Curious by Nature

Teacher Guide

Environment and Climate Change Canada
Environnement et Changement climatique Canada

Canada

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Why Nature?

No matter our age, no matter where we live, nature matters. And, though we know we *should* care about nature, many of us aren't sure why—or even how—to care.

But in a polarized world of complex problems, we need to find common ground—now more than ever. *This* is where nature comes in.

Whether it's a fox in the woods, a busy beaver in the city, or simply a beautiful sunset, nature offers daily moments we often overlook. Yet, when we pause and notice, we realize nature's beauty is the *one* thing we can all agree on. While the environment can divide, nature unites us—it's our shared humanity.

Appreciating nature helps us understand our place in a vast, interconnected system. After all, biodiversity sustains life: it provides oxygen, it filters our water, it gives us food and medicine, it cleans our pollution, it decomposes our waste, and it regulates our climate.

More than that though, nature allows us to find a common starting point for learning. *And nature can teach us*.

Its stories—like a beaver saving a neighbourhood or a fox caring for her family—reflect our own lives, spark wonder, and help us see that everything serves a purpose, *including us*.

When we value all life—when we value our own contributions—we think more critically and act more creatively, creating a better world in the process.

This is why nature matters—and why experiencing nature together matters even more. Today, and every day.

Why Nature Education?

Nature education is more than learning the names of trees or ecosystems. It helps students rediscover their place in the world by connecting classroom learning with real outdoor experiences.

Nature Learning Offers

Curiosity and creativity
- Exploring nature sparks science questions, poems, and math problems inspired by real-world patterns.

Well-being
- Time outdoors reduces stress, improves focus, and supports mental health—skills every learner needs to thrive.

Empathy and responsibility
- Seeing nature first-hand teaches how biodiversity supports clean air, fresh water, healthy food, and a stable climate.

Reconciliation and inclusion
- Indigenous Knowledge and land-based stories foster respect, reciprocity, and connection across cultures and generations.

Essential skills for changing times
- Nature education builds critical thinking, collaboration, adaptability, and hope.

Nature learning is hands-on and dynamic, showing students that learning goes beyond classroom walls. It helps them see that nature is the context of human life—and that we are not separate from it.

When students realize for themselves that nature is valuable, that's when learning becomes lasting. After all, once we understand *why* nature matters, we begin to understand why *we* matter, too.

The Guides

The Curious by Nature guides help students explore and understand biodiversity—whether in city parks or natural spaces. These hands-on guides foster curiosity and critical thinking through interactive, place-based learning.

Rather than memorizing facts, the guides encourage students to discover the value of nature for themselves, and to develop a sense of belonging.

This teacher guide supports educators in using the activity guides with their students. It includes:

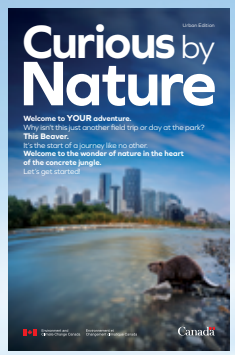
- Simple, ready-to-use activities for students to observe and reflect on their local environment.
- Cross-curricular links to subjects like geography, art, creative writing, and science.
- Discussion prompts and reflection questions for deeper understanding and personal connection to place.

This guide connects to the naturelabs.ca/curious-by-nature platform offering:

- Video stories that build on the Curious by Nature guides, expanded activities, and resources.
- Interactive maps, resources, and toolkits.
- Opportunities to share observations and compare data across regions.

Together, the Curious by Nature guides and online resources empower students to see that nature thrives everywhere—and inspires them to play a role in caring for it.

Nature Edition



Urban Edition

Safety and Outdoor Etiquette

Exploring nature—whether in a city park or a natural space—is a rewarding and memorable experience. To ensure activities associated with the Curious by Nature guides are safe and respectful, keep these key guidelines in mind:

1. Safety First

Set clear boundaries
- Define where students can and cannot go before heading outside. Assign small group areas and establish meeting points.

Dress for the weather
- Encourage students to wear suitable clothing, footwear, and protection (hats, sunscreen, insect repellent) for the weather conditions.

Stay aware of surroundings
- Remind students to watch where they step, avoid uneven ground, and stay clear of water edges unless supervised.

No touching animals
- Students should observe animals and insects without handling them to ensure everyone's safety.

No touching plants
- Students should not go around touching plants (and mushrooms) without knowing if they might irritate their skin.

Bring the First Aid kit
- Cuts and bruises can happen. Also, be mindful of pollen, insects, or plants that may cause allergic reactions.

2. Respect for Nature

Look, don't take – Encourage students to collect observations through notes, drawings, or photos—rather than removing natural items.

Leave no trace – Remind students to pack out all belongings and litter, returning the space as they found it.

Be gentle – If students lift rocks, logs, or leaves to look underneath, they should carefully return them to their original position.

Practice quiet observation – Promote calm, mindful listening to help students notice subtle sounds and reduce disturbance to wildlife.

Don't harass wildlife – Ensure students don't approach wild animals, and never feed, chase, or generally harass wildlife for their safety and that of the students.

3. Respect for Others

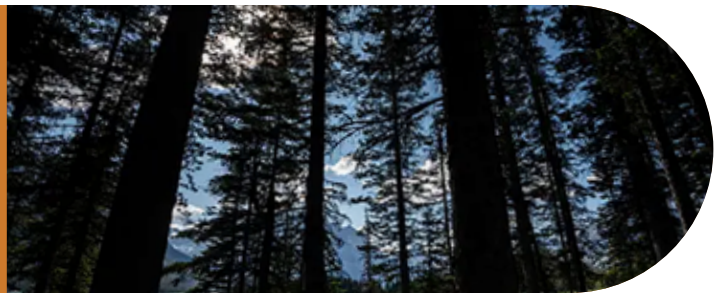
Share spaces respectfully – Curious by Nature activities may take place in shared parks or community areas. Teach students to be courteous to others using the space.

Practice teamwork – Emphasize collaboration, listening, and patience within groups.

Reflect together – End each outdoor session with a short discussion on what students discovered and how they demonstrated respect for their environment.

By following these simple guidelines, teachers can create a safe, positive, and respectful atmosphere for outdoor learning that helps students realize they are stewards of our natural environment.

Selecting a Natural Space for Exploration



Learning Objectives

This activity helps students connect to their local environment by identifying and voting on a location to use the Curious by Nature guide. It encourages curiosity, teamwork, and decision-making while reinforcing the idea that learning can happen anywhere.

Curriculum Connections

- **Science:**
  - Life systems, habitats and communities, ecosystems, interrelationships, landforms, soils, organisms, scientific inquiry, observation, sustainability and stewardship
- **Social Studies/Geography:**
  - Mapping, spatial awareness, human-environment interactions, Indigenous perspectives, land use, community and identity
- **Language Arts:**
  - Oral communication, writing and reflection, media literacy

Materials

- Local maps (digital or printed)
- Chart paper or whiteboard
- Markers or sticky notes
- Photos or online images of local parks, natural areas, or schoolyard spaces

Instructions

1. Brainstorm

- Begin by asking:
  - *What kinds of natural places exist around us?*
  - *Where do you like to explore outside?*
  - *What makes a good place for observing nature?*
- Have students brainstorm a list of possible nearby locations. Examples could include a local park, a pond, a ravine, or a community trail.
- Record all ideas on the board or on chart paper.

2. Map It Out

- _ Show a local map and pinpoint the brainstormed areas. Discuss:
  - *How far away are these places?*
  - *Can we walk there safely? (Or organize a field trip to the location?)*
  - *What might we find there (trees, water, insects, birds, rocks)?*
- _ Students can help label the map with drawings or sticky notes showing their predictions.

3. Compare and Choose

- _ As a class, talk about what makes an area a good choice for a Curious by Nature activity. Discuss:
  - Accessibility and safety (Is it close? Are there clear paths?)
  - Variety of natural features (trees, water, rocks, open space)
  - Opportunities to observe plants, animals, and non-living features
- _ Have each group of students pick their top two choices and explain why. Then, hold a class vote to decide where to go!

4. Reflect

- _ After choosing the location, ask:
  - *What are we most excited to explore there?*
  - *What do we expect to find?*
  - *Why is this place important to our community or region?*

Extensions

- _ Students draw a map of their chosen place, showing where they might look for natural features or wildlife.
- _ Students research the history or Indigenous significance of the chosen area and share what they learned before the visit.

Curious by Nature Lesson Plans

Use these lessons to build on Curious by Nature activities and field explorations for deeper learning.

Exploring Nature Like an Animal

Duration: 60-90 minutes
Subjects: Science, Language Arts, Visual Arts

Learning Objectives

By the end of this lesson, students will be able to:

- Use their senses to make careful observations in nature.
- Identify natural features that could be part of an animal's habitat.
- Describe how animals use their senses to survive.
- Communicate their observations through drawings, notes, or stories.

Curriculum Connections

- **Science:**
  - Understanding Living Things: Needs of living things, habitats, and interdependence
  - Inquiry and Observation Skills: Using senses to gather information from the environment
- **Language Arts:**
  - Oral Communication: Sharing ideas and listening to others' observations
  - Writing: Descriptive language and journaling about sensory experiences
- **Visual Arts:**
  - Drawing and visual representation of natural elements and animal homes

Materials

- _ Clipboards or journals with pencils
- _ Optional: small bags or containers for natural items (leaves, stones, twigs)
- _ Sensory prompts handout (sight, sound, touch, smell)
- _ Chart paper or whiteboard for group sharing

Terms

- _ **Habitat:** The place where an animal lives and finds what it needs.
- _ **Senses:** Sight, sound, touch, smell, and taste—how animals (and humans) explore the world.
- _ **Observation:** Carefully noticing details about what you see, hear, and feel.

Instructions

1. Introduction

- _ Show a picture of your Curious by Nature animal and ask: What do you think it needs to live?
- _ Explain that an animal's home (its habitat) has everything it needs—food, water, shelter, and space.
- _ Introduce the home metaphor:
  - **Four Walls:** a cozy space (home)
  - **Roof:** trees or cover overhead
  - **Kitchen:** where it finds food
  - **Living Room:** space to play or rest
  - **Bathroom:** water sources
  - **Garden:** plants and ground cover
  - **Entertainment:** natural sounds
- _ Talk about how animals use their senses to find these things.

2. Outdoor Exploration

- _ Go outside to a nearby park, schoolyard, or natural area, using your guide.
- _ Give each student sensory prompts.
- _ Encourage them to use all their senses (except taste!) to explore:
  - *What do you see that could be part of an animal's home?*
  - *What do you hear? Birds, rustling leaves, wind?*
  - *What can you feel? Rough bark, smooth stones, soft moss?*
  - *What do you smell? Pine needles, flowers, earth?*
- _ Students sketch, write, or collect small items that represent parts of your animal's habitat.

3. Group Sharing

- _ Gather the group in a circle.
- _ Invite students to share one sensory discovery.
- _ On chart paper, record what students noticed under categories like sight, sound, smell, and touch.
- _ Discuss:
  - *Which of these things do you think your animal would find helpful in its home?*
  - *Why are senses important for animals? For us?*

4. Reflection

- _ Ask: *What's one new thing you learned about nature today?*
- _ Encourage students to continue using their senses—listen for bird songs, notice animal tracks, or explore their backyard as nature detectives.

Extension

- _ **Language Arts:**
  - Write a short story, a song, or a poem from the point of view of an animal exploring its home.
- _ **Visual Arts:**
  - Create a habitat collage using natural items or recycled materials.
- _ **Science:**
  - Compare your animal's habitat needs with another local animal (e.g. squirrel, hare).
- _ **Homework:**
  - Family Sensory Walk: Take a short nature walk near home and fill in a "What Did We Notice?" chart together.

Staying Safe and Respectful in Nature

Duration: 45-60 minutes
Subjects: Science, Health and Physical Education, Social Studies

Learning Objectives

By the end of this lesson, students will be able to:

- Identify basic safety rules for outdoor learning.
- Demonstrate respectful behaviour toward nature and others.
- Recognize potential hazards (plants, insects, terrain) and know how to respond safely.
- Understand the importance of preparation for outdoor activities.

Curriculum Connections

- **Science:**
  - Habitats and Communities: Understanding how to respect and protect living things in the environment
- **Health and Physical Education:**
  - Personal Safety and Injury Prevention: Understanding safe behaviours in outdoor environments
- **Social Studies / Citizenship:**
  - Responsible citizenship and care for shared spaces
  - Working respectfully with others during group activities

Materials

- Permission slips and emergency contact forms
- First aid kit and sunscreen
- Cell phone or communication device
- Visual aids or slides: poisonous plants (poison ivy, giant hogweed), local insects (ticks, wasps, mosquitoes)
- Chart paper for class safety rules

Terms

- **Etiquette:** Showing good manners and respect in shared spaces.
- **Leave No Trace:** Leaving the natural space in the same (or better) shape than you found it.
- **Hazard:** Something that can cause harm (e.g. sharp rocks, poison ivy, or ticks).

Instructions

1. Introduction

- Begin by asking: *What makes learning outdoors fun? What could make it unsafe?*
- Explain that just like scientists, we prepare before going into nature.
- Introduce the day's focus of staying safe and being respectful so everyone can enjoy the experience.

2. Pre-Trip Preparation

- Share where the class will go and what they'll be doing (forest walk, pond study, nature sketching, etc.).
- Review clothing: closed shoes, hats, weather-appropriate layers.
- Discuss medical or allergy needs (handled privately with teacher).
- Practice packing for a safe trip: water, snack, sunscreen, and curiosity!

3. Nature Safety Rules

- Create a safety rules chart together.
  - Stay with your buddy and within sight, of an adult.
  - Walk carefully on trails; avoid edges or steep areas.
  - Don't pick or touch unknown plants or insects.
  - Look, don't touch. Use your eyes and tools to explore.
  - Drink water and rest if you feel tired or too warm.
- Show visuals of poison ivy, and discuss ticks and insect awareness.
  - Explain that some plants and animals have defenses (like poison ivy's oils or an insect's bite) to protect themselves from predators. This is not because they're bad. We just happen to react to those defenses, too!
  - Emphasize that all species play an important role in the ecosystem. For example, milkweed's sticky sap can irritate skin, but it's also vital for monarch butterflies, showing why respect, not removal, helps keep nature in balance.
- Have students brainstorm how to spot hazards and what to do (e.g. tell an adult).

4. Respect for Nature and Others

_ Discuss the Leave No Trace principle in kid-friendly terms:
  - *Take only memories and photos; leave rocks, flowers, and sticks behind.*
  - *Stay on marked trails because they lower the impact of humans on nature and help keep wildlife and their habitat safe.*
  - *Respect animals' homes and observe quietly without touching.*
  - *Keep noise low to let everyone hear nature's sounds.*
_ Role-play quick scenarios:
  - *What to do if you see a wild animal?*
  - *What if someone drops garbage?*
  - *How to share trails respectfully with other visitors?*

5. Emergency Preparedness

_ Review who to tell if there's a problem (teacher or chaperone).
_ Explain the importance of staying calm and listening to adults during any emergency.
_ Show the buddy system signal (e.g. holding up a hand or calling "Buddy Check!" for quick head counts).

6. Wrap-Up

_ Ask: *What's one way you can help make our trip safe and enjoyable?*

Extensions

_ **Language Arts:** Write a short safety poster or persuasive paragraph about why it's important to respect nature.
_ **Art:** Create illustrated nature safety posters to display before the trip.
_ **Science:** Research one local plant or animal that should be protected and share how to do so safely.
_ **Social Studies:** Connect to discussions about shared community spaces and environmental stewardship.

What Makes a Home?

Duration: 45-60 minutes
Subjects: Science, Language Arts, Visual Arts

Learning Objectives

By the end of this lesson, students will be able to:

- Identify the basic needs that make a home for both humans and animals.
- Describe how animal homes meet these needs (shelter, safety, warmth, food, and water).
- Compare and contrast human and animal homes.
- Express their understanding through drawings and simple explanations.

Curriculum Connections

- **Science:**
  - Needs and Characteristics of Living Things: Understanding what living things need to survive
  - Habitats and Communities: Exploring how animals adapt their homes to meet their needs
- **Language Arts:**
  - Oral Communication: Sharing ideas and describing features of homes
  - Writing and Reading: Using descriptive words to label and explain drawings
- **Visual Arts:**
  - Creating and Presenting: Drawing and representing ideas through art

Materials

- Drawing paper and crayons or markers
- Photos or short videos of animal homes (e.g. bird nests, beaver lodges, rabbit burrows, fox dens, ant hills)
- Whiteboard or chart paper for brainstorming

Terms

- **Shelter:** A place that provides protection.
- **Habitat:** The natural home of an animal.
- **Adaptation:** A change in behaviour, structure, or function that helps a living organism survive.

Instructions

1. Introduction and Discussion

_ Begin by asking: *What do you need in your home to live comfortably*?
  - List ideas like bed, food, water, roof, family, warmth, safety
_ Explain that all living things—people and animals—need homes to meet their basic needs.

2. Exploring Animal Homes

_ Show pictures or short videos of different animal homes:
  - **Beaver lodge:** built for warmth and safety.
  - **Bird nest:** safe place to lay eggs.
  - **Rabbit burrow:** hidden shelter underground.
  - **Bee hive:** a place for work, food storage, and protection.
_ Discuss how each home helps animals stay safe and meet their needs.
_ Ask: *What's the same about our homes and theirs? What's different?*

3. Brainstorming Chart

_ On chart paper, draw two columns:
  - My Home Needs | Animal Home Needs
_ As a class, fill in ideas together:
  - Warmth, safety, protection, food, water, space for family
_ Circle the similarities between the two columns to show connection.

4. Drawing Activity

_ Give students paper and drawing tools.
_ Ask them to draw two homes on the same page:
  - One showing their own home (or what they imagine as home)
  - One showing an animal home of their choice
_ Have them label important parts of each home (door, bed, nest, water area, etc.).
_ Encourage creativity—the animal home could be realistic or imaginary.

5. Sharing and Reflection

_ Invite students to share their drawings in small groups or with the class.
_ Ask guiding questions:
  - *How is your home like the animal's home?*
  - *What makes both homes special or safe?*
_ Reinforce the idea that all living things need homes that keep them safe and comfortable.

Extensions

- **Language Arts:** Write a few sentences or a short story about "If I were an animal, my home would be…"
- **Science:** Explore how seasons affect animal homes (e.g. hibernation, migration, rebuilding nests).
- **Art:** Build a 3D model of an animal home using recycled materials or natural items.
- **Social Studies:** Compare different types of human homes (apartments, cabins, houseboats) and discuss how people adapt to their environments too.

Respecting Indigenous Territory and Knowledge

Duration: 60 minutes
Subjects: Social Studies, Science, Language Arts

Learning Objectives

By the end of this lesson, students will be able to:

- Recognize that the land where they live and learn is part of the traditional territory of Indigenous Peoples.
- Explain why it's important to respect Indigenous Knowledge and stewardship of local ecosystems.
- Demonstrate listening, observation, and reflection as ways of learning from the land and its original caretakers.
- Identify simple actions to show respect for Indigenous Knowledge and conservation efforts.

Curriculum Connections

- **Social Studies:**
  - Indigenous Peoples and communities in Canada, past and present
  - Understanding relationships to land and environment
- **Science:**
  - Habitats and Communities: Interconnections among living things and ecosystems
  - Inquiry and Observation: Learning from nature and diverse knowledge systems
- **Language Arts:**
  - Listening and Reflecting: Understanding oral traditions and storytelling
  - Writing and Journaling: Expressing respect, gratitude, and personal reflection

Materials

- Map showing local Indigenous territories
- Books, videos, or recorded teachings from Indigenous Knowledge Keepers or educators
- Journals, clipboards, or worksheets for student reflection
- Optional: Visit **Native Land Digital**, which is an AI that helps people reflect on their personal connection to the land, going beyond a land acknowledgement to explore what the place means to you
- Optional: Guest speaker from a local Indigenous nation or community organization

Terms

- **Territory:** The land and waters that are cared for by Indigenous Peoples.
- **Stewardship:** Taking care of the land, water, and all living things.
- **Knowledge Keeper:** An Indigenous person who carries cultural teachings and traditional knowledge.
- **Land Acknowledgement:** A way to recognize the original caretakers of the land we are on.

Instructions

1. Introduction

- Begin by saying: *Every place we visit, even our schoolyard, has a history. Long before we were here, Indigenous Peoples lived on and cared for this land.*
- Show a map of Indigenous territories and locate your school or trip destination.
- Name the nations, peoples, or communities connected to that territory.
- Discuss why it's important to acknowledge and thank those who have cared for the land for generations.

2. Discussion: Respect and Stewardship

- Ask:
  - *What does it mean to take care of a place?*
  - *How do you think Indigenous Peoples show respect for the land?*
- Explain that Indigenous Knowledge includes careful observation, respect for all living things, and balance within ecosystems.
- Link to science learning: Many Indigenous teachings help scientists today understand how everything in nature is connected.
- Introduce the Indigenous Guardians Program and how these community-led initiatives protect ecosystems and sustain Indigenous ways of life. Use the map to explore individual projects happening nearby.

3. Activity: Discovering Our Place

- Take students outside using the Curious By Nature guides (schoolyard, park, or field trip site).
- Have them use their senses and journals to quietly observe:
  - *What sounds do you hear?*
  - *What plants, animals, or water sources can you see?*
  - *How does being quiet and still help you notice more?*
- Encourage students to think: *If this land could speak, what stories would it tell?*
- Emphasize respect—no picking plants or disturbing animals, just observing and listening.

4. Learning from Indigenous Voices

- Share a story, teaching, or video from a local Indigenous Knowledge keeper, elder, or community resource.
  - Example topics: The importance of balance, respect for animals, or seasonal changes
- Before listening, remind students that stories are a gift. They are meant to be listened to with care and gratitude.
- Afterward, discuss what message or feeling stood out to them.

5. Reflection

- Back in class or at the end of the trip, invite students to write or draw in their journals:
  - *What did I learn about this land today?*
  - *How can I be a respectful visitor?*

Extensions

- **Language Arts:** Write a thank-you letter or poem to the land.
- **Social Studies:** Create a classroom territory map showing Indigenous nations across your region or province.
- **Science:** Explore Traditional Ecological Knowledge (TEK)—for example, traditional fire management, seasonal cycles, or sustainable harvesting.
- **Art:** Have students illustrate "The Story of This Land" using natural colours or symbols inspired by local ecosystems.

BioBlitz—Discovering Biodiversity

Duration: 60-90 minutes
Subjects: Science, Language Arts, Visual Arts, Technology

Learning Objectives

By the end of this lesson, students will be able to:

- Identify and describe different species within a local ecosystem.
- Recognize how plants, animals, and fungi form an interconnected community.
- Record and share biodiversity observations using tools like iNaturalist or nature journals.
- Explain how biodiversity supports a healthy environment.

Curriculum Connections

- **Science:**
  - Habitats and Communities: Interdependence of living things and their environments
  - Understanding Life Systems: Observing and classifying organisms
  - Scientific Inquiry Skills: Making detailed observations, recording, and interpreting data
- **Language Arts:**
  - Oral Communication: Sharing discoveries and reflections
  - Writing: Descriptive notes and journal reflections on species and roles
- **Visual Arts:**
  - Drawing and diagramming natural features and organisms
- **Technology:**
  - Using digital tools (like iNaturalist) to record and identify species responsibly

Materials

- Scavenger Hunt Checklist (provided below)
- Student BioBlitz journals or clipboards with paper
- Pencils or markers
- Identification tools: local field guides, class tablets, or phones with iNaturalist app
- Optional: binoculars or magnifying glasses
- Chart paper for group reflection

Terms

- **Biodiversity:** The variety of living organisms in an ecosystem.
- **Ecosystem:** A community of plants and animals working together with their environment.
- **Habitat:** The place where an organism lives and has its needs met.
- **Interdependence:** The way living organisms rely on each other to survive.
- **Observation:** Using your senses and tools to carefully study nature.

Instructions

1. Introduction

- Begin with a short discussion: An animal's home is part of a whole community of living things.
- Ask: *Who might live near the animal featured in our guide?* (Students might name hares, birds, insects, trees, or even people.)
- Explain that today they'll be citizen scientists conducting a BioBlitz, which is a fun challenge to find and record as many living organisms as possible in a given area. Note that citizen science also helps scientists by contributing to a national database of observations.
- Review safety and respect guidelines: Stay with a buddy, don't touch animals or plants, and take photos or draw instead of collecting.

2. Outdoor Exploration—BioBlitz Scavenger Hunt

- Head outside to a nearby green space or park, using the Curious by Nature guides.
- Give each student a Scavenger Hunt Checklist or blank journal.
- Encourage students to look for signs of life using all senses—sight, sound, smell, and touch (when safe).
- Optional: Use iNaturalist to photograph and identify species. The Merlin app can help you identify bird songs. Use NatureCounts to learn about every bird in Canada.
- Ask guiding questions:
  - *What role might this plant or animal play in this community?*
  - *Is this something our animal might eat, hide under, or share space with?*
- Remind students to document findings in their BioBlitz journal (see template below).

3. Sharing and Reflection

- Back in class (or gathered outside), invite students to share one or two favourite discoveries.
- On chart paper, create a food web which connects species with arrows showing who eats or depends on whom (e.g. bee, flower, berry bush, hare, fox).
- Discuss:
  - *What surprised you about what you found?*
  - *Why do you think biodiversity is important?*
- Emphasize that like any community, natural communities depend on many living things working together.
- Explain that conservation efforts are everyone's responsibility.
- Highlight how conservation efforts work to protect all elements of the community.
- Share examples of protected and conserved areas nationally, provincially, and within their municipality so students can explore the natural communities being protected there.
  - National Wildlife Areas (federally protected areas) prioritize the protection of habitats for migratory birds and species of national importance, including species at risk. They are created and managed for the purpose of wildlife conservation, research, and interpretation. Some locations are open to the public for people to experience and connect with nature. Each NWA is unique and only activities that minimize human impacts are allowed.

4. Reflection

- Reflect as a class: *What could we do to help support biodiversity where we live?*
- Ideas might include:
  - Planting native flowers
  - Protecting local habitats
  - Sharing observations on iNaturalist, Schoolyard Bird Blitz or Backyard BioBlitz to help scientists and their projects

Extensions

- **Science:** Create a food web mural showing relationships among local species.
- **Language Arts:** Write a short story from the perspective of one community member.
- **Technology:** Continue using iNaturalist over time to build a class biodiversity map of the schoolyard.
- **Art:** Turn sketches into a field guide, with student illustrations and captions.
- **Math:** Graph or tally the number of plant vs. animal species found, and discuss patterns.

BioBlitz Scavenger Hunt Checklist

Animals:

Snowshoe hare or rabbit
Songbirds (e.g. chickadees, sparrows)
Wild bees or pollinators
Coyote or fox tracks
Beaver lodge or gnawed trees
Mice or small rodents
Woodpecker holes or drumming sounds
Reptiles, like lizards, turtles or snakes
Frogs or toads
Fish, big or small
Worms, snails, slugs
Ant hills, spider webs, wasp nests

Plants & Trees:

Local trees (e.g. red maple, yellow birch)
Wildflowers (e.g. goldenrod, asters)
Berry bushes (blueberry, raspberry)
Grass species
Ferns

Signs of Life:

Animal tracks in soil or snow
Feathers or fur
Nests, burrows, or dens
Insect activity (bees, ants, caterpillars)
Mushrooms
Lichen near trees

BioBlitz Journal Template

What I Found	Where I Found It	What It Does in This Community (food, shelter, pollinator, etc.)	Drawing or Notes

Exploring Watersheds and Abiotic Factors

Duration: 60-75 minutes
Subjects: Science, Geography, Math, Language Arts

Learning Objectives

By the end of this lesson, students will be able to:

- Define what a watershed is and explain how water connects different habitats.
- Identify key abiotic (non-living) factors that influence life in aquatic and surrounding ecosystems.
- Collect and record simple environmental data (e.g. temperature, sunlight, soil moisture).
- Explain how abiotic and biotic factors interact to shape ecosystems.

Curriculum Connections

- **Science:**
  - Understanding ecosystems and interactions between living and non-living components
  - Investigating local environments and the impact of natural processes
- **Geography / Social Studies:**
  - Explore how water systems connect communities and habitats
  - Develop map-reading and spatial awareness skills
- **Math:**
  - Measuring and recording environmental data
  - Creating simple graphs or tables to represent data
- **Language Arts:**
  - Recording observations in journals
  - Communicating findings and reflections clearly

Materials

- Regional or local watershed maps (printed or digital)
- Clipboards, pencils, and data collection sheets
- Thermometers, soil moisture meters, and light meters (optional, can be estimated visually)
- Clear plastic cups or containers for collecting small water samples
- Chart paper and markers for class discussion
- Nature journals or blank paper for diagram creation

Terms

- **Watershed:** An area of land where all the water drains into a shared body of water, such as a river, a lake, or an ocean.
- **Abiotic Factors:** The non-living components of an ecosystem (e.g. sunlight, water, soil, temperature).
- **Biotic Factors:** The living components of an ecosystem (plants, animals, fungi, bacteria).
- **Water Cycle:** The continuous movement of water through evaporation, condensation, precipitation, and runoff.

Instructions

1. Introduction

- Begin with a discussion: *Where does the water in our rivers, lakes, and ponds come from?*
- Explain that a watershed is like nature's neighbourhood—every drop of rain eventually flows downhill, connecting all living things.
- Show a local watershed map. Have students trace where their nearest creek, stream, or river flows.
- Introduce abiotic factors such as sunlight, soil, water, air, and temperature, as the foundation for all life.

2. Outdoor Exploration

- Visit a nearby natural area or schoolyard with access to soil, plants, and (if possible) a small body of water, using the Curious by Nature guides.
- Divide students into small groups. Give each a data collection sheet with categories such as:
  - Air temperature
  - Soil moisture (dry, damp, wet)
  - Sunlight level (full sun, partial, shade)
  - Water clarity (clear, murky, muddy)
  - Notes on nearby plants or animals
- Encourage observations: *Where does the water go after it rains? Which plants grow closest to the water?*

3. Data Sharing and Discussion

- _ Back in class, have each group share their findings. Record data on chart paper.
- _ Discuss patterns:
  - *Where was it warmest or wettest?*
  - *Which areas had the most plant life?*
  - *How do abiotic factors affect who lives where?*
- _ Relate findings to the wildlife range maps—how do animals rely on healthy watersheds for prey and habitat diversity?

4. Reflection

- _ Students create a simple watershed diagram showing hills, rivers, soil, plants, and animals.
- _ Include arrows to show water flow and labels for at least three abiotic factors.
- _ Ask students how humans might affect a watershed and have them consider examples such as pollution, dams, draining wetlands, or the impacts of climate change.

Extensions

- _ **Math:** Graph average soil moisture or temperature readings from different locations.
- _ **Language Arts:** Write a story or poem from the perspective of a raindrop or river stone.
- _ **Art:** Create 3D watershed models using recycled materials.
- _ **Social Studies / Citizenship:** Research how local communities care for their watersheds or reduce pollution.
- _ **Technology:** Use iNaturalist or Google Earth to explore connected water systems across your region.

Teaching Resilience Through Nature

Duration: 60 minutes
Subjects: Science, Language Arts, Social-Emotional Learning (SEL), Visual Arts

Learning Objectives

By the end of this lesson, students will be able to:

- Define resilience and explain how it appears in both nature and human life.
- Identify examples of natural resilience and recovery in local environments.
- Observe and record evidence of adaptation in plants, animals, and ecosystems.
- Reflect on how humans can support resilience in nature and in their communities.

Curriculum Connections

- **Science:**
  - Understand how living things adapt to their environments and respond to change
  - Explore interactions and interdependence in ecosystems
- **Language Arts:**
  - Use descriptive language and reflection to express ideas and observations
  - Listen actively and communicate thoughts during group discussions
- **Social-Emotional Learning (SEL):**
  - Build awareness of personal and environmental resilience
  - Develop empathy and optimism through real-world nature examples
- **Visual Arts:**
  - Use drawing or creative expression to represent ideas about strength and recovery in nature

Materials

- Nature journals, clipboards, or printed worksheets
- Pencils, crayons, or markers
- Photos, maps, or short articles about local species or ecosystem recovery stories (e.g. beaver reintroduction, forest regrowth after fire, salmon restoration)
- Optional: Guest story or video highlighting local conservation success

Terms

- **Resilience:** The ability to recover, adapt, or grow stronger after facing challenges.
- **Adaptation:** A change in behaviour, structure, or function that helps a living organism survive.
- **Ecosystem:** A community of living and non-living things that depend on each other.
- **Recovery:** The process of healing or returning to a healthy state.

Instructions

1. Introduction

- Begin with a class discussion:
  - *What does resilience mean?*
  - *Can you think of times when you or someone you know showed resilience?*
- Introduce the idea that nature also shows resilience through animals, plants, and ecosystems that adapt and recover after change.
- Share examples of resilient species like:
  - The red fox adapting to live in cities and forests
  - Beavers creating new wetlands after disruption
  - Wildflowers that regrow after fires or floods
- Use a local or regional comeback story (e.g. salmon returning to restored streams, forest regeneration after fire) to make it relatable.

2. Outdoor Exploration

- Take students outdoors to observe signs of resilience in nearby nature.
  - Look for plants growing through cracks, trees with healed scars, animal nests rebuilt after storms, or evidence of regrowth
  - Encourage all senses: what can they see, hear, smell, or feel that shows renewal?
- Students record or sketch what they find in their journals, noting:
  - What they observed
  - How it shows resilience or adaptation
  - How it made them feel (hopeful, curious, inspired, etc.)

3. Reflection

- _ Back in the classroom, invite students to share one example of resilience they found.
- _ Record their examples on chart paper under headings like plants, animals, and ecosystems.
- _ Discuss:
  - *What helps nature recover?*
  - *How can humans help nature be more resilient?*
  - *What can we learn from nature's resilience in our own lives?*

4. Creative Wrap-Up

- _ Students create a drawing or short reflection:
  - Draw an example of resilience they observed (a regrowing plant, animal habitat, etc.)
  - Write one sentence about what resilience means to them
- _ Optional: Display artwork or reflections on a class "Wall of Resilience."

Extensions

- _ **Science:** Research how climate change affects the ability of species to adapt and survive.
- _ **Language Arts:** Write a story or poem.
- _ **Social Studies:** Explore community examples of environmental restoration projects (wetland cleanup, reforestation).
- _ **SEL:** Connect to personal growth. Journal about a time they overcame a challenge, inspired by nature's example.
- _ **Art:** Create a mural showing how nature and people recover together.

Learning Suggestions and Questions for Reflection

Sense of Place

Core Idea:
Every environment, whether in an urban or natural green space, has unique living and non-living features that make it special. Understanding *place* helps us see how people, animals, and ecosystems connect.

In-Field Teacher Prompts:
- What makes this place unique or important?
- How does this environment support life?
- How do humans shape or change this space?
- What stories could this place tell if it could speak?

Key Terms & Definitions:
- **Place:** A specific location with unique natural, cultural, or personal meaning.
- **Ecosystem:** A community of living organisms interacting with each other and their environment.
- **Habitat:** The home or environment where a plant or animal naturally lives.

In-Class Student Reflection Questions:
- What did you notice first about the space we visited? How did it feel different from other spaces?
- What elements (natural or human-made) made this location unique?
- How do people use or interact with this area?
- What might this place have looked like 50 or 100 years ago?
- What evidence did students find of change? Is it natural or human-caused?
- How might Indigenous Peoples describe or connect with this place?

Observation and the Senses

Core Idea:
Using our senses—sight, sound, smell, touch, and even taste (safely, of course!)—helps us notice patterns, relationships, and changes in nature.

In-Field Teacher Prompts:
- What do you see, hear, smell, and feel?
- Which of your senses helps you learn the most here?
- How would another animal experience this place differently?

Key Terms & Definitions:

- **Observation:** Carefully watching or noticing details to gather information.
- **Adaptation:** A feature or behaviour that helps a living organism survive in its environment.
- **Sensory Awareness:** The ability to use your senses to understand your surroundings.

In-Class Student Reflection Questions:

- Which senses did you use the most? Which did you forget to use?
- What sensory experiences stood out (sounds, smells, textures, light)?
- How did your observation change when you sat quietly versus when you moved around?
- What do the senses reveal that photos or data might not?
- How could an animal experience this same environment differently?
- How might people sense and experience this place in unique ways? Consider accessibility—not everyone sees, hears, or feels the world in the same way.

Biodiversity and Ecosystem Connections

Core Idea:
Biodiversity includes all living things and their relationships. Every organism plays a role in keeping the ecosystem balanced—some as prey, some as decomposers, and some as engineers.

In-Field Teacher Prompts:

- How are the species you find connected in a food web?
- What adaptations help them survive here?
- Can you find any plants or animals that don't seem to belong?
- What might happen to the ecosystem if a new species moves in, or if one disappears?

Key Terms & Definitions:

- **Biodiversity:** The variety of life in a particular habitat or ecosystem.
- **Species:** A group of similar organisms that can reproduce and have offspring that can reproduce.
- **Interdependence:** The way living organisms rely on one another to survive.
- **Food Chain:** The sequence of who eats whom in an ecosystem, showing how nutrients flow from one living organism to another.
- **Adaptation:** A physical feature or behaviour that helps a plant or animal survive and reproduce in its environment.

In-Class Student Reflection Questions:

- How many different living organisms did you identify (plants, animals, fungi, insects)?
- How do these species depend on one another? Can you build a food chain or web?
- What adaptations help species survive in the place we visited?
- What roles do decomposers (like insects or fungi) play in this system?
- How might this ecosystem change with the seasons?

Watersheds and Stewardship

Core Idea:
Water connects us all, from rainfall to rivers to the ocean. Understanding watersheds and human impacts helps students see how small actions in one place affect the health of the larger system.

In-Field Teacher Prompts:
- Where does water flow in this area? Where does it go next?
- How do humans affect water systems and the land around them?
- What can we do to protect water, wildlife, and soil?

Key Terms & Definitions:
- **Stewardship:** Caring for and managing the environment responsibly.
- **Conservation:** Protecting and restoring natural areas and species.
- **Resilience:** The ability of an ecosystem to recover after disturbance or change.
- **Watershed:** An area of land where all the water drains into the same body of water, such as a stream, a river, a lake, or an ocean (e.g. the rain that falls on your schoolyard flows into a local creek that connects to a larger watershed; we all live in a watershed).

In-Class Student Reflection Questions:
- In the place we visited, where does the water here come from? Where does it go next?
- What happens to rain that falls at this location?
- How does the landscape's shape and materials (soil, rock, pavement) affect water flow?
- How does human activity (roads, storm drains, lawns) impact this watershed?
- What might the place we visited look like during a heavy rain or drought?

Human Connections

Core Idea:
People are part of nature too. Every community depends on natural systems for food, water, shelter, and our general wellbeing.

In-Field Teacher Prompts:
- How do people use or impact this area?
- What does this place provide for humans, animals, and plants?
- How can communities live in balance with the environment?

Key Terms & Definitions:

- **Urban Ecology:** The study of nature and living systems in cities and towns.
- **Sustainability:** Meeting our needs today without harming future generations' ability to meet theirs.
- **Cultural Connection:** The relationships between people, their traditions, and the land.

In-Class Student Reflection Questions:

- What human-made features were visible in the place we visited? How do they affect nature?
- What small actions could help improve or protect the area we visited?
- What species or elements might be missing from this environment and why?
- How does the space we visited show resilience (signs of regrowth or recovery)?
- What would this area look like if left untouched for 50 years?
- How can you share what you've learned to inspire others to care for this place?

Exploration and Discovery

Core Idea:
Exploring and identifying local species helps us understand how rich our ecosystems are and how they're changing over time.

In-Field Teacher Prompts:

- What living things can you find here today?
- How are these species connected to one another?
- How can we share what we discover to help others learn?

Key Terms & Definitions:

- **BioBlitz:** A community event where people work together to find and record all the living species in an area.
- **Field Observation:** Collecting data by observing and recording what's found in nature.
- **Citizen (Community) Science:** When everyday people help collect or analyze scientific information.

In-Class Student Reflection Questions:

- What was surprising or unexpected about the field trip?
- How did being outdoors change the way you learned?
- How can you represent your learning—through art, writing, data, or storytelling?
- How did collaboration and discussion shape your understanding?
- How can this experience connect to your classroom learning in science, art, or social studies?

Optional Big Picture Guiding Questions

(For linking multiple Curious by Nature experiences together.)

- What patterns are students noticing across different locations?
- How does biodiversity differ between urban and natural sites?
- What connections can students make between local ecosystems and global environmental issues?
- How do human and natural systems work together (or come into conflict) in their community?

Curious by Nature Guide Extensions

Deepen the Learning

Goal: Extend classroom understanding through research, creativity, and continued observation.

- **Seasonal Revisit:** Return to the same place you used the Curious by Nature guide in a different season. Compare what has changed (species, temperature, water levels, colours, sounds).
- **Ecosystem Mapping:** Create a large illustrated map or digital poster showing how living and non-living parts of the ecosystem connect.
- **Species Profiles:** Research one species observed while using the Curious by Nature guide. What role does it play in the food web? What adaptations help it survive?
- **Soundscapes:** Record natural sounds and compare to urban or indoor soundscapes. Discuss how sound reflects ecosystem health.
- **Water Watch:** If near a stream, a wetland, or a drainage area, monitor water clarity or flow over time. Connect to watershed learning.
- **Community BioBlitz:** Host a follow-up event where students invite families or community members to join in identifying species together.

Take Stewardship Action

Goal: Empower students to care for the ecosystems they explore.

- **Habitat Helpers:** Build bat hotels, bird boxes, insect hotels, or pollinator gardens to support local species.
- **Litter Audit:** Conduct a trash tally of human impacts on the area you visit. Classify what's found and create solutions to reduce waste.
- **Plant Native:** Work with a local garden club or Indigenous Knowledge holder to plant native species in the schoolyard or community.
- **Water Guardians:** Trace your local watershed, identify where your water comes from, and brainstorm actions to keep it clean.
- **Stewardship Pledges:** Have each student write or draw a personal stewardship pledge—one small action they'll take to protect local ecosystems.

Connect to Community and Culture

Goal: Link learning to local knowledge.

- **Indigenous Perspectives:** Invite an elder, knowledge keeper, or local community representative to share stories or teachings about the land.

- **Community Collaboration:** Partner with local parks, conservation authorities, or nature centers to continue student involvement.
- **Local Stories Project:** Research how your community has changed over time (forests cleared, rivers restored, parks created). Students can create a then-and-now visual display.
- **Citizen (Community) Science:** Submit species observations through platforms like iNaturalist or eBird. Discuss how data contributes to real research. Join a national program like the Schoolyard Bird Blitz or the Backyard BioBlitz to help scientists and their projects.
- **Art in the Park:** Create art installations or public displays (murals, poetry, photography) that celebrate biodiversity and encourage stewardship in partnership with this popular program.

Reflect and Share

Goal: Encourage metacognition, creativity, and connection.

- **Nature Journals:** Continue journaling observations, questions, and sketches over time.
- **Class Museum:** Curate a classroom display with photos, drawings, and student work about their Curious by Nature experiences.
- **Storytelling and Poetry:** Have students write a story or poem from the perspective of a species they observed.
- **Compare Sites:** Visit both an urban and natural site. Compare biodiversity, human impact, and ecosystem health.
- **Share Findings:** Create a class presentation, short video, or social media post (if appropriate) highlighting what was discovered and learned.

Long-Term Projects

Goal: Build continuity across the school year or grade levels.

- **Adopt-a-Site Program:** Adopt a local park, schoolyard garden, or natural area to visit and care for regularly.
- **Biodiversity Tracker:** Create a long-term data set of species sightings to analyze patterns over time.
- **Biodiversity Campaign:** Students design posters or short videos encouraging peers to help enhance local biodiversity.
- **Climate Connection:** Explore how local biodiversity may shift with climate change and what can be done to build resilience.

Resources and Toolkits for Further Learning

Curious by Nature Guide Collaborators:

Environment and Climate Change Canada (Bilingual)
Environment and Climate Change Canada is the federal department working to conserve Canada's natural heritage, and ensure a clean, safe, and sustainable environment for present and future generations. This includes:

- Protecting and conserving natural areas and species.
- Protecting migratory birds, under the *Migratory Birds Convention Act, 1994.*
- Predicting weather and environmental conditions.
- Preventing and managing pollution.
- Promoting clean growth and sustainable development.

Nature Labs (English only)
Nature Labs is a free Canadian virtual textbook and complete learning platform that helps students challenge their assumptions and unlock their full potential, today and every day.

Nature Labs uses nature as a metaphor to explain class lessons. Through balanced storytelling, it connects students to experts—from prime ministers to chefs—and to real-world issues. With hundreds of curricula-connected lessons, thousands of curated resources, and endless classroom tools, Nature Labs is a favourite resource for schools in every Canadian region, and is used daily by hundreds of thousands of students.

Field + Citizen Science Resources:

Citizen Science Portal (Bilingual)
A searchable list of citizen (community) science projects across Canada to find opportunities to get involved.

iNaturalist (Bilingual)
A community science platform where people can record and share observations of animals and other living things.

eBird (Bilingual)
A global citizen science project where people can record and share bird sightings. The observations help scientists track bird populations, migration patterns, and species distribution.

Mission Monarch **(Bilingual)**
Mission Monarch is a community science program documenting the monarch's reproductive success. The program is part of an international research and education effort aimed at saving the migratory populations of this endangered species.

Indigenous Resources:

TRACKS **(Trent Aboriginal Cultural Knowledge and Science) (English only)**
A dynamic, land-based youth program that fosters environmental stewardship, cultural awareness, and leadership skills by connecting youth with nature and Indigenous perspectives.

Kina8at – Ensemble (Bilingual)
Their mission is to allow cultural reconnection among First Nations, foster the sharing of Indigenous cultures with everyone in the spirit of reconciliation, and promote respect for nature.

Centre for Indigenous Environmental Resources **(CIER) (English only)**
Empowers Indigenous youth to become leaders in environmental stewardship, fostering a balance between cultural traditions and modern science.

Four Directions Teachings **(Bilingual)**
An audio-narrated resource for learning about Indigenous Knowledge and philosophy from five diverse First Nations in Canada.

Place-Based Resources:

Environment and Climate Change Canada—Protected Areas **(Bilingual)**
ECCC's Protected Areas Program manages a network of more than 60 National Wildlife Areas (NWAs) and over 90 Migratory Bird Sanctuaries (MBSs) across Canada. This network is established for the benefit of wildlife conservation, with a particular focus on migratory birds and species of national importance such as species at risk. Public participation in the conservation of wildlife is encouraged through science and monitoring activities and by connecting to nature through activities such as wildlife viewing, hiking, canoeing, hunting, and fishing—where they do not compromise conservation objectives.

Parks Canada **(Bilingual)**
Protects and presents nationally significant examples of Canada's natural and cultural heritage. Fosters public understanding, appreciation, and enjoyment in ways that ensure their ecological and commemorative integrity for present and future generations.

Outward Bound Canada **(English only)**
School and group programs; that provide immersive adventures (wilderness days, multi-day trips) to build skills like leadership and resilience.

Leave No Trace Canada (Bilingual)
To promote and inspire responsible outdoor recreation through science-based education and partnerships throughout Canada. Includes the seven principles adapted for children: respecting animals, minimizing waste, and sticking to trails, for example.

Community-Building Resources:

Canada Service Corps (Bilingual)
Canada Service Corps is a national youth service program that enables Canadians ages 12 to 30 to gain leadership skills, build networks, and make a difference in their communities by participating in diverse volunteer projects focused on civic engagement, reconciliation, and environmental stewardship.

Canada Helps (Bilingual)
Volunteer Canada provides resources, research, and expertise to strengthen volunteering, and supports over 1,100 organizational members in building accessible, inclusive volunteering opportunities for all Canadians.

Community Foundations of Canada (Bilingual)
Community Foundations of Canada has programs that empower young people to identify local needs, research charities, and grant funding to make a direct impact in their communities while developing teamwork and leadership skills.

Roots & Shoots (English only)
Roots & Shoots Canada, founded by the Jane Goodall Institute, empowers youth to launch community projects for people, animals, and the environment, inspiring compassionate action and leadership across the country.

Science Resources:

The State of Canada's Birds (Bilingual)
The State of Canada's Birds provides scientific insight into 463 bird species regularly occurring in Canada and how their populations have changed since 1970. This user-friendly resource offers the most complete overview of birds in Canada to date. Monitoring migratory birds is the most cost-effective tool to measure conservation efforts and the state of biodiversity. The more we understand how birds are doing, the better we can act to protect them and our environment.

Exploring By The Seat Of Your Pants (English only)
This Canadian non-profit organization inspires the next generation of scientists, explorers, and conservationists by bringing free, live, interactive virtual lessons and field trips with leading experts into classrooms around the world.

École en réseau (French only)
École en réseau provides infrastructure that enables teachers to develop their skills in teaching through digital networking, to propose and participate in networked activities, and to enrich their students' learning experience.

Water Rangers (Bilingual)
Community science platform offers data-gathering toolkits and guides for students interested in water quality monitoring.

Pollinator Partnership Canada (Bilingual)
Shows kids how to protect bees, butterflies, and other pollinators including a kit with wildflower seed balls, a bug ID sheet, and instructions for building a bee hotel.

Canadian Association for Girls in Science (CAGIS) (English only)
CAGIS is a STEM club for girls and gender-diverse youth aged 7–17 and offers hands-on, behind-the-scenes experiences in science, technology, engineering, arts, and math (STEAM).

Hinterland Who's Who (Canadian Wildlife Federation) (Bilingual)
Lesson plans and programs to help students understand the impacts humans have on our environment, and how they can help to conserve Canadian wildlife. Students will learn conservation concepts such as biodiversity, sustainability, ecosystem conservation, and endangered species recovery.

Let's Talk Science (Bilingual)
Free online resources for educators and youth to enrich their understanding of climate change with related activities, events, projects, videos, and resources.

Language and Arts Resources:

Ripple Foundation (English only)
Empowers young Canadians to express their creativity and share their voices through writing. Their programs include the *Kids Write 4 Kids* contest and Wave Blog offering opportunities to transform outdoor experiences into stories that ripple outward to others.

The Canid Project (English only)
The Canid Project is a creative and conservation initiative made up of photographers, educators, and biologists dedicated to documenting and protecting wild canids through coexistence, citizen science, and educational resources across the country.

Stewardship + Environmental Resources:

Learning for a Sustainable Future (LSF) (Bilingual)
LSF collaborates with educators, students, parents, governments, and communities to promote knowledge, skills, values, and practices essential for a sustainable future.

R4R – Resources for Rethinking (Bilingual)
Is a free online database where educators can search for over 1,800 high-quality, teacher-reviewed, curriculum-matched resources (including lesson plans, videos, children's books, outdoor activities and apps/games) on issues related to sustainability and climate change. Resources searchable by language, province, grade, subject, theme, Sustainable Development Goal, and Indigenous Knowledge theme.

EcoSchools Canada (Bilingual)
Frameworks, guides, and toolkits for schools to reduce waste/energy, develop outdoor classrooms, or implement sustainability plans.

Earth Rangers (Bilingual)
A national kids' conservation club that offers missions like planting pollinator gardens, reducing plastic waste, and protecting habitats.

Canadian Wildlife Federation: WILD Education (Bilingual)
Training for educators to bring wildlife and environmental learning outdoors.

Nature Canada (Bilingual)
Offers programs and resources related to conservation education, including opportunities for youth and school-based projects. Naturehood includes local Nature Passport with challenges like bird-watching, litter cleanups, or tree ID.

Green Learning (English only)
Free online education programs about energy, climate change, and green economy that engage and empower students to create positive change for our evolving world. There are also professional development resources to further your own knowledge about environmental sustainability.

Be the Change – Earth Alliance (English only)
The Student Leadership for Change contains a comprehensive suite of experiential and project-based curriculum material to inspire youth to connect, understand, and respond to the environmental and social challenges facing our planet. Students will learn to connect local solutions to global issues by taking specific, measurable actions with their classmates and families. The suite is also available in Distance Learning formats.