

Students may present this to the class or hand in a hard copy for assessment.

3.2 FIELD TRIP: TURTLES

This activity is meant to reinforce the understanding of human impacts on turtle species and biodiversity in wetland habitats.

Materials:

- *Field Trip: Turtles article and questions (located in the Activity Worksheets section of document)*

Steps:

Provide students with a copy of Field Trip: Turtles, or project a copy of the article and questions. Have students read the report and respond to the questions to complete the chart.

3.3 OH, TURTLE WHERE ARE YOU?

This activity reinforces an understanding of turtle needs for survival. Using both activity-based and arts-based learning strategies, artistic expression and a card game are used to illustrate turtle needs. This activity will also tap into various learning styles including kinesthetic, interpersonal, and visual/spatial.

Materials:

- *Set of 'Turtle Cards' for each group (located in the Activity Worksheets section of document; should laminate)*
- *Paper and art supplies*
- *Poster paper or sheet of Bristol board for each group to decorate to resemble a wetland (include a pond with basking sites such as logs, stones, and/or shoreline).*

Steps:

Divide the class into small groups (four students). Briefly discuss the needs of a turtle for survival, including sources of food, shelter, water, and space. Write a list on the board for students to refer to.

Provide each group with paper and art supplies to create a game board. Students must design a wetland with a pond in the middle and basking sites for turtles around the edge. Encourage each group to design and draw food, plant life, etc. for their wetland habitat.

Provide game cards for each group of students, preferably laminated.

Remove the food, habitat, and turtle helper cards from the deck.

Game Rules for Turtle version of 'Go Fish':

1. Each player has an area of the wetland on the game board with basking places including logs, stones, rocks, or shoreline. This area will be used to display turtle species triplets.
2. The dealer shuffles the cards and deals seven cards to each player. The remaining cards are placed face down in the middle of the wetland.
3. Each player clusters identical cards together in his/her hand.
4. Player one, sitting to the left of the dealer, asks any player for a particular turtle species card to match a card in his/her hand. If the player has the card, it must be given to player one. If the player does not have any of the requested cards, he/she says "O Turtle" and player one must draw a card from the deck in the middle of the wetland.
5. When a player gets three cards of the same species, the cards form a basking site. The cards are laid down face up in front of the player when he/she can identify the turtle species (Blanding's, Map, Midland and Western painted, Snapping, Spiny Softshell, Spotted, Stinkpot, and Wood turtle).
6. Any other player who has the fourth card of the species can lay it down in front of his/her part of the wetland at the next turn.
7. The game ends when one player runs out of cards, or when the pond is empty, and all the turtles are basking on logs and rocks.



CURRICULUM ACTIVITY CHAPTER FOUR NEIGHBOURS AND FRIENDS

TEACHER BACKGROUND

The activities included in this chapter incorporate traditional Anishinaabe and Haudenosaunee understandings with western science, crossing many academic subjects including visual art, drama, science, and language.

First Nations people recognize the importance of interconnections. Turtle Island Conservation's *The Ways of Knowing Guide Earth's Teachings* illustrates this:

A common teaching in the spiritual path is the understanding of interconnectedness: that all things are dependent on each other. Even though each individual and all things have their own special gifts and place in the world, all [are interdependent]. One's very existence depends on the web of interconnectedness between the self and the community and between the community and nature. (53-54)

Spiritual experiences can take place through dreams, which are valued by First Nations people. The creation of a dream catcher holds important cultural significance in relation to this belief. Regardless of the dream's content, all dreams are considered important. Dream catchers allow good dreams to pass through, while capturing bad dreams. One teaching shares that bad dreams are caught in the web, move down to the feathers, and burn off as dew in the early morning sun.

The activities included in this chapter are important for students as they incorporate the understanding of interconnectedness, in both science and in First Nations culture. Other important aspects of educational development are included in these activities including art, drama, and cooperative play.

Additional Resources:

Adopt-A-Pond Turtle Curriculum
Unit 3 Section 2: Ecological Connections
Activity 12- A Link in the Chain
http://www.torontozoo.com/AdoptAPond/turtle_curriculum/unit3.pdf

Ducks Unlimited: Wetland and Environmental Education
Free Lesson Plans for Teachers
http://www.ducks.ca/resource/teachers/lesson_plans/index.html

Hinterland Who's Who – Where They Live: Wetlands
Description of wetlands and of many animals and plants that can be found there
<http://www.hww.ca/hww2.asp?pid=0&id=233&cid=2>

ACTIVITY

4.1 WELCOME TO MY NEIGHBOURHOOD

Using an inquiry-based learning strategy through game play, students will use their oral communication and pragmatic skills, while developing an understanding of food chains and food webs in a wetland. This game is similar to 'Guess Who?'

Materials:

- *Double-sided 'Wetland Neighbours and Friends Cards' (located in Activity Worksheets section of document; should laminate)*





Steps:

Tape a 'Wetland Neighbours and Friends Card' to each student's back without saying which animal or plant it is. Students should mingle near an imaginary pond or wetland in the classroom, trying to identify his/her identity based upon questions asked to and answered by other students.

As students guess their identities, they will proceed to the imaginary wetland or pond area and try to collect at least three other students who they depend upon, or who depend upon them for survival in the wetland, creating food webs and chains.

Each web or chain must be able to explain their membership to the class at the completion of the activity. The teacher can record the webs and chains which are made.

Collect 'Wetland Neighbours and Friends Cards' from students.

4.2 WE'RE ALL IN THIS TOGETHER

Using the activity-based learning strategy, simulation, and the inquiry-based learning strategy, problem solving, this activity utilizes students' oral communication skills while developing an understanding of food chains and webs in a wetland.

Materials:

- Ball of string/yarn
- 'Wetland Neighbours and Friends Cards' (located in Activity Worksheets section of document; should laminate)

Steps:

Have the students sit together in a circle. Deal a 'Wetland Neighbours and Friends Card' to each student. Students place the cards in front and face up so that they are visible to everyone.

Each student introduces him/herself according to the creature or element on the card. Students should also include who the feature in the card relies on and who

relies on it. When all students are introduced, the teacher takes a ball of string and passes it to a student. The student calls out the feature's name and calls out the name of another wetland inhabitant, briefly describing the relationship.

The ball of string is passed to the inhabitant identified. This person looks around the circle and identifies another feature which it is related to in the wetland community and the ball of string is passed to the new member. Eventually all students should be connected with the ball of string, illustrating the interconnections within a wetland. The teacher has the opportunity to discuss how interdependent everything and everyone is. The following "what would happen if..." questions can be used:

1. *What would happen if the minnows were all caught in minnow traps? (The student with the minnow card would be asked to gently tug on their string. Students who receive a tug could put up their hand to identify who is being affected.)*
2. *What would happen if the wetland is drained to create a new housing development?*
3. *What would happen if the plants purple loosestrife or phragmites filled the marsh and the cattails and bulrushes disappeared?*

Remind students to be careful when gathering the string. Collect all of the 'Wetland Neighbours and Friends Cards' from the students.

4.3 WETLAND WEB OF LIFE

This activity incorporates a culturally relevant teaching tool, artistic expression, and an understanding of wetland food chains and development into a food web.

Materials:

- Paper plates (one for each student)
- Yarn/string
- Craft beads, feathers
- Markers/paint
- Scissors
- Hole punch

Steps:

Have students decide as a class the bead colours to represent different wetland creatures (ie. yellow for the sun, green for the algae, brown for the fish, etc.).

Students cut out the centre of a paper plate, leaving a large rim with enough room to hole punch around the edge. Students hole punch around the edge of the plate, about five centimetres apart. Also, students need a two metre length of string/yarn to weave through the holes. Students should tie one end of the string through one of the holes to secure it.

Students then weave the string through the paper plate, creating their own pattern. Within the pattern, students should create food chains, using the coloured beads, to ultimately create a food web.

When students are finished threading through all of the holes, they must tie a knot at the end of the yarn with the last hole.

The students punch three more holes at the bottom of the plate to add three short pieces of string/yarn. The students can choose a food chain to add to the three yarn pieces, represented by beads, and then tie one feather to the end each of the hanging yarn pieces. Students can use markers or paint to decorate the edges of the paper plate.

Have students punch one more hole at the top of the paper plate dream catcher and tie a piece of string through it so it can hang.

4.4 A LIVING DIORAMA

This activity crosses multiple subjects including language, visual art, drama, and science with many opportunities for evaluation. Students completing this activity will demonstrate their knowledge about interactions in a wetland.

Materials:

- Art supplies (poster paper, paint, markers)
- Paper and writing tools
- One Morning in Our Wetland story (located in Activity Worksheets section of document)

Steps:

Read *One Morning in Our Wetland* aloud to the students, or give pairs copies to read to each other. Split students up into small groups. Give students the role of a creature or element from the 'Wetland Neighbours and Friends Cards' including the dragonfly nymph, leopard frog, black toad, tadpole, redwing blackbird, moose, blue jay, beaver, old turtle, black bear, barred owl, wolf, and red squirrel.

Have students work together to write a script for a drama presentation with a set number of lines or time amount. This should include the feeding habits of the animals, predator-prey relationships, what the animal looks like, how it sounds and moves, etc.

Once the script is written, students construct a background mural of a wetland showing trees, water, rocks, floating logs, and water plants. This will serve as the backdrop for the dramatic presentation. This can also be done as a class, with all groups using the same backdrop.

Ensure students have enough time to practice their roles and become comfortable performing. Have the students perform in front of the class or a larger audience to teach about different wetland relationships.

