

Learning for a Sustainable Future

LEARNING



INSIDE



OUT



Educator-reviewed

GRADE 4-8 RESOURCES

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Learning Inside Out Activities for **Grades 3-8**

Title	Theme	Grade Level	Activity Type	Description/Links
<p>1. Natures Partners: Pollination, Plants and You</p>	<p>Step Outside: Spring Awakenings</p>	<p>4-8</p>	<p>Hands-On Activity</p>	<p>This resource provides a series of activities focused on pollinators. The activities can include nature or neighbourhood walks, research, crafts, and more:</p> <ul style="list-style-type: none"> • Observe like a scientist • Pipe cleaner pollination • Design your own flower • Design your own pollination • Bonus Activity: Pollinator-friendly planting <p>For activity instructions, click here.</p>
<p>2. Freida Makes a Difference</p>	<p>UN SDGs: Intro to the Sustainable Development Goals</p>	<p>3-5</p>	<p>Book</p>	<p>This book was created to simplify the lesson of the global goals so younger students can relate to and better understand the Sustainable Development Goals. The book (available in free ebook format) aims to raise awareness of the SDGs in a fun, colourful and relatable way.</p> <p>Frieda develops a global perspective and is encouraged to take action against the biggest issues of our day, from combating climate change and protecting endangered species to ending poverty and fighting inequality.</p> <p>Follow up</p> <p>After reading Freida Makes a Difference, there are four activities in the SDG Family Pack that are a great way to consolidate learning, and continue to engage young learners:</p> <ul style="list-style-type: none"> • Guess the SDG icon! (Activity 1) • What do you see through the global goals glasses? (Envisioning your 2030) (Activity 2) • Colouring poster: consider each element of your plate (Activity 3) • Every Plate tells a story: draw and rate a meal of your choice (Activity 4)

<p>2. Power of Stories: The World's Largest Lesson</p>	<p>UN SDGs: Intro to the Sustainable Development Goals</p>	<p>3-7</p>	<p>Books</p>	<p>Check out this wonderful collection of stories and comics that allow students to engage with many of the themes addressed within the Global Goals through the power of storytelling.</p> <p>A great comic to start with would be Heroes for Change , which gives an introduction to how the SDGs came to be and how important they are for improving the world we live in!</p>
<p>2. Go Goals! Game</p>	<p>UN SDGs: Intro to the Sustainable Development Goals</p>	<p>3-6</p>	<p>Apps, Games and Other Tools</p>	<p>The free and fully downloadable "Go-Goals!" SDG board game helps students understand the Sustainable Development Goals, how the global aims impact their lives and what they can do every day to help achieve the 17 Goals by 2030.</p> <p>Game is for 2-6 Players Time: 30-60 Minutes</p>
<p>3. Get to Know Birds</p>	<p>Step Outside: Bird Alert</p>	<p>3-8</p>	<p>Outdoor Activity</p>	<p>Get to know the feathered friends in your neighbourhood with Get to Know: Birds!</p> <p>Learn how to observe birds' appearance and behaviours, and practice spotting signs of bird activity in your neighbourhood, whether it's out in nature, on your street, in your yard, or from your window.</p> <p>See activity instructions here.</p>
<p>4. Kids vs. Global Warming</p>	<p>UN SDGs: Earth Week! SDG 13 - Climate Action</p>	<p>5-8</p>	<p>Video</p>	<p>This video portrays Alec Lorz, a remarkable teenager who crusades against climate change. He spearheaded his own "iMatter" campaign and other climate change education initiatives and got his whole community involved! Alec exemplifies how youth can make a difference, and watching this film will inspire and motivate students to become more involved in caring for our planet.</p> <p>Before watching the video , encourage kids to talk, write or think about the following questions:</p> <ul style="list-style-type: none"> • What is your understanding of climate change? • Depending on the response, maybe take some time to do some research about this issue and have a general understanding before learning about

				<p>the fight against it!</p> <ul style="list-style-type: none"> • What role do you think that young people play in the fight against climate change? • How does thinking and talking about climate change make you feel? <p>After watching:</p> <ul style="list-style-type: none"> • How does seeing these amazing teenagers take action inspire you? • Does it change your perspective of kids’ role or responsibility in the climate crisis? • It is important to know how your community will be affected by change. Alec’s community, Ventura, would be directly affected by the sea level rise—what might happen to your community? • What are some ways in which you can educate yourself, your family or your community and be a part of the fight against global warming?
<p>5. Ocean Trash Talk</p>	<p>UN SDGs: SDG 12 - Responsible Consumption & Production</p>	<p>4-7</p>	<p>Video</p>	<p>Plastic is everywhere in our world. Do you use a computer at home? Are you wearing clothes containing synthetic fibres? Have you eaten a packaged snack or gotten takeout? If you answered yes to any of the questions, you have likely been in contact with plastic today. Sadly, many plastic items are thrown out after only one use.</p> <p>Watch the Ocean Trash Talk video to learn how your own actions can reduce the amount of plastic waste that enters the oceans and the environment.</p> <p>After watching the video, discuss:</p> <ul style="list-style-type: none"> • In the video, did you see any plastic that you use? • Make a list of single-use plastics you can find in your home • What is one new thing you can do to help reduce ocean plastic pollution? <p>Activities</p> <ul style="list-style-type: none"> • Read The Life of a Plastic Fork comic • Create your own comic strip about the life of a single-use plastic item! • Share you comic with us on social media using #LearningInsideOut

<p>6. Decoding Loon Language</p>	<p>Step Outside: Decoding Loon Language</p>	<p>4-7</p>	<p>Apps Games and Other Tools</p>	<p>Loons are perhaps Canada's most iconic bird. Their distinctive calls are a hallmark of summer for many, and you can recognize them from our dollar coin—the "loonie!"</p> <p>Start by reading about loons in our latest Step Outside Guide . Follow the links in the Guide to hear the different sounds they use to communicate and watch the short video clips of loon behaviour (more info on loons here).</p> <p>After reading the Guide, discuss:</p> <ul style="list-style-type: none"> • What do think is most striking visually about loons? • Which is your favourite loon call? What message does it send? • Are loons better adapted for movement on land or in water? Why? • Why do you think loons can fly so fast and dive so deep? <p>Next, play the Incredible Loon Journey board game (2+ players)! Click to find the printable game board and migration challenge cards , as well as the instructions . If you have enough space and materials, there's even an option to turn the game into an obstacle course!</p> <p>After playing the game, discuss:</p> <ul style="list-style-type: none"> • Identify all of the threats to loon survival that were revealed in playing the board game • Separate these threats into two categories: naturally caused and human caused • These disturbances collectively have resulted in fewer loon chicks being born each year. Can you contribute to loon conservation in any of these ways? <p>Bonus activity: read these loon legends , then write your own legend about the loon!</p>
<p>7. Maq and the Spirit of the Woods</p>	<p>UN SDGs: SDG 15 - Life on Land</p>	<p>3-5</p>	<p>Video</p>	<p>This animated film explores the interrelationships among the natural, human and spiritual worlds with the traditional tale of Maq, a young First Nations boy who struggles to fit in. When a village elder helps the boy embark on an</p>

				<p>astounding journey into the forest, a mystical guide shows Maq that he has always been special and unique.</p> <p>For activity instructions, click here.</p>
<p>8. Biosphere Biokit Activities</p>	<p>Step Outside: International Day for Biological Diversity</p>	<p>4-6</p>	<p>Outdoor Activities</p>	<p>Explore Canada’s biodiversity in a fun and interactive way at any time of the year. This activity includes options for both urban and rural settings, so you can explore biodiversity wherever you are!</p> <p>First, brush up on your biodiversity knowledge .</p> <p>Then select your desired kit (Urban or Nature /Rural), print it out, and complete your outing!</p> <p>Bonus Activity: calculate the biodiversity index of your backyard!</p>
<p>8. Get to Know Nature: Biodiversity Bingo</p>	<p>Step Outside: International Day for Biological Diversity</p>	<p>3-4</p>	<p>Outdoor Activity</p>	<p>Participate in a scavenger hunt activity to explore and document biodiversity in your neighbourhood. Search for various plants and animals based on their characteristics and discover the wealth of life waiting outside your door!</p> <ul style="list-style-type: none"> • First, watch the biodiversity bingo video to see other kids in action. • Then print out (or recreate by hand) your bingo card ! One per player—everyone can participate! • Visit a nearby green space, neighbourhood, or your own backyard and try to spot the things on your sheet. Challenge yourself to get a straight line, an X, or even a full sheet! <p>Hints</p> <ul style="list-style-type: none"> • animals with 6 legs: insects (ants, ladybugs, bees, butterflies) • animals with 8 legs: spiders • animals with 2 legs: people, birds <p>Bonus Activity 1</p> <p>Write the word "BIODIVERSITY" vertically on a piece of paper. For each letter, challenge yourself to think of the name of a creature or plant that can be found in</p>

				<p>your area. For example, B for bird, I for inchworm, etc.</p> <p>Bonus Activity 2 Check out the Bio DaVersity Code game (Adobe Flash required)!</p>
<p>9. Our Environmental Footprint: Introduction to Energy</p>	<p>UN SDGs: SDG 7 - Affordable and Clean Energy</p>	<p>3-5</p>	<p>Hands-On Activity</p>	<p>Through a variety of activities, students learn about different sources of energy and the amount of energy that they consume every day.</p> <p>Activity 1: Energy Use at Home</p> <ul style="list-style-type: none"> • Part A: What is Energy • Part B: Ranking Appliances • Part C: Wasted without knowing <p>For Activity 1 Instructions, click here.</p> <p>Activity 2: Energy Let's Save It!</p> <ul style="list-style-type: none"> • Watch the Energy: Let's Save it video • Follow up: Complete the discussion questions <p>Activity 3 : Energy Walkabout For Activity 3 Instructions, click here.</p>
<p>9. Electricity Conservation and You</p>	<p>UN SDGs: SDG 7 - Affordable and Clean Energy</p>	<p>5-7</p>	<p>Lesson Plan</p>	<p>The choices we make with respect to how much energy we consume and how our demand will be met has consequences for all of us as individuals, for other peoples with whom we share the planet, and for the plants and animals that have no voice in those decisions.</p> <p>Activity 1: Energy Sources</p> <ul style="list-style-type: none"> • Watch this video on energy sources • Complete these discussion questions. <p>Activity 2: Canada's Energy Use</p> <ul style="list-style-type: none"> • Read, and examine Canada's energy use using the data found here • Use this information to complete the discussion questions found here

<p>10. All About Earth</p>	<p>Step Outside: Canadian Environment Week</p>	<p>3-5</p>	<p>Hands-On Activity</p>	<p>In this lesson, students will become familiar with the different Earth Systems and the interconnections among them that make life on earth possible.</p> <ol style="list-style-type: none"> 1. Read the story. 2. Complete the chart and discussion questions. 3. Head outside and observe the ways Earth's systems interact. Record the interactions on the Make and Record Observations sheet (you can use multiple copies of the sheet). Then summarize your observations using We're All Connected chart. <p>Bonus activity: Meet a Plant Up Close and Personal</p>
<p>10. Chimney Swifts Lesson</p>	<p>Step Outside: Canadian Environment Week</p>	<p>5-8</p>	<p>Hands-On Activity</p>	<p>Learn more about these acrobatic birds from from our Early June Step Outside guide:</p> <p>Chimney Swifts, often described as "cigars with wings", can also be seen performing courtship displays. "V-ing," most pronounced after pair formation, involves two swifts flying together. The rear bird snaps its wings upwards to form a "V," the leader joins, and the pair gracefully glides downward. As their name implies, Chimney Swifts nest in chimneys or the walls of abandoned buildings. Historically and currently where suitable habitat still exists, they nest(ed) in large hollow trees. Logging removed most natural sites, and Chimney Swifts adapted to 'human' chimneys. Contrary to common belief, Chimney Swifts do not nest in colonies. Unmated birds, however, commonly roost together in large flocks, and sometimes in a chimney with a single nested pair. Like many other aerial insectivores in North America, Chimney Swifts are experiencing strong population declines, and are listed by COSEWIC as threatened in Canada, Ontario (scroll</p>

				<p>down), Manitoba, New Brunswick, and Nova Scotia, and protected in Quebec.</p> <p>Activities:</p> <ul style="list-style-type: none"> • Watch the "Protecting Threatened Chimney Swift Populations" video • Discussion questions: • What important role do Chimney Swifts perform in nature? • Why are they threatened as a species? • What are some of the actions being taken to support Chimney Swift populations? • How does "couch surfing for birds" apply to Chimney Swift conservation • Make your own Chimney Swift cootie catcher and play a few rounds to learn more about these aerial acrobats • Go the distance with the Migration & Mapping exercise • Head out and try to observe Chimney Swifts in your community!
<p>11. A Million Bottles a Minute</p>	<p>UN SDG's: SDG 14 - Life Below Water</p>	<p>3-8</p>	<p>Hands-On Activity</p>	<p>LSF's latest resource is designed to raise awareness of the single-use plastics issue through engaging and hands-on activities. The classroom resource is available on R4R, but we've also created an at-home version with 2 options:</p> <ul style="list-style-type: none"> • Activity PDF Overview: this is the "home base" for working through the workshop on your own (you can do it with your kids, or they can work through it on their own). The PDF lays out each activity step by step and links directly to printable worksheets and slides with detailed instructions and further information. You can complete the steps at your own pace. • Recorded Webinar: just play-and-go! LSF staff take participants through all necessary information and explain each activity in depth. Users are

				<p>prompted to pause the video when it's time to complete the activities, so they can take as much time as you need. Just print the activity materials ahead of time, and hit play!</p> <p>Find both options and all necessary activity materials here!</p>
<p>12. Get to Know Insects</p>	<p>Step Outside: Early June</p>	<p>4-6</p>	<p>Outdoor Activity</p>	<p>This outdoor activity introduces young learners to insect diversity, distribution and behavior. After learning some background information, discussing observation techniques, and finding a great spot to look, students are invited to go on a hunt for insects!</p> <p>It is not important for this activity that students learn the proper classification and names of the insects they find. The intent is to show them that insects are everywhere, that they are diverse and complex, and that they have interesting lifestyles and behaviours!</p> <p>Find the Activity Instructions here!</p>
<p>13. Celebrating National Indigenous Peoples Day</p>	<p>Hot Topic: National Indigenous Peoples Day</p>	<p>3-8</p>	<p>Hands-On Activity</p>	<p>Use the following resources to learn more about what National Indigenous Day is and why it is celebrated in Canada.</p> <p>These activity slides highlight some important facts about First Nations, Métis and Inuit people in Canada and touch on the importance of storytelling and the summer solstice.</p> <p>Find the activities here.</p>
<p>13. Claire and her Grandfather</p>	<p>Hot Topic: National Indigenous Peoples Day</p>	<p>3-8</p>	<p>Book</p>	<p>Claire and her Grandfather is a First Nations story designed to raise awareness of the many historical and contemporary contributions of First Nations and Inuit people to Canada and the world. The story portrays a discussion between young Claire and her grandfather, an Indigenous elder who teaches Claire the geography of</p>

				<p>Canada, from a First Nations perspective. Students learn about many Indigenous contributions related to food, transportation, exploration, the arts and technology through the story of Claire, who is learning about her heritage so she may share some of her family history and culture with her classmates.</p>
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