TEACHER TOOLKIT

GRADES 2-4



2022-2023

Created by Wildlands League in collaboration with Tess Ulrich.

50 YEARS

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Recycled Winter Nature Journals
ACTIVITY

Grade 2 3 4

Date : _____

Overview:

Nature journals are a great way for students to practice important scientific skills such as observation, vocabulary, and descriptions. Students will keep records of the winter nature phenomena, animals, and plant life that they see each day by documenting observations in a nature journal made of recycled materials. We encourage older students to additionally label different parts of their pictures and keep track of daily seasonal data, such as the weather and temperature, which could spark discussions on how these factors impact their observations.

What You'll Need

- A large amount of collected recyclable materials (mostly paper, flat cardboard)
- A stapler or ribbon for binding
- Pencils, erasers, pencil crayons
- Small amounts of natural materials like leaves, pine needles (optional)

Pre Activity:

PRE-NATURE JOURNALING

Show students different examples of nature journals and demonstrate what they are used for. Ask students questions like, “Why do you think it is important to keep track of what you see in nature?”, “Why might keeping detailed notes in your journal be important?”

Leading up to the nature journal construction, have students collect and bring in recycled materials to use on construction day. In the classroom, ask students to be vigilant about saving construction paper and blank paper. Facilitate conversations about why recycling is important and beneficial to the environment and nature.

Begin discussing seasonal changes - ask students to think about the different kinds of things they notice throughout the days, especially as the weather and season change to help develop their scientific observation skills.

Activity:

NATURE JOURNALS:
Using the collected materials, spend one period constructing the journals. Students may want to use blank cardboard or the surfaces of cereal boxes as the covers. Students can decorate their covers with construction paper scraps. Inside, include 20 pages of blank paper (or any useable paper from the recyclable collection) - This is where students will sketch and keep notes. Bind the journals using a hole punch and ribbon. If students are younger, there is a template below that can be printed and inserted into the journals. They can practice descriptive writing on the lines under their sketches.

Make some time each day for nature journaling. Students can collect natural material, like a fallen pine needle or leaf, to keep in their journal instead of drawing a picture. If students do opt to collect natural materials, make sure that it has fallen from a plant (i.e., ensure students are not plucking leaves) and they are not collecting large amounts - a single needle or leaf is enough. Encourage students to write their notes down along with a sketch of one nature observation. This may be best completed after lunch or recess, when students have just come in from outdoors so they have a fresh memory to draw from.

Name : _____ Date : _____

Recycled Winter Nature Journals

ACTIVITY

Temperature:

Weather:

Observational Drawing

Story Stones
ACTIVITY

Grade 2 3 4

Date : _____

Overview:

The purpose of this lesson is to enhance students' understanding of a nature-themed book through artistic and literary interpretation. Students will recreate a story (beginning, middle, and end) by painting it on stones. Students will gain a deeper awareness of the nature story and have the opportunity to re-construct narratives chronologically.

What You'll Need

- Washable paint
- Paint brushes
- Flat and smooth stones

Pre Activity:

Start by exploring a book, YouTube video, movie, or other media with a nature theme. This may take a number of days to complete. The media could be experienced as a class, in groups, or individually, depending on the ages of your students.

Activity:

Once students have completed the book, distribute three to five stones to each student. These can be handed out during class, or students can go outside to find their own in the schoolyard (not the forest). Students can then paint their scenes from the story onto the stones! Once the stones are completed, students can keep their story stones in their home or in their backyards. It's important to not put the painted stones into the forests where they may disrupt natural habitats for insects, animals, or plants.

Examples:





Species At Risk Information Cards

ACTIVITY

Grade 2 3 4

Date : _____

Overview:

Extinction is an imminent threat facing approximately 1,000, 000 species around the world. This includes many species across Canada and Ontario. Students will create cards with information related to a species at risk of their choosing. Students will independently research information to include on their cards. Students can make a note of the animals' conservation status.

What You'll Need

- Laptops/ Chromebooks/ iPads
- Animal information card template

Activity:

CREATING THE CARDS:

On a large piece of paper or a white board, write down the objectives of the activity for a visual reference. Ask students if they can think of an example of an endagered animal - Some students might respond with "tiger", "elephants", or "lions". Facilitate a discussion on the differences in conservation statuses (from least concern to extinct) on a graphic organizer or a white board, generating different examples for each. There will likely be limited examples of Canadian wildlife, so inform students these are all very important animals, but that Canada also has many different animals considered species-at-risk. After this, ask the students if they know of any Canadian animals that are under the threat of extinction. Help them generate a few examples. Students can then use laptops or classroom books to find a Canadian species at risk to research in-depth. Students can research a species and record the animals' habitat, diet, an interesting fact, conservation status, and one way to help the species (for example, refrain from stacking river rocks to prevent harming salamanders and amphibians)! You can either print out the template and have students print out an animal picture, or you can paste them into the template.

ADDITIONAL RESOURCES:

- **Learn more** about how you can help protect Canada's endangered species

Here are a few examples of species at risk that you could present to students:

- **Boreal Caribou**
- **Chorus Frog**
- **Any turtle species in Ontario**

Example:

Common Name:
Blanding's Turtle

Scientific Name: Emydoidea blandingii

Habitat: Blanding's Turtles live in shallow lakes, ponds and wetlands.

Diet: They are omnivores and can eat plants as well as fish and insects



Status:

- ◯ Endangered
- ✓ Threatened
- ◯ Special concern
- ◯ Extirpated

How we can help:

Preserve wetland habitat and nesting sites.

Common Name:

Scientific Name: _____

Habitat: _____

_____

Diet: _____

_____



Status:

- ◯ Endangered
- ◯ Threatened
- ◯ Special Concern
- ◯ Extirpated

How we can help:

Common Name:

Scientific Name: _____

Habitat: _____

_____

Diet: _____

_____

Status:

- ◯ Endangered
- ◯ Threatened
- ◯ Special Concern
- ◯ Extirpated

How we can help:

Common Name:

Scientific Name: _____

Habitat: _____

_____

Diet: _____

_____

Status:

- ◯ Endangered
- ◯ Threatened
- ◯ Special Concern
- ◯ Extirpated

How we can help:

Common Name:

Scientific Name: _____

Habitat: _____

_____

Diet: _____

_____

Status:

- ◯ Endangered
- ◯ Threatened
- ◯ Special Concern
- ◯ Extirpated

How we can help:

Common Name:

Scientific Name: _____

Habitat: _____

_____

Diet: _____

_____

Status:

- ◯ Endangered
- ◯ Threatened
- ◯ Special Concern
- ◯ Extirpated

How we can help:

Common Name:

Scientific Name: _____

Habitat: _____

_____

Diet: _____

_____

Status:

- ◯ Endangered
- ◯ Threatened
- ◯ Special Concern
- ◯ Extirpated

How we can help:

Common Name:

Scientific Name: _____

Habitat: _____

_____

Diet: _____

_____

Status:

- ◯ Endangered
- ◯ Threatened
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How we can help:

Common Name:

Scientific Name: _____

Habitat: _____

_____

Diet: _____

_____

Status:

- ◯ Endangered
- ◯ Threatened
- ◯ Special Concern
- ◯ Extirpated

How we can help:

Adaptation Station
ACTIVITY

Grade 2 3 4

Date : _____

Overview:

This lesson allows students to explore, brainstorm, and create creative animal adaptations to try and help a caribou thrive in a warmer climate brought on by climate change.

Activity:

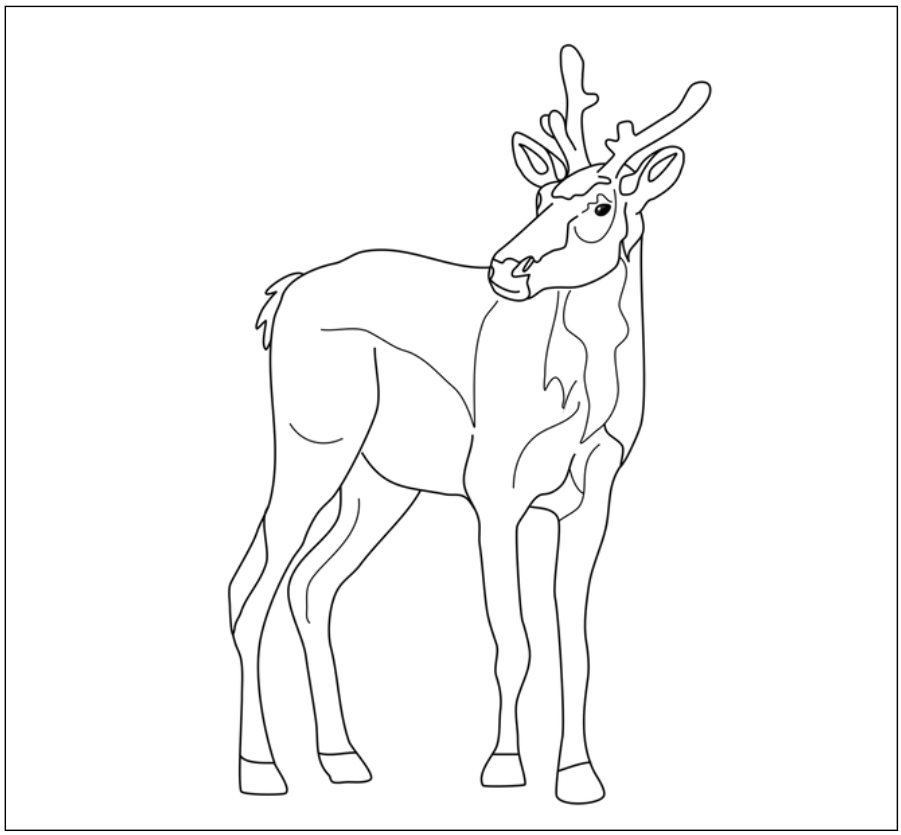
BEFORE THE LESSON:
Ensure students understand what an adaptation is and how animals have evolved to have specific adaptations that allow them to thrive in their particular environment and habitat. Ask students - what might happen to an animal if something changes their environment drastically? Provide them some scenario questions - Could a rainbow trout survive in a forest without any bodies of freshwater? Would a camel thrive in a snowy arctic tundra? Show students examples of animals and ask them about the particular adaptations for each species. For example, fennec foxes have large ears that can hear prey moving from the sound and keep them cool, polar bears have a coat that appears white for camouflage in the snow, and layers of fur and fat to keep them warm. Have students practice deciphering what adaptations can look like on different animals.

ADAPTATION STATION:
Prior to creating adaptations, students can brainstorm possible adaptations in the categories of body coverings, body parts, and behavioural. After drawing the chosen adaptations, list your adaptations and their purposes below. It is important to explain to students that real caribou are currently being affected by climate change, and animals cannot adapt quickly to a changing environment in real life.

Name : _____ Date : _____

Adaptation Station
ACTIVITY

Caribou wants to take a trip to somewhere warm. There's one problem - he doesn't have any adaptations that will help him thrive in a warmer climate! Help Caribou take his dream vacation and draw on some adaptations that might help make his stay more comfortable. He wants to be able to avoid new predators, stay cool, and eat the local plant life.



Body covering adaptations and purposes:

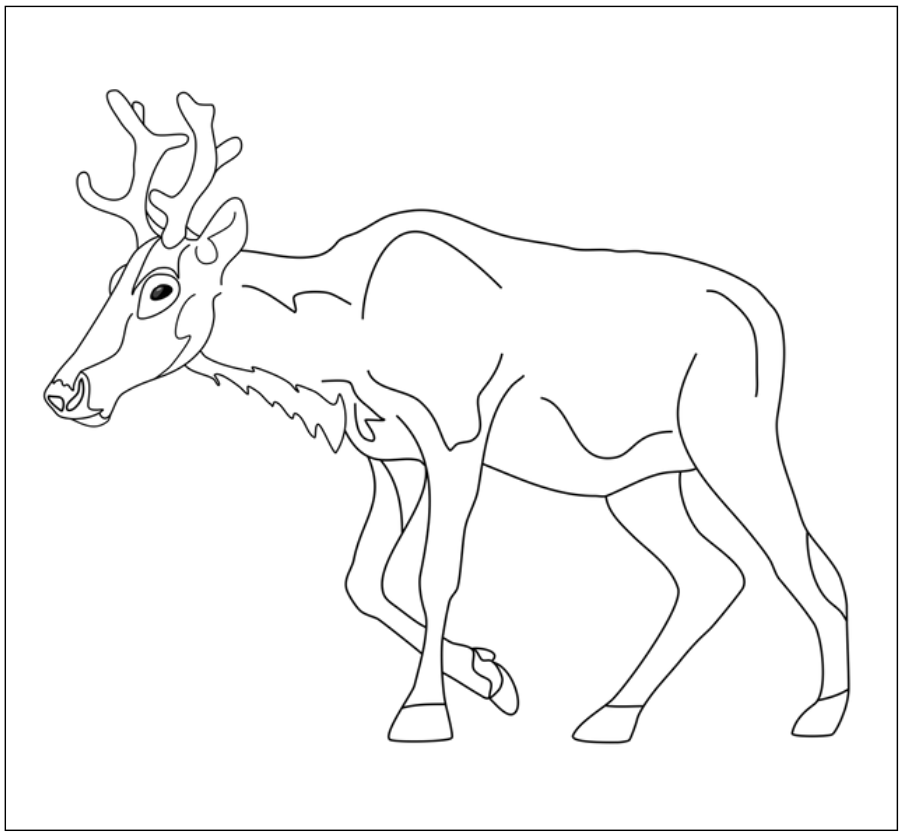
Body part adaptations and purposes:

Behavioural adaptations and purposes:

Name : _____ Date : _____

Adaptation Station
ACTIVITY

Caribou wants to take a trip to somewhere warm. There's one problem - he doesn't have any adaptations that will help him thrive in a warmer climate! Help Caribou take his dream vacation and draw on some adaptations that might help make his stay more comfortable. He wants to be able to avoid new predators, stay cool, and eat the local plant life.



Body covering adaptations and purposes:

Body part adaptations and purposes:

Behavioural adaptations and purposes:

Nature Sound Walk

ACTIVITY

Grade 2 3 4

Date : _____

Overview:

Transform your students into sound scientists! As students identify a sound, they will record the sound on their data tracking sheet. The teacher then facilitates a short discussion about the nature of the sound and how it fits into the local community. Once students identify the origin of the sound, they will mimic what they hear while on their nature walk by walking, running, or moving like the sound source (e.g., flap their arms like a butterfly, sway their arms like the wind"), until the next sound is heard. This activity can help build a sense of place and ecological literacy through participation in an authentic learning experience that allows students to examine different components of the local community. Remember, because it is a sound walk, this activity is meant to be quiet. Active listening and focus can build skills related to mindfulness, self-awareness, and emotional regulation. There are opportunities for inquiry as students engage with their surroundings and learn about local sources of sound.

Students will build a sense of place by investigating the local sounds in their community and the sources of the sound. Students will learn how these sound sources affect one another. Students will learn that sounds can come from animals, plants, or people (even wind and water!). They will use imagination and creative play to mimic the action of a natural sound (e.g., a bluejay, a butterfly, the wind).

What You'll Need

- The Very Quiet Cricket by Eric Carle (Either hard copy or video read-along) or any other book or video that focuses on sound
- Pencils (1 per student, though preferable if pencils are pre-attached to clipboards by string)
- Cellphone for teacher to record noises
- Clothing suitable for the weather Water bottles

Activity:

- Whistle (only use if needed)
- Projector (optional)
- 2 pieces of chart paper
- Markers
- Clipboards (1 per student)
- Sound worksheet (1 per student)
- Map of route (digital or physical)

BEFORE THE LESSON:
Introduce the book The Very Quiet Cricket. This picture book follows the journey of a cricket who lost his sound. Along the cricket's journey to regain his sound, he meets many other insects who can make all kinds of noise. The cricket's journey continues until he meets another cricket, who helps him regain his "voice"- The book is automated to play a cricket chirp song through the use of a hidden chip on the last page.

- Ensure students are engaged by using varied voice pitch, but try to keep voice low and dramatic to emphasize quietness - This will be juxtaposed with the chirping song surprise on the last page.
- Optional: Place the book on under the projector, and have a volunteer read each page
    - Not only does using a projector make it easier to see, but each student has an opportunity to participate through group reading
- Ask students to predict what will happen on the next page (This ensures engagement while also providing a way to assess comprehension

As the book progresses, offer questions for students to answer

- E.g., "Have you ever heard a cricket in real life? Could someone please demonstrate what the cricket sounded like? What would the world be like if no insects made noise?

Once the reading is complete, you can ask the question "think about nature in our local community. What sounds do you think we will hear when we take our sound walk today?" You can write out student ideas/responses and document them on chart paper.

SOUND WALK:
Before leaving for the sound walk, explain to students that the only time they should be talking during this walk is when they hear a noise and they are offering an idea to a sound that they hear.

Explain to students using the Explicit Instruction Strategy:

- We are becoming Sound Scientists for the day
- We are going on a nature sound walk
- We are going to keep moving as we listen carefully to the sounds around us
- If someone hears a nature sound, tell the class what you think you heard
- If you are unsure of what the sound is, the teacher or another student can help you
- Once we have identified a sound, we are going to talk about what made the sound
- We are then going to walk using the movement of that sound or take its point of view (redefine the word "perspective")

Provide students with a clipboard with pencils attached and a simple handout where they can record their sound data.

Optional: Group students into groups of 3-4. Assign roles to each student: Listener (responsible for listening for sounds), Idea Manager (responsible for giving an idea of what the sound could be), Recorder (responsible for writing down the sound), and Movement Officer (responsible for giving an idea for how to emulate the sound source through movement). Groups with roles can ensure that each student is positively contributing to their group, feeling useful and valued, and held accountable.

- Remind students of safety rules: Stay with class, secure pencil in clipboard before moving.
- Encourage students to get creative with their sound movements (if they hear wind blowing through the trees, prompt them to think about how the leaves would feel getting rustled by the wind; if they hear a bird, have them imagine how a bird must feel flying in that area; if they hear a vehicle, have them mimic how a car drives or pretend to be a person driving the car.).
- Once a sound is heard, students may call out what they believe the sound is (If this is too loud, then create a stipulation that students need to be called on before speaking).
- Once a sound is identified, facilitate a short discussion about the sound source
    - E.g., "Yes! It is a bird! Where do you think a bird might live around here? Can we see the bird? Can we see where the bird lives? Let's look for it."
    - E.g.,"Yes, there is a river here! Do you think water is important for our community? Who uses water?"

- From this, students will take on the perspective of the sound source until a new sound is heard and the process repeats again - For instance, if the sound is of a bird, students can move like a bird (flapping wings, imitating flying), if the sound is a river, students can interpret how they imagine a river would move (weaving, whooshing).
    - As students take on the identity of the new sounds, ask questions about how the sound source might be "feeling" or what they must be "thinking" . E.g., if we are imitating a butterfly: "I'm getting tired with all this flying! Where can I stop to eat something?"

Remember, as students call out their sounds, they should be switching their movements.

Pre-selecting routes makes for a more meaningful walk, as there will be rich opportunities for discovering a wide variety of local sounds that may lead to inquiry. As students walk, have them consider questions...

For a water feature:

1. How can we represent how water moves with our bodies?
2. What animals might live in the water feature?
3. Who might use this water feature?

For a busy road/city area:

1. What animals live in the city?
2. Why do they live in the city and not the forest?
3. What animals may not be able to live in the city? Why?

AFTER THE SOUND WALK:
Revisit the chart where the predicted sounds were written. Compare the sounds students predicted they would hear to sounds actually heard.
Ask students:

- What was the same? What was different? Why do you think it was different?
- If a predicted sound and an actual sound match, ask the student if they would like to come up and "check" the box with a marker.
- When students make a connection (E.g., "We predicted that we would hear birds and we did"), pose questions like, "Why did we hear birds?" Or, if students did not hear birds, ask them why? Maybe many migratory birds have already flown south for winter, or perhaps there were not many trees around for birds to nest in.

When these sentences come up, write them down on another piece of chart paper...

- Once a connection is made, write it down on a new piece of chart paper called “Nature in My Community”. Ensure that the students are the ones coming up with the sentences. Examples include...
    - There are lots of birds in my community
    - My community has a river that is home to different fish and amphibians
    - My community has lots of dogs, but not many squirrels

Modifications:
If you live in an area without access to quiet natural spaces, you may consider playing audio clips of animal/nature sounds for your students and have them identify the sound. Once a successful identification has been made, students can engage their bodies until the next sound in heard. This YouTube video is a great resource.

Nature Scavenger Hunt
ACTIVITY

Grade 2 3 4

Date : _____

Overview:

Students will be going on a scavenger hunt to find some species of plants and animals in their local community. This can be completed as a class (partner or group work). With this activity, students will get a chance to be more observant of their surroundings and also understand the science behind their local communities. Instead of simply reading about local organisms in their community, they will be able to engage meaningfully with their surroundings and make connections as they explore their environment.

What You'll Need

- Scavenger hunt checklists
- Pencils
- iPads or portable devices with iNaturalist or Seek (optional)

Optional: Using iNaturalist or Seek, students can photograph and identify local plants and animals to ensure their observations are accurate. If students are younger, using the Seek app is recommended.

This activity can be a great way to develop students' sense of place, as they explore their immediate and local surroundings and get to know it on a more "personal" level. Moreover, they will be relating research and retrieval with their real observational data which is more salient than retrieving information from a textbook. There are three different scavenger hunts below that have been modified for grades 2-4.

Pre-Scavenger Hunt:

- Ensure that students spend time learning about the specific concepts
- Teachers may choose to add additional challenges, such as finding one fact related to each identified species.
- Ensure that the area students are exploring is accessible to everyone
- Pre-teach vocabulary
- Give students breaks to rest if they require it

Extension Suggestions:

1. Students can create a food web and/or food chain using the species they have observed. They can compare these food chains and food webs between groups and also discuss the impact of removing one or more organisms from the chain or web. They could create their food chains and food webs on chart paper through draw/cut/paste strategies and put it up in the classroom for everyone to see and compare.
2. During the scavenger hunt activity, students can take pictures of species that match the prompts as many times as they see them. Students can then create a bar graph to determine the most common species seen during the scavenger hunt.
3. Using the procedure above, students could add up the total number of species or trees seen during their scavenger hunt (for instance, students can tally the number of trees they see with and without lichen; or, tally the number of animals and then count how many are herbivores). Using the total number of species observed and the number of observations that match the prompts below, students can conduct a probability experiment and answer the following questions: What is the probability of seeing a tree covered in lichen? What is the probability of seeing an invasive species on your scavenger hunt? What is the probability of seeing a herbivore while on your scavenger hunt? What is the probability of seeing an omnivore while on your scavenger hunt? What is the probability of seeing a conifer tree on your scavenger hunt?
4. With supervision and guidance, students can continue the scavenger hunt at home or at a different location. Students can create their own prompts and bring them to school for their peers to complete. At home, students can compare the plants and animals in their own backyard and at school.

Name : _____ Date : _____

Scavenger Hunt
ACTIVITY

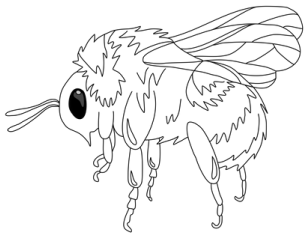




Grade 2 3 4

Can you find all the clues?

- ☐ Find an animal that flies
- ☐ Find an animal that eats plants
- ☐ Find an animal that builds a nest
- ☐ Find something pink
- ☐ Find something that looks heavier than your clipboard
- ☐ Find something that looks lighter than your clipboard
- ☐ Find something rough
- ☐ Find something smooth
- ☐ Find a pinecone (in a tree or on the ground)
- ☐ Find some animal tracks



Name : _____ Date : _____



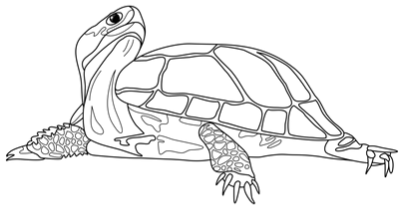
Scavenger Hunt
ACTIVITY

Grade 2 3 4



Can you find all the clues?

- ☐ Find an animal that flies
- ☐ Find a herbivore
- ☐ Find an animal that builds a nest
- ☐ Find something pink
- ☐ Find something that looks heavier than your clipboard
- ☐ Find something that looks lighter than your clipboard
- ☐ Find something rough
- ☐ Find something smooth
- ☐ Find a pinecone (in a tree or on the ground)
- ☐ Find some animal tracks



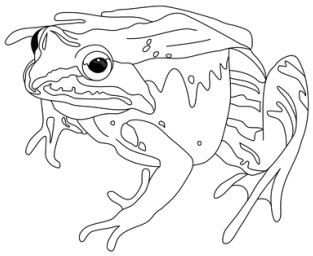
Name : _____ Date : _____

Scavenger Hunt

ACTIVITY

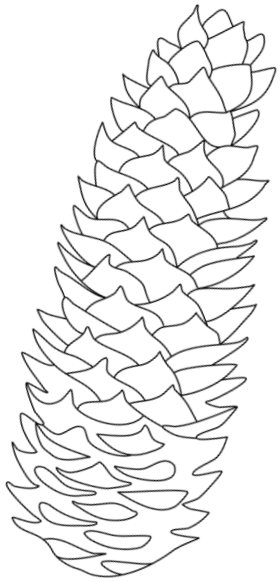
Grade 2 3 4





Can you find all the clues?

- ☐ Find a conifer tree
- ☐ Find a deciduous
- ☐ Find an invasive plant
- ☐ Find an invasive insect
- ☐ Find a herbivore
- ☐ Find some animal tracks
- ☐ Find a tree covered in lichen
- ☐ Find an animal that builds a nest
- ☐ Find a species that fills the role of "decomposer"
- ☐ Find a species that fills the role of "producer"
- ☐ Find a species that fills the role of "consumer"
- ☐ Find a tree with smooth bark
- ☐ Find four different species of trees
- ☐ Find a species that is at risk/endangered



Crafting Caribou

CRAFT

Grade 2 3 4

Date : _____

Overview:

Province-wide, Ontario has already lost 40-50% of its historic boreal caribou distribution. And local caribou populations here are facing high-risk situations. Protecting the habitat of boreal caribou means the Boreal Forest ecosystem as a whole would benefit including other species that rely on healthy, intact forests for their survival such as wolverine and interior songbirds.

Boreal forests also cleanse our air and water, and store vast amounts of carbon within their soils, moderating climate change. Caribou are indicators of a healthy boreal forest. This activity helps encourage student understanding of the critical status of caribou in Canada.

What You'll Need

- Cardstock/craft paper/construction paper
- Glue
- Scissors
- Tape

Check out Wildlands League's website to find information on how caribou are threatened by logging and deforestation in Canada: **wildlandsleague.org/project/caribou/**

Before Crafting:

Explore the link above and introduce the importance of caribou and the threats facing them. Because the craft is focused on creating depictions of caribou, some facts to include when speaking about them with your class are:

- Both males and females have antlers - they are the only one that have them in deer family
- Females keep them longer - Until they have calves in the spring
- Santa's reindeer are all female! (Depending on the classroom and those who observe Christmas, this may be more or less relevant)

Newspaper Animals of James Bay

CRAFT

Grade 2 3 4

Date : _____

Overview:

In this activity, students will use newspaper to create pictures of animals that inhabit James Bay, one of the least studied marine habitats in Canada.

What You'll Need

- Coloured construction paper (shades of blue)
- Ripped strips of white construction paper or cardstock
- Snowflake stickers, cotton balls, or other craft items
- Old newspapers
- Googly eyes
- Scissors
- Glue

Before Crafting:

Check out Wildlands League's website for more information about Wildlands' marine conservation initiatives in Canada and about the arctic animals of James Bay: **marine.wildlandsleague.org/**. We recommend checking out the infographic at the bottom of the page with your students!

After this, students can pick one animal to research. Have them answer questions about their habitat, behaviour, diet, size, and the threats facing them. They can organize this information into a graphic organizer to reference. To tie it in with principles of visual art, explain that the craft/art project that they will be working on is focused on creating a foreground (animal), middle ground (environment), and background (trees, snowflakes, etc.). Once they have this information, they can move on to the craft!

Set the newspaper on the desks, with pre-ripped white cardstock for snowy background. It might be helpful to create an example beforehand so students know what the end product will look like.

Craft:

Students can begin by choosing their animal. Some examples are: Snowshoe hare, black bear, polar bear, and short-eared owl. It is expected that time needed to cut each shape and glue them to the paper will vary greatly for each student. For this reason, it might be best to circulate and ask if those who are behind or are unhappy with their products would like any help, or go through each step as a class.

Students should cut out multiple shapes for their animal, instead of using one piece of newspaper - This will give the final product a more dramatic effect. Once students have cut the shapes and glued them down to the paper, explain that they have three different options for eyes:

1. Students may choose some googly eyes to put on their bear.
2. Students may use white cardstock, cut circles out, and draw the irises.
3. Students can create their own eyes using their own idea.

When students have completed their bear (middle ground/foreground) and made the eyes, they add extra details to the background and further decorate their art if they feel they would like to.



Here is an example of a completed polar bear. The student opted to add a little scarf, though this is optional.

Mapping My Community

Activity

Grade 2 3 4

Date : _____

Overview:

This activity aims to develop students' sense of place and community, while also examining the modern uses of maps and how they relate to conservation efforts. There are different map-making activities depending on the grade below.

Additional Resources:

Check out the maps available on Wildlands League's Connectivity website (**connectivity.wildlandsleague.org**) and facilitate a conversation on why maps are important.

You can talk about how maps help conservation by marking important natural features, and how some maps even determine which species are at risk by through habitat and species mapping. Maps even help scientists and policymakers develop conservation planning and management projects. Students will participate in a mapping activity focused on natural features, animals, and plants in their community.

What You'll Need

- Grid paper
- Pencil, eraser
- Technology (iPad, personal phones)

For Grade 2:

For the second grade, students are asked to investigate plants in their local community. This might be their schoolyard or around the school neighbourhood. Students will be tasked with creating a simple map of the area, using key map features (such as key, legend, and direction). Have students work in small groups to create their map. On the map, students can identify the different plants around them by drawing them. Ask students to identify patterns that they see in the different plants, for example: Are there mostly trees in the area? Big plants? Flowers?
(Example image here)

For Grade 3:

For the third grade, students will first find and identify structures in their local environment, this includes natural and man-made structures. Students will also note the location of any local species that they come across, they can later add this to their maps. Students will label whether or not the structures are human-made or natural (e.g., land formations/weather formations/animal-made, snow structures in the yard). Once they have returned to the classroom, facilitate a discussion about how man-made structures might affect the animals or natural structures in the environment.

Included with the map, students can give detailed instructions on what moves they need to make in order to get from point A to point B (example, walk 3 steps, then turn right, walk 40 steps).

For Grade 4:

For the fourth grade, students will locate, identify, and investigate natural habitats in their local environment. For instance, if mapping their school yard, students might find ant hills, birds nests, and chipmunk holes. When looking for a habitat, prompt students to think about why the habitat is in it's particular spot (food, water, exposure to weather), students will identify these factors on their map. A great additional resource can be found here, on **https://connectivity.wildlandsleague.org**. You can discuss the importance of having safe spaces for animals to roam across the landscape.

Map-Making

- Activities and lessons related to maps and mapmaking can help student understanding during the activity. Show students examples of different kinds of maps. Ask them, "What might make a good map?" "Who uses maps today?" "What types of things should be included on the map?"
- Before implementing this activity, take students outside to learn about their specific science concept. Allow students to explore and find examples to help understanding.
- Use technology (videos, pictures) to look up examples of habitats in the classroom is a simple modification if accessing the local environment is not an option
- Go outside to explore the environment and allow students to get an idea of what they want to represent on their map.
    - If going outside is not an available option, using technology and resources such as Google Maps to help students explore the environment

- Bring paper, pencils and technology (cameras) outside if available for students to track their steps
- Creating their maps can be an indoor or outdoor activity. Students can retrace their steps to their final location and document it on their map at the same time. If the maps are being created inside, students can access their notes or technology to help remember.

Extension suggestions

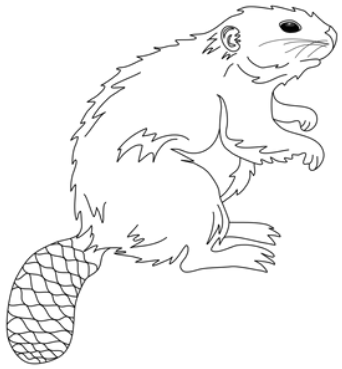
Grade 2:
Students can explore solids and liquids in nature. For example, students can create maps for areas where they can find trees that produce sap (liquid), if there are any rivers or streams (liquid). or if their local environment has rocks or sidewalks (solids). This activity could be extended through winter and spring as students explore their liquid or solid and how it transforms through seasonal transitions. Further, educators can explore how these changes may relate to human activities.

Grade 4:
This activity could be extended into habitat and environmental protection. Students can investigate factors that threaten their chosen habitat as well as steps they can take to protect the habitats in their local environment.

Name : _____ Date : _____

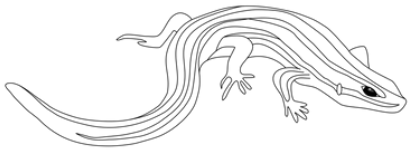
Matching Game
ACTIVITY

Grade 2 3 4



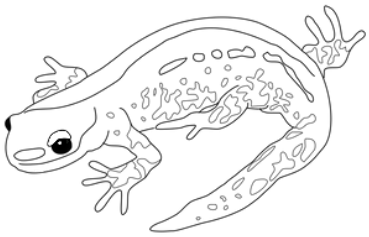
Beaver

Mammal



Five-Lined Skink

Non-Migratory Bird



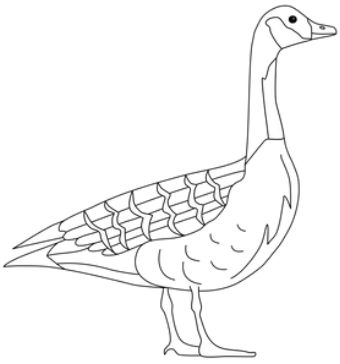
Jefferson Salamander

Amphibian



Northern Cardinal

Migratory Bird



Canadian Goose

Reptile

Name : _____ Date : _____

Matching Game
ACTIVITY

Grade 2 3 4



Squirrel

Forests and Urban Spaces



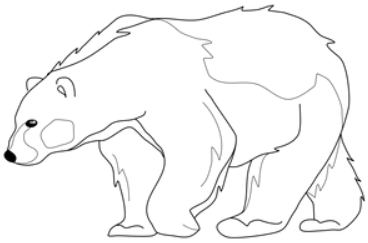
Sugar Maple

Arctic Tundra



Red Spruce

Conifer Tree



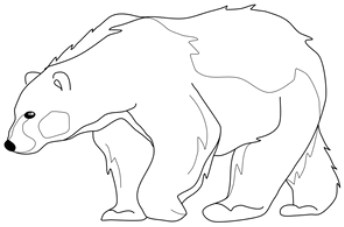
Polar Bear

Deciduous Tree

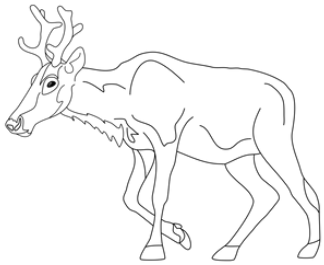
Name : _____ Date : _____

Matching Game
ACTIVITY

Grade 2 3 4



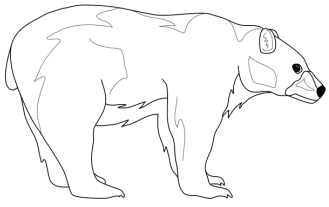
Polar Bear



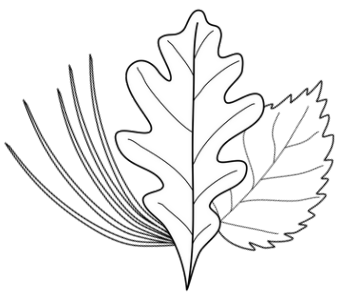
Caribou



Fungi



Black Bear



Plants

Herbivore

Carnivore

Producers

Decomposers

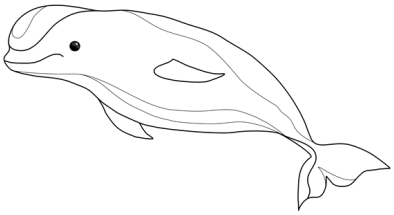
Consumer

Name : _____ Date : _____

Word Scramble
ACTIVITY

Unscramble the letters to find the animal!

BLEUGA



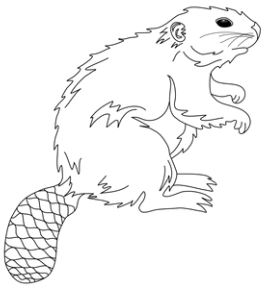
_ _ _ _ _ _

DRE XFO



_ _ _ _ _ _

EBVARE



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EUBL AYJ



_ _ _ _
_ _ _

ESOMO



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ARICTC WLOF



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_ _ _ _

REGY QSURIERL



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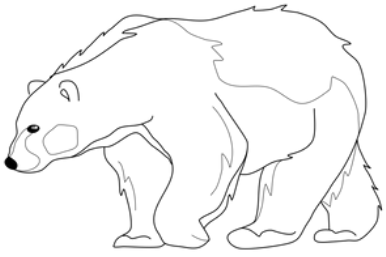
_ _ _ _ _ _ _ _

ORPAL ERBA



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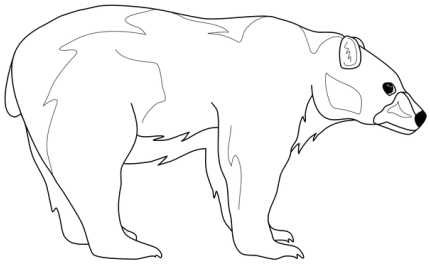
_ _ _ _

Name : _____ Date : _____

Who Hibernates?
ACTIVITY

Colour in the animals that **do** hibernate.

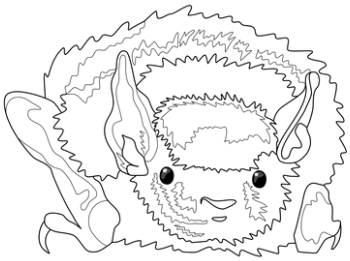
Black Bear



Grey Squirrel



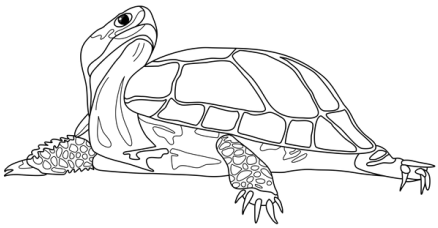
Little Brown Bat



Groundhog



Blanding's Turtle



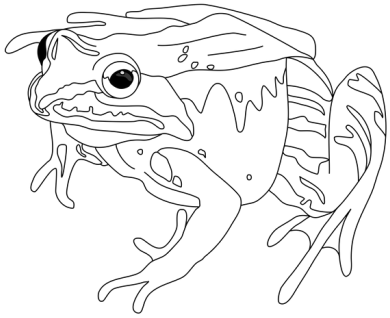
Grey Wolf



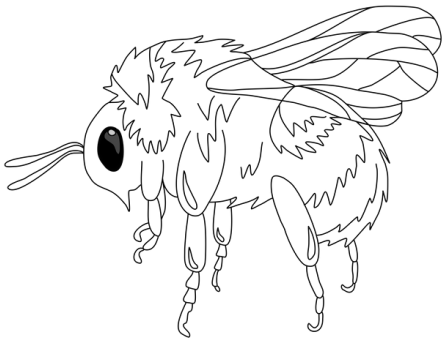
Striped Skunk



Wood Frog



Bumblebee



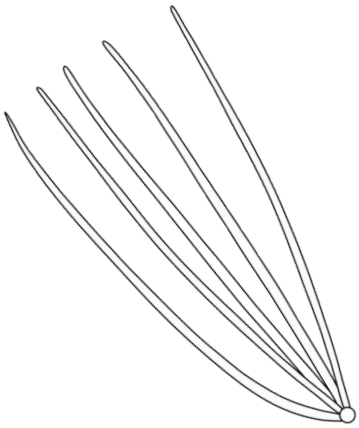
Name : _____ Date : _____

Conifer Search
ACTIVITY

Take this sheet outside and see what you can find! Put a tally next to the picture for each one you see!

White Pine:

- The only pine that has 5 needles per bundle
- Long needles
- Pinecones are cone-shaped



Tally:

☐ ☐ ☐
☐ ☐ ☐
☐ ☐ ☐
☐ ☐ ☐
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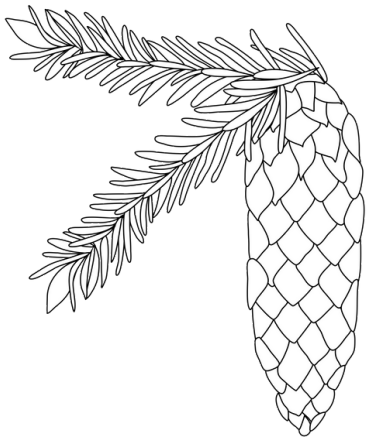
Norway Spruce:

- Short needles
- Needles are dark green in colour
- Long, thin pinecones

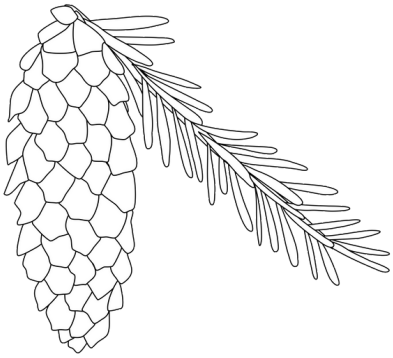


Tally:

☐ ☐ ☐
☐ ☐ ☐
☐ ☐ ☐
☐ ☐ ☐
☐ ☐ ☐

Blue Spruce:

- Needles usually stick out evenly from all sides of the twig and almost all are straight
- Needles stand on a small woody peg
- Needles are a blueish-green colour

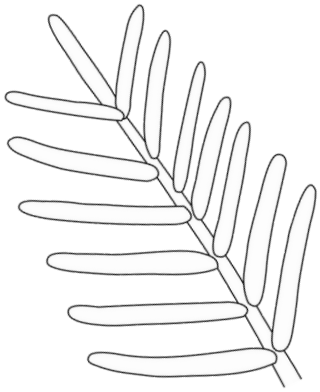


Tally:

☐ ☐ ☐
☐ ☐ ☐
☐ ☐ ☐
☐ ☐ ☐
☐ ☐ ☐

Balsam Fir:

- Tree will have a strong smell
- Needles are dark green and 3-4 centimeters long
- Smooth and grayish bark with blisters filled with resin or balsam pitch



Tally:

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☐ ☐ ☐
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Name : _____ Date : _____

Who am I?
ACTIVITY

Check out **https://marine.wildlandsleague.org/** and look at all the animals you see on the pages, including the video. What animal from the page and video matches all of the following:

- I can swim for two days straight
- I can weigh up to 800kg
- I eat seals and I can smell them from over 15 kilometers away
- While I look very white I actually have black skin and am covered by hollow hair that looks white!
- My habitat is at risk due to climate change

Draw me! (Bonus points for including my habitat)

About Wildlands League

Wildlands League is a not-for-profit charity working to protect the natural world. We create solutions and hope by giving voice to Canada's irreplaceable nature to make sure at least half of Canada is protected for all children, the climate and for the planet.