

Raindrops Keep Falling on Peel

Activity Overview:

- A large map of Peel Region is created in an obstacle course type fashion. The Activity Operators will lead the students on a tour as if they were raindrops that had fallen in Peel.
- The tour will introduce the students to the various landmarks in Peel: the area municipalities (Mississauga, Brampton, Caledon), Oak Ridges Moraine, Niagara Escarpment, Heart Lake, urban boundary and the major rivers. This is a physical activity for the students that will involve running. It is important for the Activity Operators to think, "Safety First!" Seven high school volunteers (one for each station) will be required for this activity.

Objectives:

- Elementary students should develop an awareness of Peel's geography. They should know where the City of Mississauga, City of Brampton and Town of Caledon are located. They should also know the locations of natural features such as major rivers, the Oak Ridges Moraine, the Niagara Escarpment and Heart Lake.
- Students should also learn about other important features in Peel such as Regional Wells, Urban Boundaries and settlement areas.

Materials:

- Please check the activity inventory sheet to ensure that all materials are present prior to the start of the activity centre. At the end of the day fill in the inventory sheet to ensure all supplies are accounted for the next day.

Safety: Encourage students to be safe while running through the activity.

Vocabulary:

Sewer – A manmade underground pipe for carrying off sewage or rainwater.

Oak Ridges Moraine – A long ridge of sandy hills stretching 160 kilometres from the Trent River in the east to the Niagara Escarpment in the west. It was created during the last ice age 10,000 years ago.

Niagara Escarpment - A ridge of rocky hills with a long, gradual slope on one side and a cliff on the other. The Escarpment is 725 km in length and passes through the most populated regions of Canada.

What will I be doing? (Procedure):

Before you start your presentation check with the teacher or chaperone that the entire group is present and ready to start.

*Remember that **doing** an experiment and **discovering** the answer is more powerful than watching and listening to someone, so try to involve as many children as possible.*

Station #1: Start: This is the first station of the activity that provides a brief introduction and a few facts about the Credit River.

Say: "Welcome to Raindrops Keep Falling on Peel. In this obstacle course, you will be raindrops that fall over Peel and you will be learning about the geography in Peel Region."

Say: “You are standing on a very large map of Peel Region. As you can see from this key map over here (refer to coloured map of Peel Region), Peel Region is where you live. According to this map, we are facing north. We are at the bottom of the map and you are all standing in a very big lake.”

Say: “Does anyone know what lake this is? It starts with an “O”. Lake Ontario, that’s right!”

Say: “Peel Region is made up of three Municipalities; two cities and one town. Do you know what they are? The City of Mississauga, the City of Brampton, and the Town of Caledon.”

Say: “This blue path over here represents the Credit River (point to the blue lines representing the Credit River). The Credit River stretches from Lake Ontario all the way up to the Town of Orangeville. The Credit River is home to a wide range of wildlife and supplies water to many people in Peel Region.”

Say: “Let’s pretend that we are rain drops and we just landed in Lake Ontario. Everyone put your hands over your head and point your fingers to the sky. We are raindrops and are going to fall into the river. Ready, one, two, three, fall... (crouch down mimicking rain falling, then have everyone stand up again.)

Say: Now, when I say go, I want you to run up the river. Stay on the blue path in single file. Go through the tunnel, up the ladder, down the slide and stop at Station #2 over by that person standing by the sign. They will tell you what to do next.”

Say: “Okay, everybody ready? On your marks, get set, GO!”

Station #2: The Niagara Escarpment

Say: “Welcome! You are now at the top of Peel Region. We are standing beside the Niagara Escarpment. Have any of you visited the Niagara Escarpment on a camping trip or perhaps hiking trip?”

Say: “The Niagara Escarpment is a forested cliff that stretches all the way from Niagara Falls to the Bruce Peninsula. (*Point to the row of blue recycling boxes*). It crosses through Peel in Caledon, which is where we are standing on this map.”

Say: “The Niagara Escarpment is a World Biosphere Reserve because it has a lot of special trees, plants, and animals that cannot live in the city. Therefore, it is a very important part of Peel’s natural environment.”

Say: “Thanks for visiting, when I say go, I want you to hop like a bunny single file between the blue boxes over to the sign that says Station #3 where you will learn a little about the Humber River and the Oak Ridges Moraine! (*Point to Station #3 sign*). “Okay, everybody ready? On your marks, get set, GO!”

Station #3: Humber River and the Oak Ridges Moraine

Say: “Hello everyone! We are standing at the top of the Humber River. It supplies water to many people living in Peel Region and Toronto and is home to many animals. Follow me to the Oak Ridges Moraine.” (*Lead students to the parachute located on the Oak Ridges Moraine, which is identified by the orange lines*).

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Say: “Everyone grab a side of the parachute. Now lightly move the parachute up and down (this is to mimic rolling hills). The Oak Ridges Moraine is made up of rolling sandy hills. As water drops, we are easily absorbed by these sandy hills.”

Say: “Now everyone who is wearing a hat, please throw your hat into the parachute. The hats represent the dirt and other pollutants that get into the Moraine. It is our job to get them out. Now hold on to the parachute and shake it as hard as you can until all of the hats come out. Ready, set, GO!”
...wait a few seconds... “Okay, everyone stop.”

Say: “When I say go, everyone lift the parachute above their heads and take three steps forward. Now let us sit down on the edge of the parachute (*This will create a parachute bubble, in which the students will sit*). We are now groundwater, meaning we move underground.” (*Wait for bubble to deflate a bit and then say:* “Okay now please stand up, get out, and put the parachute on the ground.”

Say: “Any other droplets will get sucked up into a well. When I say go, I want you to walk over to the hula-hoops, pick one and stand inside it. Ready, set, go!”

Station #4: Palgrave Wells

Say: “These hula-hoops represent wells (Regional wells that supply drinking water to homes and businesses in the Town of Caledon). Did you know there are 14 Regional wells and thousands of private wells located in Peel Region. These Regional wells supply water to many homes located on the Oak Ridges Moraine.” (*Point to each of the hula-hoops*)

(Have the children pick up their hula-hoop and let them play with it for about 20 seconds)

Say: “Do you know what a well is? Do you know what wells are used for? Wells contain water from the ground to drink and to use for washing for people who do not get their water from the lake or rivers. These wells are kept safe by a Wellhead Protection Area. This means that certain things are not allowed near the wells – does anyone know why? Because things like garbage dumps, chemical spills, fertilizers and pesticides for farms, and salt from the roads in the winter can accidentally dirty or pollute the groundwater. Everyone take turns using the hula-hoops - we are water travelling down through the ground to the bottom of the well. Soon you will be pumped back out of the well to be used for drinking and washing.”

Say: “Thanks for visiting the Palgrave Wells. When I say go, run along the orange path all the way to the Etobicoke Creek. Ready? Go! (*Run along next to the children until they get to the Etobicoke Creek (blue path)*) Okay everyone, jump across from the orange path to the blue path until you get to the Station #5 sign right over there.”

Station #5: Etobicoke Creek, Heart Lake & Professor’s Lake

Say: “Welcome to Etobicoke Creek. Who here has heard of Etobicoke Creek? We are standing at the source of the Etobicoke Creek in the Town of Caledon. Do any of you live in Caledon? Here, the land is mostly used for farming. Further down the Creek there are many people living near the Creek in the Cities of Brampton and Mississauga.”

Say: “The Etobicoke Creek is a source of water for many people and animals. What can you do to keep the Etobicoke Creek clean?” (*Ex: do not throw garbage in the creek, do not pour chemicals in the creek*).

Green Colour Group- Intermediate

Say: "Follow me over to the pool. (*Lead the children over to the two small pool representing Heart Lake and Professor's Lake. Have everyone crouch or sit around the pool*). Just below the source of Etobicoke Creek is Heart Lake. Heart Lake has been home to the Peel Children's Water Festival for many years."

Say: "I want each of you to grab a bucket. When I say go, use your bucket or to carry water from Heart Lake (Pool #1) to Professor's Lake (Pool #2)." *The children will run back and forth trying not to spill the water in the grass. They must continue for about 30 seconds to a minute.* **Say:** "Stop!"

Say: "The purpose of this activity is show you that water runs from lake to lake through rivers, streams and groundwater."

Say: "Okay, let's stand and line up on the blue path representing the Etobicoke Creek. When I say go, run down Etobicoke Creek all the way out to Lake Ontario, where this tour ends. Thanks for visiting Peel Region, I hope you had fun! Keep our lakes and well water pollution-free by not littering because rivers and creeks will carry this garbage and it can hurt plants and animals."

Station #6: End

There should be a volunteer at the last station to make sure that the students clear off the map and are reunited with their chaperones.

Say: "Did everyone have fun?! Please remember to pick up all of your things and head back up the hill."

The sprinkler will be running if it is a hot day. Ask the children if they would like to play by the sprinkler to cool down. **They must have permission from their chaperones in order to participate.**

Specific Reminders for Students:

- Water connects all things in Peel.
- The main rivers in Peel are: the Credit River, the Etobicoke Creek, the Humber River and Mimico Creek.
- We need to protect Peel's water resources for future generations.

