

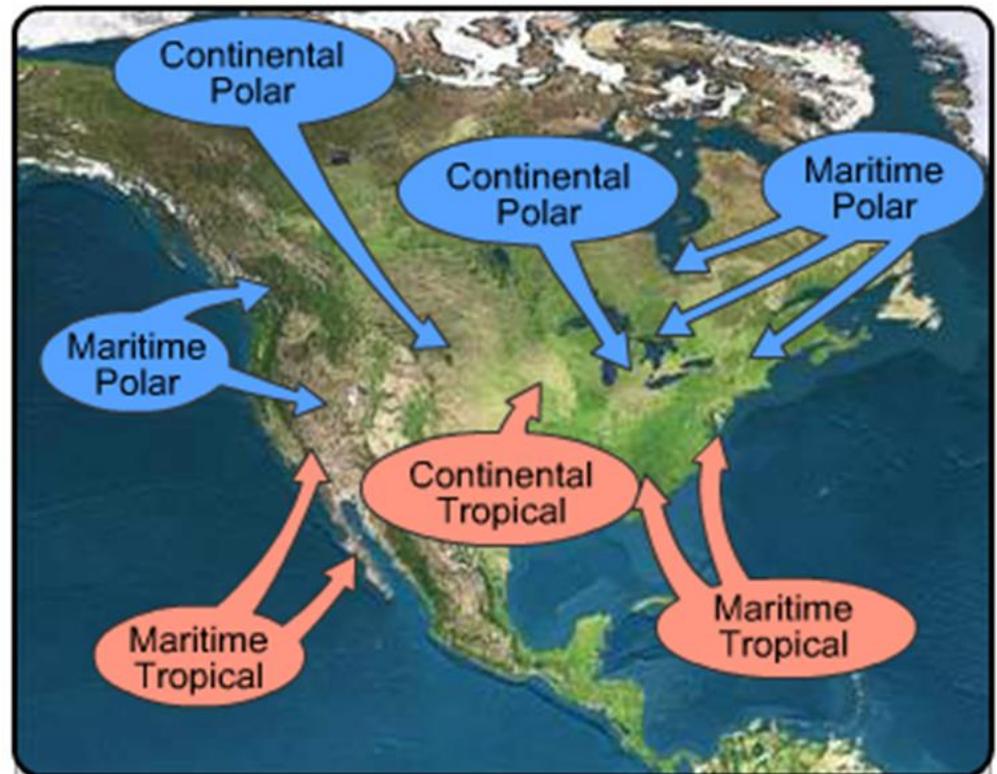
Study guide unit 5 lesson 7

Remember!

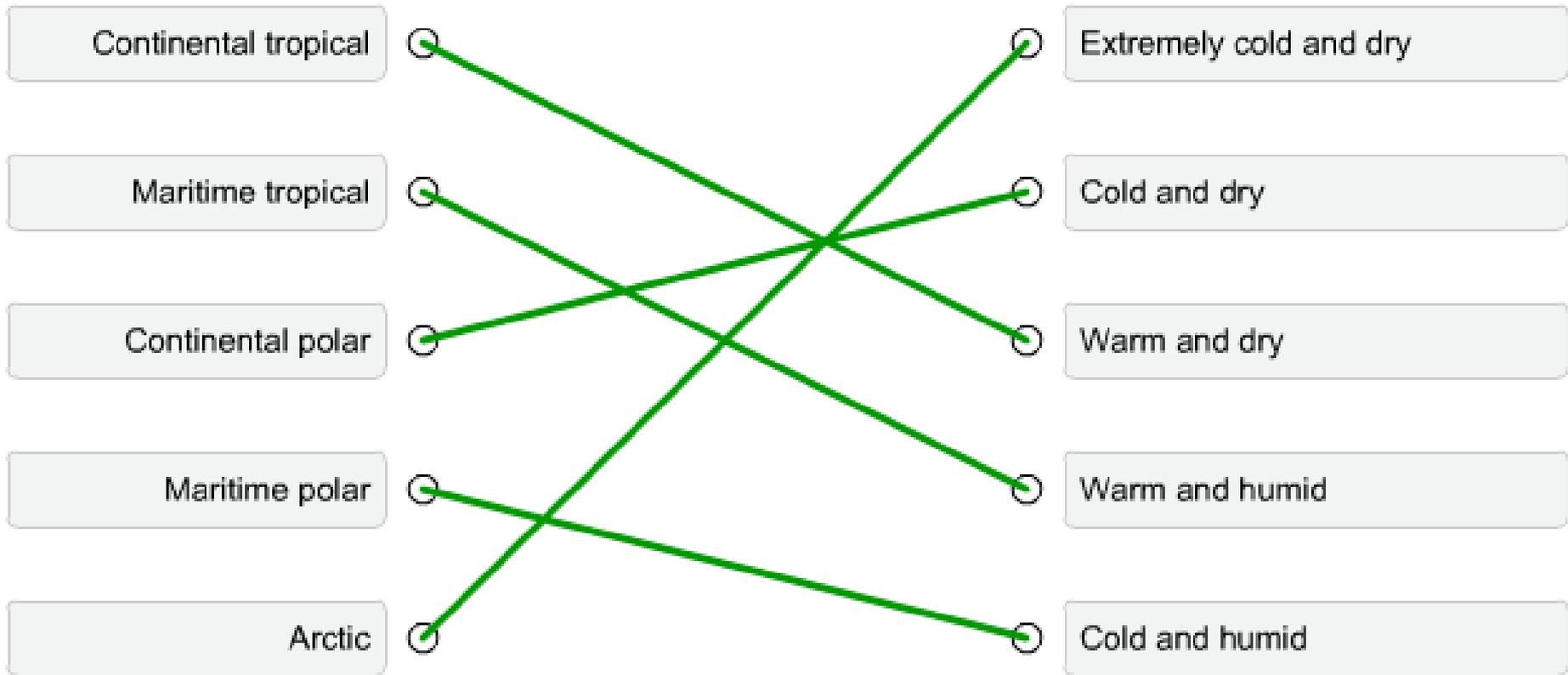
- Maritime = humid
- Tropical = warm
- Polar = cold
- Continental = dry

Types of Air Masses

- * **Continental tropical (cT):**
warm and dry
- * **Maritime tropical (mT):**
warm and humid
- * **Continental polar (cP):**
cold and dry
- * **Maritime polar (mP):**
cold and humid



Answers:



Let's Review:



- Warm air is less dense. (think about how heat rises)
- Warm air can hold more water molecules!!
- Warm air has high clouds!
- Cold air is more dense (think about how its hard to breath in really cold temperatures!)
- When the two collide we can get storms!



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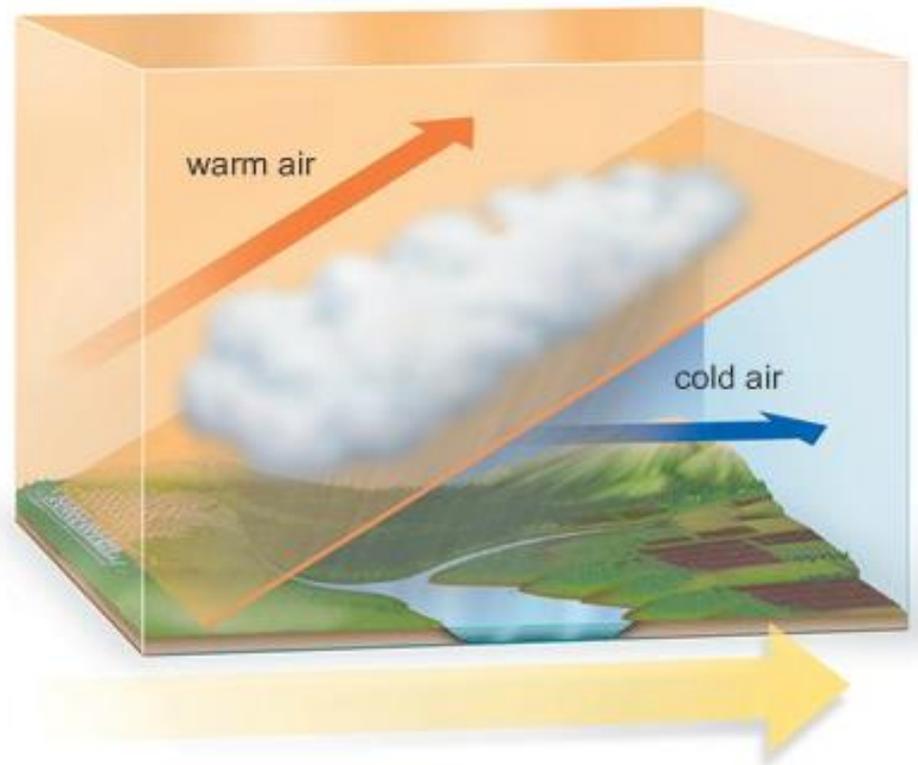
When Air Masses Meet

- Though there are weather patterns that come with each type of air mass, some of the most interesting weather occurs where two air masses meet.
- If two air masses with different temperatures or humidity levels meet, they do not immediately mix or blend. Instead a line or boundary forms between them. This boundary is called a **front**.



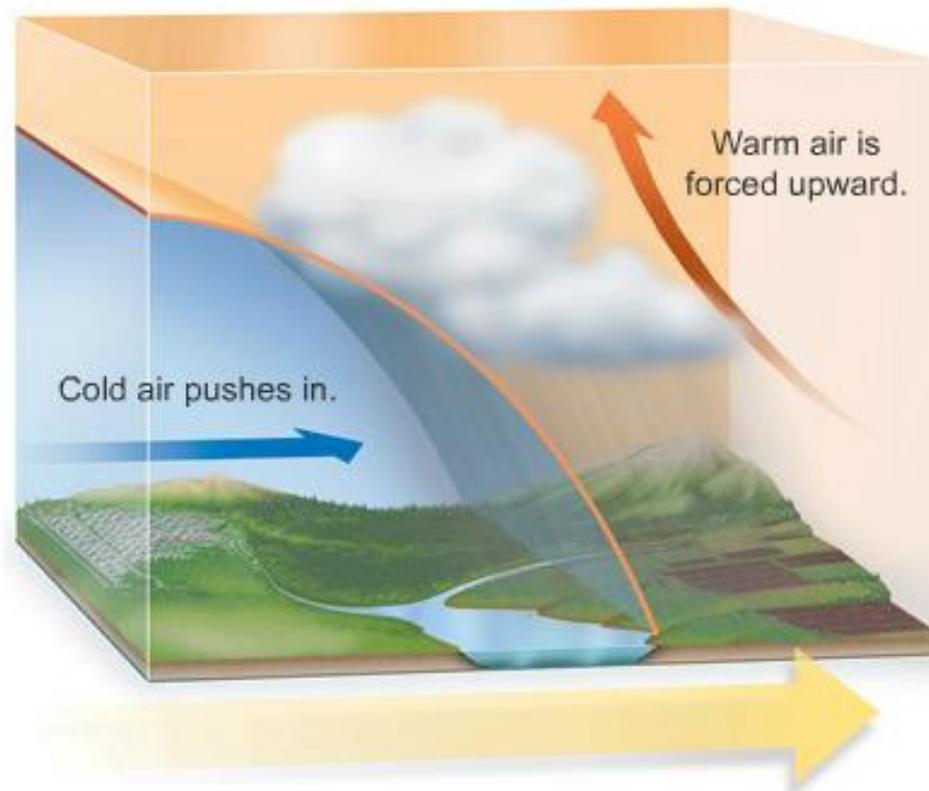
Warm Fronts

- If warm or more humid air presses forward and colder or drier air draws back, the boundary is called a warm front.



Cold Fronts

- If colder or drier air presses forward and warmer or more humid air draws back, the boundary is called a cold front.



Thunderstorms:

- Cold air is denser and so it pushes in quickly under warm air. The warm air cools to its dew point and clouds form. Cold fronts can bring dramatic weather such as large thunderclouds and storms. When you see a thundercloud moving up into the atmosphere, you're seeing a warm air mass being forced up by a cold air mass.

Cold air heavy so it pushes warm air up!
Drama!!! Dramatic weather!



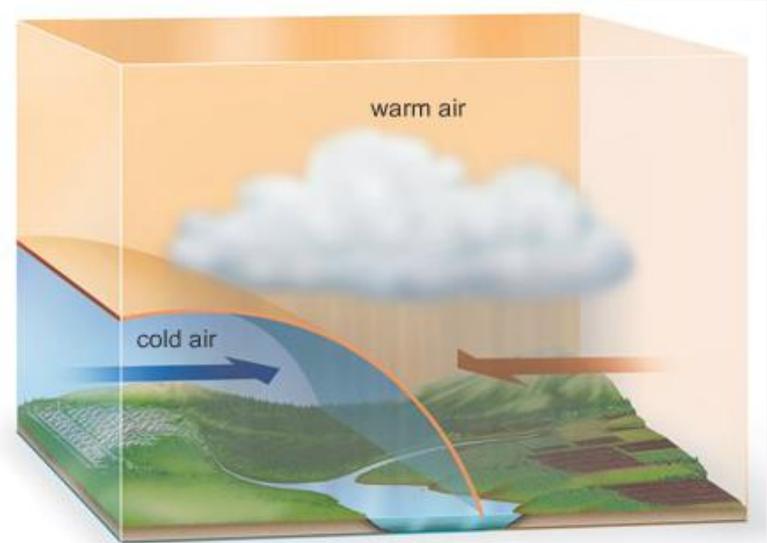
Warm Air:

- Weather at a warm front is often drizzly. Warm air will rise above the cooler air because it is less dense, and then it will cool. The moisture in the warm air will form clouds and then fall as precipitation.



Stationary Fronts

- When a cold air mass and a warm air mass meet but are at a standstill, the boundary is called a stationary front. The air masses may be moving along the boundary between the two fronts, but the boundary itself moves only slowly, if at all.
- Gray skies, rain, or snowy weather may last a long time near a stationary front. Winds may also blow along this boundary.

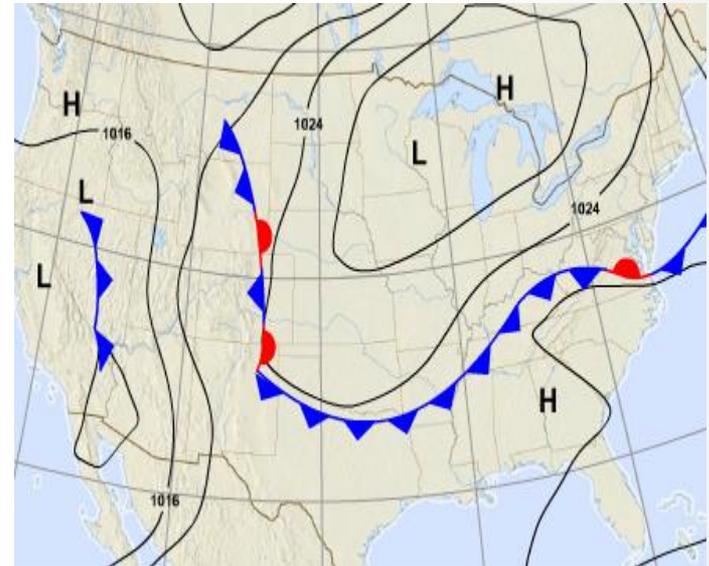


Cold and warm air masses meet at a standstill.

Stationary-= stays no pushing

Highs, Lows, and Fronts

- You have learned a lot about how different air types can bring certain kinds of weather. Highs or high-pressure areas bring fair weather. Lows, or low-pressure areas bring wet weather, high humidity, or both.
- It is important to know the difference between the weather that comes with a high- or low-pressure system and weather that comes with fronts. A fair, sunny day may be the result of a high, but this weather can quickly change from sunny to rainy if a front moves in and disturbs the air mass.



Quick Check:

- High Pressure fronts bring nice weather while low pressure brings rainy weather.



- *Remember “Nice people say HI”

