Our Changing Planet: Oceans, Land and People

Lesson Overview: Our planet consists of a relationship between land, water and its inhabitants. The shoreline along major bodies of water and landforms are influenced by many factors. Environmental elements and physical locations influence where settlement, residential neighborhoods, parks, industrial and agricultural regions are determined.

Grade Level: Three

Time Required: 2-3, 45-minute lessons

Curriculum Connection: Alberta Social Studies, Science, Language Arts

Link to Canadian National Geography Standards:

Essential Element #1: The World in Spatial Terms
- Location and distribution of physical and human features

Oceans Scope & Sequence Standard #1: The World in Spatial Terms
- Location of major world oceans, seas, and gulfs

Essential Element #2: Places and Regions
- Physical and human characteristics of neighbourhood and community

Essential Element #4: Human Systems
- Patterns of land use and economic activity in the community (e.g. agriculture, industrial, commercial, residential, educational and recreational)
- Transportation (people and goods) and communication networks
- Population distribution
- Human settlement patterns (e.g. rural, urban, suburban)

Oceans Scope & Sequence Standard #4: Human Systems
- The role of the ocean in the migration of human populations, trade and human settlement patterns

Essential Element #5: Environment and Society
- Human activities change Earth (e.g. agriculture, transportation, industry)

Oceans Scope & Sequence Standard #5: Environment and Society
- Human influences on oceans (e.g. beach closures, marine debris, overfishing, loss of habitat, water quality)
Additional Resources, Materials and Equipment Required:
- Chart paper and felts
- Access to library and technology resources
- Maps, Atlases and Globes

Main Objective:
Students will research and collect data on the impact of human systems on oceans and coastal regions of Canada.

Learning Outcomes:
1. Explain understanding of new concepts in own words.
2. Identify facts and opinions, main ideas and details in oral, print and other media texts.
3. List significant ideas and information from oral, print and other media texts.
4. Experiment with arranging and recording ideas and information in a variety of ways.
5. Organize ideas and information, using a variety of strategies, such as clustering, categorizing and sequencing.
6. Determine if gathered information is sufficient to answer research questions.
7. Draft ideas and information into short paragraphs, with topic and supporting sentences.
8. Use titles, headings and visuals to add interest and highlight important points of presentation.

The Lesson:

This lesson incorporates oceanographic study into a student inquiry that addresses the “Essential Elements” outlined in the NGS Oceans For Life brochure.
### Introduction

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<th>Teacher Activity</th>
<th>Student Activity</th>
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| A. Determine what students already know and want to find out about the impact of human systems on oceans and coastal regions.  
- Divide the class into groups of 3-4 students.  
- Provide each group with chart paper divided into three sections: K.W.L. (What I know, What I want to find out and What I have learned).  
- Ask students to discuss and record the first two seconds of the chart paper. Allow students to work together for 15 minutes. | Find your group members and fill in the chart answering: What I know, What I want to find out and What I have learned. |
| B. Ask students to bring their charts up to the board and share with the class what they already know and what they want to find out about the impact of human systems on oceans and coastal regions. | Present your chart to the class. |
| C. Together with students determine which questions from the section “What I want to learn” of the K. W. L. chart would help us to explore the impact of human systems on oceans and coastal regions. Highlight prominent questions to become possible research questions for a research report. | As a class, determine what questions from “What I want to learn” will help the best with exploring the impact of human systems on oceans and coastal regions. |
Lesson Development

A. Develop student understanding with examples of:
- Patterns of cultural traits (language, religion, family and structure).
- Patterns of land use and economic activity in the community (agriculture, industrial, commercial, residential, educational, recreational).
- Political units and hierarchies (differences between community, city, municipality, province, country).
- Transportation (people and goods) and communication networks
- Human settlement patterns (rural, urban, suburban)
- Changes in culture (spread of ideas, people, goods)

Guide students toward developing research questions that discuss: The Impact of Human Systems. Human Systems that include:
- Patterns of cultural traits- What are people’s customs surrounding the ocean and coastal regions?
- Land use and economic activity- How are coastal regions are used for agriculture, industry, trade, neighborhoods, education and recreation?
- Political units –What cities, communities, and provinces are located along oceans?
- Transportation – How is the ocean and coastal regions used to move people and goods?
- Communication networks- How do people communicate at sea or below the ocean surface?
- Human settlement patterns-Where are people living and why have they settled in particular areas of coastal regions?
- Changes in culture-What changes have happened on coastal regions?

B. Give each group of students a concept to develop research questions. Have them record the questions in a web format around the concept.

C. Ask students to choose questions they wish to research from each conceptual web and to choose an area of Canada to focus their report project on. They may choose any area where the ocean touches the boarders of Canada. For example: the West Coast of British Columbia.

D. Allow students to use library resources, maps, atlases and the internet to locate information to help them answer their research questions.

E. Information can be recorded in a graphic organizer or in jot note form.

F. Ask students to keep track of the resources they have used to develop a simplified bibliography. Teach students how to record information to develop bibliographies.

Develop research questions and record them in a web format.

Choose questions and area of coastal Canada to focus project on.

Search for answers to your questions using various resources.

Keep track of where you get all of the information. Record in a bibliography.
**Lesson Development**

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<th>Description</th>
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<td>G.</td>
<td>Once students have located enough information, they can organize their notes into paragraphs using topic sentences, supporting sentences and concluding sentences.</td>
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<td>H.</td>
<td>Encourage editing and revising using a writers’ workshop process.</td>
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<td>I.</td>
<td>Ask students to develop a table of contents and bibliography to add to their report.</td>
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<td>J.</td>
<td>Students should also be encouraged to add their own illustration, create models, posters etc.</td>
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Start to organize all of the collected information.

**Conclusion**

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<td>Have students present their report to the class orally.</td>
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Oral presentation of report.

**Extension:**
Have students share projects within a fair to the school community.

**Assessment:**
Assess and evaluate students’ cooperative group skills, written report, models, posters etc., and oral presentation.