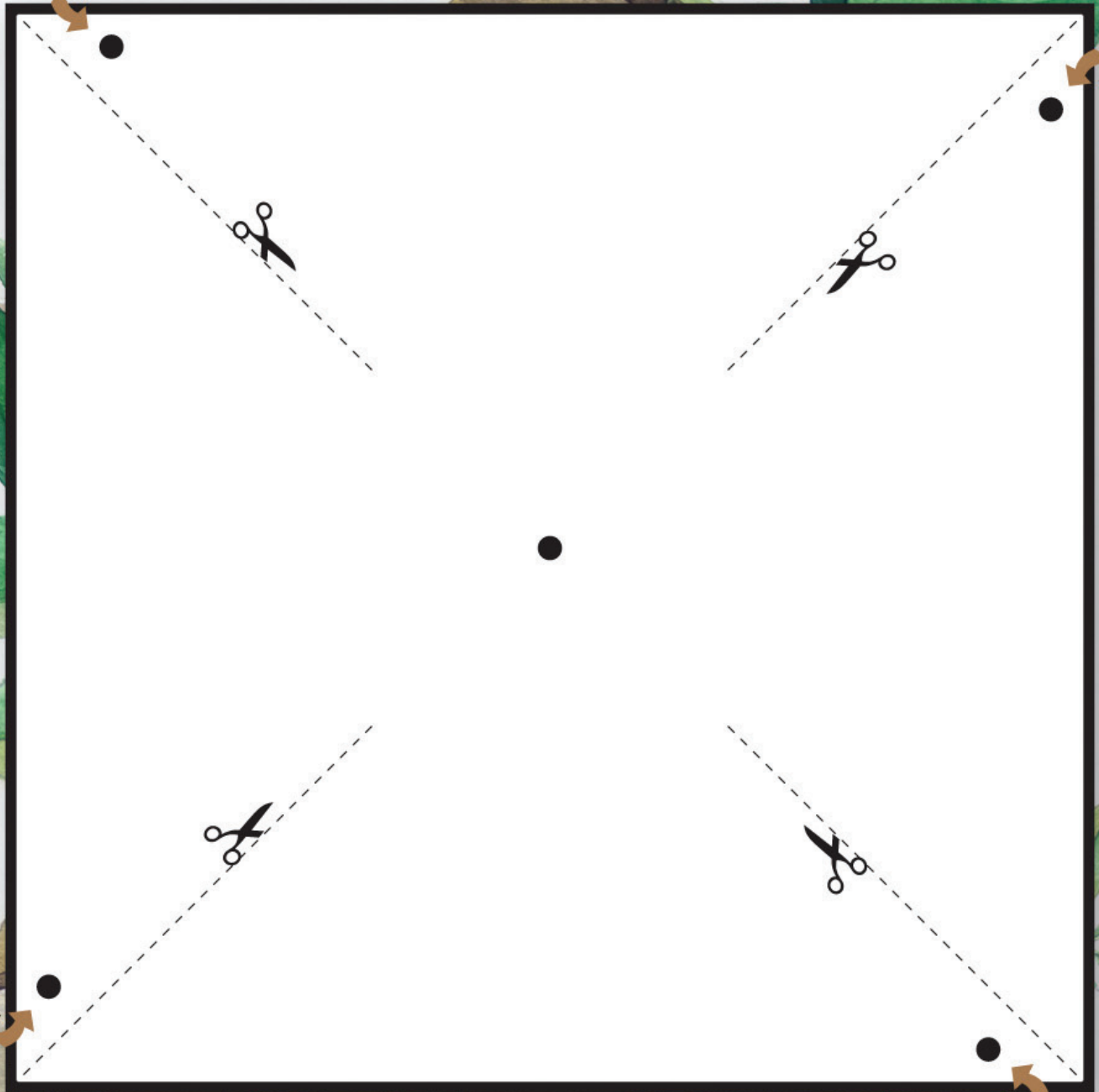
- Create a sample of a “window”, colour and decorate it with stickers. Here is how
- Take 2 shorter strips and 2 longer strips and place them as shown below. Use tape to fix the frame together.



Annex 2: Pinwheel Template

INSTRUCTIONS:

Cut the diagonal dotted line with a scissors. Fold the corners where the 4 holes are towards the middle hole. Once all these holes are aligned together, use the hole puncher to punch a hole.



Annex 3: Checklist For Clothing

TEACHER: _____ CLASS: _____ DATE: _____

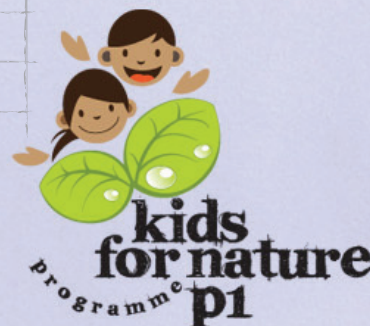
NAMES OF GROUP MEMBERS

Leader _____
Packer 1 _____
Packer 2 _____
Packer 3 _____
Note-taker _____

WHAT WOULD YOU WEAR AND BRING?

Discuss as a group that you would wear and bring to a field trip. Then tick the items you would bring for a particular weather.

ITEM	WEATHER		
	SUNNY	WINDY	RAINY
Gloves			
Hat / Cap			
Hiking boots			
Leather boots			
Pants			
Poncho			
Singlet			
Skirt			
Slippers			
Socks			
Towel			
Track shoes			
T-shirt			
Umbrella			
Windbreaker			
Winter Jacket			



Annex 4: Nature Scavenger Hunt



NAME: _____ CLASS: _____ DATE: _____

The items below are just to touch and to see – but NOT to collect. Check off the following things that you have found:

CHECKLIST

Find...

☐	a rock
☐	soil
☐	something prickly
☐	something furry
☐	something smooth and cold
☐	a red leaf
☐	a brown leaf
☐	a yellow leaf
☐	a green leaf
☐	something wet
☐	something sticky
☐	something made by humans
☐	something alive
☐	something dead
☐	a plant that smells nice
☐	a leaf that has been chewed by an insect
☐	something that you think is really interesting
☐	something that you dislike



Annex 5: Gifts From You To Me

TEACHER: _____ CLASS: _____ DATE: _____

NAMES OF GROUP MEMBERS

Leader _____

Packer 1 _____

Packer 2 _____

Packer 3 _____

Note-taker _____

Wood

Shade

Vegetables

Fruits