



**WHY IS CLIMATE IMPORTANT?**



## WHAT DO THESE STATEMENTS HAVE IN COMMON?

- The high temperature today will be 14 degrees.
- Yesterday we had a tornado.
- I have never seen it snow like this before!

## WHAT DO THESE STATEMENTS HAVE IN COMMON?

- Over the last decade the ice cap has been receding.
- Each year the monsoons come in the Spring.
- We have four seasons every year: Spring, Summer, Fall and Winter.



# CLIMATE VS. WEATHER



# WEATHER

- Describes the changes in the atmosphere on a particular day, in a particular place.
- Includes temperature, precipitation, wind, etc.



Hurricane Sandy is an example of weather.



# CLIMATE

- Refers to the average weather of an area over decades or centuries.
- You can use climate information to predict what conditions might be like in a particular place at a certain time of year.



How does the climate  
where you live affect  
your way of life and  
day-to-day activities?



Students, write your response!



# HOW CLIMATE AFFECTS US?

- What we can grow and eat.
- What we wear.
- The types of shelters we build.
- What activities we can do.





# CLIMATE IN CANADA

## SPATIAL SIGNIFICANCE

What is where?

Why there?

Why Care?





## WHAT IS WHERE?

What is happening?

→ Describe in detail the issue/event

Where is it happening?

→ Name the location of the event.

→ Is this a repeating/common event (patterns/trends)

## WHY THERE?

→ What has caused this event to occur?

→ Is this an issue/event caused by people or nature? Explain

## WHY CARE?

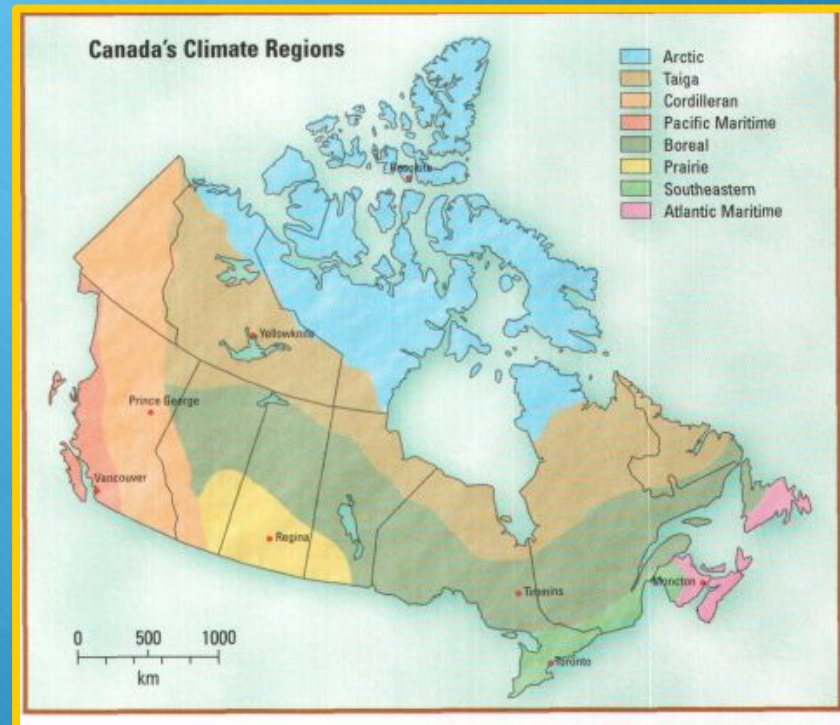
→ Think the different peoples perspective on this issue/event.

→ Which SDG(s) does it relate to? [Use this link to find the specific targets for each SDG](#)

# What is Where?

## ISSUE:

- Climate in Canada.
- Canada is split into Climate Regions
- Impact climate change will have on the different climate regions in Canada.





# Why There?

Climate is determined on physical location & surrounding features.





# CANADA'S OCEANS

Canada is a very large country that is surrounded by 3 different oceans.  
Which oceans are they?

**Atlantic Ocean**  
(on the east coast)

**Pacific Ocean**  
(on the west coast)

**Arctic Ocean**  
(in the north)

These oceans impact the climate of the provinces/regions near them.





# MARITIME CLIMATE

Provinces/regions that are close to one of the oceans will have a  
**MARITIME CLIMATE**

## Characteristics:

- Small annual temperature range (difference between hottest and coldest temperatures is small)
- High precipitation (it will rain or snow a lot throughout the year, much more than 1000mm)



Name two cities that may have a MARITIME CLIMATE because they are near an ocean.



# CONTINENTAL CLIMATE

Provinces/regions that are inland (away from ocean) will have a  
**CONTINENTAL CLIMATE**

## Characteristics:

- Large annual temperature range (difference between hottest and coldest temperatures is big)
- Low precipitation (it will not rain or snow a lot throughout the year, much less than 1000mm)



Name two cities that may have a CONTINENTAL CLIMATE because they are inland; away from a large body of water.



# MODIFIED CONTINENTAL CLIMATE

Provinces/regions that are inland but near the Great Lakes will have a  
**MODIFIED CONTINENTAL CLIMATE**

## Characteristics:

- Large annual temperature range (difference between hottest and coldest temperatures is big)
- Slightly high precipitation (it will not rain or snow a lot throughout the year, around 1000mm)



Name two cities that may have a MODIFIED CONTINENTAL CLIMATE because they are near the Great Lakes.





# Why Care?

- Human activity creating quick/less natural climate change
- Impacts resources, wildlife & human health





# Why Care?

**13** CLIMATE  
ACTION



If we don't address climate change we will fall back on all the development we have done around the world in the last 30 - 50 years. Climate Change impacts all other goals, education, poverty, clean water, etc.



**THE END**





# Massive Earthquake in Mexico City, September 2017

PRACTICE

What is Where?

Why There?

Why Care?





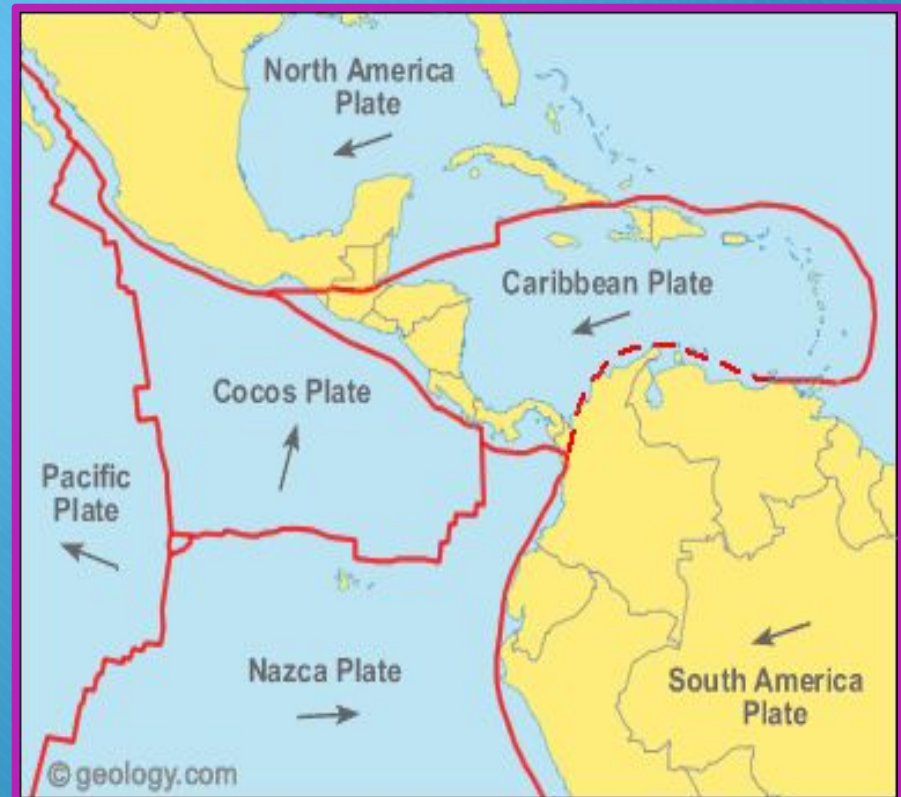
# What is Where?

A 7.1 magnitude  
earthquake near  
Raboso, Mexico



# Why There?

- Mexico is located near a tectonic plate boundary
  - North American Plate & Cocos Plate
- When two plates collide or slip by each other it creates an earthquake





# Why Care?



**11** SUSTAINABLE CITIES AND COMMUNITIES



[Use this link to find the specific targets for each SDG](#)



# CANADA'S "BIG ONE"

- WIW? → Potential earthquake near Vancouver, Canada
- WT? → Located near a plate boundary (Pacific Plate & Juan De Fuca)
- WC? → as discussed

## Cascadia Subduction Zone



The **Cascadia Subduction Zone** is a 1000 km fault that runs from Northern Vancouver Island to Northern California. The fault itself is a boundary between two tectonic plates: the **Juan de Fuca** tectonic plate and the **North American** plate that we live on.



An aerial photograph of a city with various buildings and streets, overlaid with a blue and black text graphic. The text is arranged in a grid-like fashion, with 'WE' and 'THE' in black, 'WILL' and 'BE' in blue, and 'HAVE TO' and 'CHANGE.' in blue. The background is a faded, high-angle view of a city grid.

**WE** **WILL** **HAVE TO** **BE**  
**THE** **CHANGE.**