**SNC1W Resource Collection**

**Title:** Environmental Threats - What are they? Who do they impact?

**Course Code:** SNC 1W

| **Topics**  Thinking Classroom Warm-Up - Ecological Hazards  Lesson - Human Impacts on Climate Change | **Timing**  Preparation: 15 min  Activity: 25 min  Lesson: 35 min |
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**Curriculum Expectations**

* **B1.2** assess the impacts of climate change on communities in Canada, including First Nations, Métis, and Inuit communities
* **B2.6** identify and use various indicators of climate change to describe the impacts of climate change on local and global ecosystems, and analyse how human activities contribute to climate change

**Introduction**

The focus of this learning day is to introduce students to factors that affect our environment and begin to understand the environmental/community impact these factors have.

**Learning Goals**

* Climate Change refers to long-term changes in temperature or weather patterns on Earth. This has been occurring through the process of Global Warming
* Human activity has been the driving force behind global warming, through the emission of fossil fuel and clearing of forests
* Climate Change has had a profound effect on various cycles that regulate our ecosystems, and these effects may have irreversible consequences
* Climate change impacts different communities in different ways and should be considered when looking for solutions

**Prior Knowledge**

Students may need to review the following concepts:

* Climate Change, Global Warming, Greenhouse Gases, Greenhouse Effect, Carbon Dioxide

**Lesson Plan**

| **Description** | **Time** |
| --- | --- |
| Introduction | |
| Thinking classroom activity: (Refer to 02 Thinking Classroom Activity Outline - Anthropogenic Factors for instructions, 03 Thinking Classroom Activity Printable Envt Threats (one set per group), 04 Thinking Classroom Prompts (one copy per group) (30 minutes)   * Set the stage: a land untouched with plentiful resources, water, air, land, regular and predictable seasons where no one goes without * Given a list of anthropogenic (human-caused) factors that negatively impact our environment in Canada, order them from worst impact to least impact based on prior knowledge and a brief description of each * Add more factors, group factors, try to find some common themes | 30 minutes |
| Content | |
| Lesson: Human Impacts on Climate Change - Presentation (25 minutes + videos), **Note 6 - Human Impacts on Climate Change**   * Includes learning summary, many linked videos | 30 minutes |
| Consolidation | |
| * consolidation homework questions at the end of the lesson | 15 minutes |

| **Materials:**   * Computers/Tablets * Laptop/LCD Projector * Handouts: 02 Thinking Classroom Activity Outline - Anthropogenic Factors, 03 Thinking Classroom Activity Printable Envt Threats (one set per group), 04 Thinking Classroom Prompts (one copy per group), 06 Human Impacts on Climate Change - Notes * Other: | **Transferable Skills**   * Critical thinking and problem solving * Innovation, creativity, and entrepreneurship * Self-directed learning * Collaboration * Communication * Global citizenship and sustainability * Digital literacy |
| --- | --- |
| **Instructional Strategies**   * Brainstorming * Think Pair Share * Demonstration * Group Work * Independent Work * Questioning * Class Discussion * Hands On Activity * Other: Thinking Classroom | **Assessment For/As/Of Learning**   * Conversation * Observation * Homework Check * Notebook Check * Participation * Peer Assessment * Self Assessment * Product * Other: |

**Assessment**

* See thinking classroom activity links in lesson plan: Thinking classroom activity
* See checkpoint and homework questions in lesson: 02 Thinking Classroom Activity Outline - Anthropogenic Factors, 03 Thinking Classroom Activity Printable Envt Threats (one set per group), 04 Thinking Classroom Prompts (one copy per group), 05 Human Impacts on Climate Change - Presentation, 06 Human Impacts on Climate Change - Notes

**Safety**

* No safety precautions

**Equity and Diversity Concerns**

* None

**Teaching Suggestions/Hints**

* Please read the instructions for the thinking classroom activity linked above before conducting the activity

**Next Steps/Extensions**

* See Day 2 Lesson Plan