



Reclaiming the Land - The Twin Sisters Story

Grade 5 Lesson Plan

Lesson #5: Reclaiming the Land - The Twin Sisters Story **Duration:** 70 mins (+30 mins to create poster)

Subject: Social Studies **Topic:** First Nations Collaboration and Leadership in Restoring the Land

Overview

In this lesson, students learn about the effects of industrial processes on the traditional lands of the Saulteau and West Moberly First Nations in and near the Tumbler Ridge UNESCO Global Geopark (TRUGG). They then learn about First Nations land restoration projects with a focus on the Twin Sisters Nursery.

Lesson Objectives

Students will be able to:

- Witness how First Nations communities manage and use their traditional land through an economic development initiative (Twin Sisters Nursery)
- Describe what the Twin Sisters Nursery does to reclaim and restore the landscape, biodiversity and economy
- Create a poster displaying the importance of the Twin Sisters Nursery in the reclamation of mining and industrial landscapes
- Work independently and cooperatively in groups

Curriculum Connections

Please see the *TRUGG Education Toolkit Curriculum Connections Matrix* for specific connections of this lesson to the B.C. Curriculum for Grade 5.

Materials

- Four pieces of chart paper with one of the following written across the top of each sheet:
 - Oilfield reclamation
 - Coal mining reclamation
 - Logging reclamation
 - Wind Turbine reclamation

- Felt pens or other writing implements at each station
- A laptop/computer, digital projector and access to the Internet and the TRUGG Website
 - *Twin Sisters Nursery* Video on the TRUGG website
- A class set of computers/laptops with access to the Internet (and other resources to support student research)
- *Twin Sisters Nursery* Student Handout
- Class set of paper and materials such as markers, crayons, etc. for posters

Teacher Prep

- Prepare the chart paper with four reclamation topics and put them up in the four corners of the classroom.
- Arrange access to laptops/computers, the Internet and other resources to support student research.
- Preview the *Twin Sisters Nursery* Video on the TRUGG website.
- Print and photocopy a class set of the *Twin Sisters Nursery* Student Handout.
- Have students gather all their work from Lessons 1 - 4 and have ready to use.
- Have a class set of poster paper, markers, crayons, etc. ready for posters.
- Review the *Tumbler Ridge UNESCO Global Geopark* Teacher Backgrounder.

Background Information

Reclamation is the process of restoring disturbed land back to a natural state, allowing the environment and wildlife to flourish. To reclaim land, irrigation is generally needed to restore soil health and fertility. Replanting vegetation, preferably native plants, is another crucial step in the reclamation process.

Twin Sisters Nursery

The Saulteau and the West Moberly First Nations established the Twin Sisters Nursery as a collaborative business venture that collects, grows and distributes native plants for the restoration of land in Northeastern B.C., specifically those that were impacted by mining and other industrial activities. Staff at the Twin Sisters Nursery use traditional practices to restore the disturbed areas. The nursery also provides much needed, long term employment and community development opportunities for local First Nations.

More information on the Twin Sisters Nursey can be found directly on their website at www.twinsistersnursery.com.

The Education page of the Tumbler Ridge UNESCO Global Geopark website has more information and resources about the Twin Sisters Nursery. Please visit: www.tumblerridgegeopark.ca.

Please see the *Tumbler Ridge UNESCO Global Geopark* Teacher Backgrounder for more background and details on the Geopark.

Lesson Activities

Introduction/Hook:

1. Ensure that the four pieces of chart paper with their reclamation headings are distributed around the four different corners of the room, and ask students to retrieve all their work from Lessons 1 to 4 – they will use these documents as reference material to support this activity.
2. Divide the class into small groups and introduce the topics and carousel activity. While at each station, and using their work developed in Lessons 1 - 4, students should:
 - a. Reflect on their previous learning (e.g., geological formations and careers related to the land).
 - b. Discuss how the industrial activities involved (for each station topic) can impact the land and how reclamation might restore the land.
 - c. Record their ideas from their discussion on the chart paper at each station.
 - d. Move clockwise to the next station/topic when instructed to do so.
3. After the last station, have students share some of their ideas with the class.

Activity 1:

1. Using a laptop/computer and digital projector, show students the *Twin Sisters Nursery Video* (visit the Tumbler Ridge UNESCO Global Geopark website to access the video).
2. Once students have viewed the video, have a discussion about how it relates to their previous learning about reclamation, geology, industry and First Peoples' traditional uses of their land.
3. Distribute the *Twin Sisters Nursery Student Handout* to the students and review it as a class.
4. Provide students with access to computers or laptops and invite them to explore the websites below to learn more about the Twin Sisters Nursery and complete their handouts:
 - a. www.twinsistersnursery.com
 - a. www.tumblerridgegeopark.ca

Activity 2:

1. Distribute poster paper and materials (markers, pencil crayons, etc.) to the class.
2. Explain to students that they will be making posters that showcase the importance of the Twin Sisters Nursery in the reclamation of mining and industrial landscapes. They will use the Five Ws to guide their posters: Who are they? What are they doing? Why are they doing this? Where are they doing this? When are they doing this?
3. Provide students with time to create their posters. Encourage them to be visually creative.

Closure:

1. Ask students to review their answers on the *Twin Sisters Nursery* Student Handout with a partner.
2. Facilitate a class discussion on their learning about land reclamation and the Twin Sisters Nursery.

Assessment/Evaluation

- Observe students during the hook and other lesson activities, and assess their ability to access prior knowledge, conduct research effectively and work cooperatively in groups.
- Review and assess each student's *Twin Sisters Nursery* Student Handout.
- Review and assess each group's reclamation posters.

Extensions

- Facilitate a deeper discussion on other ways that we can help reclaim land for First Nations peoples.
- Invite a local elder or worker from a local nursery to come and speak to your class about reclamation and the importance of native plants on helping to restore ecosystems.