



Earth Science Virtual Learning

**HS Earth Science**

**Air Masses**

April 21, 2020



High School/Earth Science  
Lesson: April 21, 2020

**Objective/Learning Target:**

Develop an understanding of air masses and the role they play in weather and climate.



## Warm Up Activity

1. Where are the westerlies located and which direction do they blow?
2. What winds are between 30 degree N and S latitude and what direction do they blow?



## Warm Up Activity

1. 30-60 degrees N and S latitudes, blowing toward poles.
2. The tradewinds are located around the equator (from 30 degree S to 30 degree N) and blow towards the equator.



## Lesson Activity:

1. Watch the following video.
2. Read the following article
3. While watching the video and reading the article, take careful notes about air masses on a separate piece of paper.
4. Answer the questions associated with the video found on the following slide(s)

## Links:

[Video Link 1](#)

[Article](#)



## Practice Questions

1. What is an air mass?
2. What determines the characteristics of an air mass?
3. If an air mass forms over land what will its characteristics be and what is its abbreviation?
4. If an air mass forms over the ocean what will its characteristics be and what is its abbreviation?
5. What are the temperature characteristics and abbreviations



## Practice Questions Answer Key

1. A volume of air defined by its temperature and water vapor content.
2. The air mass takes on the characteristics of the land or ocean beneath them.
3. The air mass will be dry and has an abbreviation of a lowercase c for continent.
4. The air mass will be humid and has an abbreviation of a lowercase m for maritime (another word for ocean).
5. The temperature characteristics are arctic abbreviated with a capital A which is extremely cold, polar abbreviated with a capital P which is cold but not as cold as an arctic, and tropical abbreviated with a capital T which is warm/hot air.



How about some practice? [Click this link](#) to access a ProProfs quiz over air masses.

Use your notes to answer these air mass practice questions.

The answers will be revealed after each question- as well as a short rationale for the answer. Each time you take the quiz, you will see a few new questions, so take it as many times as you can until you think you have it mastered!





## Extra Resources

Here is another video to help understand air masses and their effect on weather:

[Video](#)

Here is another article if you still have some questions: [Air Masses Continued](#)

Still want more information? Here is another great reading about air masses: [More About Air Masses](#)