



Wild Wisdom

curriculum-infused
outdoor Learning ideas

Grade
4



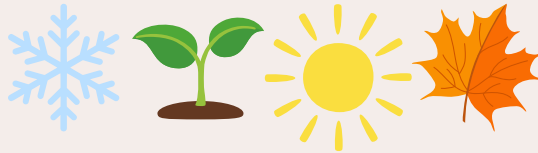
by Rebecca Seiling



Cardinal directions



Season: All



Curriculum Expectations:

Social Studies, History and Geography

B3.7 demonstrate an understanding of cardinal and intermediate directions (i.e., NW, SW, NE, and SE), and use these directions as well as number and letter grids to locate selected political and physical regions of Canada on a variety of print and digital/interactive maps

Materials needed:

- Compass (1, or enough for each small group to have one)
- Cameras, one per small groups
- Chart paper
- Markers

See the video posted under “Other resources” for this idea. Students work in small groups to make a compass rose on a page, listing North, East, South, and West, and also NW, SW, NE and SE. Put these onto clipboards to take outside. If you only have one compass, model how to find North. If there are enough for each small group, have students practice using a compass and orienting to North.

In small groups, record what they can see at different compass headings onto their paper with the compass rose. As a group, pick 8 key spots to photograph that represent each of the 8 cardinal directions you are learning about. As a follow up, these photos can be printed off and posted onto a large piece of chart paper that is labelled with all 8 directions, creating a compass rose photo map of the school yard.

POLLinator garden



Season: Spring



Curriculum Expectations:

Science and Technology, Habitats and Communities

B1.1 assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account

B1.2 analyse the impact of the depletion or extinction of a species on its habitat and community, and describe possible actions to prevent such depletions or extinctions

Materials needed:

- Pollinator wildflower seeds
- Native species seedling plants that attract pollinators
- Shovels, trowels
- Gardening gloves
- Composted soil

Overview

As part of their unit on Habitats and Communities, students in Grade 4 will design and create a pollinator friendly garden/space on school property. Students will learn about different types of pollinators native to the local environment and then explore in more detail the connections between local plants, animals, pollinators, and habitats. In designing a pollinator garden, they will consider location, plant species, and could also create proposals for the school council to advocate for funding for their garden. When the garden is ready, the school community will be invited to a garden opening, to celebrate the student success and to listen to the students as they share their new understandings of pollinators. Students will explore the power of invertebrate species that are pollinators, researching their contributions that these invertebrates have on crops as well as to the survival and reproduction of many native plants.

POLLinator, cont'd



In this lesson, students begin to understand the relationship between certain plants and the insects that pollinate them, the process of how these insects take the pollen from the plant, and how people depend on pollinators for food.

Timeline

April: Research and Project Proposal

Students learn about native pollinator species, habitats, risks to pollinator species including changing habitats and the impacts of human interactions on habitats. Students will research plants that are beneficial to the native pollinators of the area. Students will also consider a balance of plants that are food sources (to support pollinator larva) and a water source. When choosing an area for the garden, there should be at least 6 hours of sunlight on this location daily. Students will co-create proposal for school council funding. This proposal will include plants they wish to purchase, a budget for the project, and their goals.

May: Design

Students will design an example of a garden. Students will prepare the garden bed for planting.

June: Plant

Students will plant the pollinator friendly plants in the determined garden space. This month could include a celebration where the larger school community is invited to learn about the project and about the importance of pollinators.

In subsequent years, the grade 4 class can maintain this garden, weeding out plants and adding more composted soil to the area to encourage the growth of the plants that are there. In the early fall, it is a great time to observe a pollinator garden and track how many pollinators are seen at various times of day.

POLLinator, cont'd



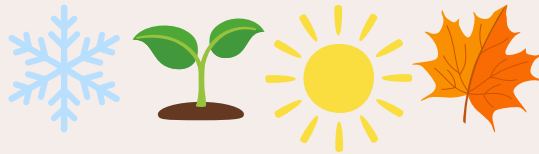
Potential Positive Outcomes

- Planting the garden creates a habitat for local pollinators who are an at-risk species
- Planting the garden raises awareness across the school community (students, staff, families, etc.) of the importance of pollinators and planting pollinator friendly gardens
- Planting the garden creates learning opportunities for future classes
- Students are more informed on pollinator species native to the area and can transfer this knowledge to other contexts (ex. planting at home)
- In subsequent years, when the pollinator garden is already created, grade 4 students can be involved in assessing whether more plants are needed, and then planting them, or in doing citizen science tracking projects where they track pollinators in early fall (September).

Predator Prowl



Season: All



Curriculum Expectations:

Science and Technology, Habitats and Communities

B2.1 describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities

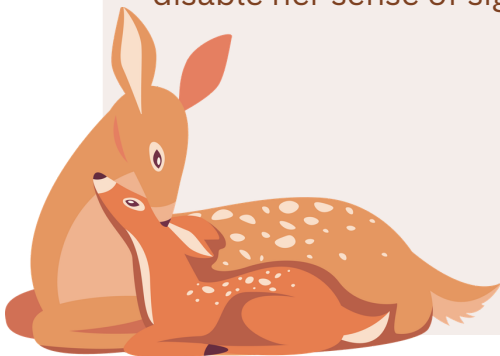
B2.2 describe a community as a group of interacting species sharing a common habitat, and identify factors that affect the ability of a community of plants and animals to survive in a local habitat

B2.7 explain why all habitats have limits to the number of plants and animals they can support

Materials needed:

- Keys
- Blindfold

This game will help to put children in the role of either prey or predator. One student is chosen to play the part of the mother deer. She sits in a designated spot, with a set of keys placed on the ground in front of her. The keys represent a baby deer that the mother is protecting from predators. The mother deer's job is to use her keen sense of hearing to listen for predators who will be approaching. She will wear a blindfold to disable her sense of sight and highlight her sense of hearing.



Predator, cont'd



Other students will play the role of predators who would like to eat a baby deer - brainstorm together which creatures that would be (coyote, fox). Talk about places that mother deer tend to hide their babies (think underbrush). Predators choose a starting place away from the mother deer - usually it is a tree, but they can be creative with this as long as it is easy to remember (and return to). When the mother deer is blindfolded and ready, the teacher/leader points to predators one predator at a time to have them start sneaking up to the mother deer. Whenever the mother deer hears movement, she points in that direction. If a predator is pointed at, they return to the tree where they started and wait for the signal from the leader to start approaching again. There can be many predators approaching at the same time. The goal of the predators is to snatch the keys (baby deer) without the mother deer hearing them, and bring the keys back to their starting tree. If they do this, they “win” the round, and a new mother deer is chosen.

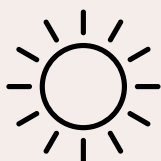
Debrief this game by talking about what predators and prey need to do to survive. Which role did they like to play, and why?

Log it!



Date:

Weather:



Wind:



Temperature:

I notice...

Log it!



I wonder...

This reminds me of...

what do you sense?



Date:



Imagination space



Date:

