

What is a rainforest?

Students explore their outdoor environments and how Indigenous stories help us understand place. They also tell a story of a rainforest, and explore rainfall and how it relates to rainforests.

Learning Intentions

1. What are the defining features of a rainforest, including the Great Bear Rainforest?
2. How can we use our senses to explore the outdoors
3. How do Indigenous stories help us understand place?
4. How can we tell the story of a rainforest?
5. How can we track the amount of rain that falls in a rainforest, or where we live?

Curricular Connections

Refer to the “Curriculum” drop-down option under the “Learn” tab of the Great Bear Rainforest Education and Awareness website.

Curriculum Alignment: Great Bear Rainforest Education and Awareness Trust

<https://greatbearrainforesttrust.org/curriculum/>

Learning Intention 1

What are the defining features of a rainforest?

In this lesson, students will explore the term rainforest and learn about the different types of rainforests.

Experiences and Observations

“Exploding” the Word “Rainforest”

Ask students what words they see in the word “rainforest.” Students write all they know about “rain” (wet, water, moisture, needed to sustain life, drops, etc.), and “forest” (trees, canopy, homes for animals, etc.) Students brainstorm as many words related to both words as they can. Using their ideas, ask them if they can guess what a rainforest may be.

- After students have given their definition of a rainforest, have them observe a video and photos from the Gallery tab of the GBREAT website to build a definition of a rainforest:
GBREAT Website
<https://greatbearrainforesttrust.org/>
- Explain that there are two different types of rainforests: tropical and temperate.
 - ◆ Describe some of the characteristics of the two types of rainforests
 - ◆ Watch a video on rainforests (see resources), or
 - ◆ Read a book that illustrates the two types of rainforests
- From the images that they saw of the GBR, ask students what kind of rainforest they think it is. What evidence did they use to make that decision?

Possible Topics/Key Vocabulary

- Forest
- Rainforest
- Temperate rainforest
- Community
- Unique
- Ecosystems
- Biomes

Reflections on Learning

- Have students reflect in words (could be poetry or a word cloud) and/or pictures what they know about (or how they envision) a rainforest.
- Have students fill in a Venn diagram to identify what is different or the same about forests in their community and the GBR or between both types of rainforests. This can be done individually or in a group. For kindergarten students, the entire class can do the activity together.
- Students can also do their own drawing(s) or create a collage by choosing images in magazines or online to illustrate what a rainforest is.

Suggested Resources

Explore

Videos in the “Explore” section of the GBREAT website

<https://greatbearrainforesttrust.org/video/>

GBREAT Website

Refer to photos on “Gallery” tab of the GBREAT website for images of the GBR

<https://greatbearrainforesttrust.org/>

Great Bear Rainforest in 4K

<https://www.youtube.com/watch?v=7wWQ-0CKv1M&t=206s>

Rainforest 101

Video by National Geographic

<https://www.youtube.com/watch?v=3vijLre760w>

Rainforest for Kids

A great video that talks about the two types of rainforests (temperate and tropical)

<https://www.youtube.com/watch?v=sEQMEIUYks>

Learning intention 2

How can we use our senses to explore the outdoors?

In this lesson, students will explore their outdoor environment.

Experiences and Observations

- Ask students to name their senses. Choose a picture book that can be used to practice observing. While you read the book, have students name the sense they are using to make connections to the book. You can also have them point silently to their nose for smelling, ear for hearing, and so on. After reading, ask students how many of their senses they used. What would happen if they couldn't use one or more of their senses; how would that change the meaning of what they observe?
- Here is a list of multiple activities that can be done on this topic. You can choose to do one or many over a few days.
 - ◆ Nature walk: Take a walk outside. A forest is best, but this can be done in a park and even in your school yard.
 - ◆ Student use their senses to explore the place they live and the natural world around them. You can either do one sense per walk or you can stop students and switch to the next sense. Depending on the grade and prior knowledge of students, you can front load by teaching sensory vocabulary, or by brainstorming with them what they think they will observe with their senses.
 - ❖ Sight—Noticing details
 - ❖ Sound—What can we hear if we stop and listen?
 - ❖ Smell—Creating a forest (or garden or place) perfume
 - ❖ Touch—Scavenger hunt of textures, or students take off their shoes to explore with their feet by putting various materials out on a tarp. Students can also take rubbings of different textures with paper and crayons.
 - ❖ Taste—This sense needs to be done in a controlled way with teacher-led materials (if health and safety protocols allow)

Nature Journaling

Provide each student with a nature journal. This can be a blank notebook or can be made using pre-set example pages (see the “Sample Nature Journal” template at the end of this learning intention, or search online for nature journaling templates). Have students answer prompts or draw what they observe. See journal prompts in reflections on learning / assessment section.

Sound Mapping

Have students pick an area and listen. On a sheet of paper, they draw a small circle in the middle of the sheet that represents them. Have them identify where on the paper is behind them, in front of them, to the left and to the right so that everyone has a shared understanding of how the sheet is set up. They can also put an arrow in the circle showing the direction they are looking. As they hear sounds, they identify on the paper what and where they heard it. For example, if they hear a bird behind them, they draw a bird or write bird chirping behind the circle.

Sit Spot

What I can do from my sit spot (sound making, seasonal changes, what human impact I see, what I smell).

Possible Topics/Key Vocabulary

- Senses/sensory
- Nature
- Environment
- Sight
- Smell
- Touch
- Taste
- Sound

Reflections on Learning

Have students journal. Here are some examples of prompts for journaling:

- Draw something you can see
- Draw something you heard
- Draw a flower
- Draw a bug
- Draw a picture of an animal you have seen today
- Draw a picture of a plant
- Draw a leaf
- What animals may live here? Did you see any?
- Did you find any tracks? What may have made them?
- Describe your environment.
- Create a poem about one of your senses
- Activity sheets (see the end of this learning intention) ABC activity—write one thing you find or feel outdoors for each letter of the alphabet.

Suggested Resources

My Five Senses

Strong Readers book by Terri Mack

https://www.strongnations.com/store/item_display.php?i=4362&f=

A Walking Curriculum

Website/book by Gillian Mack

<https://www.educationthatinspires.ca/walking-curriculum-imaginative-ecological-learning-activities/>

Me and My Sit Spot

Book by Lauren MacLean

<https://www.goodreads.com/book/show/63010068-me-and-my-sit-spot>

Sample Nature Journal Template

Observer's name : _____ Date and time : _____

Location : _____

Weather : _____

Notes	Drawing or sketch	Notes	Drawing or sketch
I see		I hear	
I feel		I smell	
I noticed		I wonder	

ABC Activity: Alphabet Hunt in Nature

Try to find a word for each letter of the alphabet. Use your senses, what do you see, hear, feel? Hint: Instead of Tree, can you name the type of tree? If you have access to species identification books or cards, use them to help fill in your alphabet! Happy exploring!

A _____

N _____

B _____

O _____

C _____

P _____

D _____

Q _____

E _____

R _____

F _____

S _____

G _____

T _____

H _____

U _____

I _____

V _____

J _____

W _____

K _____

X _____

L _____

Y _____

M _____

Z _____

Learning intention 3

How do Indigenous stories help us understand place?

In this lesson, students will explore Indigenous storytelling and how Indigenous stories help us understand place.

Experiences and Observations

- Start with a land acknowledgement. Ask students why we do land acknowledgements, why they should be personalized, and how they are meaningful.
- As First Nations people have been living here long before settlers, it is important to acknowledge their stories. It is also important to acknowledge that we do not have permission to use all stories and that we ask when we're unsure about protocols concerning using stories that aren't published.
- When appropriate, discuss western knowledge vs First Peoples' knowledge and how what we learn at school is mostly western knowledge, but that we have lots to learn about those who have been on our lands since time immemorial (decolonizing science).
- Explore local Indigenous stories of the GBR and local First Nations. Who are the characters? What is the setting? How are they connected to place? (See resources section.)
- Discuss how where we live has an impact on how we live. What we eat, how we recreate, and what we wear may be different from people in another area.

Possible Topics/Key Vocabulary

- Interconnectedness
- Local Indigenous language words for animal and plants in the area/in the stories
- Western knowledge
- Decolonization

Reflections on Learning

- Students can respond to stories with drawing and writing/oral shares.
- Have students write a comparison about how their life would be different if they lived in a different area or in the GBR.

Suggested Resources

Peace Dancer

Website with text / story / video

<https://memoriestomemoirs.ca/portfolio/peacedancer/>

Story of the flood in Húyat

<http://www.huyat.ca/stories/deluge.html>

Húyat Stories

<http://www.huyat.ca/stories/stories-intro.html>

Learning intention 4

How can we tell the story of a rainforest?

In this lesson, students will take what they have learned in previous lessons to tell the story of the rainforest.

Experiences and Observations

Tell students that now that they have explored what a rainforest is and how stories connect to the land, they will explore how to tell the story of a rainforest.

Story Workshop

Provide provocations for students to explore concepts of the rainforest.

Loose Parts

Use loose parts to create a forest.

Telling our Stories

Have students tell their stories orally or through drawing. Students could also record a video, a voice recording, or write down their story to share with others.

Telling the Story of a Rainforest

Imagine you are a rainforest. What stories would you be able to tell about the animals you see and what lives within you?

Reflections on Learning

- Oral storytelling can be captured by teachers scribing/typing.
- Drawings and watercolour can help students capture their stories.
- Reflection: How do the students' animals live together in a community? How do they get what they need?
- Maker space criteria: Animals must demonstrate how (or what body parts they use) for all their senses.

Suggested Resources

Can You Hear the Trees Talking?

Book by Peter Wohlleben

<https://focusedresources.ca/en/k-12-evaluated-resource-collection/can-you-hear-trees-talking>

- Photo examples

Extensions

Maker Space

Given various material choices, students can build/create their own animals that would survive in the forest (in partners or small groups).

Learning intention 5

How can we track the amount of rain that falls in a rainforest, or where we live?

In this lesson, students will explore rainfall and how it relates to rainforests and their community.

Experiences and Observations

- Rainforests have a large amount of precipitation. Remind students of lesson one where they “exploded” the word rainforest and how they learned that the rainforest has much rain and moisture.
- If necessary, start with a lesson about the water cycle or a review depending on your students’ grade and their prior knowledge.
- In weather and climate studies, tracking precipitation is an important way to gather data about an area. In this lesson, students will be meteorologists and learn to collect precipitation data.

The Water Cycle in a Bag or Bowl

To demonstrate the water cycle, have students create a water cycle in a plastic bag that can be taped to a window for them to observe condensation and how it collects and falls back to the bottom of the bag. If you don’t have windows, you can do the same activity in a bowl covered with cellophane and with a light shining on it. See resources section for ideas.

Tracking Precipitation

In your school yard, use a container to collect precipitations each school day for a month. Using a graduated cylinder or other measuring tool, measure the precipitation from the container at the same time each day. Make sure to return the container to the same spot. Talk about independent and dependent variables and how we need to keep as much as we can the same to make sure our measurements are accurate. Use the precipitation tracking worksheet (see the end of this learning intention) to create a graph of the rainfall in your area for a month.

- Using the historic rain data from the GBR, ask students how the rainfall in their area compares to that of the Great Bear Rainforest in the same month. What information can they gather from the rainfall data?

Possible Topics/Key Vocabulary

- Precipitation
- Tracking
- Climate
- Weather
- Water Cycle

Reflections on Learning

- Students create a graph using the data they have collected in class or using the historical weather data for their town or city. Co-create a list of criteria to be included in the graph, such titles, etc. Students then share why their area has more, less or the same amount of precipitation as the GBR. Why may this be the case.
- Students create a video or podcast where they explain the water cycle in their community and how it is similar or different in the GBR. They can use their oral storytelling skills by telling the story of a water drop using drawings, and how it makes it to the sky and into the clouds to then fall back to Earth.

Suggested Resources

The Water Cycle for Kids

<https://www.youtube.com/watch?v=TD3XSIE4ymo>

Water Cycle in a Bag

<https://www.mobileedproductions.com/blog/how-to-make-a-water-cycle-in-a-bag>

Water Cycle in a Bowl

<https://www.metlink.org/experiment/water-cycle-in-a-bowl/>

Historical Weather Data British Columbia

https://climate.weather.gc.ca/historical_data/search_historic_data_e.html



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Precipitation Tracking Worksheet

Name : _____

Rainfall tracking sheet for the month of _____

WEEK ONE

Day	Date	Amount
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		

WEEK TWO

Day	Date	Amount
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		

WEEK THREE

Day	Date	Amount
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		

WEEK FOUR

Day	Date	Amount
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		

Using the data from your measurements, create a graph of the monthly rainfall.