



Pre and Post Winter Wonder Field Trip Activities

Snowflakes

It takes approximately 20 minutes from the moment a snowflake is formed to the moment it lands. Give students the opportunity to make one or all of the following types of snowflakes.

Plates -Use paper plates or plastic yogurt lids

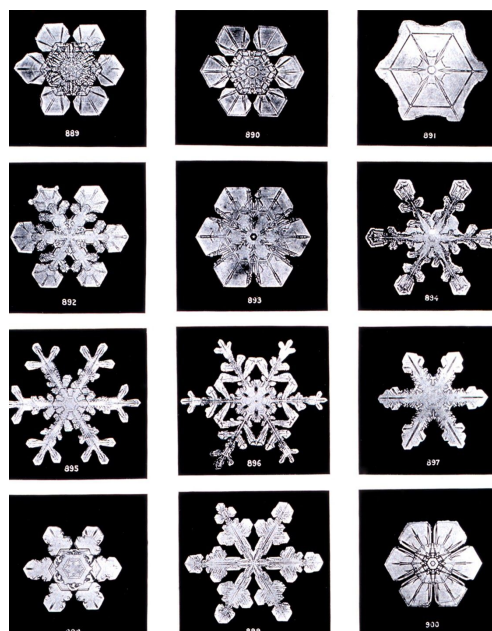
Stellar Dendrites -Classic shape cut out of paper

Columns -Use toilet paper tubes and construction paper

Needles - Use pipe Cleaners can be used to form this type of snowflake

Graupel -Cotton balls

Have students create their own snowflakes and compare them with those of their fellow students.



Wilson Bentley Snowflakes

Winter Weather Watch

Have students build a Winter Weather Watch station. This can be as elaborate or simple as you'd like. Here are some ideas on weather data you can collect:

- Record daily temperature
- Record daily weather observations (cloud cover, precipitation, icy sidewalks)
- Record snowfall using a [snow gauge](#)
- Designate a snow plot where the snow will not likely be disturbed. Read the temperatures of the different layers in the snow pack (surface, middle, ground)
- Describe the different layers of snow
- General observations (why is it easier to make a snowball after school than in the morning?, types of snow crystals, types of clouds, etc.)
- Have students make weather predictions for the school week and then check your local forecast.

Who Done It - Track & Scat Cards

Winter time is fabulous for looking for tracks in the snow. You can tell a lot about what an animal was doing, how they were moving, and which direction they were heading by investigating their tracks.

- Build a set of laminated track cards to help students learn about the different species in your area
- Create a Who Done It calendar board to track when and where tracks or scat were discovered
- Have students speculate and share what the animal might have been up to! Was it slowly stalking prey? Running (or hoping) away from a predator? Eating? Tracks and scat give us insight into a day in the life of different species.

Get to know your local Species

Research local wildlife and investigate their winter survival strategies. Do they migrate south? Or do they migrate to a different part of the region? Do they sleep the winter away? Or stay and cope? Or are they winter super species with special adaptations that allow them to thrive in the winter? Describe their winter habitat and how they acquire food, water, shelter. Some interesting species to research include Monarch butterflies, hummingbirds, elk, snowy owls, Swainson's hawks. Choose a local species that students are interested in learning more about.



Each fall, Monarch butterflies set out on an incredible 5,000 kilometer journey to their wintering sites in the mountain forests of Mexico. Their migration cycle is longer than their life span so no one butterfly will ever make the entire round trip.

Winter Treasure Hunt

Using food coloring, create an array of different colored ice cubes. Prior to taking your students outside, hide the ice cubes around the school yard. The ice cubes could represent food for critters who stick around in the winter - seeds for birds, cones for squirrels, deciduous branches for moose.



First Voices - Exploring Language

The First Voices website offers great resources for incorporating First Nations language into your teaching. There are handy apps to download that can help you to learn the language of your local first people. <https://www.firstvoices.com/explore/FV/sections/Data>

Journaling

When kids attempt to draw things they see in nature, they develop attention to detail. They also learn to observe objects more closely than you may typically do in a general nature walk. Observing and drawing objects from nature usually generates conversation about the objects themselves, which often develops new vocabulary. The intimate art of nature journaling helps all of us form a deeper connection to the natural world.



Some ideas to help get your journaling started:

- You don't need a fancy journal to start - just something to write on. A plain notebook works great, clip boards are handy for ensuring a durable writing surface. If you want to do watercolor or painting, you'll want a notebook with thicker paper.
- Pack some journaling supplies for your outing: pencils, crayons, watercolor crayons, Bird and Plant ID books, binoculars, camera (you can print the pictures later for students to add to their journals), sit pads.
- Encourage students to tune in to all of their senses and record what they are smelling, hearing, seeing, tasting, ect.
- Record the weather, the temperature, and the date.

Winter Scavenger Hunt

[Winter Scavenger Hunt](#)

Books

The following books are a great way to introduce the winter and continue the learning throughout the seasons:

- Do Frogs Drink Hot Chocolate? How Animals Keep Warm - *Etta Kaner*
- In the Snow - Who's Been Here? - *Lindsay Barrett George*
- Animals in Winter - *Henrietta Bancroft and Richard Van Gelder*

Links to Winter Activity Resources

[Glacier National Park Winter Ecology Teacher Guide](#)

[Animals in Winter - A Mini Unit](#)

[Cornell Lab of Ornithology](#) (Excellent resources for year round learning about our local birds. Learn their calls, breeding and nesting habits, migration patterns, etc.)

[Wild Safe BC](#) (Excellent resource for ready-made, year-round, nature activities!