



**High School Science Virtual Learning**

**Earth Science**

**Weather vs. Climate**

**May 4, 2020**



# High School Environmental Science

## Lesson: May 4, 2020

### **Objective/Learning Target:**

Students will be able to identify the difference between climate and weather.



1. What kind of air pressure system causes most heat waves?
2. What kind of air pressure system causes most cold waves?



1. Heat waves are generally caused by high pressure systems
2. Most cold waves are caused by low pressure systems that pull polar air toward the equator.



## **Lesson Activity:**

### **Directions:**

1. Read the article and then watch the video linked below. As you are doing so, take careful notes about the different ways one can mitigate the effects of climate change.
2. Write a short speech that you could give to a group of 4th graders comparing and contrasting weather and climate. Your speech should be about 5 minutes long.

### **Link(s):**

[Article](#)

[Video](#)



# Practice

You will use the information from the activity on slide 5 to answer the following questions.



# Practice Questions

1. What is weather?
2. What is climate?
3. What is the major difference in the two?
4. What is wrong with the statement "It is so cold outside, what happened to global warming and climate change? I always knew it wasn't real."?
5. Is the following statement about weather or climate: "Texas is always so hot and dry."

# Answer Key

Once you have completed the practice questions check with the work.

1. Weather is the short-term condition of the atmosphere in a given location.
2. Climate is the long term average condition of the atmosphere for a location.
3. The major difference between weather and climate is weather is a short term, usually a day or week, while climate is long term, usually classified of 30 years of data but can refer to a year or longer.
4. The statement is concentrating on the current weather and then relating the short snapshot to the overall climate.
5. This statement is referring to climate as there are days were Texas could be cold.





# More Practice

You will use the information from the activity on slide 5 to answer the following questions.



## More Practice Questions

On a blank sheet of paper, create a T-chart. Label the left side WEATHER and the right side CLIMATE. Then, take each term from the list below and place it in the appropriate column. (Hint: there are 5 weather and 8 climate terms)

Averages

Bodies of Water

Equator

Polar

Temperate

Landforms

Long Term

Short Term

Tropical

Heat Index Warning

Thunderstorm

Snow storm

Cold Front



# More Practice Questions Answer Key

## Weather

Short Term

Heat Wave

Thunderstorm

Snow storm

Cold Front

## Climate

Averages

Bodies of Water

Equator

Polar

Temperate

Landforms

Long Term

Tropical



## Extra Resources

Here is another article discussing the difference between weather and climate - [Article](#)

This video gives another summary of the difference in weather and climate- [Video](#)