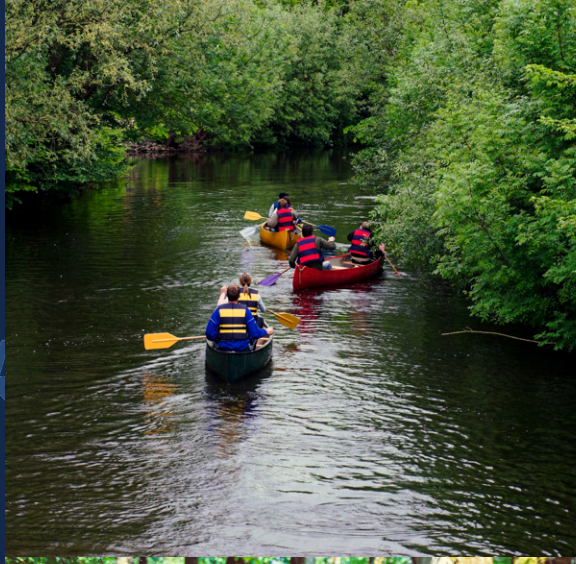
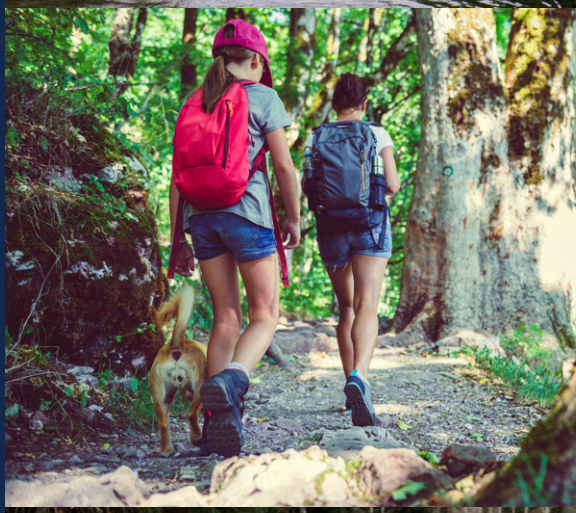
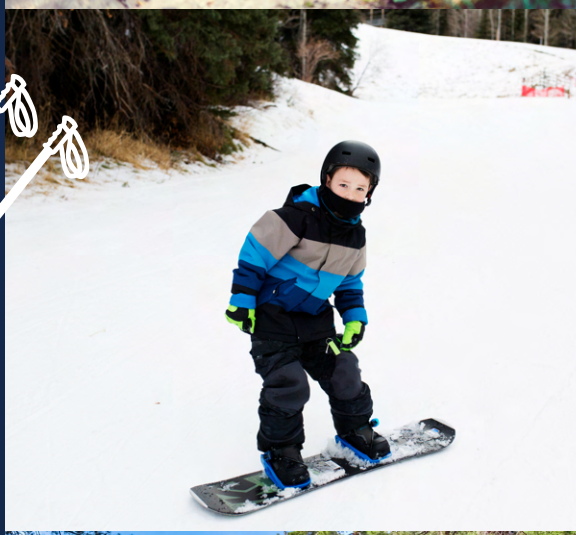
phea
Healthy Schools
Healthy Communities

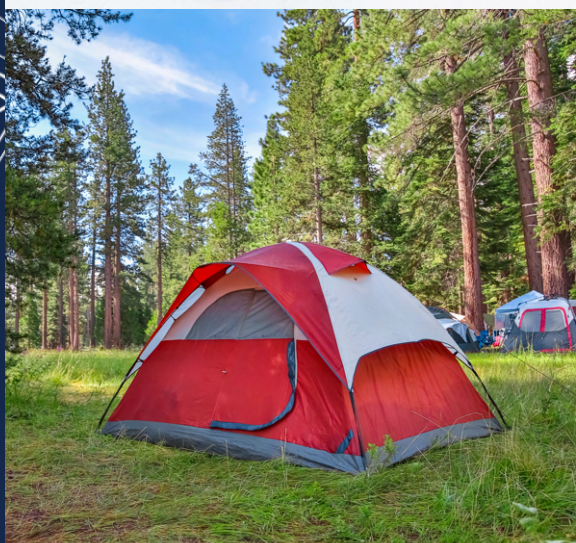
OUTDOOR EDUCATION TOOLKIT

For Grades 1 to 8









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About Ophea

Ophea is a not-for-profit organization that champions healthy, active living in schools and communities through quality programs and services, partnerships, and advocacy, and is led by the vision that all children and youth value and enjoy the lifelong benefits of healthy, active living. Ophea is a registered charity.

Acknowledgements

Ophea wishes to acknowledge the support of various contributors from across Ontario who participated in the development of the Elementary Outdoor Education Toolkit.

In particular, Ophea wishes to thank the following individuals for their contributions to the toolkit: Deborah Diebel, Ryan Howard, Richard Lachance, Pascale VandenHaak, Karen Trotter and Joanne Walsh.

Every effort has been made to trace the owners of the copyrighted materials and to make due acknowledgement. If situations are identified where this has not been achieved, please notify Ophea so that appropriate corrective action can be taken. Inclusion or omission of any particular resource should not be considered as a recommendation or comment on the quality of the resource. No endorsement of any of the included resources by Ophea should be inferred.

About this Toolkit

This toolkit contains lessons, activities, and additional resources to support creating a culture of safety-mindedness before, during, and after outdoor education activities. Recognizing that teachers may approach outdoor education differently depending on their experience, knowledge, confidence, and local school community, teachers are encouraged to use and modify the resources for their unique context.

In this toolkit you will find:

- Tips to promote a culture of safety-mindedness among students participating in outdoor education activities.
- A checklist for teachers with key planning considerations before, during, and after the outdoor education activities.
- Conversation starters and reflection activities for teachers to initiate, deepen, and consolidate student learning related to safety and risk management.
- Lesson plans for teachers to support students in acquiring the knowledge and skills to safely participate in outdoor education activities.
- Links to additional resources with supplementary information about a variety of outdoor education activities, certifications, and associations.

The objectives of this toolkit are to:

- Enrich and promote a culture of safety-mindedness.
- Increase teacher awareness, confidence, and preparedness to teach outdoor education safety and risk management.
- Increase student awareness, confidence, and preparedness about outdoor education safety and risk management.

IMPORTANT: Consult your school board to ensure compliance with its policies and procedures for outdoor educational activities.

Land-Based Learning

Land-based learning acknowledges a connection and a relationship with the natural world. It embraces the concept that we, as humans, are part of the natural world rather than the natural world serving as a resource for our use. As we interact with the natural world and everything around us, we learn. We are stewards of the Land and as such have a responsibility to care for all living things, to respect the Land, and protect it.

Land-based learning typically uses an Indigenized and environmentally-focused approach to education by first recognizing the deep, physical, mental, and spiritual connection to the land that is a part of Indigenous cultures. Elders and knowledge keepers pass on their knowledge through storytelling and songs, teaching about ceremonies, traditional medicine, the history of the Land, the traditional native languages, and how to be good environmental stewards of the Land.[1]

"Although traditional values and systems of belief differ among First Nations, Inuit and Métis, there are many commonalities, including respecting and caring for all living things, valuing traditional knowledge and ensuring that the Land is respected." [2]

Kareena Butler, a member of the Anishinaabe Algonquin, describes it as, "Land-based learning is more than just bringing students into the outdoors; it is an opportunity to learn about where they live and delve deeper in understanding the importance of the Land." [3]

It's important for Indigenous students (and all students) to connect to the Land. This connection allows Indigenous students and their worldview to make sense in our modern school systems, and demonstrates a respect to Indigenous Peoples' worldviews and knowledge. Land-based learning would benefit any student and would provide opportunity for them to build a stronger connection to the Land and develop a sense of stewardship and responsibility to all of our relations. [4]

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1 Cherpako, D., Making Indigenous-Led Education a Public Priority: the Benefits of Land-Based Education and Programming, (2019). Retrieved from: **https://www.socialconnectedness.org/wp-content/uploads/2019/10/Land-Based-Education-Pamphlet.pdf**

2 Indigenous Land-Based Learning, Elementary Teachers' Federation of Ontario, (2020). p.5. Retrieved from: **https://etfofnmi.ca/wp-content/uploads/2020/11/Book_Land-Acknowledgement.pdf**

3 Indigenous Land-Based Learning, Elementary Teachers' Federation of Ontario, (2020). p.19. Retrieved from: **https://etfofnmi.ca/wp-content/uploads/2020/11/Book_Land-Acknowledgement.pdf**

4 Indigenous Land-Based Learning, Elementary Teachers' Federation of Ontario, (2020). P. 6. Retrieved from: **https://etfofnmi.ca/wp-content/uploads/2020/11/Book_Land-Acknowledgement.pdf**

WHERE TO BEGIN INTEGRATING LAND-BASED LEARNING

Land-based learning happens everywhere, in urban and rural settings, including inside classrooms:

- Acknowledge the territory on which you learn to show respect to the Land.
- Connect to your school boards' Indigenous Education department or lead person to help connect with local Indigenous Knowledge Keepers and Elders and learn cultural protocols that are region-specific and respectful.
- Contact First Nations, Inuit and Métis provincial organizations for resources to deepen your understanding of Indigenous Land-Based Learning.
- Reach out and connect with local Indigenous Peoples and communities to bring Indigenous ways of learning into the classroom environment and curriculum.
- Invite Indigenous Knowledge Keepers, Elders, and community partners into your classroom to share their stories.
- Connect with outdoor education centres within your school board and ask for Indigenous land-based learning opportunities with students.
- Provide students with the opportunity to get out on the Land with knowledge keepers. Participate in a local hike or Indigenous land-based learning activity or event that is open to students; invite a Knowledge Keeper (check your school board protocols) to lead the hike!
- Connect with stories and picture books by Indigenous authors that convey teachings about Land and culture.
- Take your lessons outside - ask yourself: “What part of this lesson could be done outside?".
- Teach an attitude of kindness for all living things. Instead of killing an insect indoors, capture it and return it outdoors.
- Provide students with opportunities to engage in activities that use their 5 senses (for example, learning about the trees, plants and birds in the area using all of their senses).
- Model using your senses when outdoors to show students how you appreciate and enjoy the outdoors.
- Incorporate more outdoor education activities into your program to provide students with real-life experiences to build their confidence to engage in outdoor experiences.

*The content from the section “Where to begin integrating Land-Based Learning” was extracted from: **Indigenous Land-Based Learning**, Elementary Teachers' Federation of Ontario. (2020).*

About the Ontario Physical Activity Safety Standards in Education

Managed by Ophea, the **Ontario Physical Activity Safety Standards in Education (OPASSE)** represent the minimum standard for risk management practices for school boards in Ontario. They focus the attention of teachers, supervisors, coaches, and outside activity providers on safe practices, in every activity, in order to minimize the element of risk. OPASSE includes a concussion protocol to help prevent and identify suspected concussions and manage a student's safe return to learning and to physical activity. OPASSE is one component of a strong risk management toolkit for outdoor education.

School boards may RAISE the standards in OPASSE, but they are strongly encouraged not to LOWER them.

Teachers should always check with their school board to ensure alignment with their school board's policies and procedures.

HOW TO ACCESS OPASSE

- Visit **safety.ophea.net**
- Select Elementary (Grades 1–8)
- Select the activity. The activity pages are listed alphabetically, with outdoor education activity pages listed together starting with Outdoor Education. Each activity page includes the following sections:
  - Title
  - General Introductory Information
  - Equipment
  - Clothing/Footwear/Jewellery
  - Facilities
  - Environmental Considerations
  - Special Rules/Instructions
  - Supervision
  - First Aid
  - Definitions
- Select Curricular, Interschool, or Intramural, based on the setting of the activity.

Definitions

The definitions have been extracted from the Ontario Physical Activity Safety Standards in Education (OPASSE) and are intended to clarify the terms used in the context of this resource.

Instructor:
An individual who provides instruction on skills and possesses the required certifications. This role could be fulfilled by a teacher, parent/guardian/volunteer or an employee of an outside activity provider.

Outside Activity Provider:
An outside facility contracted by the school/board to provide activity services.

Supervisor:
A supervisor is a teacher, parent/guardian/volunteer, or trip guide.

Teacher:
A person with a current certification from the Ontario College of Teachers, under contract by the school/board. This person is legally responsible for the students.

Trip Guide:
An individual who has the required certifications and/or knowledge/skills of the route and activity. This role could be fulfilled by a teacher, a parent/guardian/volunteer or an employee of an outside activity provider, and must be approved by the school/board.

Tips for Engaging Elementary Students in Outdoor Education Activities

A growing chorus of scientists and researchers agree: time spent in nature makes us happier, healthier and less stressed...It even makes us nicer, more empathetic humans, with more meaningful relationships and increased community involvement. When students develop a keener awareness of the sounds, smells and sight in life around them they develop an appreciation of the natural world and their role in protecting it. They learn to become more aware of the safety and actions of themselves and others.[5]

Educators can provide students with an opportunity to participate safely in outdoor education activities by accessing the community spaces around their school. The schoolyard, local parks and urban trails provide a backdrop for sparking students' interest and curiosity in the outdoors.

TIPS TO CONSIDER

Educators might begin by engaging students in a Read Aloud session outdoors with a book related to getting outside, the environment or the natural world around them. Educators may also consider providing students with silent reading time outside, integrating an active math lesson (for example, measurement), or a science experiment, or engaging students in an active outdoor education activity as part of Daily Physical Activity (DPA). Educators may then build on these learning experiences to incorporate one or more outdoor education lessons in the natural surroundings near the school. These outdoor education learning experiences will develop routines and a class culture that lends itself well to outdoor education learning, and assist educators in building their repertoire of ideas and knowledge/skills to engage students in outdoor education activities. Educators might ask themselves these questions to assist them in planning outdoor education activities:

- What spaces are available and easily accessible in my community?
- What community partnerships might I connect with for resources, funding or expertise?
- What funds might be available from my board?
- What grants or funds might be available from local community organizations?

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5 Excerpted from The David Suzuki Foundation The One Nature Challenge. (2021). Retrieved from: **https://davidsuzuki.org/take-action/act-locally/one-nature-challenge/**

- What experiences can I plan that are accessible for all my students - no money and equipment needed?
- Where can I start to increase my confidence and competence to engage my students in outdoor education activities?
- What daily practices can I engage in to increase my awareness of the natural world in and around the school?

Outdoor Education Tips for Creating a Culture of Safety-Mindedness

What does it mean to create a culture of safety-mindedness?

Creating a culture of safety-mindedness provides students with safe spaces as they participate in physical activity in a variety of settings. This requires adopting behaviours and core principles that focus on injury prevention by being aware of hazards, alert to dangers and adopting safe practices that minimize or prevent injuries.[6]

Teachers enrich and promote a culture of safety-mindedness among students participating in outdoor education activities through careful planning of outdoor education activities.

TEACHER AND SUPERVISION PREPARATION

To facilitate a culture of safety-mindedness make sure all teachers and supervisors are knowledgeable about the following:

- School board policies, procedures, and approval processes;
- The **Ontario Physical Activity Safety Standards in Education (OPASSE)**;
- The activity area: Survey the route (walk the area) before involving students and become familiar with the area and check for safety hazards;
- Activity preparation:
  - Document student participation in lessons to prepare for the activity (for example, appropriate clothing, rain and sun protection, inclement weather procedures).
  - Maintain sufficient and ongoing communication with the school administration, parents/guardians/caregivers about the activity and student preparation for participation (for example, packed lunch, clothing, rain and sun protection, medical conditions).
  - Be aware of students' **medical conditions** and school board policies and procedures on medical conditions, including considerations for carrying medication for use in emergencies (for example, asthma inhalers, epinephrine pen).
  - Ensure that adequate liquid replacement (for example, personal water bottles, water fountains) is accessible for students before, during, and after the outdoor education activity to prevent dehydration.

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6 Adapted from: Council of Ontario Directors of Education (CODE). (2017). An Update on the CODE Student Injury Prevention Initiative: Phase Three. Retrieved from: **http://www.ontariodirectors.ca/SIPI/2017/Update_n0_1_SIPP-Final.pdf**

- Ensure students have access to washroom facilities in urban areas (for example, a local community centre, on-site portable toilets) or are taught sanitary procedures when in wooded areas where permitted (for example, cat holes, latrines, thunderboxes, outhouses).
- Have a **First Aid Plan and First Aid Emergency Response** plan and make sure other activity supervisors and students are aware of the plan and their role during an emergency.
- Consult the relevant **OPASSE activity page(s)** to make sure all the minimum standards for the activity are in place.
- Modify the activities according to the age, ability level, language and experience of students, number of students, and the facilities available.
- Prior to participation, address any safety concerns for students with special needs and make appropriate accommodations/modifications to provide a safe learning environment.
- Allow students to select a challenge at their comfort level, including the choice to not participate.
- Verify that the teacher or any of the supervisors and/or activity providers have the appropriate level of knowledge and competency required for the activity as listed on the relevant OPASSE activity page(s). For example:
  - Skills related to the specific activities involved (for example, hiking, camping, canoeing)
  - Certifications related to the specific activities involved (for example, Ontario Recreational Canoeing and Kayaking Association (ORCKA) Basic Instructor, Paddle Canada Lakewater Canoe Instructor, Standard First Aid)
  - Outdoor food preparation and cooking skills
  - Navigation skills
  - Group facilitation and problem-solving skills
  - The ability to communicate and interact with colleagues and students in a positive and constructive manner

STUDENT PREPARATION

Make sure students are knowledgeable of the following:

- Know safety procedures related to environmental conditions and be aware of ways to protect themselves (for example, sunburn, dehydration). Consult the Ontario Physical Activity Safety Standards in Education (OPASSE), **Weather** section in the Tools & Resource section, for safety standards related to specific weather conditions.
- Have received information on **concussion** prevention specific to the activity, the inherent risks of the activity, and procedures and rules for safe play, and understand the importance of reporting symptoms related to a suspected concussion.
- Know how to identify and avoid potential hazards to prevent injury.

- Know the required and correctly/comfortably fitting gear needed for the outdoor education activity and have packed it (for example, closed toed shoes that provide traction, rain gear, hats for sun protection).
- Know the **First Aid Emergency Response** plan. Know where and how to access who and what they need in an emergency.
- Know the location of the First Aid kit and how to signal for help (for example, 3 blasts from a whistle, 3 shouts).
- Have the required skills and abilities to safely participate in the activity (for example, tent set up, fire building, safe food storage).
- Know the boundaries for the designated activity, and the rules and procedures.
- Awareness of expectations as they relate to signals to assemble a system to keep track of students (for example, a buddy system), proper use of equipment, and boundaries of the activity.
- Know the route, if travel is involved in the activity.
- Know the importance of avoiding wild animals and how to stay safe when encountering them.
- Know the importance of staying hydrated and adequate nutrition to safely participate in the activity.

Outdoor Education Teacher Checklist

This checklist provides a list of key considerations when planning outdoor education activities. Keep in mind that school and school board requirements may differ, and so always consult with the school and school board before planning any outdoor education activity.

BEFORE OUTDOOR EDUCATION ACTIVITIES

- [ ] Consult school board policies, procedures, and approval processes.
- [ ] Consult the **Ontario Physical Activity Safety Standards in Education (OPASSE)**. Assess the risks and establish a plan to mitigate them prior to starting an activity.
- [ ] Survey the activity area to check for safety hazards.
- [ ] If the activity takes place off school property, check the activity route for safety hazards. Ensure access to an emergency communication device for off-school site activities (for example, cell phone, satellite messenger).
- [ ] Assemble a team of teachers and/or supervisors with the skills and/or qualifications (for example, first aid qualifications, police record checks) to meet the minimum safety standards for the activity in question as described in OPASSE, and to meet the school board requirements for student to supervisor ratios.
- [ ] If the activity takes place off school property, assess transportation requirements and cost. If the activity requires equipment, make sure the equipment is compliant with school board safety standards, is well maintained, and is suitable for student use.
- [ ] Fill out, distribute, and collect signed forms as required by the school board's policies and procedures. Consult the **OPASSE Tools and Resources** section for sample forms.
- [ ] Create a list of known **medical conditions** and a plan to manage them during the activity. Create a contact list including emergency numbers, the school and Principals' phone numbers, and the hospital addresses for each location in case of emergencies for quick reference while on the excursion.
- [ ] Teach the skills associated with the relevant outdoor education activities and assess student skill level and readiness to participate in the planned activity.
- [ ] Ensure and document that students meet prerequisites for participation in the relevant outdoor education activities (for example, results of the swim test procedures for water-based activities).

- [ ] If the activity takes place off school property, leave a copy of the activity plan and a list of participants with the school.
- [ ] Inform parents of how to contact the teacher/supervisors and how they would be contacted in the event of an emergency (for example, through the school).
- [ ] Inform students of necessary safety protocols such as changing weather conditions and their responsibility.
- [ ] Access school board **concussion education resources** to provide students with concussion awareness education before involving students in physical activities.

DURING OUTDOOR EDUCATION ACTIVITIES

- [ ] Provide a safety briefing to the group prior to starting new activities or when moving to new locations.
- [ ] Monitor the well-being of the group. Check in with students with existing **medical conditions** and be attentive to potential conditions that may arise (for example, allergic reactions).
- [ ] Be responsive to shifting weather patterns; if in doubt, sit it out.
- [ ] Address any safety issues that arise with all students.
- [ ] Establish hydration-specific breaks for all participants.
- [ ] Do not deviate from the planned activities and locations that have not been approved prior to the start of the activity. Changes in location and activity types often require additional risk assessment and approval.

AFTER OUTDOOR EDUCATION ACTIVITIES

- [ ] Hold a teacher and supervisor debrief meeting to assess and document what went well during the activity (for example, safety and risk management, equipment, student experiences) and what might be modified for future outdoor education activity experiences.
- [ ] Follow up with any issues that occurred during the activity with the school/school board administration, and parents/guardians/caregivers as needed.
- [ ] Provide students with an opportunity to assess what went well and what could be changed for future outdoor education activity experiences.
- [ ] Celebrate! Reflect on how this outdoor education activity experience made a difference in the lives of the students, teachers and supervisors, and, more specifically, yours.

Outdoor Education Conversation Starters and Reflection Activities

What?

Conversation starters and reflection activities include questions and scenarios related to safety and risk management.

Why?

The intention of conversation starters and reflection activities is to initiate, deepen, and consolidate learning about managing risk by being prepared and following safety rules and procedures while participating in outdoor education activities.

Who?

The conversation starters and reflection activities are for teachers to use to engage students in conversation.

When?

The conversation starters and reflection activities can be used BEFORE, DURING, and AFTER the outdoor education activity.

How?

Teachers can use these conversation starters and reflection activities as presented, or adapt, or add to the examples provided, where appropriate. These activities may be used throughout a unit or as a component of a single lesson.

BEFORE AN OUTDOOR EDUCATION ACTIVITY

Having a Conversation About Risk Management and Safety

The term "risk management" is often heard when discussing how to maximize group safety during activities that take place either on or off the school site. Risk management is a proactive approach used to create and sustain a culture of safety-mindedness to reduce the risk of injuries by focusing on safe practices. These practices include identifying the risks, having procedures in place to minimize or eliminate the risks, and implementing these procedures to maximize the safety of students during outdoor education activities. [7]

These sample guiding questions may be used with students to start a conversation about creating a culture of safety-mindedness. Through these conversations, students learn to identify potential risks and learn about their roles and responsibilities in managing possible risks to safely participate in outdoor education activities. Consider adapting the questions to meet the needs and language level of the learners.

Teacher Prompt: The word "culture" means a way of doing things. We want to build a culture of safety-mindedness to keep ourselves and others safe while participating in outdoor education activities. We can do this by thinking about some of the risks (dangers) we might encounter in an activity and then decide on the rules and procedures we will follow to reduce or eliminate those risks.

- What does the word, "risk" mean to you?
- What safety risks might you encounter during our outdoor education activity?
- What are some possible risks related to "x"? (define the activity)
- What can you do to reduce these risks?
- What can you do before the activity to prepare yourself to safely participate in the activity?
- What can you do to keep yourself safe while participating in this activity?
- What can you do to help keep others safe while participating in this activity?
- What might be the result if someone doesn't follow the established safety practices?
- How can we cooperate as a whole group to maximize the safety of everyone participating in the activity?
- What might be the outcome of not participating in this activity?

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7 Adapted from: Goodman, S., McGregor, I. (1993). Legal Liability and Risk Management. A Resource Manual for Professionals and Students in the Sport, Recreational and Leisure Fields. (p.8). Toronto, Canada.

Risk Management Scenarios for Discussion

Provide students with one of the following scenarios:

> Primary: You and three classmates are gathering materials in a local park to build natural shelters. Your teacher has established very specific boundaries but you know that just a little further into the forest there are some really great sticks for shelter building.
>
> Junior: You and your classmates are travelling as a class group from the school to the local marsh for a hike. The marsh is two blocks away from the school and you have to cross two busy intersections to get there. The marsh is surrounded by tall grasses and has approximately 1 metre of water in the center. There isn't a clear shoreline, so it is hard to tell where the solid ground ends and the water starts.
>
> Intermediate: You are spending the day at your local conservation area where you and your group of friends will be outside all day doing group activities, hikes, and interpretation activities. Some of the activities have you doing small group activities on your own and reporting back to the instructor. The weather is very hot with no clouds or wind, and thunderstorms are very probable later in the afternoon.

Have students identify some of the possible risks and identify some safety rules and procedures that the group can follow to minimize or eliminate the risks.

DURING AN OUTDOOR EDUCATION ACTIVITY

Understanding the Risk

Dangers cannot always be avoided but teachers should plan for the greatest number of possible scenarios that may occur during an activity. Students and their parents/guardians/caregivers must also be aware of the risks inherent in certain activities.

These sample questions may be used with students before an activity, to help deepen their understanding of possible risks:

- What will we do before today's activity to help keep ourselves safe?
- What safety rules and procedures are we each responsible for following in today's activity?
- What safety rules and procedures for today's activity will we look after as a group?
- What safety rules and procedures for today's activity will be the responsibility of the teacher and/or other supervisors who are with us?

These scenarios can be used to encourage discussions and reflection on various activities:

Primary: Amir bought new shoes specifically for the class hiking trip to make sure he had enough grip and wouldn't slip or fall on the trails. They are working but his feet are starting to hurt. During the water break he looks at the spots on his feet that are hurting and sees that his heels are all red and sore. What should he do? How can you help Amir as his friend? What might happen if you don't say anything?

Junior: Jose and Lam are the leaders for the morning hike that has been organized by your community youth council. They are setting a good pace on this section of the trail. It is hilly so they are taking frequent breaks for snacks and water. Some of the participants are getting tired and are having difficulty keeping up the pace. They don't get as much time for a break because they are at the back of the group. You notice this but haven't said anything to either Jose or Lam. What might happen if you don't say anything? What should you do? How can the group solve this problem to help everyone in the group safely enjoy the hike?

Intermediate: Ellie is participating in a two-day camping trip as part of the year-end grade 8 trip. The teachers and supervisors have been reminding everyone to drink water during all breaks in the day and stay in the shade on breaks from activities. Ellie prefers to be in the sun because she likes the way the heat feels on her skin. She has finished her water and has forgotten to fill it up at the water station between the activities. During the afternoon, you notice she doesn't seem as enthusiastic about the activities. When you ask if she is ok, she tells you she has a headache and isn't feeling well. What should she do? How can you help Ellie as her buddy? What might happen if you don't say anything to her?

Intermediate: Your class is participating in a three-day outdoor education experience at a camp. One of the daily activities involves everyone choosing a spot to sit quietly without interacting with other students in the class for a period of fifteen minutes. The teacher and camp staff are circulating and you can see them but you will not be close enough to friends to talk with them. You have never spent time sitting in the woods like this because you don't like sitting on the ground and you fear spiders and other insects. What are you worried about? What can you do to help you manage your fear? What might you talk about with friends?

AFTER AN OUTDOOR EDUCATION ACTIVITY

Culture of Safety-Mindedness

The sample activities within this section may be used to help students reflect on their experiences and their application of safety rules and procedures to stay safe and help others stay safe.

Exit Cards:
Have students reflect on how they followed the safety rules and procedures to stay safe and help others stay safe while using the following questions as a guide:

- Think of and share three ways that you demonstrated safety-mindedness throughout the activity.
- What rules and procedures did you take responsibility for in today's activity?
- What rules and procedures did the group take responsibility for in today's activity?
- What rules and procedures did the teachers and/or supervisors in charge take responsibility for in today's activity?
- Think of a situation where you may not have paid enough attention to your safety or that of the people around you, and describe what you would do differently next time?

My Favourite Moment:
After an outdoor education activity, use a sharing circle to have students share their favourite moment and how following the rules and procedures contributed to the safety and enjoyment of the day.

Journaling:
After an outdoor education activity, have students reflect on a challenge they tried, what they learned from the experience, and how it helped them stretch their comfort zone.

Planning for Safety:
After a class outdoor education trip, have students plan an imaginary trip they would like to do with their friends and family. Have them create their own safety plan for the trip.

From my Hat:
After an outdoor education activity, have each student draw something from the day's activity that they learned. Put these simple drawings into a hat and have each student select one. Each student must decipher the image and explain how it applies to personal and group safety.

Community Timeline:
Have each student take a turn sharing three words that represent what was learned during the

outdoor education activity. Each student will take a turn and then have the group attempt to verbally "paint a picture" of the day in order.

Ball Toss:
Prior to the outdoor education activity, write some questions on the various sections of a beach ball or volleyball. Have students toss the ball around the circle after the event/activity. Have students answer the question upon which their thumb lands when they catch the ball. Students toss the ball until everyone has had a chance to speak. Questions can also include prompts for students to acknowledge others in the group and positive things they saw others doing, or prompts to mention positive things they contributed to the group, as well as how they managed the challenge.

REAL VERSUS PERCEIVED RISKS

There are differences between real risk and perceived risk. Helping students understand the difference fosters a sense of adventure and challenge to try new things, promotes skill building, and results in a sense of accomplishment. This can occur while maintaining safety rules and procedures to minimize or eliminate the real risks.

The sample guiding questions from this section may be used with students to start a conversation about real versus perceived risks. Through these conversations, students learn to differentiate between real and perceived risks, identify and think about how to manage their emotions in situations that they perceive as risky, and ways to reduce real risks. Consider adapting the questions to meet the needs and language level of the learners.

Teacher Prompt: Participating in outdoor education activities challenges us to experiment and try new things, explore the natural world around us, and learn new skills to build our confidence. An activity that is challenging may appear to be too risky for you to want to try. Yet, what one person thinks is a risky activity may not seem that way to another person. Sometimes what a person thinks is risky may not be a real risk. For example, walking on platforms at different heights, navigating a path on a rocky shore, or participating in a new outdoor education activity.

- What are some differences between a real risk and something we think is risky but may not be? How can we tell the difference?
- What are some of the benefits of trying new activities and experiences that may seem risky but may not be? (perceived risks) What can we learn about ourselves?
- How can we manage our thoughts and emotions when we are in a situation that we think is risky but may not be? (perceived risks)
- How do we reduce the real risks?

EXPLORING OUR COMFORT ZONES

When we are faced with challenges, our brains are activated to learn new things as long as there is a foundation of safety, belonging and trust. Challenges are how we grow our knowledge base, improve our skill base, build our sense of agency and our identity as a learner and as a competent person. Learning occurs at the edge of an individual's comfort zone and is unique to all individuals.[8]

The sample guiding questions from this section may be used with students to start a conversation about challenges and exploring their comfort zones. Through these conversations students learn to identify and manage their emotions in situations that they perceive as unsafe, explore the benefits of stretching the limits of their comfort zones, and consider how to help others feel safe when participating in new outdoor education experiences. Consider adapting the questions to meet the needs and language level of the learners.

Teacher Prompt: Participating in outdoor education activities challenges us to try new things and learn new skills to build our confidence. We all have different comfort zones where we feel safe and confident participating in an activity. The edge of our comfort zone is called the challenge zone or learning zone. When we are at the edge of our comfort zone, we might feel nervous, excited, a bit scared or hesitant. This edge between our comfort zone and challenge zone is different for each of us. What one person thinks is a challenge during an activity may not seem that way to another person. For example, walking in an area where there are different kinds of bugs, holding a slimy creature like a worm or a frog, or walking through the forest. Stretching the limits of our comfort zone helps us learn about our world, how our bodies work, or master a challenge, which is exciting and helps us feel successful. This also motivates us to continue to try new things to learn and grow.

- What does it look like, feel like, and sound like when you feel physically or emotionally safe while participating in an activity?
- What does it look like, feel like, and sound like when you don't feel physically and emotionally safe while participating in an activity?
- What can we say and do to help everyone feel physically and emotionally safe as we participate in activities that might stretch the limits of our comfort zones?
- What is the benefit of participating in activities that require us to stretch the limits of our comfort zones? What might we learn about ourselves?
- How might others help you feel physically and emotionally safe while you explore the edges and possibly stretch the limits of your comfort zone?
- What types of positive support can you offer others to help them confront their personal challenges and expand their comfort zone?

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8 Excerpted from Moving From the Comfort Zone to the Challenge Zone. Edutopia, (2020). Retrieved from: **https://www.edutopia.org/video/moving-comfort-zone-challenge-zone**

Considerations for Activities Designed to Explore Comfort Zones

- Activity challenges are designed to be appropriate for the age, skill level and maturity level of all the participants. Precautionary measures such as the location of the activity, the skill instruction provided, equipment used, and adherence to safety rules and procedures appropriate for the age of participants are key to effective risk management.
- Participants have the choice of the level of challenge in which they engage and how much they want to challenge themselves relative to their comfort zone. This practice is called challenge by choice and it is a powerful concept that gives students the control over their level of engagement with a given outdoor education activity.
- When a student displays hesitation (verbally or nonverbally) while participating, the teacher must determine the reason(s) for doubt. If the teacher believes that a potential hesitancy during the skill could put the student at risk, the student must be directed toward a more basic skill, or be permitted to select a challenge at their comfort level, including the choice to not participate.
- Keep the goal in mind throughout an activity. While completing the challenge is great, it is far more important for participants to experience the outdoors and learn at their own pace.
- Engaging a student's comfort zone often occurs in three stages: Frontloading, Facing the Challenge, and Reflection and Celebration. The following prompts may be used by educators during each of the three stages to engage students in identifying their emotions and ways they may be supported during the challenge.
  - Frontloading:
    - What are our fears grounded in?
    - Do we call something a fear just because we are unfamiliar with it? Think of your favorite food, at one point in your life it was unknown to you, and you had to try it for the first time, and aren't you happy you did?
    - Try and describe the fear you think you have? What does it look like, how do you expect it will make you feel?
  - Facing the Challenge:
    - What is the worst possible thing that could happen to you if you follow through with facing your fear or challenge? How likely is this to actually happen?
    - Would having someone else do it with you at the same time help support you towards facing your fear or challenge?
    - What might someone say to talk you through facing your fear? What words and steps would they need to take to support you in helping you through your challenge?
  - Reflection and Celebration:
    - Now that you have faced your fear or challenge, what do you think the next challenge might be? How do you expand what is comfortable for you even further?

- How would you describe the way you felt right at the moment you pushed past your fear or challenge?
- How does celebrating the challenge make you feel right now?
- What is the role of our community in helping us through these challenges?

Lesson Plans

This section provides sample lesson plans about safety during outdoor education activities. The goal of these lessons is to engage elementary students in age and developmentally appropriate activities to build their knowledge and skills of safe practices that prepare them to safely and confidently participate in a variety of outdoor education activities.

These lesson plans may be used as part of the Grade 1 - 8 Health and Physical Education curriculum. Connections may be made to the overall and specific expectations of Strand A: Social-Emotional Learning Skills, Strand B: Active Living, and Strand D: Healthy Living at the Primary, Junior and Intermediate level. These lessons provide students with an opportunity to apply their social-emotional learning skills to identify potential risks and strategies to prevent injury. Students learn about the importance of establishing and following appropriate safety rules and procedures to maximize their safety and the safety of others while participating in outdoor education activities. Students also have the opportunity to make connections to healthy eating in various contexts and engage in skill-building activities and discussions about ways to reduce the safety risks for themselves and others and prevent injury in a variety of outdoor environments.

These sample lesson plans do not target a specific grade but are instead designed with each of the three divisions in mind, providing educators with the flexibility to adapt these lessons to a specific division. Suggested strategies to adapt lessons according to student needs are included in the lessons as a guide. Educators should use their professional judgment to choose the appropriate lesson plan and learning strategies for their students and if necessary, adapt the lesson content appropriately to address their students' needs.

Educators may consider incorporating these lessons to address safety as part of an outdoor education activities unit or to correspond to the theme presented in the lesson. For example, mindfulness, cooperative group learning, environmental justice, or healthy eating in various settings. The lessons are independent of each other; however, they can be used in combination to complement or extend student learning.

Each lesson plan includes strategies that support assessment for learning, a self-check for students to complete to check their understanding (with the exception of Challenge Your Comfort Zones and Safety Shelters), and a suggested assessment strategy, which may be adapted or replaced as necessary. Note that the self-checks are designed to be used as a pairs or small group quiz game or challenge before or as part of the consolidation and are not meant to be used for grading or evaluation. Educators can use student answers to clarify or extend learning or provide feedback.

Sample success criteria are presented as well. Criteria for assessing knowledge and skills regarding safety measures during outdoor education activities should be co-created with the students at the beginning of a lesson. Please review these criteria with the students before having them complete the assessment activity, and use the criteria to provide feedback based on the learning goals.

CHALLENGING YOUR COMFORT ZONES

Lesson Overview

During this lesson, students will identify their emotions, practice positive motivation and build their self-awareness skills while exploring their comfort and challenge zones.

Overall and Specific Expectations

- A1: A1.1, A1.3, A1.4, A1.5
- B3: B3.1

Learning Goals

- I can identify my emotions and practice positive motivation strategies as I build my awareness of activities I am comfortable participating in and activities that challenge me while participating in outdoor activities.
- I can identify strategies for expanding my areas of growth when engaging in new experiences.

Materials

- Cones
- Hula hoops - one per student (optional)
- Rope/twine
- Student Resource: Exit Card - one per student (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Activities

- **Blanket Toss**
- **Climbing (Aerial Parks)**
- **Climbing (Ascending Lines)**
- **Climbing (Bouldering/Traverse Climbing Wall)**
- **Climbing (Challenge Courses/Towers - High Elements)**
- **Climbing (Challenge Courses - Low Elements)**
- **Climbing (Climbing Wall and Related Activities)**
- **Climbing (Zipline/Tyrolean Traverse/Equivalent)**

Tools and Resources

- **First Aid Plan and First Aid Emergency Response**
- **Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form**

Other

- Risk Management

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge and skills needed to apply their social-emotional learning skills while participating in outdoor activities that may challenge their comfort zone. For example, success criteria might include:

- I can identify how I am feeling in situations that are challenging for me.
- I can use positive words and phrases to help me persevere to try new challenges.
- I can explain how trying new challenges can help me learn and grow.
- I can engage in positive supportive behaviours to help my classmates engage with their personal challenges.

After the activity, review the co-created criteria with students, and then have them complete their exit cards.

Assess students' responses during the minds on class discussions and on their exit cards/exit card discussions (primary). Use the co-created criteria to assess student learning and offer feedback. If needed, provide feedback to individual students or the entire group, to clarify or reinforce their understanding of stretching the edges of their comfort zones to learn and grow, and answer any remaining questions.

Minds On

Primary/Junior/Intermediate:

Write down one or more of the following quotes so that students can refer to them:

- Primary: "You are braver than you believe, stronger than you seem and smarter than you think." (A.A. Milne)
- Primary/Junior: "Believe you can and you're halfway there." (Theodore Roosevelt)
- Junior/Intermediate: "All things are difficult before they are easy." (Thomas Fuller)
- Junior/Intermediate: "Try a thing you haven't done three times. Once to get over the fear of doing it. Twice to learn how to do it. And a third time, to figure out whether you like it or not." - (Virgil Barnett Thomson)
- Junior/Intermediate: "Whether you think you can or can't, you are right." (Henry Ford)

Divide students into pairs to talk about what the quote(s) means to them. Invite students to share their thoughts with the class. Use student responses to focus student attention on how they might feel or what they might think about in challenging situations.

Action

Primary/Junior/Intermediate:

Create a big circle with cones, rope, or lines that exist on the activity floor, blacktop, or grass. Have students find a space inside the circle. Alternatively, provide students with hula hoops and have them find a space to place their hula hoop and stand in the centre of it.

Explain to students that everyone has comfort zones. The circle represents their comfort zone. This is a place where they feel physically and emotionally safe and comfortable. They have fun in this space and are confident about the activity or task. The edge or the circle is where their comfort zone ends. Everyone has different size comfort zones and that's ok.

Add another ring around the circle. Have students step into the next ring. If using hula hoops, have students step outside the hoop with their heels still in contact with the hoop. Explain to students that just beyond the comfort zone is a space called the challenge or fear zone. Use the following question prompts to engage students in a whole group discussion about comfort zones and strategies they might use to manage their feelings during a challenge (for example, use a motivational “I can” statement, a deep breathing technique, visualize what being successful would look like and feel like, or keep up positive self-talk).

- Why do you think this space is called the challenge or fear zone?
- What feelings might you have as you inch your way out of the comfort zone into the challenge/fear zone?
- What do you think happens when we challenge ourselves to step out of our comfort zone into the challenge zone? What might we learn?
- How can we manage feelings that might be uncomfortable as we stretch our comfort zones?

Explain to students that the challenge zone is the place where they may feel scared, anxious or uncertain about the task, they may not think they can succeed, or they might be afraid of some sort of danger. It’s a place where they may not be comfortable, but they also don’t feel panicked. When they overcome challenges, they learn they can do new things, and they grow. Now they have expanded their comfort zone.

Have students step back into their comfort zone. Explain that they will be asked a series of questions. When they hear each question, they decide how they feel about it. If they are very comfortable, they remain standing in the middle of their comfort zone. If they are a bit uncomfortable but would do it, they move toward the edge of their comfort zone. If they would not be comfortable, and it would be a bit fearful or challenging, they step into their challenge zone. Remind them that it is important to be honest and not worry what others around them do.

Remind everyone what it might look like and sound like to show that they are respectful of others' feelings and answers. For example:

- "I can listen and observe my classmates' actions without judgmental comments or gestures";
- "I can acknowledge someone else's feelings by saying, I hear/notice you are feeling nervous about this. That's ok."

From the following questions, choose the ones that are most appropriate for the age and stage of the students (consider adapting the questions to the age and language level of students and/or adding additional questions to spark student response) and read them aloud.

- How comfortable are you with loud noises like fireworks and thunderstorms?
- How comfortable are you when a barking dog comes near you?
- How comfortable are you in meeting someone new?
- How comfortable are you inviting someone new to play with you?
- How comfortable are you speaking or presenting to your peers?
- How comfortable are you with eating something new that looks and smells a little different?
- How comfortable are you ordering for yourself in a restaurant?
- How comfortable are you with spiders?
- How comfortable are you touching a spider web?
- How comfortable are you with snakes?
- How comfortable are you with touching something slimy like a worm or a frog?
- How comfortable are you if a bug crawls on your arm or leg? Would it be ok?
- How comfortable are you trying a new activity?
- How comfortable are you climbing trees?
- How comfortable are you asking questions when you don't understand something?
- How comfortable are you discussing your mark with a teacher?
- How comfortable are you being away from your family for a night?

The comfort zone activity was adapted from:

- *Stepping Outside of the Circle: Growing Comfort Zones – Jordan Rowell,* ***High Trails****. (2021)*
- *Team Building Activity: Risk Zones.* ***Guide, Inc.*** *(2021).*

Consolidation

Primary/Junior/Intermediate:

Provide each student with an exit card to record their reflections about the activity. Have students answer the following questions to guide their reflection.

- Which situations fell into your comfort zone and which situations fell into your challenge zone and why?
- How did you feel when you stepped into your challenge zone?
- What is something else that would fall into a challenge zone for you?
- What do you think you might need to try new activities that would be challenging for you? (for example, support/encouragement from a friend, talk about why it is a challenge, see someone do it first)

For primary students, consider reading the questions aloud for students to talk about with an elbow partner. Alternatively, provide students with the list of the situations described during the activity (for example, fireworks, thunderstorms, a barking dog, trying a new food). Have students circle the situations that are within their comfort zone, and put a square around situations they might try to stretch their comfort zone.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity you might consider including as an extension of this activity (for example, trust activities, challenge courses).

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

Comfort zone activities are a great vehicle for helping students engage with natural areas in a more meaningful way. Most students are accustomed to seeing and hearing nature. Their low level of comfort in natural areas restricts their connection to the deeper experiences that are possible. By inviting students to challenge their senses through acknowledging and stretching their comfort zones (for example, touching something slimy, or getting close to smell something unfamiliar) allows for the normalization of natural interactions and ultimately increases their comfort zones.

Activities that have a high perceived risk such as climbing wall, blanket toss, trust walks can all be introduced with general comfort zone discussions or activities. Putting language to these internal challenges and letting them be realized and acknowledged at the group level will open the opportunity for students to engage in positive supportive group behaviours. Consider engaging students in available outdoor education activities to experience and practice stretching the edges of their comfort zone and further develop their relationships skills by practicing positive supportive behaviours to help their classmates engage with their personal challenges.

Student Resource: Exit Card

Exit Card

Which situations fell into your comfort zone and which situations fell into your challenge zone and why?

How did you feel when you stepped into your challenge zone?

What is something else that would fall into a challenge zone for you?

What do you think you might need to try new outdoor education activities that would be challenging for you (for example, support/encouragement from a friend, talk about why it is a challenge, see someone do it first)?

What might you say to support and encourage a classmate with their personal challenges to their comfort zone during an outdoor education activity?

LAYERING AND DRESSING FOR OUTDOOR SUCCESS

Lesson Overview

During this lesson, students will practice their relationship and critical thinking skills to identify how to dress appropriately for a variety of weather conditions to stay safe during outdoor education activities.

Overall and Specific Expectations

- A1: A1.4, A1.5, A1.6
- B3: B3.1, B3.2
- D2: Gr. 4 – D2.2, Gr. 8 – D2.2
- D3: Gr. 1 – D3.1, Gr. 6 – D3.2

Learning Goals

- I can use my relationship and critical thinking skills to analyze situations and behaviours and act appropriately to keep myself and others safe during outdoor education activities.
- I can behave responsibly and follow safety rules and procedures to avoid illness during outdoor education activities.

Materials

- Student Resource: Layering and Dressing for Success Self-Check (*included at end of the lesson*)
- Teacher Resource: Cold- and Heat-Related Illnesses (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Tools and Resources

- **First Aid Plan and First Aid Emergency Response**
- **Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form**
- **Temperatures**
- **Ultraviolet (UV) Index**
- **Winds**

Other

- **Risk Management**

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge and skills needed to identify potential risks and apply safety rules and procedures during outdoor education activities. For example, success criteria might include:

- I can identify the risk of not being dressed properly for the weather conditions when participating in different types of outdoor education activities.
- I can behave responsibly and apply safety rules and procedures to avoid weather-related illness and keep myself safe during outdoor education activities.

After the activity, review the co-created criteria with students, and then have them complete the Student Resource: Layering and Dressing for Success Self-Check.

Assess students' responses during the minds on scenarios and consolidation illustrations (primary), scenarios (junior/intermediate), and class discussions. Use the co-created criteria to assess student learning and offer feedback. If needed, provide feedback to individual students or the entire group, to clarify or reinforce their understanding of layering and dressing for success, and answer any remaining questions.

Minds On

Primary:

Group students into 3-4. Provide students with the following scenario and have them generate answers to the questions.

Scenario: "We are having a new student join our class. It is their first time living in Canada so they have not experienced our varied weather conditions. We want to suggest clothing options to them so they are protected from the heat, cold, rain and sun."

Questions: What should they wear on a hot day? What do they need to protect them from the sun's rays? What should they wear on a cold and snowy day? What do they need for a cold and rainy day?"

Invite groups to share their answers with the class.

Junior:

Group students into triads. Provide students with the following scenario and have them generate answers to the questions.

Scenario: "We have a unique climate in Canada because it is so diverse. Each of the four seasons can be described by its weather."

Intermediate:

Pair students with an elbow partner. Provide students with the following scenario and have them generate answers to the question.

Scenario: “There is no bad weather, just bad clothing preparation.”

Question: What does this phrase mean to you?”

Invite partners to share their answers with the class.

Action

Primary/Junior/Intermediate:

Tell students that it is important for them to know how to dress appropriately when they are spending time outside to be safe and to have fun. There isn’t one way to dress for all activities or for all conditions so they have to think about the right mix of clothes to wear for the different activities they participate in and the different weather conditions. They have to think about the intensity of the activity - are they moving quickly, slowly, always, only sometimes - and the outside temperature, the wind, the sun and precipitation like rain or snow. One good strategy to use is to dress in layers and think about all parts of their body that need protection.

Write the following information so that students can refer to it and describe what each one means (consider creating a slideshow to share content).

- Base layer: This is the layer that is in direct contact with your skin. This thin layer helps move your sweat away from your skin; this action is called “wicking.” Moving sweat away from your skin to the surface of the fabric of your clothing allows your sweat to evaporate and helps keep you dry. If this layer holds your sweat, you will start to feel cold when you slow down or stop for a rest.
- Mid layer: This is the middle layer, like the filling in a sandwich. It insulates your body holding onto the heat your body generates which will keep you warm. It also moves your sweat out to the outside layer of clothing. This layer should be roomy enough to put over your base layer and still allow you to move but should still be snug to keep out the cold.
- Outer layer: This is the layer that is visible. It works like a “shell” that provides a shield against wind, rain and snow. Depending on what type of activity you are doing, this layer should protect the layers beneath it from the wind and/or the rain. This layer helps keep your other layers dry when it rains and keeps you protected from the wind. It should fit over your other two layers but still be snug while allowing you to move.

- Types of fabric: There are four types of fabric that we need to be aware of when dressing for success in the outdoors. These include cotton, synthetics, down, and wool.
  - Cotton: Cotton is a natural fiber that is comfortable but holds onto moisture when it gets wet. For this reason, try to avoid pure cotton clothing when possible. If you have the choice of cotton or polyester, go with the polyester. However, cotton is acceptable in hot, dry conditions in summer for staying cool and avoiding heat injuries.
  - Synthetics: Synthetics are any polyester type fiber and are a great fabric choice for being outdoors. Clothing made of polyester, fleece, microfibers and spandex are all synthetic choices. Synthetic fibers do not like to hold onto moisture and help move your sweat away from your skin, and if they get wet they dry much faster than cotton or down.
  - Down: Down garments are filled with feathers that provide loft within the garment. This loft is what keeps you warm when it is dry; however, if down gets wet it loses its ability to hold loft and no longer provides any warmth.
  - Wool: Wool is a natural fiber made from a sheep's fur. Wool has natural properties that help move moisture away from the fabric similar to synthetics. Often wool fabrics are thicker than synthetic fabrics and provide some warmth.

The information about layers and fabrics was excepted from: Layering 101: How to Dress for Outdoor Activities, ***Backpacker's Pantry****. (2020).*

Use the following question prompts to engage students in discussion about using base layers and the parts of their body that need protection from weather.

- How does layering your clothes help you stay safe and to have fun? Possible answers:
  - In hot conditions layers can be removed.
  - In cold conditions layers can be added.
- What do you think you need to do to protect your head, hands and feet to avoid losing body heat in cold weather conditions? Possible answers:
  - Wear properly fitting hat, mitts, and socks and shoes that grip.
  - Bring extra socks or mitts in case clothing gets wet.
- What do you need to do to protect your eyes? Possible answers:
  - A hat to shade the sun and sunglasses.
  - Goggles to shield and protect from cold wind and blowing snow when downhill skiing.
- How can you make sure you are visible to others when you are outside at night? Possible answers:
  - Carry a flashlight or headlamp.
  - Try to wear clothes that have reflective tape on them.

- I carry some garbage bags and small baggies in my backpack in case we need them to protect us from the weather or for safety (consider showing students a garbage bag and small baggies). Why do you think I carry them with me? How might we use them to keep ourselves safe and warm when we are outside?

Junior/Intermediate:

Using the Teacher Resource: Cold and Heat Related Illnesses as a guide, share the names of the illnesses with students and ask them what they mean. Share the definitions, symptoms and basic first aid steps with students. Using a Think/Pair/Share strategy, ask students how to use layers correctly to protect themselves and avoid these illnesses.

Consolidation

Primary/Junior/Intermediate:

Divide students in pairs to complete the Student Resource: Layering and Dressing for Success Self-Check to check for understanding of the lesson goals, then have students complete the following task:

Primary:
Have students draw a picture to help others know how to dress for adventures in hot weather or cold weather. Students can include both the weather factors and personal clothing choices for the location/activity.

Junior:
Divide students in pairs to review the following scenario and complete the subsequent task.

Scenario: “We are going on a day hike tomorrow. The weather forecast indicates that it will be cool in the morning. By lunch time it will be hot and a bit humid. It looks like we may have some rain toward the end of day as we are completing our hike.”

Task: Have students create a list of the clothing they will wear and that they will bring in their backpack. Invite pairs to share their packing list with the class.

Intermediate:
Divide students in pairs to review the following scenario and complete the subsequent task.

Scenario: “You are packing your backpack for a two-day trip. The weather predictions are for an early morning chill when we set off with dew on the ground. As the day gets warmer, we will be generating body heat on our hike. Back at camp in the evening, expect to cool down as you are pitching your tent and getting ready for dinner. On Day 2, the weather reports are predicting a 40% chance of rain showers.”

Task: Have students create a list of clothing that they will wear, and what they will bring in their backpack. Invite pairs to share their packing list with the class.

Consider providing students with magazines and/or catalogues to cut out various pictures of indoor and outdoor clothing for various weather conditions. Have them include a few questionable or inappropriate clothing choices. Have students put their collection into an envelope and trade with another group. Provide the students with various scenarios. Have students create an appropriate outfit for the weather conditions they will be facing.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity.

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

Consider pairing this lesson with the lesson “Staying Safe Outdoors” for students to learn basic first aid for heat- and cold-related injuries.

Teacher Resource: Cold- and Heat-Related Illnesses

Hypothermia

Hypothermia is when the body gets so cold that it has trouble warming itself up again. This can be dangerous because the organs inside the body can stop working if they get too cold. Hypothermia can happen during any season.

Signs/Symptoms

- Early stage hypothermia: Shivering, feeling very tired, confused, numb hands, slurred speech.
- Late stage hypothermia: No more shivering, low responsive/unresponsive, pale skin, low pulse, low breathing rate.

Treatment

- Get help immediately from an adult.
- Move the person out of the cold.
- Remove any wet clothing.
- Cover the person with blankets.
- Watch their breathing.
- Give them something warm to drink.

Heat Exhaustion

Heat exhaustion starts slowly, but if it's not quickly treated it can progress to heatstroke. Heat exhaustion occurs when our body attempts to work in overdrive to cool ourselves down when it is warm outside.

Signs/Symptoms

Thirst, weakness or very tired, muscle cramps, nausea, headache.

Treatment

- Get help immediately from an adult.
- Get the person into a cool place.
- Loosen their clothing.
- Have them drink fluids.

Heatstroke

In heatstroke, a person's temperature reaches 105°F (40.5°C) or higher and our body can no longer cool itself down. Heatstroke requires immediate emergency medical care and can be

life-threatening.

Signs/Symptoms
Severe headache, weakness, dizziness, confusion, fast breathing and fast heartbeat.

Treatment
- Get help immediately from an adult.
- Get the person into a cool place.
- Cool them down with a damp cloth and a fan.
- Have them drink fluids.

Sunburn

Sunburn can happen within 15 minutes of being in the sun, the redness and discomfort may not be seen or felt for a few hours.

Signs/Symptoms
Red skin and blisters, pain and tingling, fever and chills.

Treatment
- Get help immediately from an adult.
- Cool the skin with a damp towel with cool tap water.
- Drink water to prevent dehydration.
- Consider applying a soothing cream.
- Don't break the blisters.

*Definitions within this Teacher Resource were excerpted from: Diseases and Conditions and Staying Safe, **KidsHealth.org**. (2021).*

Student Resource: Layering and Dressing for Success Self-Check

Primary

1 - Think about going outside for a walk in the cold. Place a checkmark on the line beside the pieces of clothing you should wear.

- ☐ a warm hat
- ☐ mitts
- ☐ snow pants
- ☐ a winter jacket
- ☐ winter boots

2 - Place a check on the line beside the other things you could do to be safe when you are outside in the cold.

- ☐ keep your hat and mitts on
- ☐ stay dry
- ☐ tell the teacher if you feel cold
- ☐ tell the teacher if any of your friends are shivering, feel cold, or have white patches of skin on their cheeks
- ☐ keep moving

3 - Place a check on the line beside the other things you could do to be safe when you are outside in the rain.

- ☐ wear your raincoat to stay dry
- ☐ tell the teacher if you feel wet
- ☐ tell the teacher if any of your friends are shivering or feel cold
- ☐ keep moving

4 - Place a check on the line beside the things you could do to be safe when you are outside in the hot weather.

- ☐ wear a hat
- ☐ play in the shade
- ☐ drink lots of water
- ☐ wear sunscreen

Answers:
For all 4 questions check all.

Junior

1 - Think about going outside for a walk in the cold. Put a checkmark beside the pieces of clothing you should wear and add an example when asked.

- ☐ a warm hat and mitts
- ☐ a good base layer: the clothing next to your skin. Give an example: _____
- ☐ a good middle layer: the clothing between your base layer and your coat. Give an example: _____
- ☐ snow pants
- ☐ a winter jacket
- ☐ winter boots

2 - Identify 2 characteristics that your outer layer should have:

- _____
- _____

3 - What are 2 things you should do to stay warm and safe when walking or playing in the cold?

- _____
- _____

4 - What are 2 things you should do to stay safe when walking or playing in the hot weather?

- _____
- _____

5 - What are 2 signs you might be at risk for hypothermia?

- _____
- _____

6 - What are 2 things you can do to help someone who is suffering from hypothermia?

- _____
- _____

7 - You notice a younger student in the school yard at recess on a warm day in early spring. They are wearing a winter coat and a tuque. You notice they are sweating and their cheeks are flushed. How can you offer support?

_____

_____

_____

_____

Answers:
Question 1: Check all. Base layer examples: long underwear, short or long sleeve T-shirt; Mid layer example: sweater, button up overshirt, hoodie.

Question 2: Blocks the wind, water-resistant, waterproof, be loose fitting, warm.

Question 3: Keep moving, stay dry, keep your hat and mitts on, change wet clothing.

Question 4: Wear a hat, drink lots of water, stay in the shade as much as possible, wear sunscreen.

Question 5: Shivering, numbness in fingers and toes, confused or uncoordinated.

Question 6: Move them into a warm place, remove any wet clothing, warm with blankets.

Question 7: I can ask the student how they are feeling. I can suggest they unzip their coat and remove their tuque. I can bring them to the adult supervising and offer to accompany them inside to get a drink.

Intermediate

1 - Think about going outside for a hike in the cold. Put a checkmark beside the pieces of clothing you should wear. Give an example where asked.

- ☐ a warm hat and mitts
- ☐ a good base layer: the clothing next to your skin. Give an example: _____
- ☐ a good middle layer: the clothing between your base layer and your coat. Give an example: _____
- ☐ a good outer layer. Give an example: _____
- ☐ winter boots

2 - Identify 2 characteristics that your base layer should have:

- _____
- _____

3 - Identify 2 characteristics that your middle layer should have:

- _____
- _____

4 - Identify 2 characteristics that your outer layer should have:

- _____
- _____

5 - What are 2 things you should do to stay warm and safe when hiking or playing in the cold?

- _____
- _____

6 - What are 2 signs you might be at risk for hypothermia?

- _____
- _____

7 - What are 2 things you can do to help someone who is suffering from hypothermia?

- _____
- _____

8 - What are signs you may be at risk for heatstroke?

- _____
- _____

9 - What are 2 things you can do to avoid getting overheated or sunburned?

- _____
- _____

Answers:
Question 1: Check all. Base layer examples: long underwear, short or long sleeve T-shirt; Mid layer example: sweater, button up overshirt, hoodie.

Question 2: Wicks moisture from your skin, fits snug, allows you to move comfortably.

Question 3: Adds insulation, is lightweight, continues to move moisture outward, fits snug.

Question 4: Blocks the wind, water-resistant, breathable, be loose fitting.

Question 5: Keep moving, stay dry, get changed if you get wet, keep hat and mitts on, drink warm fluids.

Question 6: Shivering, numbness in fingers and toes, confused or uncoordinated.

Question 7: Move them into a warm place, remove any wet clothing, warm with blankets.

Question 8: Feel dizzy or like you're going to faint, feel like you’re going to throw up, headache, extremely thirsty, breathing harder than usual.

Question 9: Drink, especially water, before you feel thirsty, wear clothing that is breathable, avoid direct sun - move into the shade, wear a wide brimmed hat, wear sunscreen.

STAYING HEALTHY OUTDOORS

Lesson Overview

During this lesson, students will practice their relationship, self-awareness and critical thinking skills while they apply their knowledge of healthy eating and nutrition to make reasoned decisions and take action for their health and well-being. Students will identify the environmental factors that pose a safety risk, and apply behaviours, safety rules, and procedures to maximize their own safety and avoid illness while participating in outdoor education activities.

Overall and Specific Expectations

- A1: A1.4, A1.5, A1.6
- B3: B3.1, B3.2

Learning Goals

- I can use my knowledge about healthy eating and my critical thinking skills to make informed food and beverage choices to nourish my body and keep myself hydrated while participating in outdoor education activities.
- I can behave responsibly and follow safety rules and procedures to avoid illness while participating in outdoor education activities.

Materials

- Chart paper and markers
- Student Resource: Staying Healthy Outdoors Self-Check (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Tools and Resources

- **First Aid Plan and First Aid Emergency Response**
- **Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form**

Other

- **Risk Management**

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge and skills needed for healthy eating, and safety rules and procedures during outdoor education activities. For example, success criteria might include:

- I can identify what my body needs to stay nourished and hydrated during outdoor education activities.

- I can use my knowledge of healthy eating to make healthy food and drink choices to keep myself safe during outdoor education activities.

After the activity, review the co-created criteria with students and then have them complete the Student Resource: Staying Healthy Outdoors Self-Check.

Assess students' responses during the class discussions and consolidation illustrations (primary)/scenarios (junior/intermediate). Use the co-created criteria to assess student learning and offer feedback. If needed, provide feedback to individual students or the entire group to clarify or reinforce their understanding of how to stay healthy during outdoor education activities and answer any remaining questions.

Minds On

Primary/Junior/Intermediate:

Call out different foods and beverages. Instruct students to stand up if they would pack the food for a class outdoor education trip to a local trail or stay seated if they would not choose it. Have all students sit down after each food so they are sitting and standing each time. Note that some of the suggested foods are clearly not appropriate for a packed lunch (for example, ice cream, pop). They have been included to help students think about which foods are nutritious and easy to pack to fuel their bodies during an outdoor education activity.

Foods: carrots, celery, apples, ice cream, chocolate bar, water, meat, hummus, crackers, cheese strings, raisins, cheese sandwich, energy bars, granola, pop, rice cakes, jam, bananas, chewy type fruit snacks, cured meat snack (for example, Pepperette, Jerkee), juice box, sports or energy drink, chips, licorice, trail mix or nuts, sandwich.

Action

Primary/Junior/Intermediate:

Explain to students that having the proper food and drink to fuel their body is important to have the energy for the activity and to stay safe on outdoor education trips. Remind them that they need to think of the energy they use during the day. Their food and beverage intake need to be sufficient for the energy they will need to accomplish the activities that are planned.

Divide students into groups of 3-4 and provide each group with chart paper and markers. Have groups discuss and record their answers to the following questions.

- What do we need to think about to make sure we nourish our bodies and stay hydrated for a full day of activity at a local park? Possible answers:

- We need to think about how long the trip is.
- We need to bring a full water bottle and think about how much water we should bring.
- We want to bring foods that won't go bad or don't need to stay in a fridge.
- We want foods that are light to carry in our bags.
- We want to think about how much food packaging we take because we have to carry it back.
- We need carbohydrates for energy so we should bring fruits, dried fruit or granola bars, unsalted seeds like pumpkin or sunflower seeds. Protein bars are good too.
- We need to make sure we have a balance of carbohydrates, protein like soybeans, cheese, eggs, dried meat and some healthy fat like seeds or seed butters.
- We need snacks to keep our energy up.
- We want to pack foods that don't need utensils or plates.
- We need to pick food that won't get squished, bruised, spilled.

- What can we do before we leave for our trip to make sure we are ready for physical activity? Possible answers:
  - We can make sure we have a healthy breakfast and drink lots of fluids before we leave on the trip.
  - We can think about having a snack when we arrive at the park before participating in activities.
  - We want to get a good night's rest the night prior.

- One general rule is to eat before you feel hungry and drink before you feel thirsty. Why do you think this is such an important rule? Possible answers:
  - If we wait to eat when we feel hungry then our body is telling us we are already running out of energy to fuel our needs.
  - If we wait until we are thirsty then that is one sign that we are already dehydrated.

- Make a list of foods that you think would be best to pack for an outdoor education day trip? Possible answers:
  - Fruits
  - Vegetables
  - Sandwiches
  - Coco Bread and Jam
  - Samosas
  - Pakoras
  - Wraps
  - Naan Bread

- Cheese
- Hard boiled eggs
- Granola bars
- Freeze dried fruit
- Trail mix (avoid including peanuts for everyone's safety)
- Raisins
- Rice cakes
- Rice
- Crackers
- Pepitas
- Chocolate bar

- What else should we bring for our food safety? Possible answers:
  - Disposable wipes
  - Hand sanitizer
  - Trash bags to carry out what we bring like orange peels, apples cores and food packaging

Engage students in a whole group discussion by inviting groups to share their responses with the class. Use the student responses to deepen their understanding of how fueling their body will help them stay healthy while participating in outdoor education activities.

Junior/Intermediate:

Sometimes in colder weather conditions, we might want a hot drink to help us stay warm while we stop for lunch. If we are taking a trip that includes an evening meal, we want to think about what food to cook or prepare that is nourishing, fills us up, and gives us energy for the next day but requires as little equipment as necessary.

Questions:

- What will we need to think about if we want to include a hot drink or a meal as part of our nourishment? Possible answers:
  - We can make a fire.
  - We can use camping stoves that use gas or propane.
- What are some of the things we need to think about when deciding on what we will use as a cooking source? Possible answers:
  - We need to find out if we are allowed to make fires where we are going.
  - We need to know if there is enough wood available to make and keep a fire going.
  - We need to think about how much time we have to cook.

    - We need to think about how many people will be eating.
    - We need to verify if anyone has food allergies.
    - We need to know how many stoves and how much fuel we need.
    - We need to think about other equipment we need like pots, plates, utensils, and matches and/or lighter.
    - We need to figure out how we will clean up and make sure we take everything back home. We can't leave any scraps of food or packaging behind.
- What do we need to think about when we are selecting the food we want to cook or drinks we want to make? What are some foods we might bring along to cook or prepare? Possible answers:
    - We need to think about food that can be made with one pot like pasta, rice, lentils, or quinoa.
    - We need to think about how long the food we select takes to cook.
    - We should make drinks that only need water.
    - We should try to make foods that won't be too messy to eat.
    - We can make foods that only need a fork or spoon so we don't have to use knives.
    - We want to choose foods that will fill us up and give us energy for the next day.
    - We don't want to bring food that is too heavy to carry or has a lot of packaging or needs a can opener.
    - We can also think about food that can be made ahead of time and then reheated.
    - We should make a drink like hot chocolate which only requires adding powder to boiled water.

Primary/Junior/Intermediate:

Divide students into pairs to complete the Student Resource: Staying Healthy Outdoors Self-Check to check for understanding before moving to the consolidation.

Consolidation

Primary:

Divide students into small groups to draw or write out their breakfast, lunch and snacks they would ask their caregiver to pack for a day hike.

Junior:

Divide students into groups of 4-5 to complete the following scenario and share their meal plans with the class.

Scenario: Our class will be going on a day hike two hours away from the school. We will be going by bus. The group you are now part of will cooperate as a team to help each other stay safe and

healthy throughout the day. Your task is to help each other decide on a healthy breakfast to eat before the hike to fuel up, and what you will pack for lunch and snacks for the bus and hike. You don't all have to eat the same foods, but you want to make sure everyone has decided on and planned meals and snacks for a safe and healthy day. Don't forget to plan for adequate hydration, too.

Intermediate:

Divide students into groups of 4-5 to complete the following scenario and share their meal plans with the class.

Scenario: Our class will be going on a two-day trip to a camp that is a three hour bus ride away. The group you are now part of will cooperate as a team to help each other stay safe and healthy throughout the trip. Your task is to help each other decide on a healthy breakfast to eat before the trip to fuel up, and what you will pack for lunch and snacks for the bus and the hike. As part of the trip, you will be learning how to use camp stoves. Your group is responsible for bringing two different food items that can be cooked using a camp stove. You don't all have to eat the same foods, but you want to make sure everyone has decided on and planned meals and snacks for a safe and healthy trip. Don't forget to plan for adequate hydration, too.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity.

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

Consider including this lesson into learning about healthy eating where appropriate (that is, Grade 1 - D1.1, Grade 3 - D1.1, Grade 4 - D1.1, D3.1, Grade 6 - D2.2, D3.1, Grade 7 - D3.1)

Research indicates that the two biggest challenges groups face around proper nutrition on multi-day outdoor education trips is establishing sufficient time to cook and having the skills to perform basic cooking practices. Often nutritious foods are carried on trips, but too often, they don't get used, are not cooked properly, or there isn't time to cook them, and these are all factors leading to students not receiving sufficient nutrition.

Student Resource: Staying Healthy Outdoors Self-Check

Primary

1 - Place a checkmark beside all the foods you would pack in your lunch for a hike.

- ▢ apple
- ▢ carrots
- ▢ ice cream
- ▢ nuts
- ▢ granola bar
- ▢ peanut butter sandwich

2 - Place a checkmark beside which drink would be best for your hike.

- ▢ energy drink
- ▢ pop
- ▢ water
- ▢ drinkable yoghurt
- ▢ juice box

3 - Place a checkmark beside the following items you should take with you to make sure you are prepared.

- ▢ clean hand wipes
- ▢ hand sanitizer
- ▢ a bowl or plate
- ▢ a garbage bag

Answers:
Question 1: Check all but ice cream.

Question 2: Check water.

Question 3: Check all.

Junior

1 - Put a checkmark beside the kinds of food you might take with you on a day hike and add a food as an example.

- ☐ fruit that won't spoil or get crushed such as _____.
- ☐ a high-energy food such as _____.
- ☐ a healthy carbohydrate such as _____.
- ☐ a healthy fat such as _____.

2 - Fill in the blanks to show you know.

- Two rules for staying healthy while being active in the outdoors are "Eat before you're _____" and "Drink before you're _____".

3 - What are 2 things you need to think about when selecting nourishing food and drink for a full day trip?

- _____
- _____

4 - What are 2 additional items that you should take other than food and drinks for hygiene and cleaning up?

- _____
- _____

Answers:
Question 1: Check all. examples of a fruit that won't spoil or get crushed- apple; examples of a high-energy food - fruit, dried fruit, raisins; example of a carbohydrate - apple, rice cakes, crackers; examples of a healthy fat - nuts in granola bars or trail mix, cheese.

Question 2: "Eat before you're hungry" and "Drink before you're thirsty".

Question 3: Non-perishable, Lightweight, Won' t squish, Easy to cook, How much to take?

Question 4: Hand wipes, Hand sanitizer, Garbage bags.

Intermediate

1 - Think about what types of foods you should take on a day hike. Give an example of each.

- ☐ non-perishable: _____
- ☐ lightweight: _____
- ☐ high-energy: _____

2 - Identify 2 of the nutrients your body needs to stay healthy:

- _____
- _____

3 - Give an example of each that would be good to take on a hike.

- Carbohydrate: _____
- Protein: _____
- Healthier fat: _____

4 - Two rules for staying healthy while being active in the outdoors are “Eat before you’re _____” and “Drink before you’re _____”.

5 - What 2 things should you think about when deciding on your fuel source for cooking on a hiking trip?

- _____
- _____

6 - If you were teaching someone about cooking and staying healthy when participating in outdoor education activities what are 3 things would you focus on?

- _____
- _____

- _____

Answers:

Question 1: Non-perishable (for example, fruit, vegetables, nuts), lightweight (for example, dried or freeze dried fruit and vegetables), high-energy (for example, energy or granola bars, trail mix nuts).

Question 2: Carbohydrates and fats.

Question 3: Carbohydrate (for example, rice cakes, whole grain bread or pasta, fruits, vegetables), Protein (for example, soybeans, cheese, eggs, dried meat), Healthier fat (for example, avocado or seeds or seed butters).

Question 4: “Eat before you’re hungry” and “Drink before you’re thirsty”.

Question 5: Is there a fire ban? Is there access to wood? What kind of stove to use?

Question 6: Staying hydrated, eat properly, think about your fuel source, bring foods with minimal packaging, choose foods that are easy to cook with minimal time, dishes and little preparation and take home everything you brought with you.

STAYING SAFE OUTDOORS

Lesson Overview

During this lesson, students will practice their self-awareness and critical thinking skills to identify environmental factors that pose a safety risk, and apply behaviours, safety rules and procedures to maximize their own safety and avoid injury while participating in outdoor education activities.

Overall and Specific Expectations

- A1: A1.4, A1.5, A1.6
- B3: B3.1, B3.2
- D1: Gr. 2 – D1.2, Gr. 3 – D1.2, Gr 8. – D1.1
- D2: Gr. 4 – D2.2, Gr. 8 – 2.2
- D3: Gr. 1 – D3.1, Gr. 6 – D3.2

Learning Goals

- I can behave responsibly and follow safety rules and procedures to avoid illness and injuries and keep myself and others safe during outdoor education activities.
- I can use my self-awareness and critical thinking skills to analyze situations, identify safety risks, and make safe choices while participating in outdoor education activities.

Materials

- Student Resource: "What's Wrong" Scenarios (*included at end of the lesson*)
- Student Resource: "What's Wrong" Problem, Immediate Action, and Prevention Cards (*included at end of the lesson*)
- Student Resource: Staying Safe Outdoors - Self-Check (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Activities

- **Cooperative Games**
- **Orienteering**
- **Outdoor Education (Backpacking/Hiking)**
- **Outdoor Education (Camping)**

Tools and Resources

- **Concussions**
- **First Aid Plan and First Aid Emergency Response**
- **Lightning**
- **Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form**

- Temperatures
- Ultraviolet (UV) Index
- Winds

Other

- Risk Management

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge of environmental factors that pose a risk and skills needed to make safe choices to avoid injuries and keep themselves safe during outdoor education activities. For example, success criteria might include:

- I can identify the environmental risks that might cause injury or illness when participating in outdoor education activities.
- I can behave responsibly and apply safety rules and procedures to avoid illness or injury and keep myself and others safe during outdoor education activities.

After the activity, review the co-created criteria with students and then have them complete the Student Resource: Staying Safe Outdoors - Self-Check.

Assess students' responses during the class discussions throughout the "What's Wrong" activity/Expert Group work scenario. Use the co-created criteria to assess student learning and offer feedback. If needed, provide feedback to individual students or the entire group, to clarify or reinforce their understanding of staying safe during outdoor education activities, and answer any remaining questions.

Minds On

Primary/Junior/Intermediate:

Write one or more of the following expressions so that students can refer to them:

- "If you hear it, clear it. If you see it, flee it." (If thunder is heard or lightning is seen, seek shelter.)
- "When thunder roars, go indoors." (If thunder is heard, don't wait to see lightening; go inside.)
- "If you get turned around, sit down"/"Hug a Tree" (If you lose your way, stay where you are and wait for someone to find you.)
- "If in doubt, sit it out." (if they think they might have a concussion, do not continue to participate.)

- "HIT, STOP, SIT (If they sustain a blow to the head neck or body that may produce signs and symptoms of a concussion, stop playing, and tell someone.)
- "Slip, slop, slap, seek, slide" (Slip on a shirt, slop on some sunscreen, slap on a hat, seek shade, slide on your shades/sunglasses.)
- "ABC" (ABC's of First Aid - Airway, Breathing, Circulation)

Divide students into pairs to talk about what the expressions mean to them in relation to staying safe in the outdoors. Invite students to share their thoughts with the class. Use student responses to focus their attention on actions they can take to keep themselves safe while participating in outdoor education activities.

Action

Primary/Junior/Intermediate:

Explain to students that it is important to know the safety rules and procedures to stay safe, and minimize or avoid the risk of illness or injury while participating in outdoor education activities. It is also helpful to know some basic first aid if illness, or injury happens until the ill or injured person can get medical help.

Primary:

Divide students into groups of 3 or 4. Write each of the following activities so that students can refer to them:

- Bike riding
- Playing in the snow/tobogganing
- Skating
- Playing at a park or a beach in summer
- Hiking
- Swimming
- Canoeing
- Boating
- Camping

After writing each activity, pause and ask groups to think about and share safety rules they would follow to keep themselves and others safe while participating in the activity. Record group responses. Consider adding other outdoor education activities based on student interest and access to local outdoor spaces.

Possible answers:

- Wear a helmet when I am riding my bike.
- Make sure all my equipment fits property and is secure.

- Always wear sunscreen and a hat.
- Keep my hat and mitts on when I am outside.
- Watch where I walk when on a hike so I don't trip on roots and rocks.
- If I hit my head or fall and hit the ground hard, tell an adult.
- If I don't feel well when I am playing, tell an adult.
- Keep my shoelaces tied and my feet dry so I don't get blisters.
- If I get lost, stay where I am and wait for someone to find me.
- Carry a whistle to signal for help and know the distress signal - 3 blasts or 3 shouts.
- Always wear my lifejacket around water.
- Always be supervised by a trusted adult around water.
- Have a first aid kit with you in case someone gets hurt.

Using a popcorn strategy (consult Notes to Teachers), have students generate ideas about what should be contained in a first aid kit they might take on a day trip to a local conservation area with their family. Consider showing students items in a first aid kit and have them guess what the items are and how they might be used.

Possible answers:

- Bandages that are different shapes & sizes
- Cream to treat cuts, blisters or insect bites
- Tweezers and scissors
- Gauze and sterile dressings
- Alcohol swabs
- Hand sanitizer/wipes
- A triangular bandage and safety pins
- Tensor bandages
- Splints for fingers or arms
- Instant ice packs
- Foil blanket for extra warmth
- A plastic whistle
- First aid instructions
- Epipen
- Concussion identification tool

"What's Wrong" Activity

Divide the students into small groups of 3-4. Read a scenario aloud from the Student Resource: "What's Wrong" Scenario. Have groups generate possible answers to the following questions:

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Invite groups to share their responses with the class, and then share the correct answers with them. Continue the activity using the same process for each scenario. Once students have had a chance to analyze all scenarios, review the take-aways. Consider selecting scenarios that are age appropriate for the level of learner.

Junior/Intermediate:

Using a popcorn strategy (consult the Notes to Teachers section), invite students to identify some of the elements of safety outdoors that they need to know about for their safety and the safety of others.

Possible answers:

- Staying safe in sun and hot weather
- Staying safe in cold/rainy weather
- Staying safe in bad (inclement) weather
- How to avoid sustaining a concussion/head injury
- How to use equipment properly to stay safe and avoid injury
- How to protect against insect bites
- How to stay safe in the dark
- What items should be in a first aid kit and basic first aid

Continue using a popcorn strategy, for students to generate ideas about items that should be included in a first aid kit they might take on a weekend outdoor excursion with their family. Consider showing students items in a first aid kit and have them guess what the items are and how they might be used.

Possible answers:

- Bandages that are different shapes & sizes
- Cream to treat cuts, blisters or insect bites
- Tweezers and scissors
- Gauze and sterile dressings
- Alcohol swabs
- Hand sanitizer/wipes
- A triangular bandage and safety pins
- Tensor bandages

- Splints for fingers or arms
- Instant ice packs
- Foil blanket for extra warmth
- A plastic whistle
- First aid instructions
- Epipen
- Concussion identification tool

Divide students into 10 equal groups. Give each group one of the scenarios from the Student Resource: "What's Wrong" Scenarios. Instruct groups to read the scenario and generate answers to the following questions:

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Once the group has analyzed the scenario and generated possible answers, give each group the Student Resource: "What's Wrong" Problem, Immediate Action, and Prevention Cards to learn what's wrong, the actions they should take to respond to the situation, and how to prevent the situation. Have groups pass their scenario to another group. Repeat this process until groups have had the opportunity to analyze and respond to some or all of the scenarios. Consider selecting scenarios that are age appropriate for the level of learner.

Consolidation

Primary/Junior/Intermediate:

Have students complete the Student Resource: Staying Safe Outdoors - Self-Check to assess student understanding of safety rules and procedures to stay safe and minimize or avoid the risk of illness or injury while participating in outdoor education activities.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity.

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

A Popcorn Strategy may also be referred to as a Popcorn Share and is a collaborative way for students to share their ideas with each other. Students are invited to share their ideas by “popping up” from their seat to give their answer or make a comment about an idea or concept. When done speaking, the student sits down signaling for other students to pop up and share. There is no set order for student sharing. Students may offer a different answer or perspective or build on each other’s answers or ideas.

Consider pairing this lesson with the lessons on, “Layering and Dressing For Success”, “Staying Healthy Outdoors”, and “Tick Safety” for students to learn more about safety practices, rules and procedures to avoid injuries or illness during outdoor education activities.

Student Resource: "What's Wrong" Scenarios

Scenario 1:

You are walking through wet grass on a trail behind your school and you notice that your friend is limping and complaining that their feet hurt.

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Scenario 2:

You are skating with a friend at the outdoor ice rink near your house. Your friend tries to do a trick. He falls, hitting the ice really hard. He can't get up and says he feels like he is going to be sick.

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Scenario 3:

You are hiking along a trail with your family. You and your older brother go ahead of the group to find the next trail marker. On your way your brother trips on a root sticking out of the ground. He falls and hits his chin on a rock. He is bleeding from his chin and when he tries to stand up he says his leg hurts really badly and he can't stand on it.

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Scenario 4:

You are on a winter outdoor education trip with your class. You have been playing games in the snow all morning. The activity has ended and you are now on your snack break. You are sitting with your buddy and notice that they are shivering quite a bit and are having trouble opening their snack. You ask if you can help and they seem confused about what you are saying.

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Scenario 5:

You have been tobogganing and playing in the snow. Your friend took their hat off a while ago and they can't find it. A small white patch has formed on one of their cheeks, and their skin is quite cold to touch. Their ears are quite red.

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Scenario 6:

You have been playing in the sand at the beach all day with your cousins and aunties. Your cousin's skin looks red. They say they feel like throwing up, are dizzy and have a bad headache. They head toward some shade but seem confused so go in the wrong direction. They are breathing really fast.

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Scenario 7:

You are playing with your friends in the ravine near the school. You notice that the clouds are getting darker and lower in the sky. It is getting dark but it's the middle of the day.

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Scenario 8:

You have returned from a hike and you are hanging out at your friend's house until your parent/guardian comes home from work. Your friend goes into the washroom to change out of their hiking clothes and you hear them scream. You ask what is wrong and they say they have a small, circular thing sticking out of their skin on their belly.

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Scenario 9:

You were out playing in the woods yesterday, and you are starting to notice your skin near your wrists and ankles is quite itchy today. When you take a closer look, you notice small blisters and red areas along your arms. Some of the blisters are forming in line with each other. Other areas look like a bumpy rash, and are quite itchy.

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Scenario 10:

You are riding your bike along a neighbourhood trail with friends. As you go around a bend you notice a bike lying by the side of the trail. A person is lying beside the bike. You stop to ask if they are ok. Their eyes are closed and they don't move or respond to your questions.

- What's wrong?
- What should you do?
- What safety rules would you follow to try to prevent this situation from happening to you?

Student Resource: "What's Wrong" Problem, Immediate Action, and Prevention Cards

For scenario 1:

Problem: Blisters

Immediate Action: Tell an adult right away. Put antibiotic ointment on the blister and cover the spot with a bandaid. Cover the blister. Change into dry socks.

Prevention: Doubling up your socks means any friction happens between the layers of socks rather than your foot and your boot. Keep your feet dry. At any break, take your boots off to allow your socks to air out or to change them to keep your feet dry.

For scenario 2:

Problem: Possible Concussion

Immediate Action: Stop skating immediately. Have your friend sit down. Get adult help. Stay with your friend until help arrives. Report signs and symptoms. Consult a medical doctor/nurse practitioner as soon as possible.

Prevention: Follow all the safety rules and procedures for any activity.

For scenario 3:

Problem: Potential broken bone and bleeding

Immediate Action: Use your safety whistle to call for help or shout for help. Tell your brother not to move. Cover your brother's chin with a cloth and provide gentle pressure to stop or slow down the bleeding. Wait for help to arrive.

Prevention: Pay attention to the trail to avoid hazards. Always be aware of your surroundings.

For scenario 4:

Problem: Hypothermia

Immediate Action: Get help immediately from an adult. If a person is outside, get them inside and replace any wet clothes with dry clothes. If the person is experiencing any form of hypothermia (mild to severe) they need to be kept horizontal and not stand or walk. Cover the person with blankets and check their breathing to make sure it is regular and not too slow. Give them something warm to drink.

Prevention: Be aware of how your body feels at all times when outdoors. If you are cold, tell an adult right away. Make sure you dress in layers so you can add more if you are cold. Keep your head, hands and feet warm and dry.

For scenario 5:

Problem: Frostbite

Immediate Action: The white patch on their cheek is a sign of frostbite. They need to be taken somewhere warm right away and warmed up. Get them into a warm vehicle or a house you know close-by, take off their layers so they can feel the warmth, take off any wet clothing, and serve them warm, non-sugary drinks. You can give them a hot water bottle with warm water in it to start and gradually help them warm up again. You can even snuggle under a blanket to share your body heat with them! If they continue to shiver and seem confused, seek medical attention.

Prevention: Make sure you dress in layers for outdoor activities so you can add a layer if you are cold and remove a layer if you are warm. This will help you stay warm or prevent your clothing from getting wet from sweat. Make sure to wear hats and mitts and socks and boots that will keep your feet warm. Take breaks from activity inside to warm up.

For scenario 6:

Problem: Heat Exhaustion/Heatstroke

Immediate Action: Get help immediately from an adult. Help them get to a cool place. Loosen their clothing. Try to cool them down with a fan, cool damp cloths, and give them something to drink.

Prevention: Protect yourself from sun, even on cloudy days and in the winter. Sunscreen and a hat will protect you from sunburn. Apply sunscreen 20 minutes before you go out and re-apply it every two hours. Wear sunglasses to protect your eyes. Be aware of how your body feels at all times when outdoors.

For scenario 7:

Problem: A storm is approaching

Immediate Action: Thunder and lightning are real risks, especially if you are standing near tall trees. Seek shelter as soon as you hear thunder or notice lightning. If you can't get inside then find an area such as a ditch, a depression or under a thick growth of bushes and stay low. If near the school, return upon first hearing thunder. Wait for 30 minutes after you hear thunder or notice lightning before you go outside.

Prevention: When playing outside or engaging in outdoor education activities check the weather forecast before you go. Pay attention to changes in the weather. Get to safety before it is too late and you get caught in the storm.

For scenario 8:

Problem: A tick has embedded itself into the skin of your friend. Ticks like warm places. It probably hid itself under the waistline of your friend's pants.

Immediate Action: Get help from an adult who knows the correct way to remove a tick. They can use tweezers or a tick remover to pull the tick out from the skin, using a slow pulling motion with even pressure in one smooth motion, so that the mouth is removed and the body isn't crushed. Do not twist the tick when pulling it out. Wash the area with soap and water, or apply rubbing alcohol. Put the tick in a container to take it to the local Health Unit office to have it identified and tested. Monitor the skin area for redness, swelling, and/or a bulls-eye pattern to appear. Seek medical attention within 24 hours.

Prevention: Wear long pants, a long-sleeved shirt, and close-toed shoes. Tuck your shirt into your pants. You can also tuck your pant legs into your socks. Use an insect repellent on your clothes and any exposed skin. Stay on pathways or in the middle of trails. Check your clothing and body at least once a day for ticks, especially your groin, navel, armpits, scalp, behind the knees, and behind the ears. Take a shower as soon as you can after being outdoors. Put outdoor clothing in the dryer for 60 minutes on high heat before washing them.

For scenario 9:

Problem: Skin irritation/reaction (allergic reaction or encounter with poison ivy)

Immediate Action: Wash the area thoroughly with soap and water. To treat poison ivy, you might use cold compresses when your skin is particularly itchy, or a lotion used to treat itchiness. There is not much you can do once you have it, except try to avoid scratching it and keeping the area cool which helps with the itching. If the blisters break, cover lightly with a loose bandage so you don't rub them. The liquid coming from the blisters cannot spread poison ivy to other parts of your body, but you don't want them to become infected. You can spread it to other parts of your body if you continue touching the clothes with the plants' oils on them.

Prevention: If you are going to be walking through an area with poison ivy, wear long pants and avoid touching it. Make sure everyone is aware of where it is and how to identify it. If you are taking a dog with you, try to have them walk around any patches of poison ivy as the oil can stay on them for days afterwards and spread to you when you touch them. If you think you have been exposed to poison ivy, change your clothes when you get home, being careful not to touch any spot that may still have the plant's oil on it. Launder your clothes in hot water with a strong laundry detergent that removes oils. Wash your exposed skin with a heavy soap like dish detergent, and make sure you scrub your skin vigorously. It is the friction of the scrubbing that removes the oil.

For scenario 10:

Problem: The person is unconscious

Immediate Action: Get help immediately. While waiting for help follow the ABCs of First Aid. Check the Airway: if the person is responding, tilt the head back and lift the chin to open the airway. Check Breathing: Check for normal breathing. Someone who can speak or cry is breathing. Check Circulation: Look from head to toe for deadly bleeding and signs of shock. If you think they might have a head or neck injury don’t move them unless their life is in danger where they are; leave the person in the position they were found; support their head and neck; tell the injured person not to move. If the person is unconscious, is breathing, and has no obvious injuries, roll the person onto their side and wait for help. Support their head and continue to check their breathing. If the person is bleeding, put pressure on the wound with whatever clothing is available and clean to slow the flow of blood. If the blood soaks through the cloth, apply another cloth over it and keep applying pressure until help arrives.

Prevention: it is important to have a friend (buddy) go with you on hiking, walking, biking or other travel activities to help each other stay safe and help in case of an accident.

Student Resource: Staying Safe Outdoors - Self-Check

Primary

1 - Place a checkmark beside the safety rules you would follow on a hike to show you know how to stay safe.

- ☐ drink lots of water
- ☐ eat snacks
- ☐ tell the teacher if you don't feel well
- ☐ tell the teacher if you feel cold and are shivering
- ☐ tell the teacher if your feet are wet
- ☐ watch for things you can trip on like tree roots

2 - Place a check beside the rules to show you know what to do to be safe in the sun.

- ☐ put sunscreen on
- ☐ take my hat off to cool my head if I get hot
- ☐ stay in the shade as much as I can
- ☐ wear a helmet when I am on a bike

3 - What should you do if you get lost?

- ☐ stay where you are
- ☐ try to find your way back to the group

Answers:
Question 1: Check all.

Question 2: Check all but "Take my hat off to cool my head if I get hot" and "wear a helmet when I am on a bike".

Question 3: "stay where you are".

Junior

1 - Place a checkmark beside the safety rules you would follow on a hike to be sure you stay safe.

- ☐ drink lots of water
- ☐ eat snacks
- ☐ tell the teacher if you don't feel well
- ☐ tell the teacher if you feel cold and are shivering
- ☐ tell the teacher if your feet are wet
- ☐ watch for things I can trip on like tree roots

2 - Place a checkmark beside the safety rules to follow to be safe in the sun.

- ☐ put sunscreen on
- ☐ take my hat off to cool my head if I get hot
- ☐ stay in the shade as much as I can
- ☐ wear a helmet when I am on a bike

3 - List 4 things you should always take on a hike.

- _____
- _____
- _____
- _____

4 - What should you include in a First Aid kit for an outdoor 1 day hike?

_____

_____

_____

5 - What should you do if you get lost?

- ☐ stay where you are
- ☐ try to find your way back to the group

6 - What are 2 of the signs someone who has a heat-related illness will show?

- _____
- _____

7 - Give 2 steps you could take to help them.

- _____
- _____

8 - What are 2 signs someone who has a cold-related illness will show?

- _____
- _____

9 - Give 2 steps you could take to help them.

- _____
- _____

Answers:
Question 1: Check all.

Question 2: Check all but “Take my hat off to cool my head if I get hot” and “wear a helmet when I am on a bike”.

Question 3: First aid kit, lots of water, snacks, whistle, map and compass, sunscreen, insect repellent.

Question 4: Bandages of different shapes & sizes, cream to treat cuts, blisters or insect bites, tweezers and scissors, gauze and sterile dressings, alcohol swabs, hand sanitizer/wipes, a triangular bandage and safety pins, tensor bandages, splints for fingers or arms, instant ice packs, foil blanket, plastic whistle, first aid instructions, Epipen, Concussion identification tool.

Question 5: Stay where you are; use a whistle or bell to make noise and attract attention.

Question 6: Red skin, headache, changed behaviour, rapid and shallow breathing.

Question 7: Move to a cooler place, loosen clothing, give them water (if they are alert), fan their skin or pour water on their arms and/or chest.

Question 8: Pale skin, shivering, confused, cold to the touch.

Question 9: Get them inside, replace any wet clothing with dry clothing, wrap them in a blanket, give them warm fluids if they are alert.

Intermediate

1 - Identify 5 things you should do on a hike to be sure you stay safe.

- _____
- _____
- _____
- _____
- _____

2 - List 4 things you can do to be safe in the sun.

- _____
- _____
- _____
- _____

3 - List 5 things you should always take on a hike.

- _____
- _____
- _____
- _____
- _____

4 - What should you include in a First Aid kit for an outdoor 1 day hike?

_____

_____

_____

5 - What should you do if you get lost?

_____

_____

_____

6 - What are 3 of the signs someone who has a heat-related-illness will show?

- _____
- _____
- _____

7 - Give 3 steps you could take to help someone with a heat-related illness.

- _____
- _____
- _____

8 - What are 3 signs someone who has a cold-related illness will show?

- _____
- _____
- _____

9 - Give 3 steps you could take to help with a cold-related illness.

- _____
- _____
- _____

10 - Explain the ABC's of First Aid.

A: _____

B: _____

C: _____

11 - What are the important Do's and Don'ts if you think someone has hurt their head or neck?

_____

_____

_____

Answers:

Question 1: Drink lots of water, eat snacks regularly, tell the teacher if you feel dizzy or feel like fainting, take a break if you're tired, tell the teacher if you feel cold and are shivering, keep your feet dry, watch for things you can trip on like tree roots, stay on the trail, stay away from cliff edges, don't fool around or put others at risk.

Question 2: Put sunscreen on, keep my hat on, stay in the shade as much as I can, wear a life jacket if I am near water, wear a helmet if I am on a bike.

Question 3: First aid kit, lots of water, snacks, whistle, map and compass, sunscreen, insect repellent.

Question 4: Bandages of different shapes & sizes, cream to treat cuts, blisters or insect bites, tweezers and scissors, gauze and sterile dressings, alcohol swabs, hand sanitizer/wipes, a triangular bandage and safety pins, tensor bandages, splints for fingers or arms, instant ice packs,

foil blanket, plastic whistle, first aid instructions, Epipen, Concussion identification tool.

Question 5: Stay where you are.

Question 6: Red skin, headache, changed behaviour, rapid and shallow breathing.

Question 7: Move to a cooler place, loosen clothing, give them water (if they are alert), fan their skin or pour water on their arms and/or chest.

Question 8: Pale skin, shivering, confused, cold to the touch.

Question 9: Get them inside, replace any wet clothing with dry clothing, wrap in a blanket, give warm fluids (if they are alert).

Question 10: If the person is unresponsive, tilt the head back and lift the chin to open the airway, Check for normal breathing, Someone who can speak or cry is breathing, Check for circulation problems - look from head to toe for deadly bleeding and signs of shock. If the person is unconscious, is breathing, and has no obvious injuries, roll the person onto their side into the recovery position and wait for help.

Question 11: Call for help, don’t move them unless their life is in danger where they are; leave the person in the position they were found; support their head and neck; tell the injured person not to move, don't move them unless there is a life-threatening situation.

FIRE SAFETY AND FIRE BUILDING

Lesson Overview

During this lesson, students will practice their self-awareness and critical thinking skills to identify how to build a fire and apply appropriate fire safety rules and procedures around campfires.

Overall and Specific Expectations

- A1: A1.4, A1.5, A1.6
- B3: B3.1, B3.2
- D1: Gr. 8 – D1.2
- D2: Gr. 4 – D2.2, Gr. 8 – D2.2
- D3: Gr. 1 – D3.1, Gr. 6 – D3.2

Learning Goals

- I can behave responsibly and follow safety rules and procedures to avoid injuries and keep myself and others safe during outdoor education activities.
- I can use my self-awareness and critical thinking skills to analyze situations, identify risks, and make safe choices while participating in outdoor education activities.

Materials

- Chart paper and markers (optional for primary)
- Sample fire building material: newspaper, dead and dry twigs, milkweed or cattail fluff, birch bark, dead and dry branches OR materials that represent fire building requirements (for example, pick up sticks, game blocks, pool noodles, scrap building materials)
- Sidewalk chalk (optional for Junior/Intermediate)
- Student Resource: Fire Safety and Fire Building Self-Check (*included at end of the lesson*)
- Student Resource: Fire Safety and How to Build a Campfire Resource (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Activities

- **Outdoor Education (Camping)**

Tools and Resources

- **First Aid Plan and First Aid Emergency Response**
- **Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form**

Other

- **Risk Management**

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge and skills needed to apply safety rules and procedures during outdoor education activities. For example, success criteria might include:

- I can identify the environmental risks that might cause injury when participating in outdoor education activities.
- I can behave responsibly and apply safety rules and procedures to avoid injury and keep myself and others safe during outdoor education activities.

After the activity, review the co-created criteria with students, and have them complete the questions from the Student Resource: Fire Safety and Fire Building Self-Check.

Assess students' responses during the class discussions and group sharing of campfire safety. Use the co-created criteria to assess student learning and offer feedback. If needed, provide feedback to individual students or the entire group, to clarify or reinforce their understanding of fire building and fire safety, and answer any remaining questions.

Minds On

Primary/Junior/Intermediate:

Explain to students that fires can be fun but they can also be dangerous if they are not made in the right place or get out of control. They can also have a negative impact on our environment. Have groups generate answers to the following questions:

- Why might we build fires during an outdoor education activity? Possible answers:
  - To cook our food.
  - To help us stay warm on a cool night when camping.
  - It is a fun activity that gets us off our screens and outside.
  - It can be a nice family activity.
  - We might need it to survive if we get lost on an outdoor trip.
- What should we think about when deciding to build a fire? Possible answers:
  - We need to know if we are allowed to build a fire in the area.
  - We need to think about how much it will affect the environment.
  - We need to know if there is enough dead wood on the ground. If there isn't a lot of wood, we shouldn't cut down trees to get it.
  - We need to know if there is someone with us who knows how to safely build a fire.
  - We need to know if everyone knows fire safety rules.
  - We need to have a full water bucket close by and ready to use in case of emergency before we light the fire.

Explain to students that they are going to learn how to build a fire, and appropriate fire safety practices. This will allow them to help an adult build a fire and stay safe around a campfire if they have an opportunity to go on an outdoor excursion, such as a hiking or camping trip with family, friends or the school.

Action

Primary/Junior/Intermediate:

Bring fire building materials found from your local area (for example, newspaper, dried and dead twigs, milkweed or cattail fluff, birchbark found on the ground), or objects that represent fire building materials (for example, pick up sticks, game blocks, pool noodles, scrap building materials). Include materials that can be used to create a safe fire building area.

Divide students into groups of 4 or 5. Provide and review the Student Resource: Fire Safety and How to Build a Campfire Resource with the groups.

Provide students with the following instructions: Tell the groups that they are going to teach you how to build the fire. Working on a rotation basis, each group will provide one instruction. They will need to be clear and concise because you cannot ask them any questions. If you get an instruction wrong, the next group in the rotation can clarify the instruction. The activity will conclude when the fire has been successfully built, including the creation of a safe fire building area.

Before moving onto the next activity, provide students with household items and have them explain why they would make good tinder material. Ask students what other household items they might use to build a fire. Remind students not to choose flammable liquids. Explain that cooking oils/grease and white gas can cause the fire to flare up quickly and potentially burn out of control, so avoid using these to start a fire or adding them to the fire to avoid injury.

Engage students in a large group discussion about how they would use their objects for fire building to review the different stages of fire building (Spark, Tinder, Flame and Fire).

Have students work in their fire building group to complete the Student Resource: Fire Safety and Fire Building Self-Check before moving onto the consolidation.

Consolidation

Primary/Junior/Intermediate:

Have students use their household items from the activity in the Action section and the Student Resource: Fire Safety and How to Build a Campfire Resource to build their own imitation fire.

Primary:

Have students build their own fire using their household items or available materials such as wooden blocks for the “logs”, newspaper for the tinder, small objects such as blocks, pegs or pencils to act as kindling, and some red, yellow, and orange construction or tissue paper to represent the “fire”. Remind students to create their own safe space around their fire to show they know how to stay safe around fire. For example, use rope, bean bags, a hula hoop or chalk if outside to create the fire circle, and have a pail or cup to hold sand or water to put the fire out.

Junior/Intermediate:

Have students build their own fire using their household items or available materials in the classroom or equipment such as ropes or hula hoops to define the space, bean bags as rocks, small objects for tinder and kindling, sections of pool noodles for logs, and a pail or cup to hold sand or water to put the fire out. Have students create their safe space around their fire and a list of fire safety rules to show they know how to stay safe around fire.

Primary/Junior/Intermediate:

Have groups invite other groups to their campfire site to explain how they made their fire and the safety rules. Invite groups to share affirming comments about the elements of safety they notice and like.

If equipment is not available consider having primary groups create a picture of their campfire using chart paper and markers and explain their illustration to another group. Have junior/intermediate groups use blacktop/sidewalk chalk to illustrate their fire building skills and explain their illustration to their classmates.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity.

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

One of the leading causes of campsite deforestation is the removal of living materials from the surrounding forests. When using natural props (for example, twigs, branches, logs), teach good

environmental stewardship by having students only collect these items if they have already fallen off trees and are dead on the ground. Reinforce student understanding of environmental stewardship by having them return the items they have collected to where they found them as part of the consolidation of the outdoor education activity. Having students understand this good stewardship practice will go a long way towards helping protect our natural areas.

Student Resource: Fire Safety and How to Build a Campfire Resource

Fire Safety Tips

- Only build fires in areas where it is allowed. Make sure there are no fire bans.
- Check the wind - windy days are challenging for fire building.
- Only put wood in the fire. It is not a place to burn packaging or food.
- Do not add cooking oils/grease and white gas to the fire. It can flare up quickly and potentially burn out of control.
- Have a water supply ready near the fire before you light it to douse it quickly if needed.
- Don't leave the fire unattended.
- Make sure everyone knows the rules around the fire (no running or don't get too near the fire, don't throw anything into the fire).
- Only the person in charge of the fire adds wood to it when needed.
- Stop, Drop and Roll if a spark gets on your clothing.

Fire needs three things

- A heat source: matches, lighter or spark can provide the heat source
- Oxygen: there is oxygen all around in the air
- Fuel: such as newspaper, dead twigs, milkweed or cattail fluff, birchbark found on the ground, dead branches and dry wood.

Types of Fuel needed

- Tinder: small flammable objects that catch on fire quickly such as milkweed or cattail fluff, birchbark found on the ground, dryer lint, dry pine needles, or newspaper.
- Kindling: flammable objects that are larger than tinder but smaller than logs such as twigs, sticks and small branches. No bigger than your pinky finger.
- Chopped Wood or larger pieces of dry wood. No bigger than your wrist.

Choosing a Spot for the Fire

- Choose a clear spot that is at least 3 meters (10 feet) in diameter. Make sure there are no low overhanging tree branches.
- Clear the firebuilding area of trip and fall hazards like rocks and brush, twigs and leaves. Make sure to sort and pile all the firewood in one place.
- Create a fire ring by arranging rocks around the perimeter.

Steps to make a fire

1. Make a loose pile with your tinder. Don’t pack it too tightly because oxygen needs to get to all of the tinder.
2. Use your kindling to build a structure that looks like a tepee or build a square like a log cabin. Start with small pieces first.
3. Light the tinder on all sides. Blowing gently on the fire to give it more oxygen will help it start.
4. Add larger branches and wood to the fire as it grows, making sure there is still space for oxygen to circulate through the fire. Add only one or two pieces at a time, you don't want to overwhelm the fire.
5. Put the fire out with water, sand or dirt or let it burn out completely. Don’t leave it alone until the ashes are cold.
6. Clean up the fire area by scattering unused wood back into the forest so there is no trace of you being there.

*The information within this Student Resource was excerpted from: Summer Science: How to Build a Campfire, **NPR.org**. (2021).*

Student Resource: Fire Safety and Fire Building Self-Check

Primary

1 - Place a checkmark on the line to show the rules you should follow to be safe around a fire.

- ▢ stay at least 3 big steps away from the fire
- ▢ don't put anything but dry wood on the fire
- ▢ keep anything like your clothes away from the fire
- ▢ make sure the fire is put out with lots of water
- ▢ don't have a fire if it's windy out

2 - Place a checkmark on the line to show 3 things you should do before you start the fire.

- ▢ go for a swim
- ▢ help collect the dry, dead wood for your fire from the ground only
- ▢ help clear the area near the fire of any twigs or other things that could catch on fire
- ▢ have a water supply ready near the fire before you light it to douse it quickly if needed

3 - What 3 safety words should you remember so you know what to do if a campfire spark gets on your clothing?

- _____
- _____
- _____

Answers:
Question 1: Check all.

Question 2: Check all except for "go for a swim".

Question 3: "Stop, Drop and Roll".

Junior

1 - Place a checkmark on the line to show the rules you should follow to be safe around a fire.

- ☐ stay at least 3 big steps away from the fire
- ☐ don't put anything but wood and paper wrappings on the fire
- ☐ keep anything like your clothes away from the fire
- ☐ make sure the fire is put out with lots of water
- ☐ don't have a fire if it's windy out
- ☐ never leave a fire unattended
- ☐ have a container of water near the fire

2 - Place a checkmark on the line to show 3 things you should do before you start the fire.

- ☐ go for a swim
- ☐ make sure there are no fire bans in the area
- ☐ collect the dry dead wood for your fire from the ground only
- ☐ clear a 3 metres (10 feet) area of any twigs or other things that could catch on fire
- ☐ have a water supply ready near the fire before you light it to douse it quickly if needed

3 - Describe the 3 kinds of wood fuel used for a fire.

- _____
- _____
- _____

4 - Why should an adult always carry matches in a watertight container and/or a lighter when on a hike or camping?

_____

_____

_____

5 - What 3 safety words should you remember so you know what to do if a campfire spark gets on your clothing?

- _____
- _____
- _____

Answers:
Question 1: Check all except “don’t put anything but wood and paper wrappings on the fire”.

Question 2: Check all except for “go for a swim”.

Question 3: 3 Kinds of Fuel: Tinder is twigs, dried brush; kindling is small pieces of dead and dry wood that will burn quickly; fuel is the logs or larger dry dead wood that will burn longer.

Question 4: Carrying matches in a watertight container and/or a lighter is an important measure so they always have a way of sparking the fire.

Question 5: “Stop, Drop and Roll”.

Intermediate

1 - Identify 5 of the steps you should take to be safe around a fire.

- ☐ stay at least 3 big steps away from the fire
- ☐ don't put anything but wood and paper wrapping on the fire
- ☐ reach over the fire ring to add wood to the fire if it's getting low
- ☐ keep anything like your clothes away from the fire
- ☐ make sure the fire is put out with lots of water
- ☐ don't have a fire if it's windy out
- ☐ never leave a fire unattended
- ☐ have a container of water near the fire

2 - Place a checkmark on the line to show 4 things you should do before you start the fire.

- ☐ go for a swim
- ☐ make sure there are no fire bans in the area
- ☐ collect the wood for your fire as shown by the teacher
- ☐ clear a 3 meters (10 feet) area of any twigs or other things that could catch on fire
- ☐ have a water supply ready near the fire before you light it to douse it quickly if needed

3 - Describe the 3 kinds of wood fuel used for a fire in the woods.

- _____
- _____
- _____

4 - Identify the order of the steps in building a fire in the woods.

- ☐ arrange stones in a ring around the space where you will build the fire - use existing ones if you can
- ☐ ignite the tinder then the kindling
- ☐ gather the wood for the fire
- ☐ arrange the wood in the fire pit; use cone or teepee, or log cabin structure with tinder in the centre

5 - How do you make sure that your fire is fully extinguished?

_____

_____

_____

6 - Why should an adult always carry matches or a lighter when on a hike or camping?

_____

_____

_____

7 - What 3 safety words should you remember so you know what to do if a campfire spark gets on your clothing?

- _____
- _____
- _____

Answers:
Question 1: Check all except “don’t put anything but wood and paper wrappings on the fire” and “Reach over the fire ring to add wood to the fire if it’s getting low”.

Question 2: Check all except for “go for a swim”.

Question 3: 3 Kinds of Fuel: Tinder is twigs, dried brush; kindling is small pieces of dead wood or driftwood that will burn quickly; fuel is the logs or larger wood that will burn longer.

Question 4:

- Step 1 - arrange stones in a ring around the space where you will build the fire - use existing ones if you can.
- Step 2 - gather the wood for the fire.

- Step 3 - arrange the wood in the fire pit; use cone or teepee, or log cabin structure with tinder in the centre.
- Step 4 - ignite the tinder then the kindling.

Question 5: Make sure the ashes are cold and there are no burning embers or smoking coming from it.

Question 6: Carrying matches in a watertight container and/or a lighter is an important measure so they always have a way of sparking the fire.

Question 7: “Stop, Drop and Roll”.

GROUP TRAVEL

Lesson Overview

During this lesson, students will practice their relationship and critical thinking skills to identify how to safely travel with a group during outdoor education activities.

Overall and Specific Expectations

- A1: A1.4, A1.6
- B3: B3.1, B3.2
- D1: Gr. 8 – D1.2
- D2: Gr. 4 – D2.2, Gr. 8 – D2.2
- D3: Gr. 1 – D3.1, Gr. 6 – D3.2

Learning Goals

- I can behave responsibly and follow safety rules and procedures to avoid injuries and keep myself and others safe during outdoor activities.
- I can use my relationship and critical thinking skills to analyze situations, identify risks, and make safe choices while participating in outdoor activities.

Materials

- Materials to create an imaginary trail (for example, cones or rope, bean bags, pool noodles, cardstock for signs)
- Pinnies or cloth
- Safety whistle (optional)
- Student Resource: Group Travel and Trail Etiquette Self-Check (*included at end of the lesson*)
- Student Resource: Group Travel Safety Rules (*included at end of the lesson*)
- Student Resource: Trail Etiquette (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Activities

- **Cooperative Games**
- **Orienteering**
- **Outdoor Education (Backpacking/Hiking)**
- **Outdoor Education (Camping)**

Tools and Resources

- **First Aid Plan and First Aid Emergency Response**
- **Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form**

Other

- Risk Management

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge and skills needed to apply safety rules and procedures during outdoor education activities. For example, success criteria might include:

- I know how to signal for help using the recognized distress signal.
- I can describe the rules of etiquette when hiking on trails with a group.
- I can describe and apply safety rules when traveling in a group during outdoor education activities.
- I can explain the expansion and contraction effect and why it can impact a group during a hiking experience.

After the activity, review the co-created criteria with students, and have them complete the Student Resource: Group Travel and Trail Etiquette Self-Check.

Assess students' application of trail etiquette and safety rules for group travel through their participation in class and outdoor education activities and their Student Resource: Group Travel and Trail Etiquette Self-Check.

Use the co-created criteria to assess student learning and offer feedback. If needed, provide feedback to individual students or the entire group, to clarify or reinforce their understanding of trail etiquette and group travel rules, and answer any remaining questions.

Minds On

Primary/Junior/Intermediate:

Explain to students that whether they are walking around the school, around paths at the local park, on a neighbourhood trail or a wilderness trail, learning to travel as a group is very important. When they hike with friends, family, or others in the community, there are rules that everyone needs to know and follow to stay safe and to respect the privacy and enjoyment of others who are also hiking the trail.

Action

Primary/Junior/Intermediate:

Provide and review the Student Resource: Group Travel Safety Rules and Trail Etiquette with students. Practice the rules with students. For example, use a whistle to demonstrate the distress signal, have students call out "help" 3 times, decide on and practice the non-verbal communication

signals for stop, listen, and look. Note that if practicing the distress signals in the classroom, or in and around the school, be sure to alert colleagues so they know it is a practice lesson.

Locate a large space in or around the school (for example, gym, activity space, blacktop, adjacent park). Have students play Buddy Tag to practice the buddy system and Dragon's Tail to practice group travel rules.

> Buddy Tag: Elect or ask for volunteer(s) to be the tagger. Students move about the space avoiding being tagged by the tagger. If touched, they are frozen and stay in place where touched. They can only be freed by a buddy by linking arms. After they are freed they can unlink arms to continue moving around the space.
>
> Dragon's Tail: Create small groups of 6-7. Have group members form a line and place their hand on the shoulders of the person in front of them. The first in line is the dragon's head and the last person is the tail. Provide each group with a pinnie to use as a tail to be captured, or have others tag the last person as a way of catching the tail. The object of the game is to work cooperatively to stay connected from head to tail while avoiding other dragons catching their tail. Each time a tail is caught, the tail player becomes the new dragon head with everyone else in the group moving back one position. Remind groups to move cooperatively so everyone remains safe.
>
> To increase the challenge consider having all participants form a dragon with the object being for the head to catch its own tail. Players near the head work together to assist the head of the dragon while players at the back work together to help their tail avoid being caught.

Use the same large space in or around the school to set up an imaginary trail for students to practice trail etiquette in small groups. If feasible, consider taking students on a walk through the school neighbourhood area or a day hike in a local area to apply their learning about group travel safety and trail etiquette.

Note: With permission of school administration, this activity can also be done as a silent activity in the school for students to practice trail etiquette rules. Students travel as a group, walking through the halls and available spaces using the rules of travel, practicing non-verbal signs, and giving way to other students/staff they might meet on their "trail" route.

Imaginary Trail: Create small travel groups of 4-5. Have an equal number of groups travel in opposite directions as they navigate the trail to practice trail safety and etiquette. Use available equipment to create the trail. For example, use cones or rope at intervals to create the trail, bean

bags and pool noodles to mark hazards or natural elements such as creeks that cross the trail or roots on the trail. Include signs to designate features of the tail such as uphill climb, down hill, creek, sharp turn, roots ahead, trail narrows, rest spots or “quiet”, animals nesting nearby. Once groups have navigated the trail, consider having them create their own trails for others to follow.

Consolidation

Primary/Junior/Intermediate:

Divide students into groups of 4 -5. Have students use the Student Resource: Group Travel Safety Rules and Trail Etiquette to create a scenario about an issue/problem a group encounters during an outdoor education activity. Have groups exchange their scenario with other groups. Have groups generate solutions for the scenario and share their solutions with the class. Use the group sharing to consolidate student understanding of group travel safety rules and trail etiquette.

Have students work in their travel group to complete the Group Travel and Trail Etiquette Self-Check to assess student understanding of group travel safety and trail etiquette to stay safe and maximize their enjoyment and the enjoyment of others while participating in outdoor education activities.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity.

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

The complexity of the activity can be increased by giving different students tasks along the trail to complete, or by having some students transport heavier objects or a bucket of water, while others have lighter objects or nothing at all. Each of these can symbolize comfort, ability, and/or goals for a hike, and used to discuss how each student interacts with a hike differently. This activity can be used to increase group awareness and establish norms for the group when travelling along a trail.

Student Resource: Group Travel Safety Rules

- One person in the group is the leader and another person is the sweep (the person who stays at the back, making sure everyone in the group is ahead of them).
- When the trail turns, the leader tells one member of the group to stay at the turn until the sweep has arrived. They join the group in front of the sweep.
- Don't leave the trail.
- Everyone should carry a whistle for safety and know the distress signal. 3 blasts on a whistle or 3 shouts is recognized as a distress call. Do not use the whistle for any other reason.
- Stay in one place if you become lost or separated from your group. Blow your whistle or shout 3 times.
- Everyone in the group should have a buddy. Their buddy should know where they are at all times and always be visible. Tell an adult right away if your buddy isn't visible.
- Have a way to communicate without using words (non-verbal communication). Have hand signals for stop, look and listen and make sure the whole group knows and follows them. This helps to point out hazards, a plant or animal, an interesting feature of the trail or a sound.
- Set a comfortable pace that suits everyone, taking breaks to allow everyone to rest. Check on each other's health (blisters, too hot, too cold, hunger or thirst.) This is a good time to share what you hear or notice.
- Road crossings are one of the most dangerous areas on a trail. Make sure to stop and wait for the whole group at every road and railway crossing. Cross as a group and continue on the trail.
- Be aware of the time and daylight. Don't get caught in the dark.

The information within this Student Resource was excerpted from: Know Before You Go: Tips and safety advice to make the most of your next Bruce Trail visit, ***Bruce Trail Conservancy****. (2021).*

Student Resource: Trail Etiquette

- Expect to meet others on the trail and respect their privacy and right to enjoy the natural surroundings.
- Avoid speaking in loud voices, making noise or playing music. Try to use cell phones only when needed such as an emergency.
- Normal levels of conversations will be loud enough to alert wildlife you may want to avoid.
- If you bring your pet, keep them on a leash and clean up after them.
- Many trails cross or are next to private property. Respect the privacy of people living along the trails and hike only on marked routes.
- If you are traveling in a large group, split into smaller groups and meet up at the end of the trail.
- Walk in single file in the middle of the trail and keep a respectful distance from other groups of hikers.
- If you want to pass a group, pass on the left side. If a group wants to pass you, stay to the right so they can pass on the left.
- If you meet others on a hill, the group climbing up has the right of way.
- Take breaks in an area where other hikers can pass you. Never sit down or have lunch in the middle of the trail.
- Leave flowers, wood, rocks, and plants behind in their rightful place for others to enjoy.
- Pay attention to the pace of your group members. Some people hike faster, some hike slower. This situation can lead to an expansion and contraction effect in the group. When the fast hikers wait for the slow hikers, they get a rest and often take off again once the slow hikers catch up. This situation doesn't give the slower hikers a break. Take scheduled breaks as a group to help prevent this from becoming an issue.
- Reduce the amount of packaged food you bring and pack everything out with you so you don't leave a trace that you were there. Try to repack food into small bags at home and use only plastic containers. Avoid bringing cans or glass.

The information within this Student Resource was excerpted from: Trail Etiquette: The New Outdoors, ***Ontariotrails.on.ca****. (2021).*

Student Resource: Group Travel and Trail Etiquette Self-Check

Primary

1 - Place a checkmark on the line to show ways that you should travel as a group.

- ☐ stay behind the person who is leader
- ☐ keep up with the group
- ☐ know where your buddy is
- ☐ stay ahead of the designated sweeper
- ☐ race along the trail to find out how fast you can finish it

2 - Place a checkmark on the line to show ways you can be a considerate hiker.

- ☐ only talk loud enough for the person near you to hear
- ☐ don't go off the trail
- ☐ let a person pass who is coming up the hill, moving to the right to allow them to pass you
- ☐ pass on the right side of people on the trail

3 - What should you do if you get lost from your group? Circle all correct answers.

- stay in one place
- blow your whistle or shout 3 times
- don't panic
- go back to the last place you remember

Answers:

Question 1: Check all but "race along the trail to find out how fast you can finish it".

Question 2: Check all but "pass on the right side of people on the trail".

Question 3: Circle all but "go back to the last place you remember".

Junior

1 - Place a checkmark on the line to show that you know trail etiquette and rules to follow when hiking with a group.

- ▢ stay behind the person who is leader
- ▢ keep ahead of the person who is the sweeper
- ▢ know where your buddy is at all times
- ▢ stop and rest when you need to

2 - Place a checkmark on the line to show that you know ways you can be a considerate hiker.

- ▢ only talk loud enough for the person near you to hear
- ▢ don't go off the trail
- ▢ let a person who is coming up the hill pass you by moving to the right of the trail
- ▢ stay on the right of the trail
- ▢ don't climb fences

3 - What should you do if you get lost from your group? Circle all correct answers.

- ▢ stay in one place
- ▢ blow your whistle or shout 3 times
- ▢ don't panic
- ▢ go back to the last place you remember

4 - List 3 ways you can apply a low-impact approach to hiking with a group.

- _____
- _____
- _____

Answers:
Question 1: Check all.

Question 2: Check all but "stay on the right of the trail".

Question 3: Circle all but "go back to the last place you remember".

Question 4: Visit trails in small groups or split a big group up, walk in the middle of a trail even if it's muddy, don't make excessive noise or movements that will startle wildlife, hike only on marked routes, don't take shortcuts, stay off of private property.

Intermediate

1 - Place a checkmark on the line to show that you know trail etiquette and group travel rules when hiking with others.

- ▢ stay behind the person who is leader
- ▢ keep ahead of the person who is the sweeper
- ▢ know where your buddy is at all times
- ▢ know the system for non-verbal communication (for example, hand signals to stop, look, listen)
- ▢ stop and rest in a safe area when you need to

2 - Place a checkmark on the line to show ways you can be a considerate hiker.

- ▢ only talk loud enough for the person near you to hear
- ▢ play your music quietly
- ▢ don't go off the trail
- ▢ let a person who is coming down the hill pass you by moving to the right of the trail
- ▢ stay on the right of the trail
- ▢ don't climb fences
- ▢ stay off private property

3 - What should you do if you get lost from your group? Circle all correct answers.

- stay in one place
- blow your whistle or shout 3 times
- don't panic
- go back to the last place you remember

4 - Why is it important to keep the idea of "leave no trace" in mind when hiking with a group?

_____

_____

_____

5 - List 3 ways you can apply a "no trace" approach to hiking with a group.

- _____
- _____

- _____

Answers:
Question 1: Check all.

Question 2: Check all but “play your music quietly” and “stay on the right of the trail”.

Question 3: Circle all but “go back to the last place you remember”.

Question 4: To respect, appreciate and protect the natural environment.

Question 5: Visit trails in small groups or split a big group up, walk in the middle of a trail even if it's muddy, don’t make excessive noise or movements that will startle wildlife, hike only on marked routes, don’t take shortcuts, don’t disturb plant life or terrain (for example, don’t dig trenches, pick flowers, move rocks), carry out what you brought with you, leaving nothing behind.

STAYING SAFE IN AND AROUND WATER

Lesson Overview

During this lesson, students will practice their relationship and critical thinking skills to identify how to stay safe during activities that take place in, on, and around water.

Overall and Specific Expectations

- A1: A1.4, A1.5, A1.6
- B3: B3.1, B3.2
- D1: Gr. 8 - D1.2
- D2: Gr. 4 – D2.2, Gr. 8 – D2.2
- D3: Gr. 1 – D3.1, Gr. 6 – D3.2

Learning Goals

- I can behave responsibly and follow safety rules and procedures to avoid injuries and keep myself and others safe during outdoor education activities.
- I can use my relationship, self-awareness, and critical thinking skills to analyze situations, identify risks, and make safe choices while participating in outdoor education activities.

Materials

- Sample water safety slogans (included in the Action section of the lesson)
- Student Resource: Staying Safe Around Water Self-Check (*included at end of the lesson*)
- Student Resource: Water Safety Campaign Plan Student Resource (Junior/Intermediate) (*included at end of the lesson*)
- Teacher Resource: Water Safety Slogans - Safety Tips (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Activities

- **Outdoor Education (Canoeing)**
- **Outdoor Education (Swimming)**

Tools and Resources

- **First Aid Plan and First Aid Emergency Response**
- **Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form**

Other

- **Risk Management**

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge and skills needed to apply safety rules and procedures during outdoor education activities. For example, success criteria might include:

- I can identify the safety risks when I am playing in, on, and around water.
- I can describe safety rules and procedures to follow to keep myself and others safe during outdoor education activities that occur in, on, and around water.

After the activity, review the co-created criteria with students, and have them complete the Student Resource: Staying Safe Around Water Self-Check.

Assess students' responses during the class discussions throughout the scenario and the skit/illustrations (primary)/Water Safety Campaign Plan (Junior/Intermediate). Use the co-created criteria to assess student learning and offer feedback. If needed, provide feedback to individual students or the entire group, to clarify or reinforce their understanding of safety rules pertaining to activities in, on, and around water, and answer any remaining questions.

Minds On

Primary/Junior/Intermediate:

Explain to students that one of the essential things needed for life is water. We drink it, we bathe in it, and we can have fun in it. Have students generate answers to the following question: "What are some ways we can enjoy being in, on, or around water?" Possible answers:

- We can swim in it.
- We can use it with sand to make shapes and objects at the beach.
- We can go canoeing or boating or water skiing.
- We can go fishing.
- We can splash it on us to cool down when we are hot.
- We can run through it using a sprinkler.

Action

Primary/Junior/Intermediate:

Explain to students that not all bodies of water have the same characteristics. Swimming in a pool is different from swimming in a lake; wading in a stream is different from wading in a river or at the edge of the ocean. Along with enjoying outdoor education activities in, on, and around water, they also need to know how to stay safe.

Provide students with water safety slogans that help communicate tips for being safe in, on and around water.

Sample Water Safety Slogans:

- "Swim as a Pair in an Adult's Care"
- "Look Before You Leap"
- "Think So You Don't Sink"
- "Reach or Throw, Don't Go"
- "Don't Just Pack It; Wear Your Jacket"
- "Lakes, Rivers, Streams or Yards, Watch for Water, Be on Guard"
- "Know the Flow Before You Go"
- "Dark is Deep; Clear is Near"

*The Sample Water Safety Slogans were excerpted from: Water Safety for Kids, **American Red Cross**. (2021).*

Using a **Think/Pair/Share strategy**, have students interpret the meaning of some or all of the slogans and the safety tip it is meant to communicate (for example, Look Before You Leap - you don't know what's under the surface or how deep the water is so make sure you know how deep the water is and check for people below before you jump). Consider selecting the most relevant slogans for different divisions (Primary, Junior or Intermediate). Invite students to share their responses with the class. Use student responses to clarify and extend student understanding of how to be safe in and around water.

Have students complete the Student Resource: Staying Safe Around Water Self-Check to assess student understanding of how to be safe in and around water before moving onto the consolidation.

Consolidation

Primary/Junior/Intermediate:

Share the S.A.F.E acronym with students as an example of a water safety message that helps someone be safe.

S = SPOT – spot the dangers
A = ADVICE – follow safety signs and advice
F = FRIEND – stay close to a friend or family member
E = EMERGENCY – shout for help and know the emergency number to call

*The S.A.F.E. acronym was extracted from: Ensuring Water Safety with the SAFE code, **Speedo Blog**. (2021).*

Primary:

Have students create and perform a skit or rewrite lyrics to a song that educates their friends about safety around water. Alternatively, have them draw a picture to illustrate one of the safety rules.

Junior/Intermediate:

Provide each group with the Student Resource: Water Safety Campaign Plan. Use the following scenario to have students create a plan for a water safety campaign by identifying a weekly tip to share over the six weeks, the order they will share them in, and why they are focusing on those tips.

Scenario: It is June and school will soon end. It will be time for vacation, adventure travel and summer fun at beaches, pools, rivers, lakes and streams. Use your knowledge of safety in, on and around water to plan a water safety awareness campaign to share with family, friends and your community. Your campaign will be six weeks long, each week sharing a different water safety tip.

Decide on the six tips you will share and how you will share them.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity.

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

Teacher Resource: Water Safety Slogans - Safety Tips

Swim as a Pair in an Adult's Care

- Playing in the water is fun but you should know how to swim and never swim alone. If you are unsure about your swimming ability wear an appropriately sized personal flotation device while in the water.

Look Before You Leap

- You don't know what's under the surface or how deep the water is so make sure you know how deep the water is and check for people below before you jump.
- Only dive where diving is allowed - DO NOT dive into unknown water.

Think So You Don't Sink

- If you get in trouble in the water, stay calm and float on your back.

Reach or Throw, Don't Go

- A person in trouble in the water will panic, try to grab you and pull you down trying to get out of the water. Don't get close and put yourself in a dangerous situation.
- Call for help.
- If you are strong enough, throw or reach for them with something that floats. Keep telling them to grab it until they do and then pull them in.

Don't Just Pack It; Wear Your Jacket

- Wear your personal flotation device or lifejacket when you are in or on the water. It should fit snugly and not ride up over your chin or ears, and be done up properly. Attach a plastic whistle to it near the chest or shoulder area to use to signal for help in case of an emergency.

Lakes, Rivers, Streams or Yards, Watch for Water, Be on Guard

- A wave pool has a deep end and the waves can knock you over, or knock you off your float.
- Lakes have two kinds of currents, those that travel along the shore line and those that move in and out of the shoreline, like waves. When they are strong they can be dangerous. Be aware that they may pull you under the water and pull you away from the shore.
- Currents are stronger where rivers run into lakes, so avoid swimming and playing in these areas.
- Rivers can also change depth quickly and can have hazards floating in the current like logs.
- As the weather changes, the wind can shift changing the conditions you are swimming, boating, or playing in. Be aware of the changing weather.

Know the Flow Before You Go

- In some open bodies of water lifeguards fly coloured flags to indicate the water conditions. Green flags indicate low hazard conditions good for all swimmers. Yellow flags indicate moderate hazards are present like rough water, and/or strong off-shore winds. Swimming is not advised.
- Strong winds and currents can carry you away so be careful when you are swimming, using a flotation device or boating on open water.
- Some places are designated as no-swim or no-boating areas. Be aware before you head out if you are going to an area near a dam, power station, or commercial shipping lanes.
- At different times of year water levels can change. Rivers often have higher water levels in the spring and go down throughout the summer. These seasonal changes often make rivers and lakes look and act differently at different times of the year.

Dark is Deep; Clear is Near

- The change in the colour of the water can also be a clue. The darker the water the deeper it is; clear or cloudy water indicates that it is shallow with a sandbar or shoals.

*The information within this Teacher Resource was adapted from: Water Safety for Kids, **American Red Cross**. (2021).*

Student Resource: Water Safety Campaign Plan (Junior/Intermediate)

Week 1

Water Safety Tip:

Why this Tip Is Important to Share:

Week 2

Water Safety Tip:

Why this Tip Is Important to Share:

Week 3

Water Safety Tip:

Why this Tip Is Important to Share:

Week 4

Water Safety Tip:

Why this Tip Is Important to Share:

Week 5

Water Safety Tip:

Why this Tip Is Important to Share:

Week 6

Water Safety Tip:

Why this Tip Is Important to Share:

Student Resource: Staying Safe Around Water Self-Check

Primary

1 - Place a checkmark on the line to show that you know rules you should follow to be safe around water.

- ☐ never swim alone - always have a buddy
- ☐ swim near a lifeguard or adult
- ☐ wear your personal floatation device or life jacket
- ☐ know the water conditions when playing at the beach
- ☐ stay within the boundaries except to retrieve a water toy

2 - Place a checkmark on the line to show what you should or should not do to help a friend who is in trouble in the water

- ☐ call for help
- ☐ stay in the water near them to help them to shore
- ☐ talk to them
- ☐ throw them an object that floats

Answers:
Question 1: Check all except “stay within the boundaries except to retrieve a water toy”

Question 2: Check all except “stay in the water near them to help them to shore”

Junior

1 - Place a check beside the rules you should follow to be safe around water.

- ☐ never swim alone - always have a buddy
- ☐ swim near a lifeguard or adult
- ☐ be ready to do up your personal floatation device or lifejacket if you get into trouble while boating
- ☐ only go out of the boundaries to retrieve something that has floated away
- ☐ if you are in trouble in the water, stay calm and float on your back
- ☐ look before you leap; know what is in the water below
- ☐ know the water conditions when playing at the beach or walking near rivers

2 - Place a check on the line to show what you should or should not do to help a friend who is in trouble in the water.

- ☐ call for help
- ☐ stay in the water near them to help them to shore
- ☐ throw something that will float for them to grab, and reach to pull them in
- ☐ talk to them

3 - What are the risks of swimming or boating on a lake?

_____

_____

_____

Answers:

Question 1: Check all except " be ready to do up your personal floatation device or lifejacket if you get into trouble while boating" and "only go out of the boundaries to retrieve something that has floated away".

Question 2: Check all except "stay in the water near them to help them to shore".

Question 3:

- Currents can carry you further out than you should be.
- You may find yourself in deep water away from shore.

Intermediate

1 - Place a checkmark beside all the rules you should follow to be safe around water.

- ☐ never swim alone - always have a buddy
- ☐ swim near a lifeguard or adult
- ☐ be ready to do your personal floatation device or lifejacket up if you get into trouble while boating
- ☐ only go out of the boundaries to retrieve something that has floated away
- ☐ look before you leap; know what is in the water below
- ☐ only dive where allowed; do not dive into unknown water
- ☐ if you are in trouble in the water, stay calm and float on your back
- ☐ avoid jumping off or swimming near piers where the current is stronger
- ☐ be aware of currents at the beach

2 - Place a check on the line to show what you should or should not do to help a friend who is in trouble in the water.

- ☐ call for help
- ☐ stay in the water near them to help them to shore
- ☐ throw something or reach with something that will float for them to grab, and pull them in
- ☐ stay calm and talk to them

3 - What are the risks of swimming or boating on a lake?

_____

_____

_____

4 - What are the risks of swimming or boating on a river?

_____

_____

_____

Answers:

Question 1: Check all except " be ready to do up your personal floatation device or lifejacket if you get into trouble while boating" and "only go out of the boundaries to retrieve something that has floated away".

Question 2: Check all except "stay in the water near them to help them to shore".

Question 3:

- Currents can carry you further out than you should be.
- You may find yourself in deep water.

Question 4:

- Underwater hazards like logs.
- Unknown drop-offs.
- Hidden currents.

AWARENESS AND APPRECIATION

Lesson Overview

During this lesson, students will practice their self-awareness and critical thinking skills to build their appreciation for the environment and increase their awareness of potential hazards. Students identify safety hazards and describe rules and procedures to keep themselves and others safe from injury during outdoor education activities.

Overall and Specific Expectations

- A1: A1.4, A1.5, A1.6
- B3: B3.1, B3.2
- D1: Gr. 8 – D1.2
- D2: Gr. 3 – D2.2, Gr. 4 – D2.2, Gr. 8 – D2.2
- D3: Gr. 1 – D3.1, Gr. 6 – D3.2

Learning Goals

- I can use self-awareness skills during outdoor education activities to build my appreciation for the environment.
- I can identify environmental hazards and make safe choices while participating in outdoor education activities.
- I can behave responsibly and follow safety rules and procedures to avoid injuries and keep myself and others safe during outdoor education activities.

Materials

- Cones to mark boundaries
- Student Resource: Awareness and Appreciation Self-Check (*included at end of the lesson*)
- Student Resource: Awareness Tips for Outdoor Education Adventure (*included at end of the lesson*)
- Teacher Resource: Awareness Tips for Outdoor Education Adventure (*included at end of the lesson*)
- Teacher Resource: Outdoor Education Awareness Tips (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Activities

- **Orienteering**
- **Outdoor Education (Backpacking/Hiking)**
- **Outdoor Education (Camping)**

Tools and Resources

- First Aid Plan and First Aid Emergency Response
- Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form

Other

- Risk Management

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge and skills needed to apply safety rules and procedures during outdoor education activities. For example, success criteria might include:

- I can use my self-awareness skills to build an appreciation for outdoor education experiences.
- I can use my critical thinking skills to identify actions that can impact the environment.
- I can identify potential hazards and rules to follow to keep myself and others safe while participating in outdoor education activities.

After the activity, review the co-created criteria with students, and have them complete the Student Resource: Awareness and Appreciation Self-Check.

Assess students' responses during the small group and class discussions. Use the co-created criteria to assess student learning and offer feedback. If needed, provide feedback to individual students or the entire group, to clarify or reinforce their understanding of how to avoid careless actions that impact the environment and hazards to keep themselves safe during outdoor education activities, and answer any remaining questions.

Minds On

Primary/Junior/Intermediate:

Explain to students that they will complete a Mindful Sit outdoors in an area around the school using their five senses to increase their awareness of the natural world around them.

Review the importance of using the five senses to collect information and respond to what students are experiencing. Remind students that when they use their five senses outdoors, it helps them connect with their environment, refresh their mind, slow down and build appreciation and awareness of the natural world and their responsibility to look after it.

Take students to an open space on or near the school grounds. The space should be large enough for all students to find their own spot, two to three arms' lengths or giant steps away from anyone else. Create boundaries for the space. Consider providing each student with a hula hoop to define their space.

Have students choose and check their spot for any safety hazards before they sit down. Students may want to sit on a sweater or jacket. Tell students that for the next ten to fifteen minutes they will be guided through a series of questions. They won't verbally respond; they will notice their responses as they "float" through their mind. Remind students that this is a silent activity and to respect the space and experience for themselves and others.

Instruct students to take in four to five deep breaths to relax and clear their mind. They may close their eyes if it helps them focus. Have them open their eyes and focus their attention on everything around them. Pose the following questions, pausing between each question to allow students to be mindful of the responses that come to mind.

Mindful Sit Questions:

- What do you notice? (birds, trees, buildings, flowers)
- Take a deep breath in through your nose. What do you smell? (flowers, the grass, dirt, human scents, animal scents)
- Bring your attention to your ears. What do you hear? (natural sounds, human-made sounds, the wind)
- Focus on your hands and skin. What can you touch? What can you feel on your skin? (the ground, grass, the wind on their skin, the sun on their eyelids).

*The Mindful Sit Questions were adapted from: A Moment of Intentions: Mindful Sit Spot, **aliveoutdoors.com**. (2021).*

After students have had time to reflect about each question, group them in triads to reflect on everything they experienced and how it helps them appreciate the world around them.

Action

Primary/Junior/Intermediate:

Explain to students that along with appreciating the experiences they have in the outdoors, they also have to be aware of their surroundings to avoid careless actions that impact the natural world and to keep themselves and others safe while participating in outdoor education activities.

Provide students with the Student Resource: Awareness Tips for Outdoor Education Adventure. Have students work alone or in small groups to generate tips they would share with others before they head out on an outdoor education adventure. Invite students to share their tips. Use the Teacher Resource: Awareness Tips for Outdoor Education Adventure, and student responses to consolidate and extend student understanding of the importance of being aware of their surroundings when participating in outdoor education activities.

Consolidation

Primary/Junior/Intermediate:

Have students complete the Student Resource: Awareness and Appreciation Self-Check to assess student understanding of the importance of being aware and appreciating their surroundings to have fun and stay safe while participating in outdoor education activities.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity.

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

Consider pairing this lesson with “Navigation” for students to learn how map and compass skills are important to awareness and safety in natural areas.

Student Resource: Awareness Tips for Outdoor Education Adventure

Be Aware Of….	What to Wear, Bring, Do
Your surroundings, your route, and time	
Hazards: rocks, roots, Poison Ivy, holes, mud, large puddles, rolling gravel, wet surfaces	
Animals	
Hiking rules	
How to get help when trouble arrives	
The weather	
Too Hot; Too Cold	
Cuts, scrapes and burns	
Respect Your Surroundings	
Clean-Up Time	
Capturing Memories	

Teacher Resource: Awareness Tips for Outdoor Education Adventure

Be Aware Of….	What to Wear, Bring, Do
Your surroundings, your route, and time	• Carry a trail map for reference and know how to use it (for example, terrain, landmarks, taking a bearings) • Notice points of entry/exit, meeting up with the other small groups • Wear a watch • Know how to tell the approximate time of day based on where the sun is in the sky • Know approximately how long it will take to complete your route/activity to plan for adequate nutrition and hydration
Hazards: rocks, roots, Poison Ivy, holes, mud, large puddles, rolling gravel, wet surfaces	• Use our eyes to observe our surroundings • Don't touch something we don't know about • Stay within the boundaries • Be aware of your surroundings all the time • Wear lightweight long sleeves and pants to protect our skin • Wear closed-toe footwear that fits and is done up properly
Animals	• Keep a safe distance • Don't wear scents that might attract them • Never feed them • Make some noise so they know we are near them • Learn about the animals around us
Hiking rules	• Stay on the trail • Don't take shortcuts • Walk in the middle except to pass someone • Follow the trail signs

	• Hike with a buddy
How to get help when trouble arrives	• Carry a whistle to use for emergencies • Shout out 3 times • If lost, stay where you are. Let help come to you
The weather	• Check the weather before you go • Bring a raincoat • Bring extra clothes • Make sure we have sun protection • Apply sun protection frequently
Too Hot; Too Cold	• Pay attention to how we are feeling • Find shady spots • Take rest breaks • Add or remove layers of clothing • Tell an adult if we don't feel well
Cuts, scrapes and burns	• Carry a first aid kit • Have a safety plan in case of injury • Know what to do in case of an emergency
Respect the environment	• Don't pick flowers or plants • Don't pull off branches or bark from a tree • Don't litter and take out our own garbage • Don't trample on plants
Clean-Up Time	• Bring wipes and hand sanitizer to clean up • Don't drink from natural water sources • Don't use soap near or in natural water sources • Don't pour out liquids (pop, juice) on the ground or in water sources • Don't throw away fruit peels or cores • Take all your garbage with you
Capturing Memories	• Observe nature • Listen to the sounds • Smell the air and plants

- Take pictures, sketch a drawing, journal your observations
- Leave only our footprints
- Share with others to remember the adventure

The information within this Teacher Resource was extracted from: Know Before You Go: Tips and safety advice to make the most of your next Bruce Trail visit. ***Bruce Trail.org****. (2021).*

Teacher Resource: Outdoor Education Awareness Tips

- Be aware of hazards such as loose or falling rocks, poison ivy that can cause a rash and blisters.
- Stay away from cliff and water edges unless you are with an adult.
- Avoid wild animals that come too near or seem too friendly.
- Know about the wildlife you may encounter. For example, never feed a bear, stay away from a mother and her cubs.
- Make a bit of noise when you walk in the bush to let animals know you are there.
- Don't wear perfumes or scented sprays and lotions that may attract animals.
- Follow the rules when hiking on a trail.
- Carry a whistle. Know the recognized distress signal of 3 whistle blasts or three shouts.
- Check the weather forecast before heading out and prepare for it (for example, rain coats, extra water for hydration, know where to find shade) or postpone your trip until it passes over.
- Wear proper clothes and footwear for the trail conditions.
- Know the signs and symptoms of heat and cold injuries and tell an adult if you are not feeling well.
- Have a safety plan, carry a well-stocked first aid kit and know what your role is in an emergency situation.
- Leave flowers, wood, rocks and plants behind.
- Don't damage trees by breaking branches or stripping the bark.
- Carry out all litter. Leave nothing but your footprints where you go.
- Appreciate nature using our senses: observing, smelling, and touching natural objects but not picking or trampling them. This includes insects and all little creatures in our world. Remember only to touch them if an adult tells you it is safe to do so.
- Do not build structures, fire rings, furniture or dig trenches on trails.
- When washing camping utensils or yourself, carry water at least 60 meters [200 feet] from streams or lakes and use small amounts of biodegradable soap.
- Take only pictures, drawings and fond memories away with you. Leave only a footprint on the path you have respected.

The information within this Teacher Resource was extracted from: Know Before You Go: Tips and safety advice to make the most of your next Bruce Trail visit. ***Bruce Trail.org****. (2021).*

Student Resource: Awareness and Appreciation Self-Check

Primary

1 - Place a checkmark on the line to show that you know what you should do to be aware and appreciate where you are on an outdoor education adventure.

- ☐ watch for things like roots that might trip you
- ☐ carry your whistle with you
- ☐ don't touch a plant unless you ask an adult
- ☐ stay inside the boundaries
- ☐ pick a natural object to take home with you

2 - Circle the ways that you can enjoy your hike in the woods.

- listen to the sounds around you
- smell and touch the plants that an adult shows you
- look for birds in the trees
- look for signs of other animals (like tracks) to find them

3 - Place a checkmark on the line to show ways that we can be a friend to nature.

- ☐ don't leave garbage behind
- ☐ don't make too much noise
- ☐ stay on the trails
- ☐ make friends with the animals
- ☐ don't break off tree branches or bark
- ☐ leave your fruit peel or core for animals to enjoy

Answers:
Question 1: Check all except "Pick a natural object to take home with you".

Question 2: Circle all.

Question 3: Check all except "make friends with the animals" and "leave your fruit peel or core for animals to enjoy".

Junior

1 - Place a checkmark on the line to indicate that you know what you should do to be aware and appreciate where you are on an outdoor education adventure.

- ☐ watch for things like roots that might trip you
- ☐ carry your whistle with you
- ☐ don't touch a plant unless you ask an adult
- ☐ stay inside the boundaries unless you have to retrieve an object
- ☐ be prepared for the weather
- ☐ pick a natural object to take home with you

2 - Circle the ways that you can enjoy your hike in the woods.

- listen to the sounds around you
- smell and touch the plants that an adult shows you
- look for birds in the trees
- look for signs of other animals (like tracks) to find them

3 - List 5 ways you can have as little impact as possible on the natural environment.

- _____
- _____
- _____
- _____
- _____

Answers:
Question 1: Check all except "Stay inside the boundaries unless you have to retrieve an object" and "Pick a natural object to take home with you".

Question 2: Circle all.

Question 3:
- Avoid tree damage.
- Leave flowers, wood, rocks and plants behind.

- Take out your garbage.
- Stay on marked trails.
- Don’t bicycle on wet trails.
- Don’t disturb wildlife.

Intermediate

1 - Place a checkmark on the line to that you know what you should do to be aware and appreciate where you are on an outdoor education adventure.

- ☐ watch for things like roots that might trip you
- ☐ carry your whistle with you
- ☐ don't touch a plant unless you ask an adult
- ☐ stay inside the boundaries unless you have to retrieve an object
- ☐ protect yourself from weather conditions
- ☐ pick found objects for your nature collection

2 - List 5 ways you can have as little impact as possible on the natural environment.

- _____
- _____
- _____
- _____
- _____

3 - Explain what is meant by the following safety rules and guidelines:

- Be weather aware: _____
- Be alert to hazards: _____
- Understand the wildlife you may encounter: _____
- Step carefully so you don't have a negative impact on habitat or wildlife: _____
- Garbage disposal is an important issue on trails: _____

- Take only pictures, leave only footprints: _____

Answers:

Question 1: Check all except “stay inside the boundaries unless you have to retrieve an object” and “pick found objects for your nature collection”.

Question 2:

- Avoid tree damage.
- Leave flowers, wood, rocks and plants behind.
- Take out your garbage.
- Stay on marked trails.
- Don’t bicycle on wet trails.
- Don’t disturb wildlife.

Question 3: Consult Teacher Resource: Outdoor Education Awareness Tips for answers.

NAVIGATION: TRAVELLING IN NATURAL AREAS

Lesson Overview

During this lesson, students will learn about basic components of a map and use their critical thinking skills to identify landmarks and navigate a course to stay safe while participating in outdoor education activities involving travel.

Overall and Specific Expectations

- A1: A1.6
- B3: B3.1

Learning Goals

- We are learning navigation skills so we can keep ourselves safe when participating in outdoor education activities involving travel.

Materials

- Chart paper and markers/sidewalk chalk
- Compasses (optional for Junior/Intermediate if available)
- Sample maps
- Student Resource: Navigation Self-Check (*included at end of the lesson*)
- Teacher Resource: Components of a Map (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Activities

- **Orienteering**

Tools and Resources

- **First Aid Plan and First Aid Emergency Response**
- **Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form**

Other

- **Risk Management**

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge and skills needed to navigate a route to stay safe during outdoor education activities. For example, success criteria might include:

- I can explain why it is important for my safety to know how to follow a map.
- I can identify the components of a map that help me read the map.

- I can identify key landmarks on a map to help me find my way to a location.

After the activity, review the co-created criteria with students, and have them complete the Student Resource: Navigation Self-Check.

Assess students' responses during the class discussions, mapping activities and on the exit cards. Use the co-created criteria to evaluate student learning and offer feedback. If needed, provide feedback to individual students or the entire group, to clarify or reinforce their understanding of basic navigation, and answer any remaining questions.

Minds On

Primary/Junior/Intermediate:

Using the following prompt and questions, engage students in a whole class discussion about the importance of knowing how to travel outdoors without relying on technology.

Prompt:

"Today we depend on technology, but many areas do not have reliable signals and a battery can run low without a way to recharge it. It is important to understand how to navigate using a map and compass and some signaling skills. Besides, it can be a fun and challenging adventure to put our technology away and use a map to find our way. Have students generate answers to the following questions."

Questions:

- When you walk to school, how do you know you are going in the right direction? What landmarks (signs and objects/features) do you look for? (for example, road signs, buildings, stop signs, traffic lights)
- What words do we use to describe the direction we want to travel? Provide the letters as a clue (for example, North, South, East, West).
- The sun moves in the sky throughout the day. How does the sun help us know which direction we are moving? (It rises in the east, it sets in the west and is due south at noon)

Action

Primary/Junior/Intermediate:

Explain to students that all maps have basic components that help read them to navigate the way. Provide students with a sample map (for example, amusement park map, city map, Ottawa Parliament, conservation area) and have them identify each component as they learn about it. Have students orient their map to the north by pointing the north arrow on the map to the north, so

they align the big world around them to the little world depicted on the map.

Have students explore their map to identify and share landmarks that they might use to help them find their way (for example, roads, rivers, towns, buildings). Have students point in the direction they would need to walk if they were to virtually leave the room and walk to the landmarks they identified. Consider creating a map skills anchor chart illustrating map components (consult Teacher Resource: Components of a Map) with visual examples for students to reference throughout the lesson.

Provide students with chart paper and markers and have them create a Compass Rose to learn the cardinal directions and northeast, northwest, southeast and southwest. Have students orient their Compass Rose to north and then draw and label direction arrows to show locations of items in the classroom, school or community (for example, the bus stop, the park, pool, bus stop, library). Consider having students complete this activity outside on the blacktop using sidewalk chalk.

Using their understanding of map components and direction, have students work in small groups to create a map of their surroundings (for example, the classroom, school grounds, the park, their neighbourhood).

Create a route on the school grounds (primary) or around the school grounds (Junior/Intermediate) for groups to travel using the map. Before students begin the activity, provide safety instructions for the activity.

Sample Safety Instructions:

- Stay within the boundaries.
- Do not cross roads, climb over fences or approach any water.
- Stay with your partner/group; if they are slower, wait for them.
- Before you go, double check each other's bearings and agree on where you are moving to and what landmark you are using to guide your way.
- Pay attention and obey the signal to return to the established meeting area.

Junior/Intermediate:

Provide each student with a compass or divide students in groups according to the number of available compasses. Remind students of the cardinal directions, and northeast, northwest, southeast and southwest. Using the compass, point out the degrees on a circle, and the number of degrees that represent the cardinal directions (0 and 360), ¼ (90), ½ (180), ¾ (240).

Identify the parts of a compass: Base Plate, House (dial), Direction of Travel Arrow, North Arrow

(Magnetic Needle), "Garage" or "Bed" (arrow etched on bottom of house), Degrees, String (to keep it around their wrist so they don't lose it).

Use the following prompt to explain how to use the compass:

"Hold the compass flat in your hand, slightly away from your body, with the Direction of Travel Arrow pointing AWAY from your body. Imagine it is a laser pointing away from you out of your nose if you are standing straight and looking straight ahead. It must be held flat or the arrow in the house will not tell the correct direction. The North Arrow (magnetic needle) always points north. We use it for navigation, but not to tell us what direction to travel in. If we always followed it, we would always be going north!" [9]

Have students move their body in a circle to practice putting the "red in the bed", (keeping the North Arrow over the arrow etched on the bottom of the house, reminding them to move their whole body and not just their hand. The Direction of Travel Arrow must always point directly ahead of them.

Have students practice turning the house (dial), and matching numbers to the Direction of Travel Arrow. Explain that the dashes are increments of degrees.

Have students practice finding a bearing. Give them a number/degree. Have students turn the house until the number/degree is lined up to the Direction of Travel Arrow. Students then turn their bodies, holding the compass flat in their hand, until the "red is in the bed". Once this is done, instruct them to point in the direction the Direction of Travel Arrow is telling them to go. That is the bearing they want to follow.

Have students practice landmarking using their compass bearing. Looking up from their Direction of Travel Arrow, have them choose a landmark that is fixed and won't move, stands out from the rest of the landscape BUT that is directly on the imaginary line they will travel.

Provide students with a number of bearings. Have students find the bearing, choose a landmark and walk to the landmark. Have students repeat these steps with each bearing, moving from chosen landmark to chosen landmark.

Consolidation

Primary/Junior/Intermediate:

Have students work in pairs to complete the Student Resource: Navigation Self-Check to assess

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[9] Adapted from: Beginners Guide to Using A Compass. Getoutside.co.uk. (2021). Retrieved from: **https://getoutside.ordnancesurvey.co.uk/guides/beginners-guide-to-using-a-compass/** and How to Use A Compass Correctly. Myopencountry.com. (2021). Retrieved from: **https://www.myopencountry.com/how-to-use-a-compass/**

for understanding of navigation skills to stay safe when participating in outdoor education activities involving travel.

Divide students into groups to create a route within an established boundary then have groups trade their map with another group who will travel the route.

Junior/Intermediate:

Divide students into groups to create a list of bearings that point to key landmarks in the school yard or neighbouring area. Have groups trade their list with other groups. Have groups find the bearings and identify the landmark to which it points.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity.

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

Teacher Resource: Components of a Map

Title:
Located at the top of the map and tells exactly the area the map is showing.

Legend:
These are symbols that indicate features on a map such as roads, rivers, houses, parks, forests.

North Arrow/Compass Rose:
Orienting the map is important to know so the North Arrow shows which way is north. It can also show all 4 cardinal directions which is called a Compass Rose. Scale: Maps are smaller than the actual size of the area they are showing so the scale indicator tells how far a distance on a map is in real life.

Grid:
Some maps have a series of horizontal and vertical lines that split the map into smaller parts and are labelled at one end or side of the map.

Border:
This shows where the map ends.

Student Resource: Navigation Self-Check

Primary

1 - Place a checkmark on the line to show that you know the features that are on a map to help you find your way.

- ▢ buildings
- ▢ parks
- ▢ trails
- ▢ lakes
- ▢ cars

2 - Fill in the blanks.

- The sun rises in the _____, and sets in the _____.

3 - Why is there an arrow on a map with a big N? What do you do with it?

_____

_____

_____

4 - Place a checkmark to show you know the 4 cardinal directions.

- ▢ North, Northeast, South, West
- ▢ South, Southeast, North, West
- ▢ North, South, West, East

5 - What are 3 landmarks you would tell someone to look for to find your school?

- _____
- _____
- _____

Answers:
Question 1: Check all except cars.

Question 2: East; West.

Question 3: It tells us which way is North on the map. We need to turn our map so we line our body up with North so what we see as North on the map, we see in front of us in the real world.

Question 4: Check North, South, West, East.

Question 5:

- Landmark 1: _____
- Landmark 2: _____
- Landmark 3: _____

Junior

1 - Place a checkmark on things you can find on a map to help you find your way to a place.

- ☐ buildings
- ☐ trails
- ☐ lakes
- ☐ roads
- ☐ hills and valleys
- ☐ buses

2 - Fill in the blanks.

- The sun rises in the _____, and sets in the _____.

3 - Using your compass rose, identify something in our classroom that is directly in line with North, Southeast, Southwest, and West:

- Something in line with North _____
- Something in line with Southeast _____
- Something in line with Southwest _____
- Something in line with West _____

4 - List 3 places in your school such as the library, the office or the gym. What are 3 landmarks you would tell someone who doesn't know the layout of the school to look for to find each of these locations?

- Place: _____
- Landmark: _____

- Place: _____
- Landmark: _____

- Place: _____
- Landmark: _____

Answers:
Question 1: Check all except buses.

Question 2: East; West.

Questions 3 and 4: Answers are dependent on the location of the school.

Intermediate

1 - List 5 things you can find on a map to help you find your way to a place.

- ☐ buildings
- ☐ trails
- ☐ lakes
- ☐ roads
- ☐ hills and valleys
- ☐ buses

2 - Fill in the blanks.

- The sun rises in the _____, and sets in the _____.

3 - Using your compass rose, identify something in the area surrounding the school that is directly in line with North, Southeast, Southwest, and West:

- Something in line with North _____
- Something in line with Southeast _____
- Something in line with Southwest _____
- Something in line with West _____

4 - List 3 places in your community such as the library, the mall or a local trail. What are 3 landmarks you would tell someone to look for to find each of these locations?

- Place: _____
- Landmark: _____

- Place: _____
- Landmark: _____

- Place: _____
- Landmark: _____

Answers:
Question 1: Check all except buses.

Question 2: East; West.

Questions 3 and 4: Answers are dependent on the location of the school.

TICK SAFETY

Lesson Overview

During this lesson, students will learn how to manage their exposure to tick bites during outdoor education activities keeping themselves safe from potential tick-borne illnesses.

Overall and Specific Expectations

- A1: A1.6
- B3: B3.1
- D1: Gr. 8 – D1.2
- D2: Gr. 3 – D2.2, Gr. 4 – D2.2, Gr. 8 – D2.2
- D3: Gr. 1 – D3.1, Gr. 6 – D3.2

Learning Goals

- I can behave responsibly and apply appropriate safety rules and procedures that maximize my safety and that of others during outdoor education activities.
- I can think critically to analyze situations, evaluate my choices and make safe decisions in a variety of situations.

Materials

- Picture of a tick (optional)
- Student Resource: Exit Card (*included at end of the lesson*)
- Student Resource: Tick Self-Check (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Activities

- **Orienteering**
- **Outdoor Education (Backpacking/Hiking)**

Tools and Resources

- **First Aid Plan and First Aid Emergency Response**
- **Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form**

Other

- **Risk Management**

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge and skills needed to apply safety rules and procedures to avoid illness during outdoor education activities. For example, success criteria might include:

- I can identify what a tick looks like.
- I can identify the typical habitats that ticks in Ontario like to live in.
- I can explain the best practices to follow to reduce the risk of getting a tick bite when participating in outdoor education activities.

After the activity, review the co-created criteria with students, and have them complete the Student Resource: Tick Self-Check and the Student Resource: Exit Card.

Collect and review the Student Resource: Exit Cards. Use the co-created criteria to evaluate student learning and offer feedback. If needed, provide feedback to individual students or the entire group, to clarify or reinforce their understanding of safety with respect to ticks, and answer any remaining questions.

Minds On

Primary/Junior/Intermediate:

Show students a picture of a tick and ask them if they can identify why it is important to know about it.

Explain to students that in Ontario they are fortunate to have a lot of natural space, including parks and forests that provide everyone with an opportunity to enjoy the outdoors. However, they need to be aware of insects around them, particularly ticks because some types of ticks carry Lyme disease. Lyme disease is spread to humans through the bite of infected blacklegged ticks (also known as Deer Ticks). If they come into contact with a tick and it remains on their skin for more than 24 hours, they may be in danger of contracting Lyme disease. They need to plan how to protect themselves from ticks, especially when they are in areas that are wooded or have tall grasses, bushes, and shrubs during the spring, summer and fall especially, as well as in winter.

*The information about ticks was excerpted from: How to protect yourself from ticks, **Ontario Parks**. (2019).*

Action

Primary/Junior/Intermediate:

Explain to students that many people believe that ticks are found only in woods. However, they can also be found in many places such as:

- Wooded areas
- Where woods and grassy areas meet
- In tall shrubs, bushes, and grasses
- Under leaves
- In cut grass or sports fields (in small numbers)
- Under groundcover plants in yards
- Around rock or wood walls where mice and other small mammals live
- In areas of damp, rotting wood

Tell students that the class is going on an imaginary hiking trip in the woods near the school. Have students generate and share ideas of things they can do to prevent being bitten by ticks on the hike and what they think they should do if they find one on their body. Share the tick bite prevention tips and actions that an adult can take to help them if they find a tick on their body.

Methods for Preventing Tick Bites and Lyme Disease

- Wear light-coloured clothing. This discourages ticks from attaching to you, and it makes them easier to spot if they do get on you.
- Wear long pants, a long-sleeved shirt, and close-toed shoes. Tuck your shirt into your pants. You can also tuck your pant legs into your socks.
- Use an insect repellent containing DEET or icaridin (follow manufacturer's instructions) on your clothes and any exposed skin.
- Stay on pathways or in the middle of trails.
- Check your clothing and body at least once a day for ticks. Pay particular attention to the areas of the groin, navel, armpits, scalp, behind the knees, and behind the ears.
- Use a mirror to examine the back of your body, or ask someone else to do so.
- Take a shower as soon as you can after being outdoors. This allows you to more easily find and wash off any ticks crawling on you.
- Put outdoor clothing in the dryer for 60 minutes on high heat before washing them. This kills any ticks which are often difficult to notice and thrive in wet environments.

What to Do if You Find a Tick on You or Someone Else

If you find a tick on you, tell an adult right away who can remove it for you. To remove a tick they should:

- Use fine-tipped tweezers to grab the tick as close to the skin it is attached to as possible.
- Slowly pull on the tick with even pressure, in one smooth motion, so that the mouth is removed and the body isn't crushed.
- Wash the area with soap and warm water.
- Put the tick in a sealed plastic bag or a container with a lid.
- Bring the tick to your local Health Unit office to have it identified.
- Consult with a healthcare provider within the next 24 hours.

What Not to Do

- Do not grab, squeeze, or pop the tick around its swollen abdomen.
- Do not use a match, heat, or chemical products to try to remove a tick.
- Do not twist the tick when pulling it out.

*The information about ticks was excerpted from: How to protect yourself from ticks, **Ontario Parks**. (2019).*

Consolidation

Primary/Junior/Intermediate:

Divide students into pairs to complete the Student Resource: Tick Self-Check. Have students complete the Student Resource: Exit Card to identify different areas around the school or in their neighbourhood where ticks might be found, and precautions they can take to prevent tick bites when participating in outdoor education activities in the community or when on an outdoor trip with their family.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity.

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

Student Resource: Exit Card

Exit Card - Tick Safety

Two areas around my school or in my neighbourhood where ticks may be found:

- _____
- _____

Three things I can do to prevent tick bites:

- _____
- _____
- _____

Student Resource: Tick Self-Check

Primary

1 - Place a checkmark on the line to show that you know some of the places that tick can be found.

- ▢ in the woods
- ▢ bushes
- ▢ under leaves
- ▢ in water
- ▢ in cut grass

2 - Place a checkmark on the line to show that you know some of the things you can do to keep yourself safe from getting bitten by a tick.

- ▢ stay on paths and trails, the middle is best
- ▢ use insect repellent
- ▢ wear shoes that don't show your toes
- ▢ wear skin lotion so they won't stick on you
- ▢ wear long pants when hiking on a trail

3 - What should you do immediately if you find a tick on you?

_____

_____

_____

Answers:
Question 1: Check all but "in water".

Question 2: Check all but "wear skin lotion so they won't stick on you".

Question 3: Don't try to pull it off. Tell an adult who can remove it.

Junior

1 - Place a checkmark on the line to show that you know some of the places that ticks can be found.

- ▢ in the woods
- ▢ bushes
- ▢ under leaves
- ▢ in water
- ▢ in cut grass
- ▢ around rocks and wood

2 - Place a checkmark on the line to show that you know ways to keep yourself safe from getting bitten by a tick.

- ▢ stay on paths and trails, the middle is best
- ▢ use insect repellent
- ▢ wear close-toed shoes
- ▢ stay inside
- ▢ wear long pants when hiking on a trail
- ▢ tuck your pants into your socks
- ▢ check your body once a day for ticks
- ▢ hang your outdoor clothes outside for 30 minutes before washing them so ticks can escape
- ▢ put outdoor clothing in the dryer for 60 minutes on high heat before washing them

3 - List 3 things you should have an adult do to help you find a tick on your body.

- _____
- _____
- _____

Answers:
Question 1: Check all but “in water”.

Question 2: Check all but “Hang your outdoor clothes outside for 30 minutes before washing them so ticks can escape.”

Question 3: Don’t try to pull it off. Tell an adult who can remove it. Wash the area with soap and warm water after the tick has been removed.

Intermediate

1 - Place a checkmark on the line to show that you know some of the places that tick can be found.

- ▢ in the woods
- ▢ bushes
- ▢ under leaves
- ▢ in water
- ▢ in cut grass
- ▢ around rocks and wood where small animals live

2 - Place a checkmark on the line to show that you know ways to keep yourself safe from getting bitten by a tick.

- ▢ stay on paths and trails, the middle is best
- ▢ use insect repellent
- ▢ wear close-toed shoes
- ▢ stay inside
- ▢ wear long pants when hiking on a trail
- ▢ tuck your pants into your socks
- ▢ check your body once a day for ticks
- ▢ hang your outdoor clothes outside for 30 minutes before washing them so ticks can escape
- ▢ put outdoor clothing in the dryer for 60 minutes on high heat before washing them

3 - List 3 things you should do if you find a tick on your body.

- _____
- _____
- _____

4 - List 2 things you shouldn't do if you find a tick on your body.

- _____
- _____

Answers:

Question 1: Check all but “in water”.

Question 2: Check all but “Hang your outdoor clothes outside for 30 minutes before washing them so ticks can escape”.

Question 3: Don’t try to pull it off. Tell an adult who can remove it. Wash the area with soap and warm water after the tick has been removed.

Question 4: Do not grab, squeeze, or pop the tick around its swollen abdomen. Do not use a match, heat, or chemical products to try to remove a tick. Do not twist the tick when pulling it out.

SAFETY SHELTERS

Lesson Overview

During this lesson, students will learn about natural shelters that can be found or built to keep themselves safe from weather conditions or when waiting for help in the outdoors.

Overall and Specific Expectations

- A1: A2.4, A1.6
- B3: B3.1
- D1: Gr. 8 – D1.2
- D2: Gr. 3 – D2.2, Gr. 4 – D2.2, Gr. 8 – D2.2
- D3: Gr. 1 – D3.1, Gr. 6 – D3.2

Learning Goals

- I can behave responsibly and apply appropriate safety rules and procedures that maximize my safety and that of others during outdoor education activities.
- I can think critically to analyze situations, evaluate my choices and make safe decisions that maximize my safety and that of others during outdoor education activities.

Materials

- Student Resource: Exit Card (included at end of the lesson)
- Student Resource: Natural Shelters (*included at end of the lesson*)
- Teacher Resource: Natural Shelters (*included at end of the lesson*)

Ontario Physical Activity Safety Standards in Education

Activities

- **Outdoor Education (Backpacking/Hiking)**
- **Outdoor Education (Camping)**

Tools and Resources

- **First Aid Plan and First Aid Emergency Response**
- **Sample Curricular Medical Information and Acknowledgement of Elements of Risk Form**

Other

- **Risk Management**

Assessment for Learning

At the beginning of the lesson, work with students to co-create criteria for assessing knowledge and skills needed to apply safety rules and procedures during outdoor education activities. For example, success criteria might include:

- I can identify natural features that can be used as a safety shelter.
- I can use my critical thinking skills to take precautions before using or making a safety shelter.

After the activity, review the co-created criteria with students, and have them complete the Student Resource: Exit Card.

Assess students' responses during the class discussions and on the Student Resource: Exit Cards. Use the co-created criteria to evaluate student learning and offer feedback. If needed, provide feedback to individual students or the entire group, to clarify or reinforce their understanding of safety shelters, and answer any remaining questions.

Minds On

Primary/Junior/Intermediate:

Explain to students that planning ahead is key to safely enjoying outdoor education activities. This includes dressing in layers for the weather conditions and carrying extra clothes, food, and water for all types of weather conditions, and knowing where they are at all times. Sometimes, in spite of good planning, they may need to seek shelter.

Have students generate answers to the following question: "What kinds of situations might we encounter when enjoying outdoor education activities where we need to seek shelter?"

Possible Answers:

- We may be too hot so we need to get out of the sun.
- It may be windy so we need to take a break from the activity out of the wind.
- We may get caught in the rain so we need to find shelter from it.
- We may get lost and have to stay in one place until someone finds us.

Action

Primary/Junior/Intermediate:

Explain to students that shelters can be made of blankets, tarps or garbage bags but they can also be something built out of natural materials or something found in their surroundings. Learning how to build or find a natural shelter can help keep them safe until they are able to resume the

activity, until the weather gets better, or until help arrives. The first step is to know where to look for shelter and/or natural materials that can be used to build one.

Provide students with the Student Resource: Natural Shelters. Divide students into pairs or small groups to generate ideas about how natural landscape features or natural materials may be used as a shelter. Have students identify precautions that might need to be taken before using a natural shelter or building one. Invite students to share their ideas with the class.

Have students generate ideas about what they would think about when selecting a site and building a natural shelter.

Possible ideas:

- Stay away from tree roots in case of lightning.
- Don't set it up under any dead branches or trees.
- Set it up on a spot that is higher than the ground around it to avoid water getting into the shelter.
- Build the door facing southeast where the sun rises to allow the shelter to warm up first thing in the morning.
- Keep the shelter small and close to the ground so you don't lose body heat to the air around you.
- Test out the branches and logs to make sure they won't collapse on you.
- Make it thick and layered enough to keep out the wind and rain.
- Stuff cracks with grasses, leaves, moss and/or mud.

Consolidation

Primary/Junior/Intermediate:

Have students complete the Student Resource: Exit Card to identify natural features that can be used as safety shelters and safety precautions to take when choosing a shelter.

Consider planning a class hike where the class is divided into groups of four or five to practice locating natural shelter areas and/or building one.

Notes to Teachers

Remember to check school board policies and procedures applicable to any outdoor education activity.

A variety of assessment strategies have been identified in the Assessing for Learning section of each activity. Please note that these assessment strategies have been provided as a means for teachers to gather information to determine what students already know and can do, to inform

instruction, scaffold learning, differentiate instruction in response to their students' needs, and help students monitor their progress in achieving the learning goals. These are not meant to be used for formal assessment and evaluation purposes.

Student Resource: Natural Shelters

Natural Shelters

Brush or thickets

- How might they be used?
- What are some safety precautions you might take before using the shelter?

A bushy tree canopy

- How might it be used?
- What are some safety precautions you might take before using the shelter?

Fallen logs and trees

- How might they be used?
- What are some safety precautions you might take before using the shelter?

Hollows in trees

- How might they be used?
- What are some safety precautions you might take before using the shelter?

Rock formations/Rock overhangs

- How might they be used?
- What are some safety precautions you might take before using the shelter?

Caves

- How might they be used?
- What are some safety precautions you might take before using the shelter?

Valleys, ravines and depressions in the ground

- How might they be used?
- What are some safety precautions you might take before using the shelter?

Natural Materials for Shelters

Large branches

- How might they be used?
- What are some safety precautions you might take before using the shelter?

Leaves, grass

- How might they be used?
- What are some safety precautions you might take before using the shelter?

Pine needles

- How might they be used?
- What are some safety precautions you might take before using the shelter?

Teacher Resource: Natural Shelters

Natural Shelters

Brush or thickets

- How might they be used?
  - They blocks the rain, wind or provides shade.
- What are some safety precautions you might take before using the shelter?
  - Choose the side of the brush that is on the calm side (leeward) of the wind.

A bushy tree canopy

- How might it be used?
  - It blocks some heat from the sun and provides shade.
- What are some safety precautions you might take before using the shelter?
  - Check the area for poison ivy or other hazards that may be around if you have to leave the trail or go into a wooded area to find shade.
  - If there's lightning, find a shelter other than trees.

Fallen logs and trees

- How might they be used?
  - They can provide some protection from the wind and weather and a dry space to rest.
- What are some safety precautions you might take before using the shelter?
  - Make sure there isn’t any danger of them falling further down or moving.

Hollows in trees

- How might they be used?
  - They can provide some protection,
- What are some safety precautions you might take before using the shelter?
  - They are natural shelters for animals, so check them out before using them.

Rock formations/Rock overhangs

- How might they be used?
  - They can block the wind or provide some shade.
  - There can be enough room to lie down or be used as a natural wall to build a shelter with tarps.
- What are some safety precautions you might take before using the shelter?
  - Check the area carefully for loose overhead rocks to make sure they won't move.

Caves

- How might they be used?
  - They provide protection from all the elements.
- What are some safety precautions you might take before using the shelter?
  - Make sure there is enough air to breathe, that the cave is not inhabited by animals, and that there are no toxic animal droppings in the cave.

Valleys, ravines and depressions in the ground

- How might they be used?
  - Low areas can be less windy so they provide shelter from the wind.
- What are some safety precautions you might take before using the shelter?
  - Watch out for water and flooding.

Natural Materials for Shelters

Large branches

- How might they be used?
  - They can be used as a frame.
- What are some safety precautions you might take before using the shelter?
  - They need to be strong enough to support an adult's weight which is comparable to the weight of the shelter materials these branches need to support. They must not be rotten.

Leaves, grass

- How might they be used?
  - They can be used for insulating.
- What are some safety precautions you might take before using the shelter?
  - Make sure there are enough layers to keep heat in and provide protection from rain and wind.

Pine needles

- How might they be used?
  - They can be used as cushioning and insulation from the ground.
- What are some safety precautions you might take before using the shelter?
  - Layer enough needles to provide insulation from the cold ground.

The information within this Teacher Resource was extracted from:

- *9 Natural Shelters that will Save Your Life,* ***Outdoorlife****. (2021); and*
- *Basic Wilderness Survival Shelters,* ***ALDERLEAF Wilderness College****. (2021)*

Student Resource: Exit Card

Exit Card - Safety Shelters

Three natural landscape features I can try to find for shelter in case of emergency:

- _____
- _____
- _____

Two safety precautions I would take before choosing a natural shelter:

- _____
- _____

Additional Resources

ASSOCIATIONS

Canadian Association of Nordic Ski Instructors

The Canadian Association of Nordic Ski Instructors (CANSI) is a not-for-profit organization that promotes and advances the sports of cross country skiing and telemark in Canada. It is the national association for the training and certification of cross country and telemark ski instructors in Canada.

Canadian Red Cross

Canadian Red Cross offers a wide range of courses related to essential first aid and CPR.

Council of Outdoor Educators of Ontario

The Council of Outdoor Educators of Ontario (COEO) is a non-profit, volunteer-based organization that promotes safe, high-quality outdoor education experiences for people of all ages. It also acts as a professional organization for outdoor educators in the province of Ontario.

Hike Ontario

Hike Ontario has developed standards and training programs for trip leaders that are used by community colleges, universities, local hiking clubs, and outdoor training organizations for course delivery.

Lifesaving Society of Canada

The Lifesaving Society provides programs, products, and services developed to prevent the occurrence of drowning and water-related injury.

Ontario Physical Activity Safety Standards in Education

The Ontario Physical Activity Safety Standards in Education, managed by Ophea, represent the minimum standard for risk management practice for school boards in Ontario.

Ontario Recreational Canoeing and Kayaking Association

The Ontario Recreational Canoeing and Kayaking Association promotes accessibility of paddling experiences for everyone.

Ophea's Teaching Tools

Ophea's Teaching Tools has everything teachers need to enable children and youth to lead healthy active lives, including lesson plans, activities, and supplementary materials.

Outdoor Council of Canada

The **Outdoor Council of Canada (OCC)** is a nationally incorporated, non-profit, member-owned organization. The OCC was founded to encourage, promote, and facilitate safety-oriented outdoor education and recreational programs as well as leadership opportunities that are accessible to every Canadian.

Paddle Canada

Paddle Canada sets national standards for instruction and certification for recreational paddle sports including canoe, kayak, and paddle board. Paddle Canada certifications are nationally accredited and internationally recognized.

OTHER RESOURCES

Indigenous Land-Based Learning

The **Indigenous Land-Based Learning** resource includes the journey of four writers whose perspectives of Indigenous land based-learning grew through a process of self-reflection, an interview with an Indigenous advisor (knowledge holder), and exploration and summary of relevant resources and tips for educators.

Indigenous Land-Based Education

The **Indigenous Land-Based Education** resource contains links to materials focusing on Land-based and environmental education that may be accessed by educators and/or used with students to deepen their understanding of Indigenous traditional pedagogy and relationship to the Land, and to implement Land-based education in their classrooms.

Take Me Outside

Take Me Outside is a non-profit organization operating across Canada. The goal of the organization is to encourage children and youth to spend more time outside through various projects and initiatives. Site resources include ready-to-go activities, a database to search for additional resources, and an annual Take Me Outside Learning Challenge.

Suzuki Superhero Challenge and Other Learning Resources

The **David Suzuki Foundation** website includes free educational guides to support educators to take their students outside and the **Suzuki Superhero Challenge**. This challenge helps students learn about environmental issues and make a “superhero” difference. It includes fun, free outdoor activities with step-by-step instructions.

Into Nature Guide: A Guide to Teaching In Nearby Nature, by the Back To Nature Network

The Back to Nature Network consists of a coalition of organizations and agencies working to

connect children and families with nature, envisioning a world where all children have access to nature within walking distance of their homes, and regular opportunities to spend meaningful time in it. The **Into Nature Guide** guide supports teachers in using nature as a regular component of teaching. The guide includes why and how to use nature as both a teaching environment and a teaching tool; and learning experiences for direct use in teaching outside with nature.

Peel District School Board Learning Naturally

Learning Naturally: Connecting your (Virtual) Classroom to the Outdoors is a free webinar for educators to learn about how to connect a virtual classroom to the outdoors.

Gould Lake Outdoor Centre

The **Gould Lake Outdoor Centre** is a year-round facility where individuals can experience outdoor and experiential education in a positive learning environment facilitated by skilled, knowledgeable, and personable leadership. This site includes resources for teachers to engage students in outdoor education activities that can be done in school or at home.

Earth School

Earth School includes links to 30 free Quests for students to celebrate, explore and connect with nature and care for the earth.

Learning for a Sustainable Future

Learning for a Sustainable Future is a non-profit Canadian organization that was created to integrate sustainability education into Canada's education system. This site includes a collection of activities to support learning through outdoor activities.

Toronto Zoo

The **Toronto Zoo** website includes fun activities, lesson plans and worksheets to support students' understanding and making connections to wildlife and wild spaces.