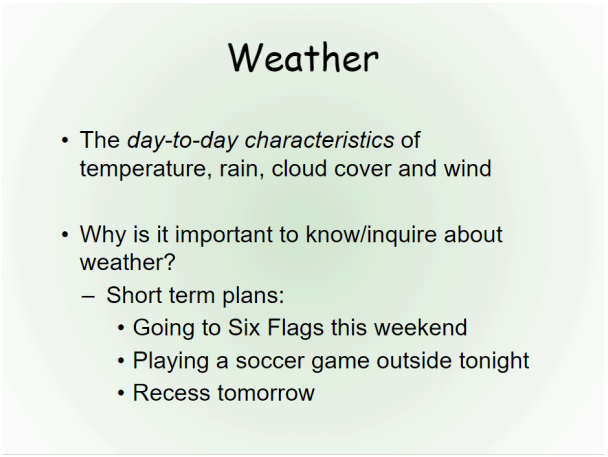
Name: | **Cohort:**

Factors that Affect Climate

To learn about the different factors that affect climate, you are going to independently work through this document.

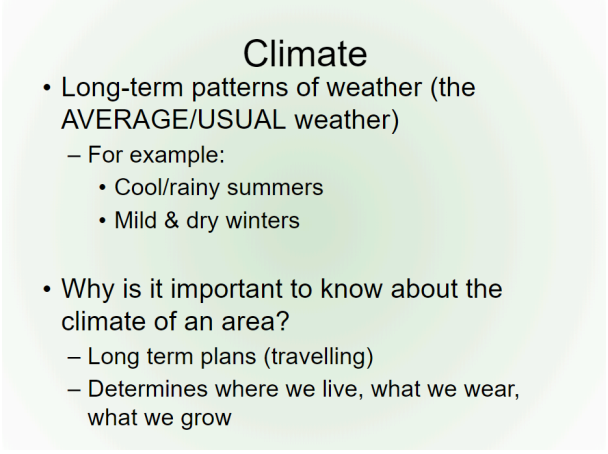
- Work in order, do not skip anything.
- You will need to watch the videos and fill in notes in all of the **BLUE** boxes.
- You can use the images on the left of each question to help you. If you can't read the words, drag the corner of the picture to make it bigger (then put it back).
- **I highly recommend that you use all the sentence stems provided for full credit.**

1. Watch this video: https://player.vimeo.com/video/80266773



What is weather?

Sentence Stem:
- Weather is…

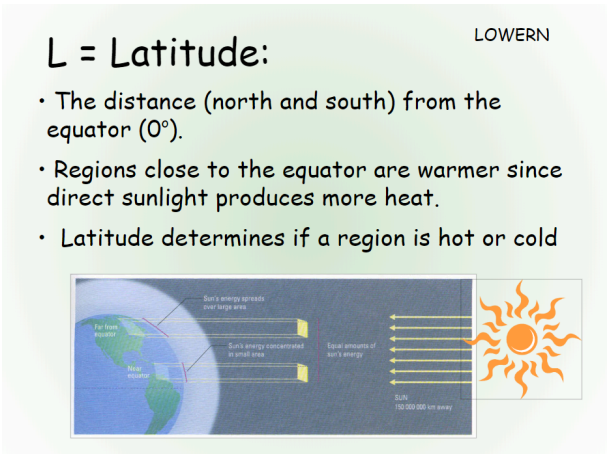


What is climate?

Sentence Stem:
- Climate is…

From the video: What are the 6 main factors that affect climate? Fill in the word(s) next to the letter.	L: O: W: E: R: N:

2. Watch this video: https://player.vimeo.com/video/80266782



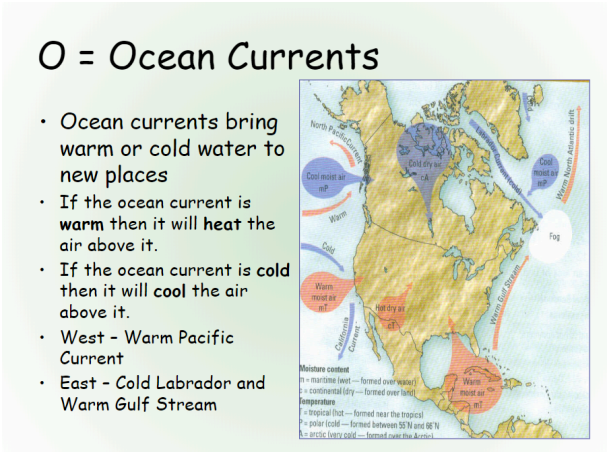
How does latitude affect climate?

Sentence Stem:
- At 0° latitude (the equator), the climate is typically…
- As you go North and South from the equator, the climate gets..

Fill in the following blanks with:
- Moderate
- Hot
- Cold

- At 20° it is:
- At -20° it is:
- At 80° it is:
- At -80° it is:
- At 50° it is:
- At -50° it is:

3. Watch this video: https://player.vimeo.com/video/80266984



How do ocean currents affect climate?

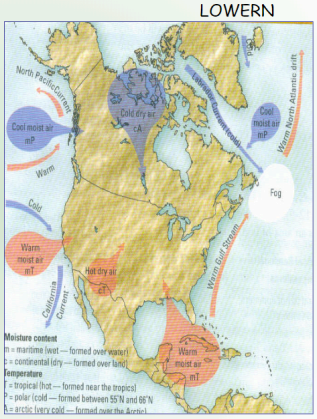
Sentence Stem:
- Ocean currents affect climate by…
- If the ocean current is **warm**, then it will _____ the air above it.
- If the ocean current is **cold**, then it will _____ the air above it.

4. Watch this video: https://player.vimeo.com/video/80266777

LOWERN

W = Wind:

- Wind moves hot and cold "air masses" to other parts of the world.
- Prevailing winds establish a pattern of weather (i.e. Jet Stream)
  - Prevailing wind = normal/typical wind
- Weather moves from West to East across Canada (easterly direction)
- If there is no wind, our weather wouldn't change very much!



How does wind affect climate?

Sentence Stem:

- Wind affects climate by…
- If there was no wind…

What are prevailing winds?

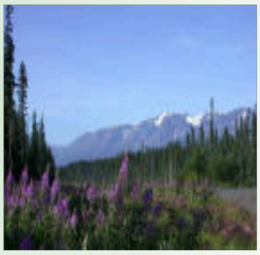
5. Watch this video: https://player.vimeo.com/video/80266781

LOWERN

E = Elevation

Elevation: refers to the height above sea level.

- The higher up you are the colder it gets



How does elevation affect climate?

Sentence Stem:

- The higher the elevation the…
- The lower the elevation the…

6. Watch this video: https://player.vimeo.com/video/80266985

LOWERN

R = Relief:

- *Relief:* refers to physical features such as mountain ranges
- For example: big difference in elevation).
- Mountains/hills act like a barrier to air masses



How does relief affect climate?

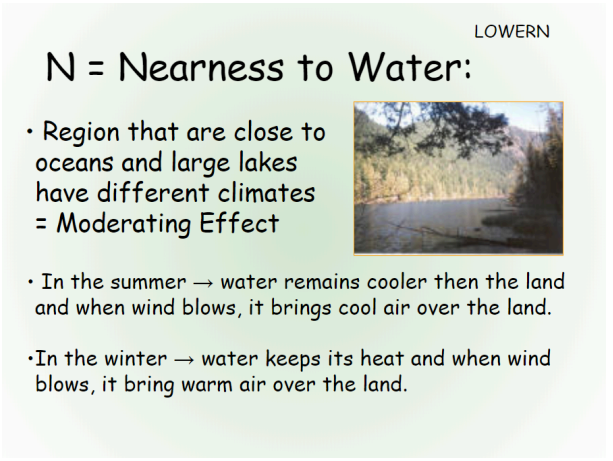
Sentence Stem:

- When places have more relief…
- When places have less relief…

What is relief? Click this link to learn more.

- Hint: What is it the opposite of?

7. Watch this video: https://player.vimeo.com/video/80266776



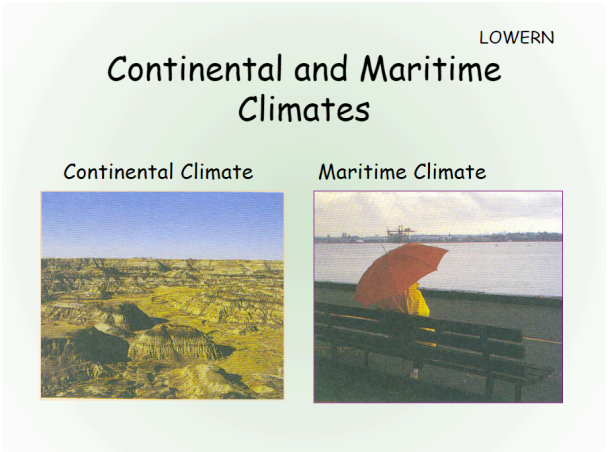
How does nearness/proximity to water affect climate?

Sentence Stem:

- Places that are near large bodies of water have more _____ climate. There is _____ (more or less) precipitation in these areas.
- Places that are **not** near large bodies of water have more _____ climate. There is _____ (more or less) precipitation in these areas.

Why does nearness/proximity to water affect climate? How does the moderating effect work?

8. Continental & Maritime Climates



What is a continental climate?

Sentence Stem:

- A continental climate is a region that is…

What is a maritime climate?

Sentence Stem:

- A maritime climate is a region that is…