

NATURE DISCOVERY BACKPACK
ACTIVITY BOOK

CONNECTING WITH NATURE

A PROGRAM OF:



DELIVERED WITH:



CONTENTS

Getting Ready to Explore Nature	04
Staying Safe	05
What Is In My Backpack?	06
Activity #1-5	08
Who Lives Here?	16
Activities #6-19	18
What Is A Watershed?	37
Resilient Shorelands	38
Ways to Help	39



ACKNOWLEDGEMENTS

This activity book was created together by Watersheds Canada and Grey Sauble Conservation with the common goal to educate students and families about the benefits of healthy waterways, lakes, and the surrounding environment for our collective future. This book is linked to the Ontario curriculum for grades K-8. Photography in this book is provided by Watersheds Canada unless otherwise labelled. Cover photo: Getty Images.

This Nature Discovery program is made possible because of support from:



**TD Friends of the
Environment
Foundation**

As one of 36 Conservation Authorities established in the Province of Ontario under the Conservation Authorities Act, Grey Sauble Conservation has made it their mission, in partnership with the stakeholders of the watershed, to champion a healthy and safe watershed through innovative conservation efforts, sound planning, and inspiring education initiatives, now and in the future.

Grey Sauble Conservation acknowledges with respect, the history, spirituality, and culture of the Anishinabek: The People of the Three Fires known as Ojibway, Odawa, and Pottawatomi Nation, who have inhabited this land from time immemorial. And further give thanks to the Chippewas of Saugeen, and the Chippewas of Nawash, now known as the Saugeen Ojibway Nation, as the traditional keepers of this land. Grey Sauble Conservation also recognizes, the Metis whose ancestors shared this land and these waters. May we all, as Treaty People, live with respect on this land, and live in peace and friendship with all its diverse peoples.

Watersheds Canada is a federally incorporated charity (863555223RR0001) and non-profit organization committed to building and delivering education and habitat restoration programs in communities across the country. By working alongside property owners, children and youth, schools, Indigenous communities, businesses, and municipalities, the health of lakes, rivers, wetlands, and shorelines can be enhanced and protected.

GETTING READY TO EXPLORE NATURE



Pickerelweed (*Pontederia cordata*).

We are so excited for you to explore your local nature. You will learn about different local species and how to protect the health of our local rivers, lakes, and beyond!

You can keep this activity book! It will give you tips to safely explore nature, as well as information about different animals and plants that are found in your area. You will learn about watersheds and understand the role of the riparian zone. The activity book will teach you what you can do to help nature, with fun activities along the way!

Please return all field materials in the backpack.

If you are interested in learning more about Watersheds Canada, please visit watersheds.ca or scan this QR code!



STAYING SAFE



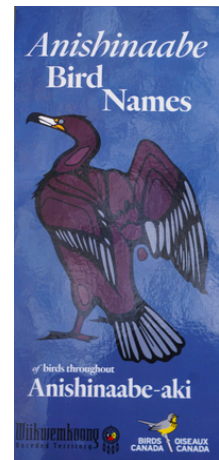
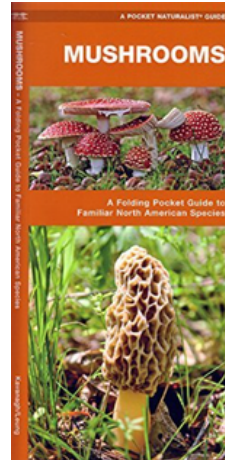
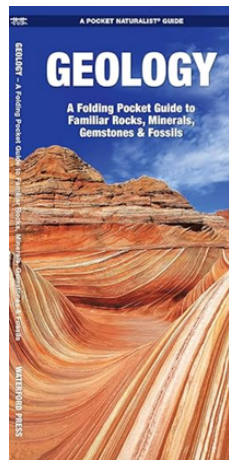
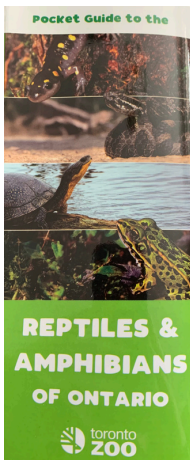
Here are some things to keep in mind when exploring outside:

- Bring a hat, snacks, reusable bottle with water, sunscreen, and bug spray.
- Tell someone where you are going and when you will be back.
- Watch wildlife from a safe distance. Do not handle wild things!
- Always swim with an adult nearby who can watch you.
- Please leave nature for everyone to enjoy. Do not pick any plants or bring any wildlife or insects home with you.
- Make sure to bring back your garbage so that you can properly get rid of it at home. With the help of an adult, you can also pick up any garbage you find in nature and bring it home for disposal!
- **There are ticks in the area. Wear long sleeves and long pants if walking in a wooded area. Learn more about tick safety: <https://www.ontarioparks.com/parksblog/how-to-protect-yourself-from-ticks/>**

WHAT IS IN MY BACKPACK?

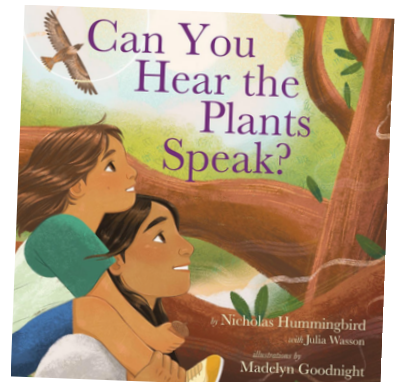
Identification guides & books

Use the guides and books to learn about the different types of local biodiversity like turtles, frogs, salamanders, snakes, birds, mammals, mushrooms, plants, and aquatic macroinvertebrates. Each guide has information and photos for each species, like their colour and size. You can also learn about geological features with the geology guide.



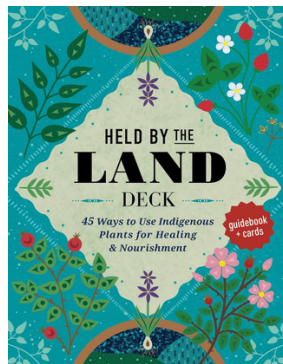
Canids	Tracks	Foot Width - Great Length	Stride	Habitat	Features
Grey Fox		Male: 11.7-14.2 cm (4.6-5.6 in) Female: 10.2-12.7 cm (4.0-5.0 in) Newborn: 4.1 cm (1.6 in) Litter: 2-4 Litter length: 1.5-2.5 cm (0.6-1.0 in) Litter spacing: 2-3 cm (0.8-1.2 in)	Male: 15.2-25.4 cm (6.0-10.0 in) Female: 14.0-20.0 cm (5.5-8.0 in) Newborn: 5.0-7.0 cm (2.0-2.8 in) Litter: 2-4 Litter length: 1.5-2.5 cm (0.6-1.0 in) Litter spacing: 2-3 cm (0.8-1.2 in)	Forests, open woodlands and grasslands. Common in urban and rural areas. Often found in brushy areas. Tracks are often found in pairs.	Tracks: Single track, double track, and single track with a central impression. Tracks are often found in pairs.
Red Fox		Male: 11.7-14.2 cm (4.6-5.6 in) Female: 10.2-12.7 cm (4.0-5.0 in) Newborn: 4.1 cm (1.6 in) Litter: 2-4 Litter length: 1.5-2.5 cm (0.6-1.0 in) Litter spacing: 2-3 cm (0.8-1.2 in)	Male: 15.2-25.4 cm (6.0-10.0 in) Female: 14.0-20.0 cm (5.5-8.0 in) Newborn: 5.0-7.0 cm (2.0-2.8 in) Litter: 2-4 Litter length: 1.5-2.5 cm (0.6-1.0 in) Litter spacing: 2-3 cm (0.8-1.2 in)	Forests, open woodlands and grasslands. Common in urban and rural areas. Often found in brushy areas. Tracks are often found in pairs.	Tracks: Single track, double track, and single track with a central impression. Tracks are often found in pairs.
Eastern Coyote		Male: 11.7-14.2 cm (4.6-5.6 in) Female: 10.2-12.7 cm (4.0-5.0 in) Newborn: 4.1 cm (1.6 in) Litter: 2-4 Litter length: 1.5-2.5 cm (0.6-1.0 in) Litter spacing: 2-3 cm (0.8-1.2 in)	Male: 15.2-25.4 cm (6.0-10.0 in) Female: 14.0-20.0 cm (5.5-8.0 in) Newborn: 5.0-7.0 cm (2.0-2.8 in) Litter: 2-4 Litter length: 1.5-2.5 cm (0.6-1.0 in) Litter spacing: 2-3 cm (0.8-1.2 in)	Forests, open woodlands and grasslands. Common in urban and rural areas. Often found in brushy areas. Tracks are often found in pairs.	Tracks: Single track, double track, and single track with a central impression. Tracks are often found in pairs.
Eastern Woodchuck		Male: 11.7-14.2 cm (4.6-5.6 in) Female: 10.2-12.7 cm (4.0-5.0 in) Newborn: 4.1 cm (1.6 in) Litter: 2-4 Litter length: 1.5-2.5 cm (0.6-1.0 in) Litter spacing: 2-3 cm (0.8-1.2 in)	Male: 15.2-25.4 cm (6.0-10.0 in) Female: 14.0-20.0 cm (5.5-8.0 in) Newborn: 5.0-7.0 cm (2.0-2.8 in) Litter: 2-4 Litter length: 1.5-2.5 cm (0.6-1.0 in) Litter spacing: 2-3 cm (0.8-1.2 in)	Forests, open woodlands and grasslands. Common in urban and rural areas. Often found in brushy areas. Tracks are often found in pairs.	Tracks: Single track, double track, and single track with a central impression. Tracks are often found in pairs.
Grey Squirrel		Male: 11.7-14.2 cm (4.6-5.6 in) Female: 10.2-12.7 cm (4.0-5.0 in) Newborn: 4.1 cm (1.6 in) Litter: 2-4 Litter length: 1.5-2.5 cm (0.6-1.0 in) Litter spacing: 2-3 cm (0.8-1.2 in)	Male: 15.2-25.4 cm (6.0-10.0 in) Female: 14.0-20.0 cm (5.5-8.0 in) Newborn: 5.0-7.0 cm (2.0-2.8 in) Litter: 2-4 Litter length: 1.5-2.5 cm (0.6-1.0 in) Litter spacing: 2-3 cm (0.8-1.2 in)	Forests, open woodlands and grasslands. Common in urban and rural areas. Often found in brushy areas. Tracks are often found in pairs.	Tracks: Single track, double track, and single track with a central impression. Tracks are often found in pairs.

(laminated tracks guide)



Discovery tools and games

Explore in the forest with a fun scavenger hunt dice game, meet critters in the soil with your garden tools set, and learn about Indigenous plants with the 'Held by the Land Deck'.

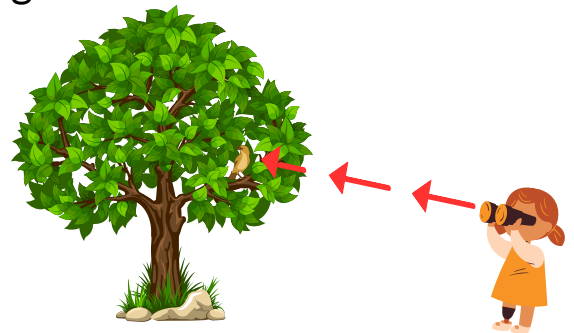


Binoculars



Use this to help you see things that are far away from you!

Turn the knob on the binoculars to make it easier to see.



Notes for Adults: Any animals taken from a pond and put into a jar or bucket need to stay in water to stay alive. A fish or aquatic snail, for example, should have water to swim in, just like it had in the pond where it lives. Animals and plants from the wild cannot be taken home as pets and should always go back to their homes in the wild when you are done looking at them.

Be gentle whenever catching pond critters. Do not handle pond critters if you have lotions, sunscreen, or bug spray on your hands as this can pass through the sensitive skin of the critter and hurt them. Be safe when near water and always keep children within arm's reach. Consider having young children wear a life jacket for additional safety near the water.

ACTIVITY #1: TALK TO THE BIRDS

You may hear birdsong in a forest or your backyard, but have you ever tried to have a conversation with a bird? Try to whistle, sing, and mimic (copy) their noises and then use your binoculars to see if anyone comes to see you!

Grab the bird guide and the binoculars!



Three different ways you can do this activity:

#1: Go outside and listen to the sounds you hear, but don't make any sounds back.



#2: Play bird calls in a free mobile app like Merlin



Merlin Bird ID

Play a sound and see who sings back to you!

#3: Go to the next page and learn some bird noises.



Make the sounds yourself and see what bird friends you can make!

Yellow Warbler

- Small, bright yellow bird
- Has a short, thin beak which can pick insects off leaves and flowers to eat
- Song sounds like it is singing "Sweet, sweet, sweet, I'm so sweet!"



Red-breasted Nuthatch

- Small blue-gray bird
- Has black and white stripes on its head
- Has a rusty-brown coloured belly
- Songs and calls: a fast series of hornlike notes that sound like "yank-yank"

Black-capped Chickadee

- Small bird with a short neck and large head
- Song sounds like it is singing "chicka-dee-dee-dee"
- Also has 2 or 3-note whistle which sounds like "fee-bee" or "hey, sweetie"



Keep practicing your bird call identification skills with these Apps:



Merlin Bird ID



ACTIVITY #2:

ANISHINAABE BIRD MATCH

Use your “Anishinaabe Bird Names” guide to draw a line between the description, the picture, and the name of the bird!

1 They say I look like a skunk.

A



i) MINOMINKESHII

2 I am a unique and ubiquitous *Shiip*.

B



ii) ZHIGAAKOOWABINESHIINH

3 My name means “red bird”.

C



iii) BOONISE

4 I get my name from my abrupt stops.

D



iv) ANINISHIIP

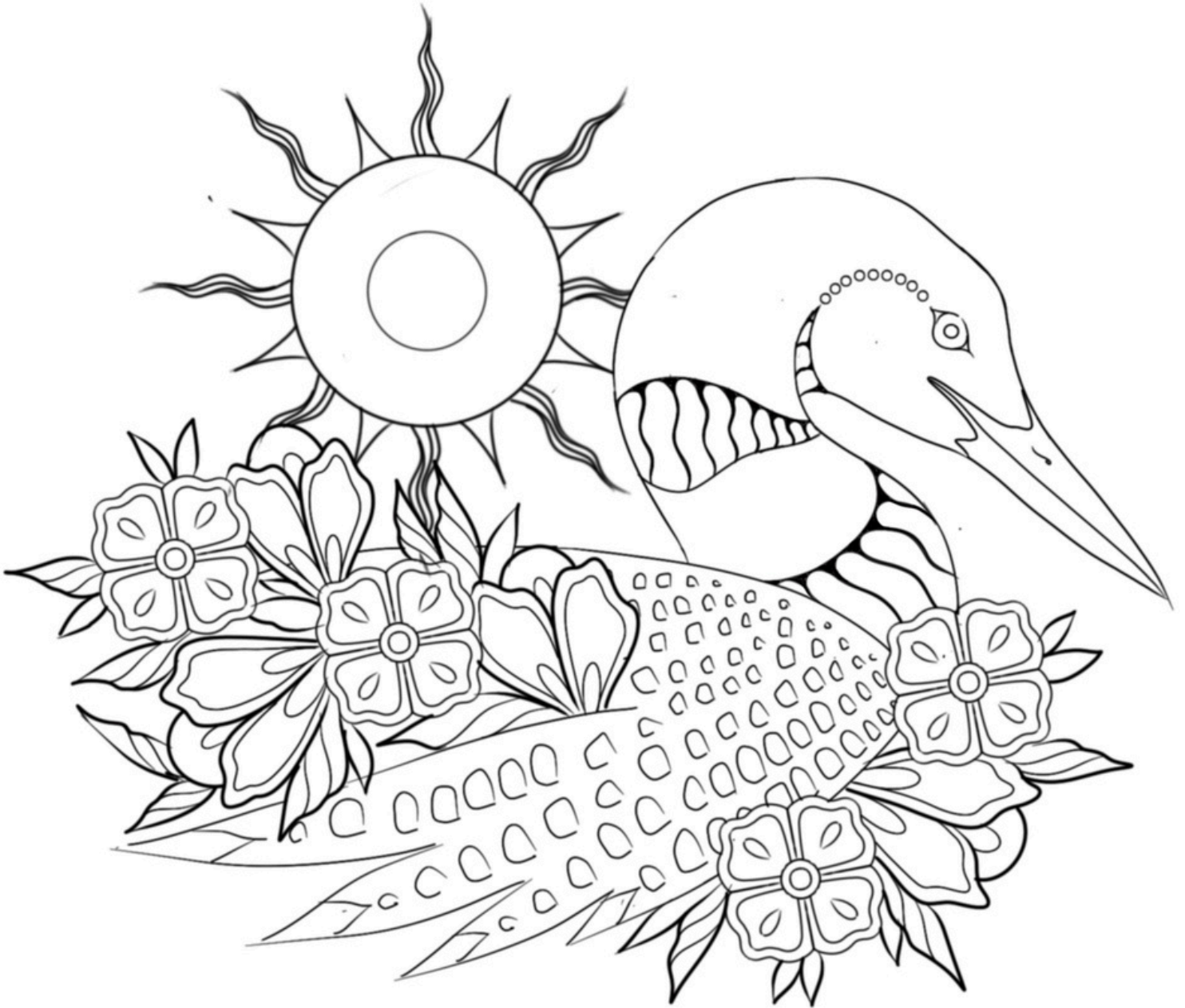
5 I help spread the seeds of wild rice.

E



v) AMESIKOOWABINESHIINH

Meet mwâko! Mwâko is how you say 'loon' in Cree.



This colouring page was created by Ameena Buchanan!

Born and raised in Katarokwi- Kingston Ontario, Ameena Buchanan is an Ojibwe artist whose family comes from Batchewana First Nation. Throughout her life Ameena has grown her creative pursuits through multiple mediums, such as silversmithing, painting, and digital media. Now she is currently tattooing at an indigenous owned studio in Tkaronto, with a focus on woodland florals, and illustrative indigenous designs.

ACTIVITY #3: OWL MAZE

Can you help the Great Horned Owl find its way back home?



ACTIVITY #4: POETRY

List 6 things that describe what you love about nature using the first letter of each line. This will make an acrostic poem, where the first letter of each line spells out the word 'nature' when read vertically. Lines do not have to rhyme.

N

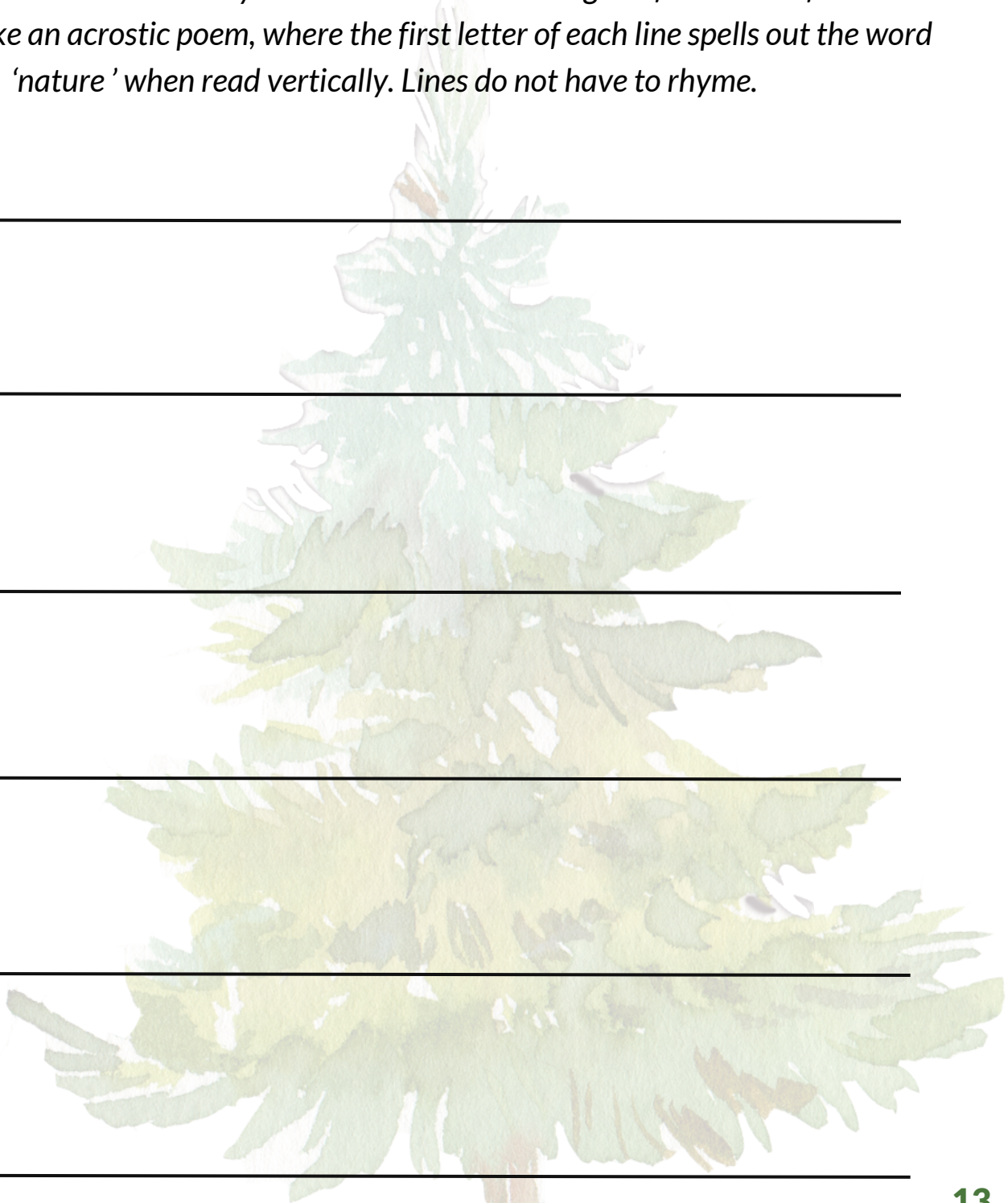
A

T

U

R

E





ACTIVITY #5: FOLLOW IN THEIR FOOTSTEPS

Not seeing any wildlife? You may have just missed them!

Here are some tips for finding animal tracks:



- Look for tracks in areas with wet sand and soft mud, like beaches, creek beds, trails, and puddles.
- Look in the early morning or late afternoon as the sun makes it easier to look in shaded areas.
- Look just beside the trail as people's shoe prints on the trail will make it hard for you to find animal tracks.
- If you have never tracked an animal before, start by watching an animal make a track and then go look at the track right away.
- Remember that you will not always come across a track that perfectly matches what is shown in your guide! You will have to do some detective work to figure out which animal left the track.
- If you cannot find any tracks, look for other signs of wildlife like fur, feathers, scat (poop), a nest, or woodpecker tree holes.

Get out
your tracks
guide for
this
activity!

Want more practice before you go in the field? Try this Scout Life animal track quiz:
<https://scoutlife.org/quizzes/6662/>



NATURE DETECTIVE OBSERVATION SHEET

TYPE OF SIGN	SUSPECT
<i>these tracks -</i> 	<i>raccoon</i> 

Write down any signs you see, hear, or touch while outside and guess what animal it could be from!

WHO LIVES HERE?



Mooningwane (Northern Flicker)

Learn more: "Anishinaabe Bird Names", Joseph Pitawanakwat



Giishmaantikoh (Belted Kingfisher)

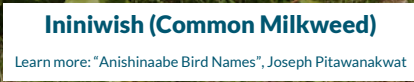
Learn more: "Anishinaabe Bird Names", Joseph Pitawanakwat



Monarch Butterfly



Painted Turtle



Ininiwish (Common Milkweed)

Learn more: "Anishinaabe Bird Names", Joseph Pitawanakwat

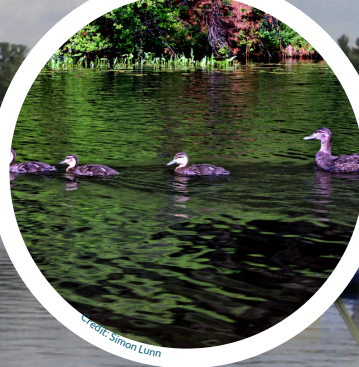


River Otter



Aninishiip (Mallard)

Learn more: "Anishinaabe Bird Names", Joseph Pitawanakwat



Northern Leopard Frog



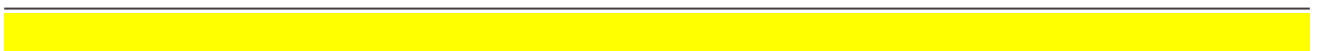
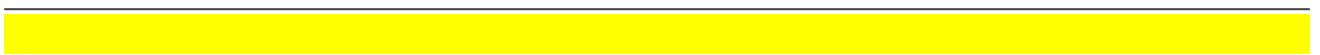
Dragonfly nymph



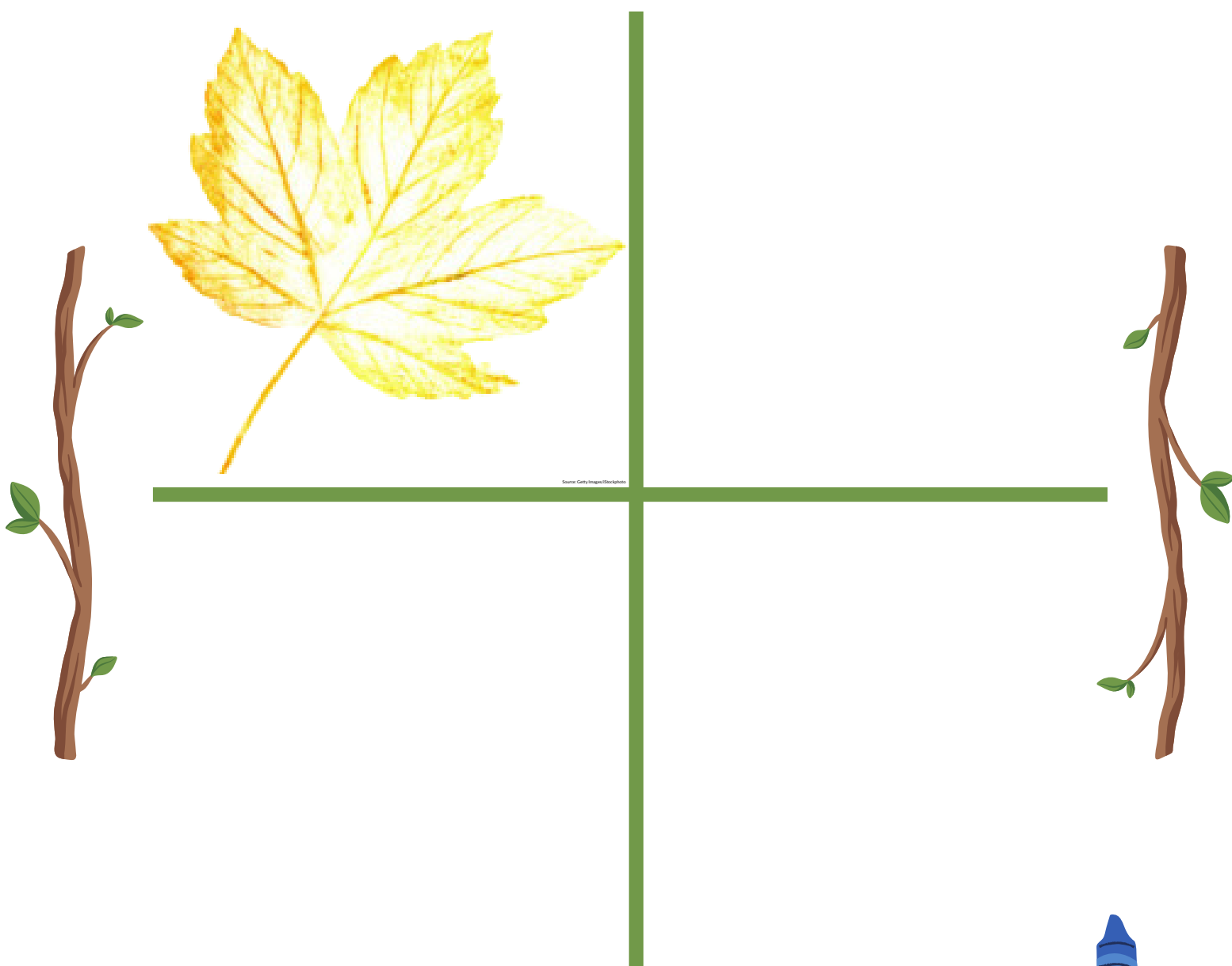
Snapping Turtle

ACTIVITY #6: MAKE A PLANT FRIEND

*Walk around and find a flower or tree you like. Draw it in the box.
Write about the plant and what you like about it on the lines below.*



Give a tree a hug and try to do a leaf and bark rubbing! Holding your paper tightly, gently rub a crayon on its side over the surface of your paper on the leaf or bark. With just enough pressure, the texture will begin to show on the paper. The first square is done for you!



Tip: Try rubbing different tree barks and leaves to reveal new textures. Compare patterns using different colours!



ACTIVITY #7: LISTEN TO THE PLANTS

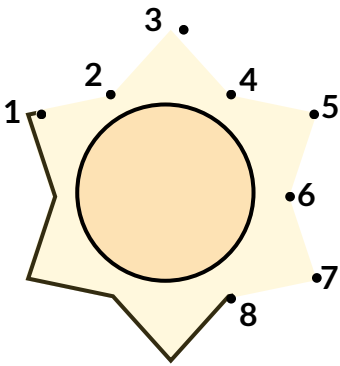


Read “Can You Hear the Plants Speak” to learn about how Nicholas and his son Tuhui listen to the plants! How can we help plants by listening to what they need?

Every plant is unique and has different needs, but all plants need light, water, food, and space. By learning more about the special plants around us, we can take care of them better.

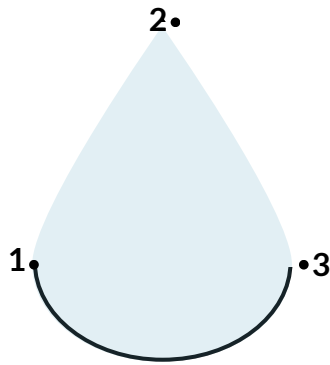
Here are examples of what you can do to listen to the plants.

Connect the dots to complete the pictures!



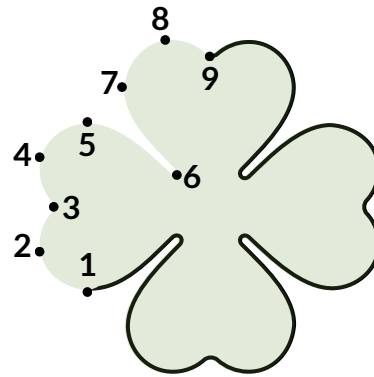
LIGHT

We can make sure plants that need a lot of light are planted in a spot that gets lots of sunshine.



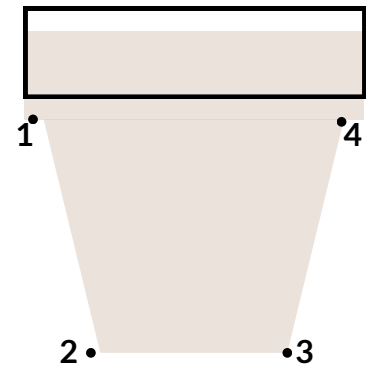
WATER

We can water plants when there isn't enough rain.



NUTRIENTS

We can add compost to our plants when they need it.

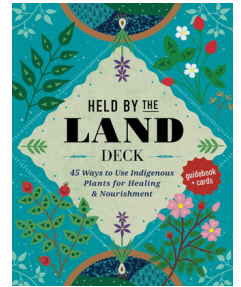


SPACE

We can leave space between plants so they don't grow on top of each other.





ACTIVITY #8: ALL YEAR HARVEST

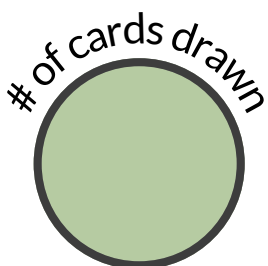
Do you know when to harvest native plants? Many of Canada's native plants can be used for food and medicine, but they should only be harvested at certain times of year.



Draw 10 cards at random from the 'Held by the Land' deck.

Write down the species' name in the column of the season it can be harvested in. Some plants have different parts that are harvested at different times of the year! If there is not a species in each column, draw another card and add the species to the chart. Keep going until there is at least 1 species for every season.

 SPRING March - May	 SUMMER June - August	 FALL September - November	 WINTER December-February



How many cards did you need? What season was hardest to find?

In Canada, there are not as many plants that can or should be harvested in winter. This not only affects humans but also other animals that need plants in the winter for food. This is one reason why it is important to leave some behind and harvest sustainably.

ACTIVITY #9: FUNGI AND LICHEN DETECTIVE



Fill in the blanks with an adjective that describes the fungi and lichen in the photos below. Then, head outside and see what types of fungi and lichen you can find in your own backyard. Remember, do not pick or eat them!















ACTIVITY #10: FUNGI SCRAMBLE

Did you know fungi are not plants or animals? Fungi are their own kind of living thing. We usually only see the mushrooms of fungi. Mushrooms are the fruits of fungi, just like how apples are the fruits of apple trees! Fungi have many jobs, including decomposing leaves and wood, sharing food between plants, and helping plants talk to each other. Fungi can grow almost anywhere and when they form lichen with algae or bacteria they can even grow in space!

Can you crack the code? Unscramble the fungi-related words below, putting the letters in the correct order in the circles beside the scramble.

A C O E D P M S E O ○ ○ ○ ○ ① ○ ⑥ ③ ○

B U F I N G ○ ② ○ ○ ○

C I L N H E C ○ ○ ○ ④ ○ ○

D O H U R M S O M ⑧ ○ ○ ○ ⑤ ○ ⑦ ○

Order the letters in the coloured circles based on their numbers to finish the joke!

HOW MUCH ROOM DOES A MUSHROOM NEED TO GROW?

AS ① ② ③ ④ - ⑤ ⑥ ⑦ ⑧ AS POSSIBLE!

ACTIVITY #11: GEMS AND ROCKS

*In this activity, learn new vocabulary that is used
to describe gems, minerals, and rocks!*

S I A G E M H S R
L P A M B O A H O
C G E O L O G Y C
R O I C S U P L K
U O T L K D J T B
M U F A L L U E U
B L L A I I E L B
L E J A G G E D L
Y B S M O O T H R

Geology
Jagged

Speckled
Gem

Rock
Crumbly

Dull
Smooth

ACTIVITY #12: COMPLETE THE GEOLOGICAL FORMATION

Draw the rest of the rock face the way you think it would look!



ACTIVITY #13: EARTH'S GEOLOGICAL TIMELINE

Time for you to make a “calendar” for events in Earth’s history!

The geological timescale is a physical representation of Earth’s history. It goes back billions of years! Using different landmasses found on Earth, we can see different layers of history. The rocks and fossils found in each layer tell the story of Earth from when its crust first formed billions of years ago, right up to today when you are alive!

Geologists, scientists who study the structure, composition, and history of Earth, divide geologic time into a series of time called **eras** and **eons**.

Each eon is then further divided into smaller and smaller units of time. Starting with the oldest, there is the:

- **Precambrian era:** about 4.6 billion years ago to 538.8 million years ago
- **Paleozoic era:** 538.7-252 million years ago
- **Mesozoic era:** 251.9 to 66.0 million years ago
- **Cenozoic era:** 66 million years ago to today

In this activity, you will cut out the different events or life forms and place them in their proper era when they were first discovered!





DINOSAURS



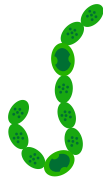
FIRST LAND MAMMALS



FORMATION OF EARTH



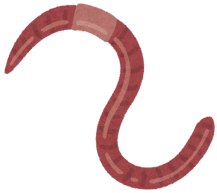
FIRST LAND PLANTS



MULTICELLULAR ALGAE



ICE AGES



FIRST INVERTEBRATES



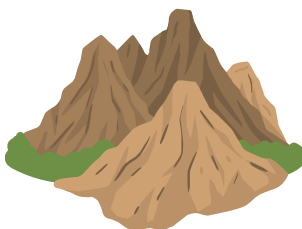
FIRST BIRDS



FIRST AMPHIBIANS



FIRST HUMANS



LAND MASSES



FIRST INSECTS

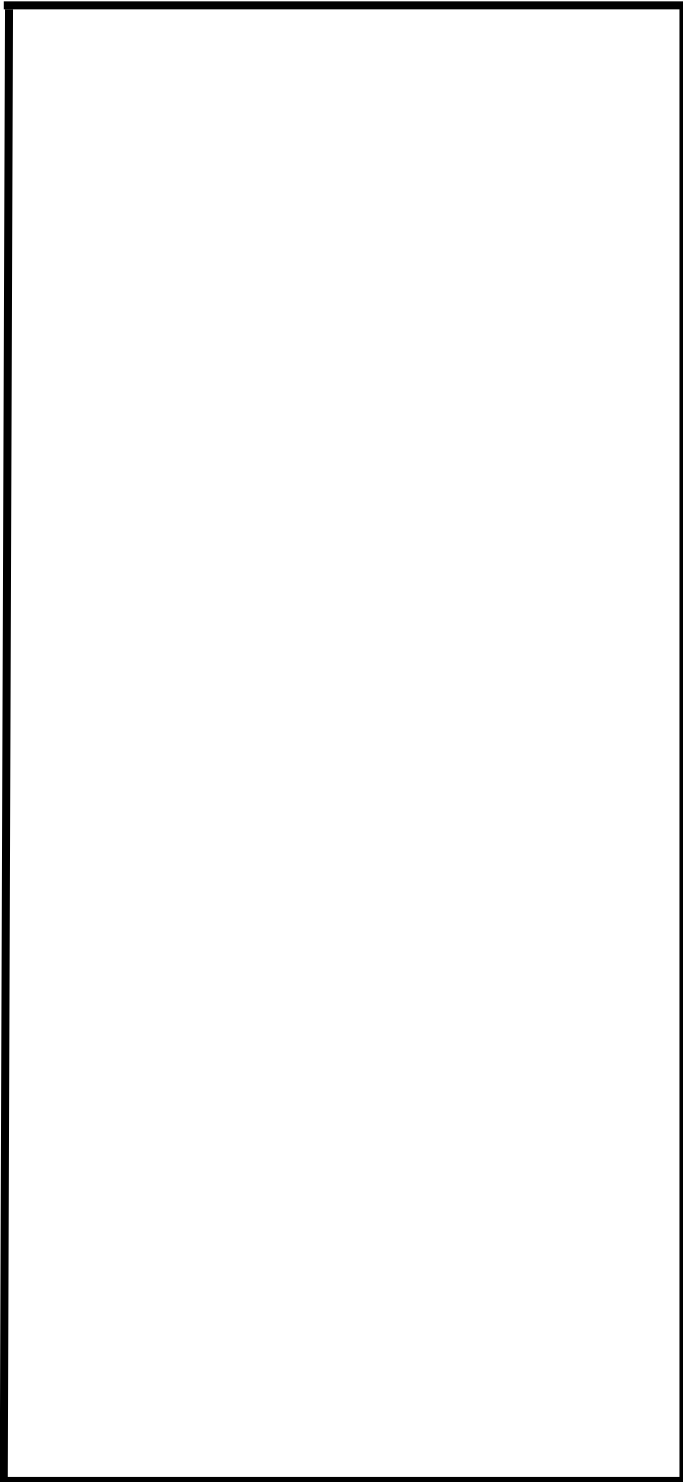
CENOZOIC ERA

MESOZOIC ERA

PALEOZOIC ERA

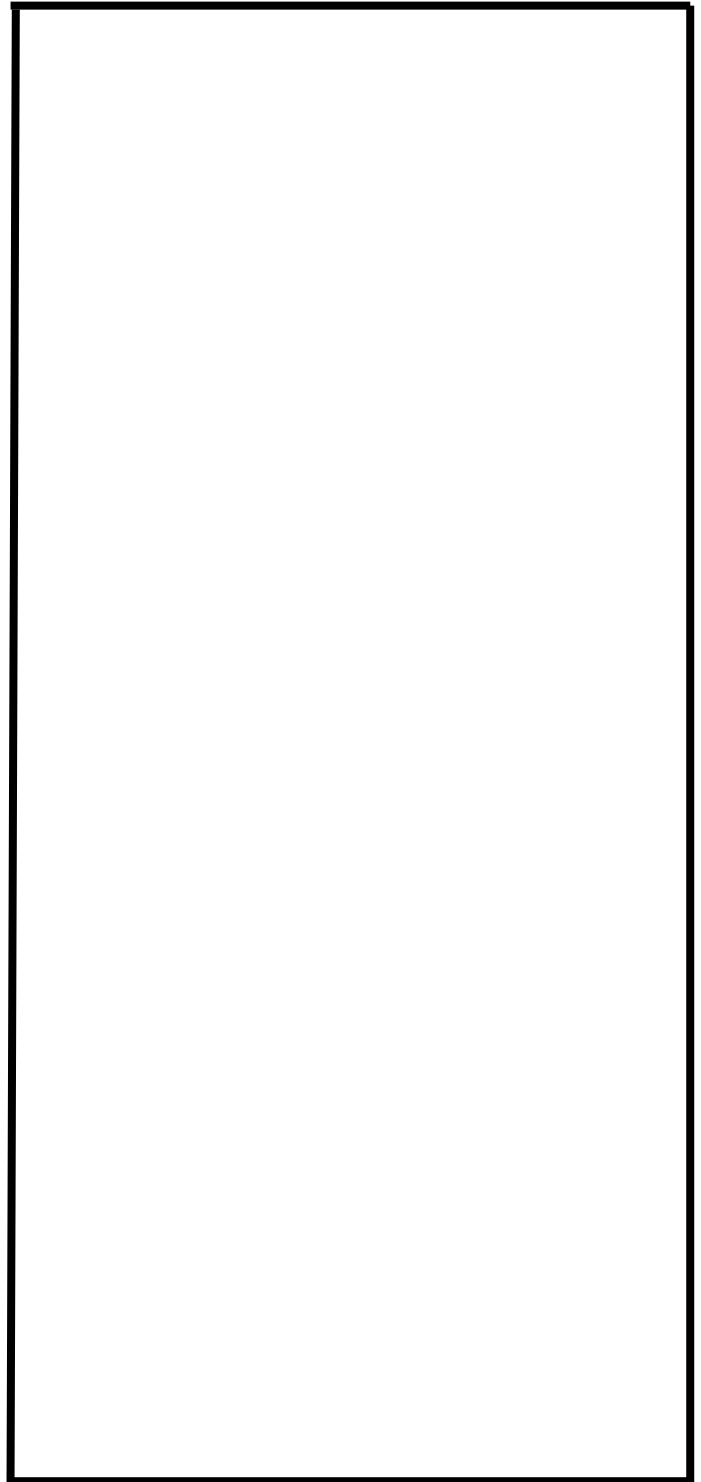
PRECAMBRIAN ERA

What day did you start your soil-arium?



Draw what it looks like inside! ↗

What day did you stop your soil-arium?



Draw what it looks like inside! ↗

ACTIVITY #15: THE ROCK CYCLE

Find a rock outside to study.

Using your senses, investigate your rock up close to determine how it feels (its texture), what it looks like, and what it smells like.



Then, describe the adventure of your rock!

Draw a timeline of your rock's life so far with key milestones including where it has travelled over time and how it got there.



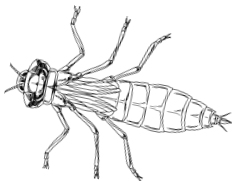
ACTIVITY #16: MAKE THE MATCH

Grab this
guide to
do this
activity!



Benthic macroinvertebrates have no backbone (spine) and we can see them with our eyes. They live in and around a waterbody their whole life, so they are living indicators that show us how healthy a waterbody is. Draw a line from the species to their name!

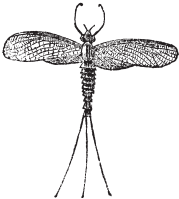
1)



2)



3)



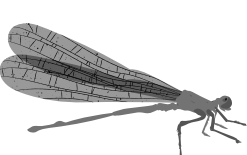
4)



5)



6)



A) Aquatic snail

Fun fact: they usually have a coiled shell but sometimes it can be a short, broad cone shape.

B) Freshwater scud

Fun fact: they have seven pairs of hard jointed legs and the first two pairs have small claws.

C) Dragonfly nymph

Fun fact: they have 3 pairs of hard jointed legs with 2 claws on each leg.

D) Mayfly

Fun fact: they are the only type of insect that has a winged immature stage.

E) Damselfly

Fun fact: there are over 20 different damselfly species found in Alberta.

F) Water scorpion

Fun fact: their "tail" is two half-tube structures that can be locked together and used like a snorkel.



ACTIVITY #17: FILL-IN-THE-BLANK PICNIC

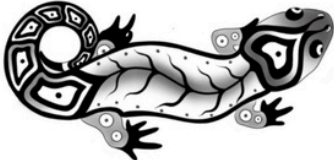







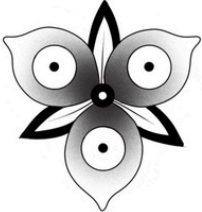


Pick two Pond & Stream Life Nature circles at random, one will be *A*, and one will be *B*. Use the information on the circles and your imagination to fill in the blanks below to create a fun story! An adjective is a word that describes your species, like its colour or shape.



One _____ and _____ day a(n) _____
ADJECTIVE ADJECTIVE SPECIES NAME; A
was _____ around in the _____ when they decided to
VERB - ing HABITAT; A
have a picnic. But first, they had to invite their _____ friend,
ADJECTIVE
_____! They were all _____ to have a picnic together
SPECIES NAME; B ADJECTIVE
and went _____ for some _____ food to share.
VERB (end in -ing) ADJECTIVE
_____ likes _____, while _____ likes
SPECIES NAME; A FOOD; A SPECIES NAME; B
_____. With their food ready, they went to the _____
FOOD; B ADJECTIVE
water for their _____ picnic. They decided to _____
ADJECTIVE VERB (end in -ing)
some games after eating and spent the rest of their _____
ADJECTIVE
day _____ together. _____'s favourite part of the
VERB (end in -ing) SPECIES NAME; A
picnic was _____ on a _____!
SPECIES NAME; B VERB (end in -ing) ADJECTIVE NOUN

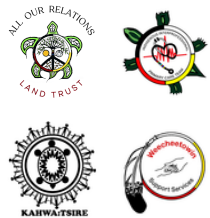
ACTIVITY #18: MAAWNDOOOSHKBIIYAA(N) (MARSH POND) BINGO

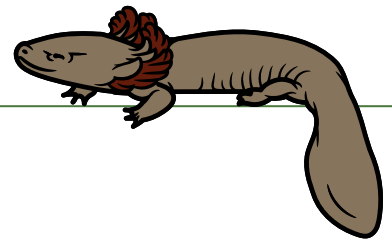
Circle the items as you find them in a local watery area!

 <p>Dawagomeg(og) (salamander)</p>	 <p>Apakweyashk (cattail)</p>	 <p>Mskwaadesi (painted turtle)</p>
 <p>Moon'angoonh (trout lily)</p>	<p>An animal or plant of your choice!</p>	 <p>maangodikwam(ag) (water spider)</p>
 <p>Zhiishiib (duck)</p>	 <p>Boojoozhens(ag) (tadpole)</p>	 <p>Biimskodsiinh (snail)</p>
 <p>baashknjibwaan(an) (white trillium)</p>	 <p>Zagime (mosquito)</p>	 <p>Omakakii (frog)</p>

ARTWORK BY:
Ameena Buchanan

TRANSLATIONS
PROVIDED BY:

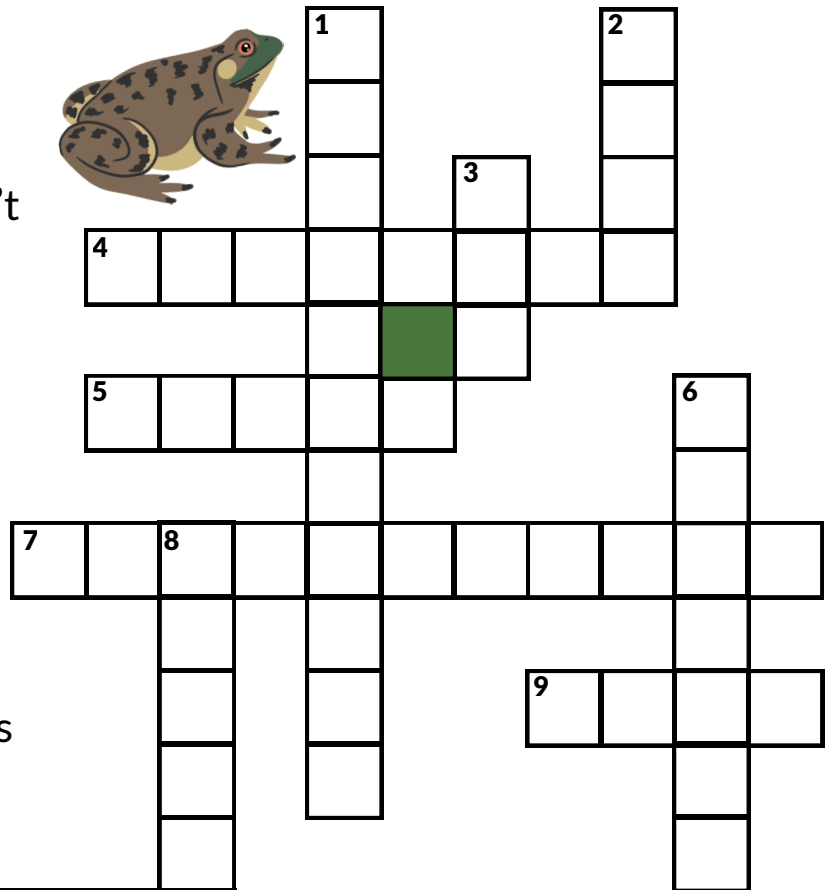




ACTIVITY #19: REPTILES & AMPHIBIANS CROSSWORD

DOWN

1. Reptile and amphibian bodies change temperature with their surroundings because they can't generate their own heat. They are cold-blooded, or _____.
2. Most reptiles and amphibians lay these.
3. How frogs move.
6. A Northern _____ Frog shares part of its name with this large spotted cat.
8. The Common Snapping Turtle is Canada's _____ freshwater turtle!



ACROSS

4. You have to be careful of Massasauga Rattlesnakes because they are _____.
5. How many native species of turtle live in Ontario?
7. Reptiles and amphibians survive cold winters by going into a sleep-like state (brumation). This is similar to the _____ bears do in the winter.
9. The _____ Ratsnake is the longest snake in Ontario!
10. This is a type of semi-aquatic salamander.

WORD BANK

HOP
 HIBERNATION
 LEOPARD
 EGGS
 BIGGEST
 NEWT
 GRAY
 VENOMOUS
 EIGHT
 ECTOTHERMIC

WHAT IS A WATERSHED?

- A **watershed** is an area of land that water flows through or across on its way to a particular water body, like a stream, river, wetland, lake, or coastline.
- A watershed is the land where precipitation – like rain – falls and flows to a common, watery place!
- Depending on where you live in Owen Sound, you may be in the Sydenham River Watershed, Bothwell's Creek Watershed, or Pottawatomi River Watershed.

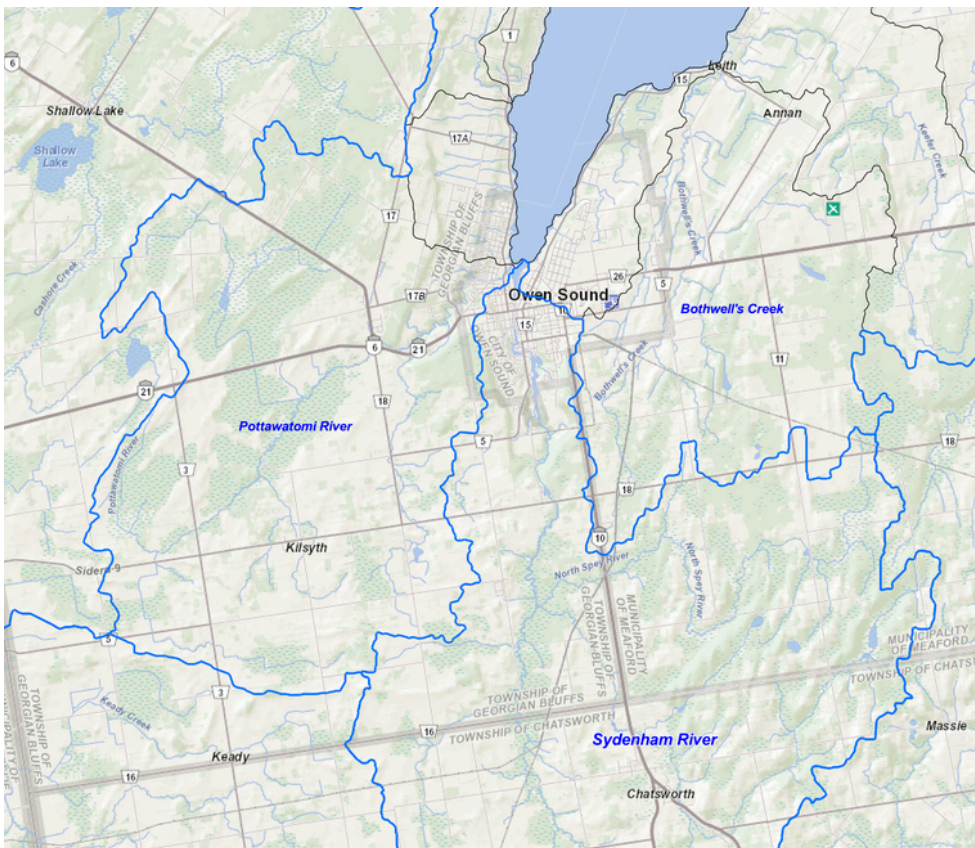


Photo credit: Open Government Licence - Ontario. Internet: <https://ontario.ca/page/open-government-licence-ontario>

RESILIENT SHORELANDS

The **Littoral Zone** extends from the water's edge to where sunlight no longer penetrates to the bottom of the water. This is where docks are built and people swim. However, we share this area with an incredible array of biodiversity as up to 90% of lake species (e.g., pike, ducks, otters and turtles) are born, raised, fed, or live in the littoral zone.

The **Shoreline** is the edge where the land and water meet. The mix of plants, shrubs, and trees form an intricate web of roots, foliage, and fallen limbs that hold the waterfront together and fend off erosion from wind, rain, boat wakes and ice.

The **Riparian Zone**, also known as the Ribbon of Life, extends inland from the shoreline for at least 15 metres and may be flooded during high water periods. It is a natural buffer protecting the shoreline, water quality, and natural habitat both on land and in the water. It is made up of trees, shrubs and grasses that absorb excess nutrients (e.g., fertilizers) and pollutants (e.g., seepage from septic systems, oil, gas and pesticides) before they can contaminate the water.

The **Upland Zone** is a drier forested area with better drainage compared to the riparian zone. The deep roots of trees stabilize the slope, the foliage buffers the effects of wind, the canopy cools its surroundings, and plants provide habitat for deer, birds, porcupines, grouse, rabbits, and many other creatures.

Upland

Riparian

Shoreline

Littoral



Watersheds
CANADA

WAYS TO HELP

- Gather data.** Take photos and observations of different animals and plants you see in nature and submit them to an online database like [iNaturalist](#), [eBird](#), [MonarchWatch](#), or [Water Rangers](#).
- Be natural.** Consider adding native plants to provide stabilization, habitat, and food to your property. Learn what native species to plant on your property: naturaledge.watersheds.ca/plant-database/
- Grow Me Instead!** Learn about native plants you can grow in your garden by checking out the “Grow Me Instead” chart: <https://ontarioinvasiveplants.ca/wp-content/uploads/2020/04/Southern-Grow-Me-Instead-1.pdf>
- Keep it clean.** Prevent the spread of invasive species by staying on trails while hiking and by cleaning equipment after boating. Learn more: <https://ontario.ca/page/invasive-species-fact-sheets>
- Be respectful.** Take only photos and leave only footprints when exploring in the forest. This lets other people, animals, and plants use the space too.
- Support local.** Buy local native plants at the Inglis Falls Arboretum Alliance: <https://greysauble.on.ca/arboretum-alliance/>
- Help local turtles!** Get involved with the turtle stewardship program at Grey Sauble Conservation: <https://greysauble.on.ca/turtle-stewardship-program/>
- Protect baby turtles.** Turtle nest predation rates are very high in our area. Help protect turtle eggs and ensure they have a chance to hatch. As a family, consider if it may be appropriate for you to make your own turtle nest protector: <https://ontarioturtle.ca/get-involved/turtle-nests-and-nest-protection/>



Watersheds
CANADA

115-40 Sunset Blvd, Perth, ON, K7H 2Y4
watersheds.ca



Great Blue Heron

Ardea herodias