



Environment and
Climate Change Canada

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United Nations Association in Canada
Association canadienne pour les Nations Unies



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Indigenous Conservation Toolkit

ELEMENTARY TEACHER RESOURCE GUIDE

contents

3-4 Elementary Curriculum

5- 14 Caring for Creation Teacher's Script

15-17 Haudenosaunee Story of Maple
Syrup

18-19 Haudenosaunee Creation Story

20- 22 Ohèn:ton Karihwatéhkwèn
(Thanksgiving Address)

23-28 Water Cycle

29- Pollution



Elementary Curriculum

Elementary Curriculum

Caring for Creation - Conservation through a Haudenosaunee Lens

*Note- We have given multiple activities for each theme within the module. Please choose which activity works for your classroom within your timeframes. This flexible broad range of choice, will ensure that the information is retained for your students in an interactive and engaging way.

| Lesson | Activity | Materials | Time | Environment | Resource Links | Learning Objectives | |
|--------|---|-----------------------------|---|--|---|--|---|
| 1 | Introduction | Slide Deck or printout | 3-5 min | In Classroom/Outside in a talking circle | Refer to Resource Folder for terminology, audio recording | <ol style="list-style-type: none"> 1. Create an understanding of individual and the collective responsibility of building a consensual relationship with the creation 2. Begin dialogue on an Indigenous worldview through the Haudenosaunee 3. Be introduced to the Kanienkehaka terms | |
| 2 | Ohénton Kariwatékwen: The Words Before All Else | Creation Story | Slide Deck or printout, Resource folder, videos on Youtube -Phone or laptop to play media | 10 min | In Classroom/Outside in a talking circle | Creation Story Hand Out | <ol style="list-style-type: none"> 1. Understanding the interconnectivity of all on Earth. 2. Knowledge shared in experiences of caring for creation and reconnecting to it with respect and reciprocity. |
| 3 | Ohénton Kariwatékwen: The Words Before All Else | Relationship with the Earth | Slide Deck or printout, Resource folder, videos on Youtube -Phone or laptop to play media | 10 min | In Classroom/Outside in a talking circle | Address with Photos Address with Students Hand Out | <ol style="list-style-type: none"> 1. Recognizing that they have an integral role to play in their home and community. They are responsible for their relationship with the Earth. |

| Lesson | Activity | Materials | Time | Environment | Resource Links | Learning Objectives | |
|--------|---|--------------------------|--|-------------|---|-------------------------------|--|
| + | How we treat Iethi'nistenha Ohontsia (land/earth) | Thinking about pollution | Materials Needed- representing Earth, Air, Water so items like Dirt, water, Mason/Bell Jars, classroom debris like paper, pencil shavings etc., aerosol spray or a match to enclose in a jar quickly (by the teacher), snow or ice. Printable pollution cards in resource folder | 20-30 min | Need setup and clean up time. Discussion throughout, Break up class in teams based on the 8 cards | Pollution Print Outs- one set | <ol style="list-style-type: none"> 1. Reflect their connection to their home communities 2. Connecting their actions to the environmental impact 3. Creating environmental models that show that impact on multiple levels. |
| | | Walkabout Collection | Jars (Plastic or Glass) Notepads | 20-30 min | Outside, Grounds | NA | <ol style="list-style-type: none"> 1. Reconnection back to the earth 2. Understanding the impact of pollution outside your door 3. Fresh air and practical simple activity |
| Lesson | Activity | Materials | Time | Environment | Resource Links | Learning Objectives | |



| | | | | | | | |
|---|------------------------------|---|---|---|---|---|---|
| 5 | Diversity of the Environment | Plant Identification-ohente'shon:'a (grasses), ononhkwa'shon:'a (medicines), ohtera'shon:'a (roots) | iNaturalist App, Class Camera or Notepad, Clipboards and pens. - Phone or laptop for media | 30 min | Divide class up into groups of 3, outside activity on school grounds | iNaturalist App or any other plant identification app online | <ol style="list-style-type: none"> 1. Providing an opportunity to connect/reconnect with nature through this new understanding and lens 2. Hands on group activity 3. Explore the environment, discovering plants that have multiple uses and meanings |
| 6 | Ohne:ka- The Water | Water Testing | Water Testing Kits, Youtube Video, Slide Deck or Print Out - Phone or laptop to play media | 30 min | In Classroom/Outside in a talking circle | Water Song Video Water Testing Kit - Water Rangers - Other Options Water Drum Teachings | <ol style="list-style-type: none"> 1. Building upon existing knowledge to integrate the teachings of pollution, habits, and health with the understanding of the individual's role in protection and prevention. |
| | | Water Cycle Wheel | Print out, Crayons, Scissors, brass fastener | 20 min | In Classroom at desk- Hands on | Water is Sacred Video Water Wheel Print Out One per student | <ol style="list-style-type: none"> 2. Themes of water is life & water is sacred. 3. Simple and proactive approaches to water protection |
| | Lesson | Activity | Materials | Time | Environment | Resource Links | Learning Objectives |
| 7 | Kentsionshona - The Fish | Identifying Minnows (optional): | Slide Deck or printout, Resource folder, video on Youtube -Phone or laptop to play media | 15 min with a 3 min 38 sec video or an afternoon field trip | In Classroom/Outside in a talking circle or at a conservation authority | Fish Habitat Video Search your local conservation authority that works with their local Indigenous community | <ol style="list-style-type: none"> 1. Connecting the health of fish, to the health of individuals, to the health of community. 2. Simple and proactive approaches to fish habitat protection |
| 8 | The Trees- karonta'shon:'a | Wah:ta oh:ses | Slide Deck or printout, Resource folder, PDFs available with activities, video on Youtube - Phone or laptop to play media | 30 min or an afternoon field trip | In Classroom/Outside in a talking circle or at a sugar shack | Wah:ta Video Wah:ta activity print outs Traditional Maple Origin story Sugar Maple Trees | <ol style="list-style-type: none"> 1. Maple - Slow Growing and Shade Tolerant; 2. Action Potential of Maple Sap 3. Connect to the Maple Story; Leader of the Trees; First Medicine of the Year; Maple Ceremony |
| 9 | Where do we go from here? | Land as Family | Slide Deck or printout | 5-8 Min | In classroom or outside- talking circle | | <ol style="list-style-type: none"> 1. Create an understanding of individual and the collective responsibility of building a consensual relationship with the creation 2. Caring for Creation is conservation but it is more than conserving, it is about creating these healthy relationships with other living beings. |



Caring for Creation

Through the eyes
of the
Haudenosaunee

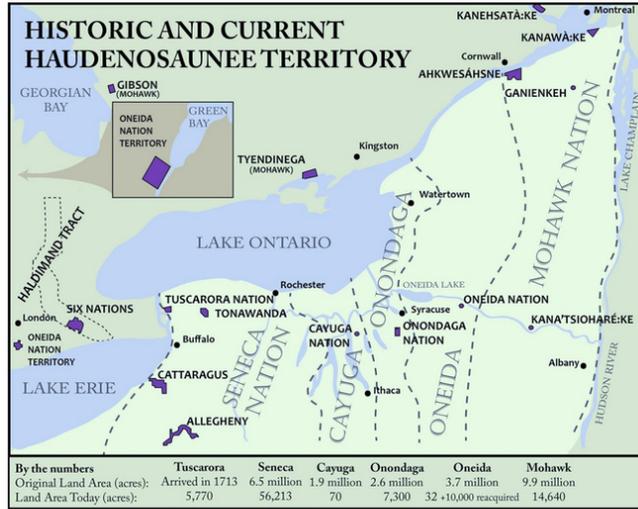


Introduction

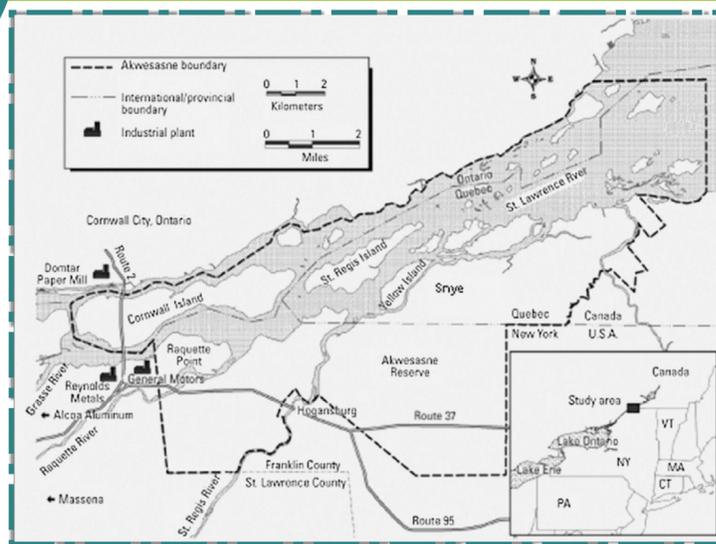
- Caring for creation as the Haudenosaunee do.
- Our roles and responsibilities to Mother Earth.
- Take care, just as we take care of our loved ones.
- Creating healthy relationships with the land, air, and water, and all the natural beings that live here.



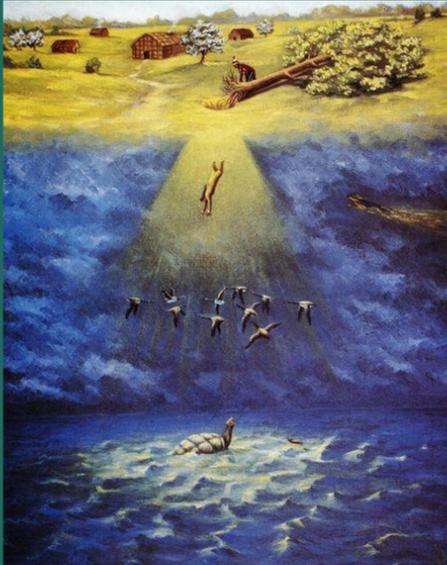
Whose teachings are we learning?



Akwesasne- Where is it?



**Eastern
Ontario,
Southern
Quebec, &
Northern NY**



IROQUOIS CREATION MYTH. Sky
Woman. 1936, by Ernest Smith

The Creation Story

- Creation is in balance.
- With every hardship or loss, there is a gain.
- The Twins lost the Grandmother but gained her as the overseer of the night in the moon.
- Where their mother was buried, grew the foods they would need to survive.

Ohénton Kariwatékwen: The Words Before All Else



- Giving thanks based on their original purpose, to be in sync with Mother Earth and all of creation
- Respect and appreciation
- Practice saying “thank you” to the water you drink and the food you eat.



How We Treat Iethi'nistenha Ohontsia (Land/Earth)



Pollution

Pollution impacts our water, air, land, and the sounds around us (noise pollution). Simply, it is putting harmful materials into the environment.

Mindfulness

Talk to your adult about things you can change at home
Take time to reconnect back to the earth
Reduce, Reuse, and Recycle.



Diversity of the Environment



Plants

We give thanks to the food, medicinal, and air purifying plants, how they keep us alive and keep us healthy.

Water

For all of the plants to grow, and for us to grow, we need water. Water is life. The Kaienkehaka give thanks to the water, as it provides life to the world. Giving thanks for the waters as they quench our thirst and provide us with strength to grow.





Fish

The fish were given the responsibility to feed the people as well as clean the water. They give us strength, so we do not go hungry.

Trees

For the Kanienkehaka, trees represent unity, strength and the cycles of life. Each tree represents different gifts and medicine for the people.



Photo from Akwesasne Travel

An annual ceremony is held to give thanks to the Creator, for providing the maple sap and the maple tree (leader of all trees) for our good health and good fortune.

Wah:ta

- In the spring, you can often spot white smoke billowing out of homes around Akwesasne.
- This is when wah:ta oh:ses (maple sap) flows and it's time to make maple syrup.



Where do we go from here?

We can think about how we would treat our mother or father, our grandparents. What kind of ways can we continue to care for the earth, with that same kind of care? What kind of actions will you take, now that you see through the eyes of the Kanienkehaka people? Do you see the Land & Body Connections? What are some things that you can do?

The End





Caring for Creation- Elementary Teacher's Script

**Note- We have given multiple activities for each theme within the module. Please choose which activity works for your classroom within your timeframes. This flexible broad range of choices will ensure that the information is retained for your students in an interactive and engaging way.*

Introduction (5 Min)

Today, we will talk about caring for creation. As we look at our roles and responsibilities to Mother Earth, we will grow in our understanding of how we all play a part in our communities to take care, just as we take care of our loved ones. We create healthy relationships with the land, air, and water, and all the natural beings that live here.

The Haudenosaunee (hoe-dee-no-SHOW-nee) (People who build a house) are a distinct and diverse population of Indigenous people, belonging to several communities along the St. Lawrence River, the Finger Lakes and Mohawk Valley of New York State, and the Great Lakes. Their connection to the earth is different from others, the Earth is a woman, and the Haudenosaunee care for her as she cares for them. Healthy relationship building is part of their culture and all creation cares for each other, as is their role and responsibility.

For the Haudenosaunee, caring for creation is similar to conservation, but different in its expression and values. The people protect and preserve the gifts from the earth, through respectful treatment on every level of relations: Self, Family, Clan, Community, Nation, Confederacy, and World. In Akwesasne, the community shares in the care of the land, through environmental advocacy, community gardens, recycling programs, and so much more. Making decisions that impact Mother Earth need to be carefully thought out in order to protect her from exploitation, destruction, or neglect. Each community member of Akwesasne has the responsibility to keep protecting and being mindful of their relationship with the earth, every day.



Caring for Creation- Elementary Teacher's Script

There are 6 Nations of the Haudenosaunee- the Tuscarora, Seneca, Cayuga, Onondaga, Oneida, and the Kanienkehaka (commonly referred to as Mohawk). For the purposes of this lesson, we will be focusing on the Kanienkehaka and their viewpoint of caring for Creation. To begin truly understanding how they view the world, we will talk about their Creation story and how they came to exist.

Activity 1: Creation Story (10 Mins)

- Resources include a 2-page Creation Story or a 5-minute video.
 - Discussion Points: Creation is in balance. With every good, there is bad but isn't seen as one or the other. Roses need protection from the thorn. The sun must rest and the moon must come out every day. With every hardship or loss, there is a gain. Again, the balance within the story. They lost the Grandmother but gained her as the overseer of the night by becoming the moon. Where the mother was buried, grew the foods that they needed to survive.
- What do you think of when you hear the word Thanksgiving or gratitude or acknowledgment?
- Discussion Points: Each word can carry a different meaning for folks. The connotation of each word to each individual is meaningful. These words help communicate the simplest form of the words, but often mean much more in the language of the Kanienke'haka. Many say that it is like a picture being painted in detail when spoken fluently. The overall message here is about understanding the roles and responsibilities of all of creation that continues to do their work so we can all live for which we are grateful. So we must do our work too!



Ohénton Kariwatékwen: The Words Before All Else (10 Min)

We are familiar with our use of the term, Thanksgiving. (Ask what they think of when they hear that word.) For the Kaienke'haka, it is gratefulness for all of the gifts that the earth has provided for the people and how they return their gratitude through acknowledgment and care. The Thanksgiving Address or the Ohénton Kariwatékwen: means the Words Before All Else- For all Haudenosaunee, it is a practice of giving thanks based on their original purpose, to be a good relative to Mother Earth and all of creation (Native North American Travelling College [NNATC], 2017). This act is meant to move forward with respect and appreciation, as all come together into the circle of understanding.

From these words, all are greeted in the Haudenosaunee ceremony and celebrated for all they do for each other. This greeting is spoken in the Kanien'keha language and has been adopted in different events outside of the longhouse ceremony like meetings, lectures, and community gatherings. The speech is given before any important meetings or events are held. This is done in order to bring everyone's minds together as one to focus and keep all our relations in mind as decisions are made or celebrations are held. It is through this thinking that we create community and build family with all our relations.

The Ohénton Kariwatékwen "thanksgiving address" reminds everyone of the importance of understanding mindfulness and the connection we all have to Mother Earth. This thankfulness shows how Kanien'kéhaka in Akwesasne relate to the earth, their families, and their lives. In the address, each verse ends with "now our minds are one." This final phase of each section helps join people together in that common goal. Ask them to come up with ideas of how to be mindful in their daily lives.

Activity 2: Relationship with the Earth (Play the video from YouTube)

Ask the students to begin thinking about what beings from the natural world that they are grateful for. This can become a discussion for the students, listing which things came to mind on the front board. You can then compare them to the list within the Ohénton Kariwatékwen.



Discussion on the reflections of the relationship with the Earth and its gifts - how do we care for her? How does the earth care for us?

- Akwesasne TV Video (3 Min Ohenton Kariwatekwen with photos) - https://www.youtube.com/watch?v=eJH_5TXzCjw
- Project 562 Video (2 min 10-sec Ohenton Kariwatekwen spoken by high school youth on Native American Day) - <http://www.project562.com/blog/a-real-thanksgiving-address-the-words-that-come-before-all-else/>

How we treat Iethi'nistenha Ohontsia (land/earth) (30 Min)

Now we must take what we have learned about caring for creation and the relationship we all have with the earth and apply it to our actions. Pollution impacts our water, air, land, and the sounds around us (noise pollution). Simply, it is putting harmful materials into the environment. Ask them what they think pollution is.

Activity 3: Thinking about pollution

- Hands-On Pollution Activity:
 - Materials needed- representing Earth, Air, and Water, so items like Dirt, Water, Mason/Bell Jars, Classroom Debris like paper, pencil shavings etc., aerosol spray or a match to enclose in a jar quickly (by the teacher), snow or ice. Children can create their own scene of pollution with the jars and compare it with a clean environment. The activity is common in many classrooms and can be found here. It includes printable cards for each type of pollution. Discuss the difference between both environments, the origins, and the ways that pollution changes the earth. Pollution discussion: Why do people do this? For the Haudenosaunee, we are taught to be in constant gratitude for all our relations as our role and responsibility to past, present, and future generations. The Haudenosaunee understand their relations through roles and responsibilities and Western Science is just another way of looking at the world, neither is more important than the other. There is an important discussion to be had about selfishness and how this is reflected in littering and pollution. We need to care for all our relations and not abuse their gifts.



- **Walkabout Collection:** The children can be taken on a walk outside and collect stuff they find and categorize them in the classroom jars - best done in spring after the snow just melts. Document the length of the walk and the number of different kinds of waste.

Discussion Points: How can they be mindful? Talk to your adult about things you can change around your home, Take time to reconnect back to the earth, Pick up trash (anytime), Turn off the lights and electronics, Use energy-efficient products, Walk when you can or ride a bike, Use eco-friendly products, Compost, Conserve Water, Plant trees, Reduce, Reuse, and Recycle.

Diversity of the Environment

The way that the Address is spoken, represents all of the beings from the smallest insect to the spirit beings in the sky. This includes the trees, the birds, the four winds, the thunder beings, Brother Sun, Grandmother Moon, the stars, and the Creator.

In order to strengthen how we care for the environment, we must look at how diverse it is, meaning how many unique types of beings live here. There are 900 hundred thousand kinds of insects and over 60,000 types of trees in the world. Today, we are going to look at a few different gifts on Mother Earth and what they mean to the Kaienkehaka people. Allowing you the opportunity to see what they mean to you. Let us grow together in our knowledge of these beings through the eyes of the Haudenosaunee people. Just like new friends, we will get to know them.

Activity 4: Plant Identification- ohente'shon:'a (grasses), ononhkwa'shon:'a (medicines), ohtera'shon:'a (roots)

Have the students go around their school grounds and find different plant species. Take pictures of them or notes describing them with the guidance provided below. Come back and learn about each one through identification. Have students break up into small teams and seek out 2 plants each based on the criteria. Teachers could also take photos of multiple plants or print some from google (note your region) for the class,



Should accessibility be unavailable for this outdoor activity. Additionally, they can use the iNaturalist app to document their observation, which is part of citizen science and adds to a body of data that can help with caring for creation. There are also other plant identification apps that can be used, depending on availability and learning curve. Prior to the activity, identify the medicinal use or if they are edible for commons plants in your region. They will be surprised to see how interesting each plant is. Criteria can include: Simple Key for Plant Identification: Go Botany (nativeplanttrust.org)

- Plant: Get them to collect different plants to compare the shape of leaves, sizes, and flowers. How do you notice they are different.
- Describe Area Plant Picked: What did you see and notice? [Bonus if you get a picture!]
- Optional Approach: Utilizing the characterizing approach above can be made easier by treating it like a scavenger hunt! Research on the specific plant can be prepared and engaged with the 5th graders to guess what interesting facts go with what plant or use.

Ohne:ka- The Water (30 min)

- For all of the plants to grow, and for us to grow, we need water. Water is life. The Kaienkehaka give thanks to the water, as it provides life to the world. Giving thanks for the waters as they quench our thirst and provide us with the strength to grow. We know its power in many forms- waterfalls and rain, mists and streams, rivers, and oceans. With one mind, we send greetings and thanks to the spirit of Water. (Water Song- 1 min 30 sec)

Activity 5: The Water

- Classes can obtain Water Ranger Kits and go to a body of water to sample its water quality. This can be done with any bit of water, such as a puddle or from the tap. The kits can be a great activity for the students to see differences in qualities (compared to tap water in the classroom) and learn about citizen science. You can find one of these kits here. There are kits in a variety of price ranges and by contacting the founder, Kat Kavanagh at kat@waterrangers.ca, she may be able to facilitate free ones. The Field Guide (testkit-guide.pdf (waterrangers.ca)) explains the water quality parameters nicely before a water sample is collected. The parameters are outlined below:



- a. Weather and Location;
- b. Air Temperature;
- c. Chlorine;
- d. pH;
- e. Alkalinity;
- f. Hardness;
- g. Conductivity;
- h. Water Temperature;
- i. Dissolved oxygen; and
- j. Water Clarity.

Additionally, the guidebook includes explanations for Safety, Waste Disposal, Why test water?; Choosing sample sites; and Schedule.

1. Water Cycle Activity- Keeping our water clean is a large project but with your support, we can make an impact. The cycle of water consists of evaporation (liquid to gas), transpiration (plant exhaling water vapor), precipitation (rain), and runoff (streams, rivers, etc. - water flowing across a landscape). Each of these phases should be clean from pollution. * Teachers can also discuss the importance of water during the pollution activity, on clean versus polluted water. See printables in the resource folder.

Many traditional activities come from the water including singing and dancing while using a water drum (5 minutes) and of course swimming, canoeing, and fishing. Water is sacred. This is an excellent resource from the Planet Protector Academy (3 min 19 sec) showing how all Indigenous people including the Cree Nation featured here, protect the water.

The Fish- Kentsionshona (10 min with a 3 min 38 sec video)

Within those waters, we give thanks to the fish- including the minnows and the sturgeon (the leader of the fish). The fish were given the responsibility to feed the people as well as clean the water.



- They give us strength, so we do not go hungry. The relationship between the Haudenosaunee people and fish is an integral part of their livelihood. Fishing made up much of the Haudenosaunee people's diet. The lakes, rivers, and streams provided the men with bass, trout, whitefish, sturgeon, and perch. Nets and spears brought in the greatest amount but they also used hooks and lines to catch the fish. The environment that the fish live in must remain clean, so they can grow healthy and strong. Here is an example of preserving the habitat of the fish in Akwesasne, and making sure they can travel up the St. Regis River. If the fish are poisoned by pollution, they will also make the people eating them sick (called biomagnification). Many communities, including Akwesasne, have to be careful when fishing, to not catch sick fish - this is why we have fish advisories (92713draft.indd (epa.gov)). How can we keep our water clean for the wildlife that lives there? How can we protect a safe environment for them to live and thrive?
- We can protect water for the fish (ask your guardians to):
 - by limiting our use in our homes while doing dishes, running laundry cycles, and short showers.
 - use a rain barrel in your yard and use that water for things around the house like watering plants and playing
 - Find out what a rain garden is, and plant where the water falls- even on your doorstep or balcony!

Earlier, when we talk about pollution prevention and the importance of water, notice how it is a holistic issue- meaning one area overlaps with another. We protect the water, we keep the fish healthy, and then the people will stay healthy as well. Keep doing what you can. You have an important role in your community and you are an active participant in protecting the earth. Every step counts!

Activity 6 (optional): Identifying Minnows

Contact a local Indigenous community environment program or engage with a local conservation authority. This organization will be able to show how to seine net and identify minnows. There are certain species of minnows with certain habitat requirements. It can also tell us how healthy an ecosystem is, which shows the connection back to the water quality sampling. Most people think of minnows as baby fish, but this is not the case. Minnows are from a family called Cyprinidae.



The Kanienkahaka called them Kanionta. Minnows have three specific characteristics that make them a family, kind of like your own! (See Minnow Graphic)

The Trees- Okwire'shon:'a (30 min or Field Trip Option)

The Haudenosaunee give thanks for the trees, especially the Sugar Maple (Wahta), the head of their family, that it still creates sap that cleans the bugs from your stomach after a long winter.

- Wahta- 3 minute video- https://www.youtube.com/watch?v=nZTd_1LdgLA

Activity 7: Wah:ta oh:ses

After reading the origin story of the Maple trees and the importance of sap collection, there are several activities available to engage in. A powerful activity could be going to a maple sugar shack, and tapping trees to process it for maple syrup. It is important to note that sap is not only a product of Maple trees, but it is maple trees that have the highest concentration of sugar in their sap - this is the maple's role and responsibility.. Some important approaches to doing tree tapping. Also, here is a list to help identify the different kinds of maples in Ontario, but we are focused on Wah:ta; Sugar Maple; or Acer saccharum.

How to identify and properly tap a maple tree – Ontario Maple

- Maple Trees: Types, Leaves, Bark - Identification Guide (Pictures) (leafyplace.com)

Maple sap is a good diuretic (makes you use the bathroom), so be careful! It is good medicine and considered the first medicine of the year. The Haudenosaunee honor this time annually with ceremony to remind themselves of their roles and responsibilities to the Maple tree. The story communicates a message of not becoming lazy and forgetting to fulfill your roles and responsibilities. The only way to tell when it is time to honor the tree is by being mindful of the world around you. There will be signs when it is time: the Maple sap runs during the freeze and thaw cycle of the end of Winter. A deeper explanation is provided at this link: [How sugar maple trees work | Massachusetts Maple Producers Association \(massmaple.org\)](http://How%20sugar%20maple%20trees%20work%20|%20Massachusetts%20Maple%20Producers%20Association%20(massmaple.org)). Ask them what the end of winter means to them.



Where do we go from here? (5- 8 Min)

For the Kanienkehaka, the way you treat the land is the same as how you treat your body. It is also how you treat others. As we come to the end of our lesson, we want to discuss building these relationships in a healthy way. Our mother earth is a living being that gives us life and allows us to live upon her. When people try to control or disrespect her, we will see the impact, which can come in the form of floods, landslides, forest fires, and other natural disasters occurring more often, which we see with climate change. You will notice that if you take the time to connect to the earth, it will bring you joy and peace. The sunshine makes you happy, digging your hands in the earth grounds you, and even a strong rain can bring you calm, as you know all living beings will be getting a drink to help them grow. Forests are special places full of magic that help your body relax and heal. Ask them to think about when they were in a forest and what they noticed.

Activity 8: Land as our family

We can think about how we would treat our mother or father, our grandparents. What kind of ways can we continue to care for the earth, with that same kind of care? What kind of actions will you take, now that you see through the eyes of the Haudenosaunee people? Do you see the way you are connected to the environment? How will you help make sure that the environment is healthy? Ask them to draw what these questions mean to them.



Caring for Creation Terminology

- Haudenosaunee (hoe-dee-no-SHOW-nee) (People who build a house or People of the Longhouse including the Seneca, Cayuga, Onondaga, Oneida, and Mohawk of the Confederacy).
- Akwesasne- The land where the partridge drums. This location is in New York State, Quebec, and Ontario. It is the traditional hunting and fishing lands of the Kanienkehaka (Mohawk)
- Onkwehonwe- the original beings
- Kanienkehaka- people of the flint
- Kanien'keha - language of the people of the flint- how they speak
- Ohénton Kariwatékwén- the words that come before all else, also known as the Thanksgiving Address
- Ohne:ka- water
- Iethi'nistenha Ohontsia- land/earth
- Kentsionshona - the fish
- Kanionta- Minnows
- Okwire'shon:'a- the trees
- Ohente'shon:'a- grasses
- Ononhkwa'shon:'a- medicines
- Ohtera'shon:'a- roots
- Wah:ta oh:sés- maple tree
- Onen'takwenhten:sera- cedar tree



Caring for Creation Supplemental Resource List

Indigenous Conservation Contribution to Canada

Indigenous peoples are the original stewards of their lands and waters. Historically and today, a relationship between all diverse populations will grow the strength needed to protect the environment. It is critical for the future of healthy ecosystems and communities, and it results in effective and durable sustainable management over time in balance and reciprocity with Mother Earth.

Indigenous Role Models

Waneek Horn Miller (Water Polo Olympian), Ashley Callingbull (Miss Universe), Sarain Fox (Activist & Filmmaker), Roxanne Whitebean (Film Maker), Tracey Deer (Film Maker), Shannen Koostachin (Shannen's Dream)

<http://education.afn.ca/afntoolkit/web-modules/plain-talk-13-first-nations-role-models-and-scholarships/role-models/>

Autumn Peltier & Xiuhtezcatl Martinez <https://www.dosomething.org/us/articles/7-young-indigenous-activists-standing-up-for-their-communities>

Tara Houska

<https://www.aptnnews.ca/facetoface/tara-houska-resistance-line-3-minnesota-police/>

Children's Books:

- We Are Water Protectors by Carole Lindstrom, illustrated by Michaela Goade
- Nibi's Water Song Hardcover – Aug. 1 2019 by Sunshine Tenasco (Author), Chief Lady Bird (Illustrator)
- The Water Walker Hardcover – Picture Book, Sept. 5 2017

Ojibwa edition by Joanne Robertson (Author)

- Stand Like a Cedar Hardcover – Picture Book, Feb. 23 2021

by Nicola I. Campbell (Author), Carrielynn Victor (Illustrator)

Ontario Plant Identification Fieldguide

Plants of Southern Ontario: Dickinson, Richard, Royer, France: 9781551059068: Books - Amazon.ca



The Haudenosaunee Story of Maple Syrup

When our ancestors arrived here they came upon a land which was rich in its ecological diversity. Perhaps no other place in North America had such a wealth of life forms from mammals to birds, pure waters and open meadows. The ancestors learned to cultivate the soils and to plant not only crops but trees as well. They brought with them black walnuts and chestnuts, then planted other trees to create complex ecosystems which were beneficial to humans and other species.

They also identified certain trees as "leaders" like the eastern white pine, the oak, willow and especially the maple. It was the Iroquois who invented maple syrup (wah:ta oh:ses in Mohawk) and the technology which went into taking sap and making it into that most delicious of sweeteners. It is the maple which tells us that spring has come and it is time to celebrate. To begin we tell our children the following story.

At one time, long ago, the Creator came to realize that the long winters of this land meant the health and well being of the people suffered. They would become physically ill and their spirits would be sad. Many months would pass since they had fresh food and deep snows meant hunting was also difficult. Something had to be done. The Creator went to the people and said he would give them a special gift. The Creator would go to the maple trees and ask them to share their blood at a certain time so the people could come and be nourished and made happy by drinking directly from the tree. They would only have to insert sumac tubes beyond the outer bark of the tree and pure syrup would flow. The people did so and were made stronger in body and mind.

The Creator was pleased with this and then left the earth to attend to other worlds. He was gone a long time. While he was away he wondered about the human beings and how they were doing with the gift he had given to them. He decided to return to earth and to the Iroquois village where he had taught them how to obtain syrup. When he arrived he saw that the longhouses were empty of people, that there were no hearth fires, no children playing about and no dogs barking. He did see dog and human footprints in the snow which went in a single direction towards a grove of maple trees. He followed the tracks and came across an amazing sight.



The Haudenosaunee Story of Maple Syrup

There, lying prone beneath the branches of the trees were the people with the long sumac tubes extended from the maples to their mouths. So great was their desire for the pure maple syrup that they had forsaken all of their normal duties including the care of their homes and their own children. The Creator also noticed that the dogs were also using the tubes to drink the sweet water with their paws waving in the air.

This was not good. The Creator awaked the people and brought them together. He said that since they had abused his gift they would have to work to make the syrup. He told them that no longer would syrup flow directly from the trees but they would have to use taps and then prepare to heat the sap over many hours and watch it very carefully until, with labour and care, it became maple syrup. They would also have to hold a ceremony of thanksgiving for the maples by which they would not only ask for this gift but express their gratitude directly to the trees.

This is how maple syrup came about, one of the many things developed by the Iroquois and shared with the world. It is also one of the 13 ceremonies the Iroquois hold to this day to mark the lunar years and to celebrate the blessings of life.

Resource: Doug George-Kanentiio, Akwesasne Mohawk, is the vice-president of the Hiawatha Institute for Indigenous Knowledge. He has served as a Trustee for the National Museum of the American Indian, is a former land claims negotiator for the Mohawk Nation and is the author of numerous books and articles about the Mohawk people. He may be reached via e-mail at: Kanentiio@aol.com or by calling 315-415-7288.





The Haudenosaunee Creation Story

Long, long ago, the earth was deep beneath the water. There was a great darkness because no sun or moon or stars shone. The only creatures living in this dark world were water animals such as the beaver, muskrat, duck and loon.

Far above the water-covered earth was the Land of the Happy Spirits, where the Great Spirit dwelled. In the center of this upper realm was a giant apple tree with roots that sank deep into the ground.

One day the Great Spirit pulled the tree up from its roots creating a pit in the ground. The Great Spirit called to his daughter, who lived in the Upper World. He commanded her to look into the pit. The woman did as she was told and peered through the hole. In the distance, she saw the Lower World covered by water and clouds.

The Great Spirit spoke to his daughter, telling her to go into the world of darkness. He then tenderly picked her up and dropped her into the hole. The woman – who would be called Sky Woman by those watching her fall – began to slowly float downward.

As Sky Woman continued her descent, the water animals looked up. Far above them they saw a great light that was Sky Woman. The animals were initially afraid because of the light emanating from her. In their fear, they dove deep beneath the water.



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The animals eventually conquered their fear and came back up to the surface. Now they were concerned about the woman, and what would happen to her when she reached the water. The beaver told the others that they must find a dry place for her to rest upon. The beaver plunged deep beneath the water in search of earth. He was unsuccessful. After a time, his dead body surfaced to the top of the water.

The loon was the next creature to try to find some earth. He, too, was unsuccessful. Many others tried, but each animal failed. At last, the muskrat said he would try. When his dead body floated to the top, his little claws were clenched tight. The others opened his claws and found a little bit of earth.

The water animals summoned a great turtle and patted the earth upon its back. At once the turtle grew and grew, as did the amount of earth. This earth became North America, a great island.

During all this time, Sky Woman continued her gentle fall. The leader of the swans grew concerned as Sky Woman's approach grew imminent. He gathered a flock of swans that flew upward and allowed Sky Woman to rest upon their back. With great care, they placed her upon the newly formed earth. Soon after her arrival, Sky Woman gave birth to twins. The first born became known as the Good Spirit. The other twin caused his mother so much pain that she died during his birth. He was to be known as the Evil Spirit.

The Good Spirit took his mother's head and hung it in the sky, and it became the sun. The Good Spirit also fashioned the stars and moon from his mother's body. He buried the remaining parts of Sky Woman under the earth. Thus, living things may always find nourishment from the soil for it springs from Mother Earth.

While the Good Spirit provided light, the Evil Spirit created the darkness. The Good Spirit created many things, but each time his brother would attempt to undo his good work.

The Good Spirit made the tall and beautiful trees, including the pines and hemlock. The Evil Spirit, to be contrary, stunted some trees or put gnarls and knots in their trunks. Other trees he covered in thorns or poisoned their fruit. The Good Spirit made bear and deer. The Evil Spirit made poisonous animals such as lizards and serpents to destroy the animals created by his brother.



When the Good Spirit made springs and streams of pure crystal water, the Evil Spirit poisoned some and placed snakes in others. The Good Spirit made beautiful rivers. The Evil Spirit pushed rocks and dirt into the rivers creating swift and dangerous currents.

Everything the Good Spirit made his wicked brother attempted to destroy. After the Good Spirit completed the earth, he created man out of red clay. Placing the man upon the earth, the Good Spirit instructed the man about how he should live. The Evil Spirit made a monkey from sea foam. Upon completion of his work, the Good Spirit bestowed a protecting spirit upon all of his creations. This done, he called his brother and told him he must cease making trouble. The Evil Spirit emphatically refused. The Good Spirit became enraged at his brother's wickedness. He challenged his evil twin to combat.

The winner would become the ruler of the world.

For their weapons they used the thorns of the giant apple tree. The battle raged for many days. The Good Spirit triumphed, overcoming his evil brother. The Good Spirit took his place as ruler of the earth and banished his brother to a dark cave under the ground. In this cave the Evil Spirit was to remain.

The Evil Spirit, however, has wicked servants who do his bidding and roam upon the earth. The wicked spirits are able to take any form and cause men to do evil things.

This is the reason that everyone has both a good heart and a bad heart. Regardless of how good a man is, he still possesses some evil. The reverse also is true. For however evil a man may be, he still has some good qualities.

No man is perfect.

The Good Spirit continues to create and protect mankind. It is the Good Spirit who controls the spirits of good men upon their death. His wicked brother takes possession of the souls of those who are evil like himself. And so it remains.

*Story from the Oneida Indian Museum



Ohén:ton Karihwatéhkwen (Thanksgiving Address)

In oral tradition, the Rotinonhsyón:ni “open” gatherings of people with the Ohén:ton Karihwatéhkwen, commonly referred to as the “Opening Address” or the “Thanksgiving Address”. A more literal translation, in the words of Elder Tom Porter is “what we say before we do anything important”.

This ceremony acknowledges and recognizes the importance and relationship of all life forces in Creation. The purpose is to bring the minds of everyone at the gathering together as one.



Below is a short version of the Ohén:ton Karihwatéhkwen; there are many written versions, all reflecting the same purpose. In oral tradition, as the Speaker is speaking in the moment and from his heart, rarely will the exact wording be used each time it is conducted.



| <h2 style="text-align: center;">Mohawk</h2> | <h2 style="text-align: center;">English</h2> |
|--|---|
| <p style="text-align: center;">Kentsyóhkwa sewatahonsí:yohst kén' nikarihwéhsha</p> | <p style="text-align: center;">Everyone (the group) listen well for a short time.</p> |
| <p style="text-align: center;">Ne kati tentshitewanonhwera:ton ne Shonkwaya'tishon ne wahi rohsa'anyon tsi nahoten teyo'tawenrye ne kentho tsi ohwentsya:te.</p> | <p style="text-align: center;">I will give thanks to the Creator for the things that go about on the earth.</p> |
| <p style="text-align: center;">Akwé:kon éhnska entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne onkwe'shon:'a. Etho niohtónha'k ne onkwa'nikón:ra.</p> | <p style="text-align: center;">We will make our minds one and give thanks to the people. Now our minds are one.</p> |
| <p style="text-align: center;">Akwé:kon éhnska entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne yethinihstenha tsi ohwentsya:te.Etho niohtónha'k ne onkwa'nikón:ra.</p> | <p style="text-align: center;">We will make our minds one and give thanks to our mother the earth. Now our minds are one.</p> |
| <p style="text-align: center;">Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne ohneka'shon:'a. Etho niohtónha'k ne onkwa'nikón:ra.</p> | <p style="text-align: center;">We will make our minds one and give thanks to the waters. Now our minds are one.</p> |
| <p style="text-align: center;">Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne kentsyon'kshon:'a. Etho niohtónha'k ne onkwa'nikón:ra.</p> | <p style="text-align: center;">We will make our minds one and give thanks to the fish. Now our minds are one.</p> |



| Mohawk | English |
|--|---|
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne ohtera'shon:'a. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks for the roots. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne ohente'shon:'a. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks for the grasses. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne ononhkwa'shon:'a. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks to the medicines. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne otsinonwa'shon:'a. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks to the bugs. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne tyonnhehkwen. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks to the sustenance foods. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne kahi'kshon:'a. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks for the fruit. Now our minds are one.</p> |



| Mohawk | English |
|--|---|
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne kontirio. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks for the animals. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne karonta'shon:'a. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks for the trees. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne otsi'ten'okon:'a. Etho niyohtónha'k ne onkwa'nikonhra.</p> | <p>We will make our minds one and give thanks for the birds. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne kaye:ri nikawera:ke. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks for the four winds. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon tetshitewanonhera:tons ne etshitewa'tsi:'a entyekhenhnekha karahkwa. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks for our elder brother the sun. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne yethihsotha ahsonthennekha karahkwa. Etho niyohtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks for our grandmother moon. Now our minds are one.</p> |



| Mohawk | English |
|--|---|
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon teyethinonhwera:tons ne ostistohkaronnyon. Etho nioyhtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks for the stars. Now our minds are one.</p> |
| <p>Akwé:kon éhnska't entitewawenon:ni ne onkwa'nikonhra táhnon tetshitewanonhwera:tons ne Shonkwaya'tishon tsi niyoyaneres nahoten'shon:'a rosa'anyon ne sken:nen aetewatonnyonhseke. Etho nioyhtónha'k ne onkwa'nikón:ra.</p> | <p>We will make our minds one and give thanks for our Creator for the good things we will continue to think peacefully about.</p> |
| <p>O:nen tho niyore wa'katerihwatkwé:ni, tokat othe:nen shonke'nikónhrhen, i:se ki' ne'e aesewatashón:teron. É:tho'k nikawén:nake.</p> | <p>Now I have done all I can do, if there is anything I have forgotten, it's up to you to fix it. That is all.</p> |





Personal Gratitude

Basic words you can use when giving thanks alone

Tekhenonhwerá:tons ne
(I thank them) (the)

1. **Onkwehshòn:'a** – People
2. **Ionkhi'nisténha Ohóntsia** – Our Mother Earth
3. **Ohneka'shòn:'a** – Waters
4. **Kentsion'shòn:'a** – Fish
5. **Ohonte'shòn:'a** – Grasses
6. **Ohtehra'shòn:'a** - Roots
7. **Ononhkwa'shòn:'a** – Medicines
8. **Kaienthóhsera/Kionhnhéhkwen** – Food plants
9. **Kahihshòn:'a** - Fruit
10. **Otsi'nonwa'shòn:'a** – Insects
11. **Kontírio** – Wild animals
12. **Okwire'shòn:'a** – Trees
13. **Otsi'ten'okòn:'a** – Birds
14. **Ionkhihsothokòn:'a Ratiwè:ras** – Our Grandfathers the Thunders
15. **Kaié:ri Nikawerá:ke** – Four Winds
16. **Shonkwahtsi:'a Enkiehkehnékhka Karáhkwa** – Our Elder Brother the Sun
17. **Ionkhihsótha Ahshonthenhnékhka Karáhkwa** – Our Grandmother Moon
18. **Otsistohkwa'shòn:'a** – Stars
19. **Kaié:ri Niionkwè:take** – Four Beings
20. **Takia'tíson** – My Creator

Onkwehshòn:'a

Ionkhi'nisténha Ohóntsia



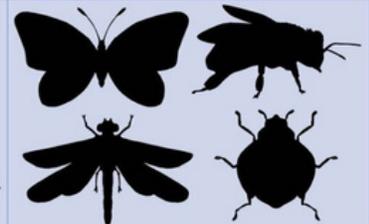
Ohneka'shòn:'a

Kentsion'shòn:'a



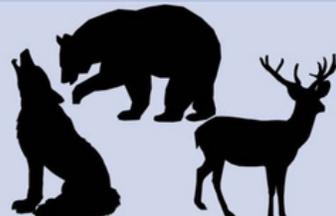
Kahihshòn:'a

Otsi'nonwa'shòn:'a

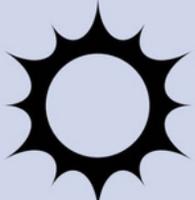


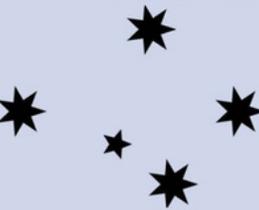
Kontírio

Okwire'shòn:'a



| | |
|---|---|
| Ohonte'shòn:'a | Ohte'ra'shòn:'a |
|  |  |
| Ononhkwa'shòn:'a | Kaienthóhsera/Kionnhéhkwén |
|  |  |

| | |
|--|---|
| Otsi'ten'okòn:'a | Ionkhihsothokòn:'a Ratiwè:ras |
|  |  |
| Kaié:ri Nikawerá:ke | Shonkwahtsi:'a Enkiehkehnhékha Karáhkwa |
|  |  |

| | |
|---|---|
| Ionkhihsotha Ahshonthennhékha Karáhkwa | Otsistohkwa'shòn:'a |
|  |  |
| Kaié:ri Niionkwè:take | Shonkwaia'tison |
|  |  |



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The Water Cycle

The WATER CYCLE

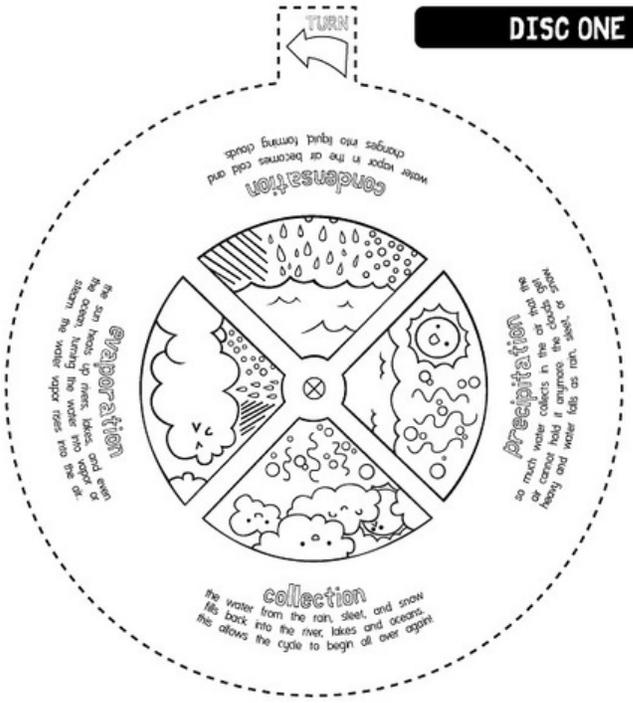
For the following activity you will need:



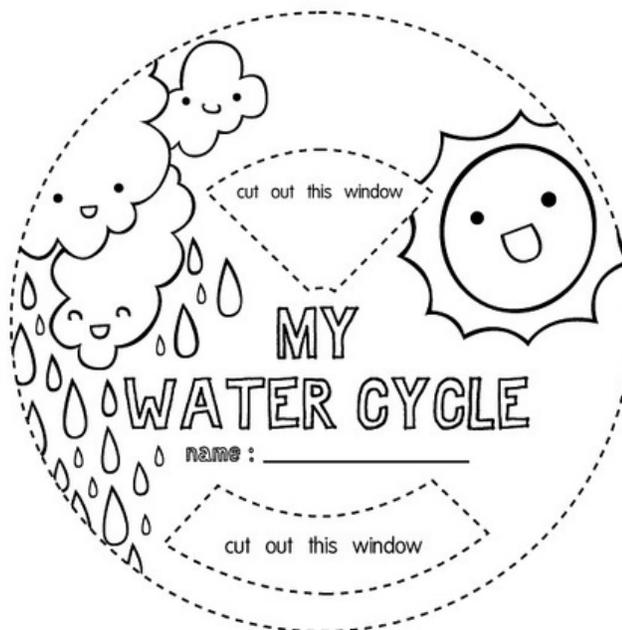
1. Color both discs however you'd like. Be creative!
2. Cut out both discs along the dotted line. On the second disc don't forget to cut out both windows!
3. You might need an adult to help you for this next step. Take the brass fastener and poke it through the middle of the second disc, and then poke it through the middle of the first disc. Fold back the prongs of the brass fastener.



4. Line up the image and the text for EVAPORATION. Now turn the circle in the direction of the arrow to go through all the steps of the water cycle!



DISC TWO



DID YOU KNOW?

That all the water on Earth has been around forever?

The water cycle keeps our limited water supply going around and around so we can keep using it.

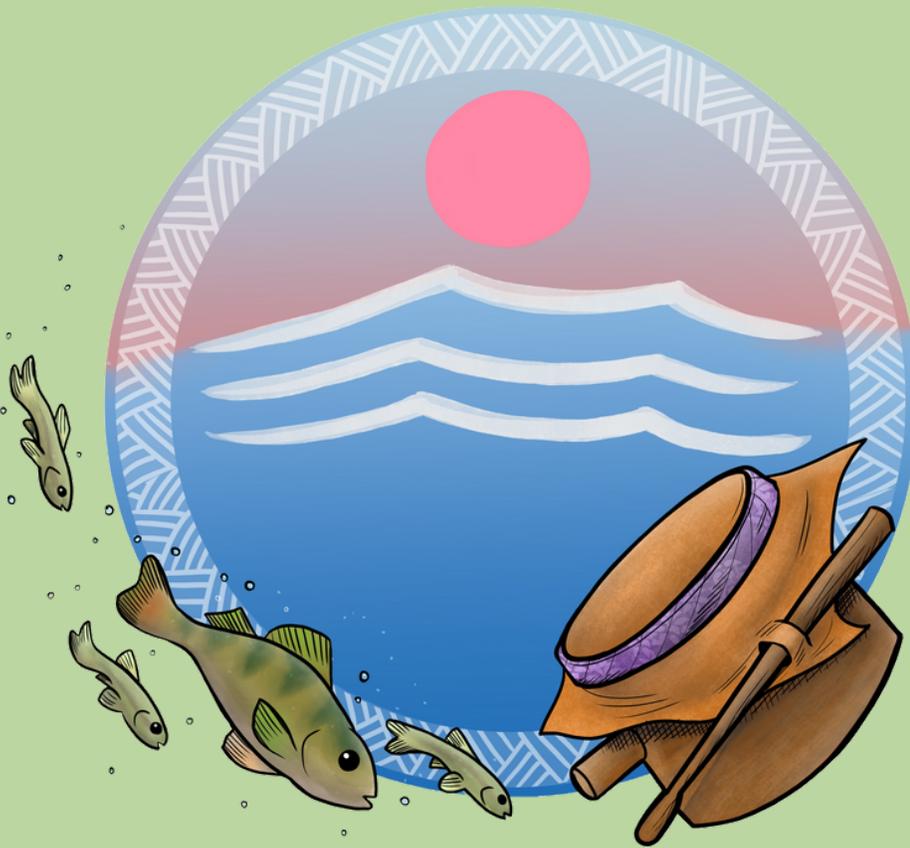
Have you ever seen water drops on a plant?

No, it's not sweating! Plants are going through transpiration, in which the plants lose water through their leaves. Transpiration helps out evaporation by putting water vapor back into the air.

Do you know that you have seen condensation at work?

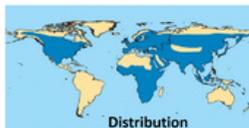
If you've ever had a drink in a cold glass or a can and the air is warm outside, you'll see water drops on the outside of the glass. This is because the water vapor in the warm air is being cooled back down into a liquid on the surface of the glass or can.



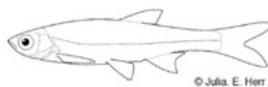


Minnow (Cyprinidae)

Note:
They are not baby fish!



What distinguishes a cyprinid from all other fishes?



© Julia E. Herr



- Single dorsal fin without true spines
- Toothless mouth with thin lips
- Pharyngeal arch with 1-3 rows of teeth, each row with a maximum of 8 teeth





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Pollution



Clean Air



Dirty Air



Clean Ground



Dirty Ground



Pollution



Clean Water



Dirty Water



Clean Snow



Dirty Snow



Pollution

Air Pollution

Water Pollution

Land Pollution

Litter

Ecology



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