



Science Virtual Learning

Grade 7th Grade Science

Characteristics of Weather Fronts

April 9, 2020



7th Grade Science
Lesson: April 9, 2020

Objective/Learning Target:

I can model and describe how weather fronts are formed from unlike air masses.

Warm Up:

1. Take this [quiz](#) to see how much you remember from your lessons this week.
2. On a sheet of paper write your answers to these questions:
 - In which layer of the atmosphere does weather occur?
 - In which layer does the International Space Station orbit?
 - In which layer do meteors burn up entering the atmosphere?

Answers to warm up questions:

- In which layer of the atmosphere does all weather occur?
Weather occurs in the troposphere.
- In which layer does the International Space Station orbit?
The space station orbits in the thermosphere.
- In which layer do meteors burn up entering the atmosphere?
Meteors enter and burn up in the mesosphere.

Practice

Read the following key terms. On a piece of notebook paper, write the key word(s) from each definition.

AIR MASS--A huge body of air that has similar temperature, humidity and air pressure at any given height.

TROPICAL--A low pressure air mass that forms in the tropics

POLAR--A high pressure cold air mass that forms north of 50 degrees north latitude, and south of 50 degrees south latitude.

MARITIME--A humid air mass that forms over oceans.

CONTINENTAL--A dry air mass that forms over land.

Practice

FRONT--The boundary where unlike air masses meet but do not mix.

OCCLUDED--Cut off, as in a front where a warm air mass is caught between two cooler air masses.

CYCLONE--A swirling center of low air pressure.

ANTICYCLONE--A high-pressure center of dry air.



With what you have learned from the key terms, match the term using the illustration or example. Click on the link.

[What's the Word?](#)

After you have named the 3 terms from the practice above, check here for the correct answers. How did you do?

[What's the Word? Correct Answers](#)

MORE PRACTICE

You will be learning about the qualities found in the 4 major types of air masses that influence the weather in North America.

MARITIME TROPICAL

MARITIME POLAR

CONTINENTAL TROPICAL

CONTINENTAL POLAR

Click on the link and record the major characteristic for each of the types of AIR MASS

[AIR MASSES](#)

MORE PRACTICE

Hint: Maritime refers to oceans, seas, or large bodies of water

Fill in the correct answer for each:

- 1. Which air masses are humid?**
- 2. Which air masses are dry?**
- 3. Which type of air mass would form over the northern Atlantic Ocean?**

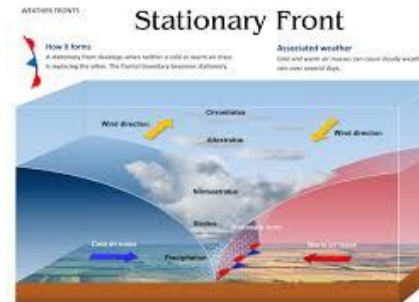
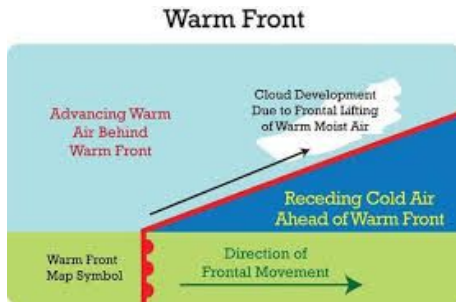
MORE PRACTICE

Hint: Maritime refers to oceans, seas, or large bodies of water

Fill in the correct answer for each:

- 1. Which air masses are humid? **Maritime tropical & Maritime Polar****
- 2. Which air masses are dry? **Continental tropical & Continental Polar****
- 3. Which type of air mass would form over the northern Atlantic Ocean? **A maritime polar air mass****

Weather front-A weather front is a boundary separating two masses of air of different densities. Click on each picture to learn more about the front.



Work through this [interactive activity](#) on fronts. At the bottom of the page are the types of fronts. Click on a front type. Drag the arrow on the bottom left of the page in the direction it is pointing to see what happens. Click on menu at the top to change front type.

Answer these questions on the same paper you wrote your warm up answers:

- In which type of front did the arrows not move? Why is that?
- What type of weather might occur in a cold front?
- What type of weather might occur in a warm front?
- What might happen if it is raining in a stationary front?
- Draw a picture of each type of front. Include title, arrows, cold or warm, and cloud form.

Click here to check your [answers](#) when finished.



More resources:

[Weather fronts quiz](#) -Review Game Zone

[Fronts](#), [Weather and Fronts](#) -Reading passages

[Fronts](#) -Reading passage from cK-12

[Own Your Weather](#) -blog with many easy to understand weather topics

[Types of Weather Fronts](#) -Video on types of fronts

[Demonstration](#) with cold and warm water