



## Pictou County Forest School Climate Change Post-Visit Lesson Plans

**Activity:** Climate Change Compass  
**Curriculum Outcomes:** Middle School

**Materials:** Paper or chart-paper for groups, markers/pencil crayons, print-outs of a compass rose or circular objects that students can use to make their own, compass or iPhone with compass app

### **Intro/Minds On:**

- Students will need to know the four directions on a compass, or this could be part of a lesson on the four directions. iPhones have a compass app built-in in the event that physical compasses cannot be acquired. Google Earth on a projector can also be used as a tool for orienting/explaining N,S,E,W if gaps need to be filled in.
- Ask students which direction is North? South? (without a compass)
  - Ask them to use physical compasses or their phone (or show them to use yours if they don't have devices) to find these directions.
- Mark the directions in your classroom with white paper saying "North", "South", "East", "West"
  - Ask where you would end up if you ventured North (the arctic)? South (the equator)? East (the Atlantic Ocean)? West (British Columbia)? Use Google Earth on the projector to demonstrate.

**Action:** Students will identify climate change "symptoms" affecting all four directions on the compass.

For example, the North is affected by polar ice melt, northerly species migration; the South has been experiencing heat stress, changes in rainfall patterns, drought, desertification, agriculture, tropical disease; Western Canada/US are being hit with long "fire seasons", the Atlantic Coast and Ocean are changing (oceanic temperature, hurricanes, acidification, fish species, coral reefs, sea level rise, etc).

Older students can **either** research these on their own as a web-quest on chromebooks in groups of four, where each student takes a direction, **OR** you can have students navigate within the room, where you provide several articles (or sections of articles) for them at each respective station that you've marked N/S/E/W. The content you provide will be largely dependent on age group/literacy level, and this lesson plan is meant to be for many age groups so please use your own discretion on what is accessible for your kids!

Students will fill out their compass sheets with key words, factual statements and drawings that symbolise the impacts of climate change on each region.

**Consolidation and next steps:** students will present their compasses to each other and have discussions on if they think the symptoms are occurring **only** in that region or if they are shared by other areas as well. A follow up assignment could be to identify research that's being done by scientists to adapt or mitigate given symptoms.

**Resources:**



<https://archive.epa.gov/climatechange/kids/impacts/signs/index.html>

Has list of impacts + blurbs about them

