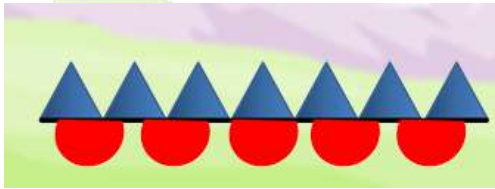
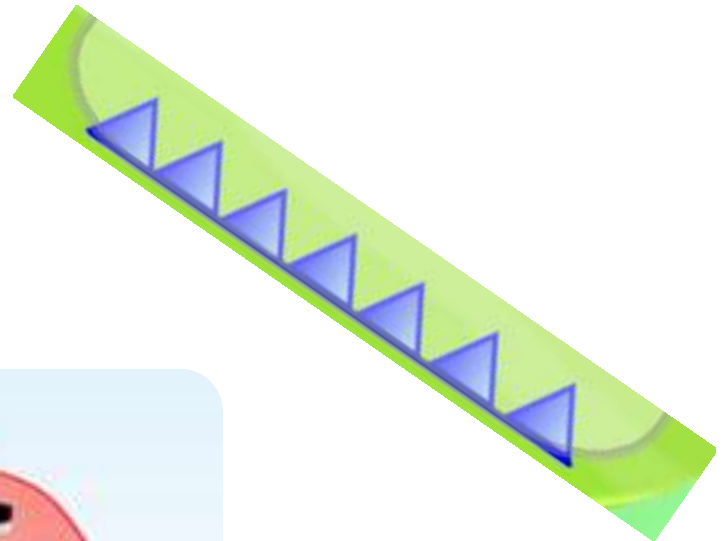


6-4.4, 6-4.5 Air



Masses,

Fronts & Pressure



Monday Warm-Up Air Masses

What do the following words mean to you?

Maritime _____

Continental _____

Polar _____

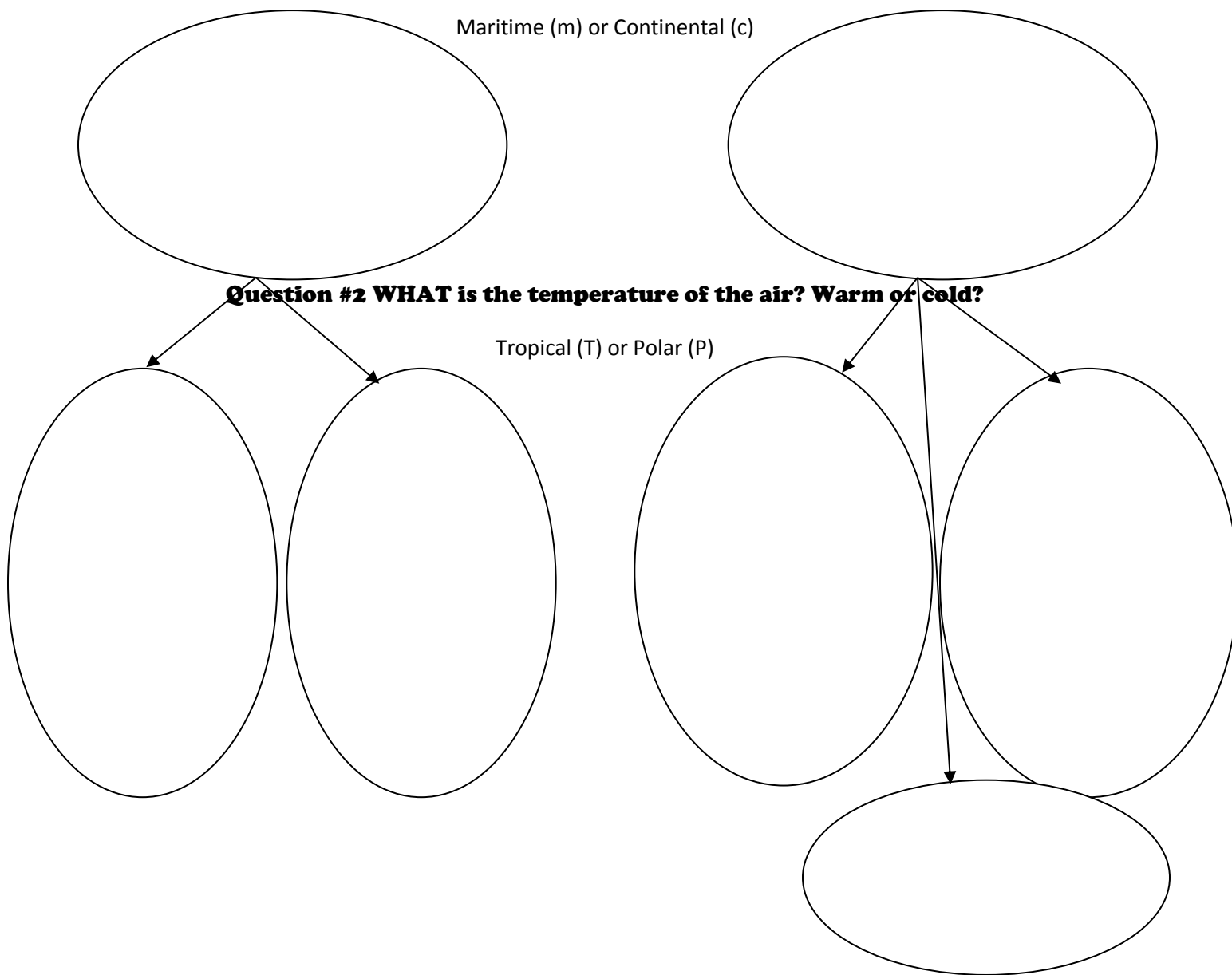
Tropical _____

Monday Activity:

In order to determine what type of air mass it is you need to ask questions! Fill out the chart below with the types of air masses and write a quality of that air.

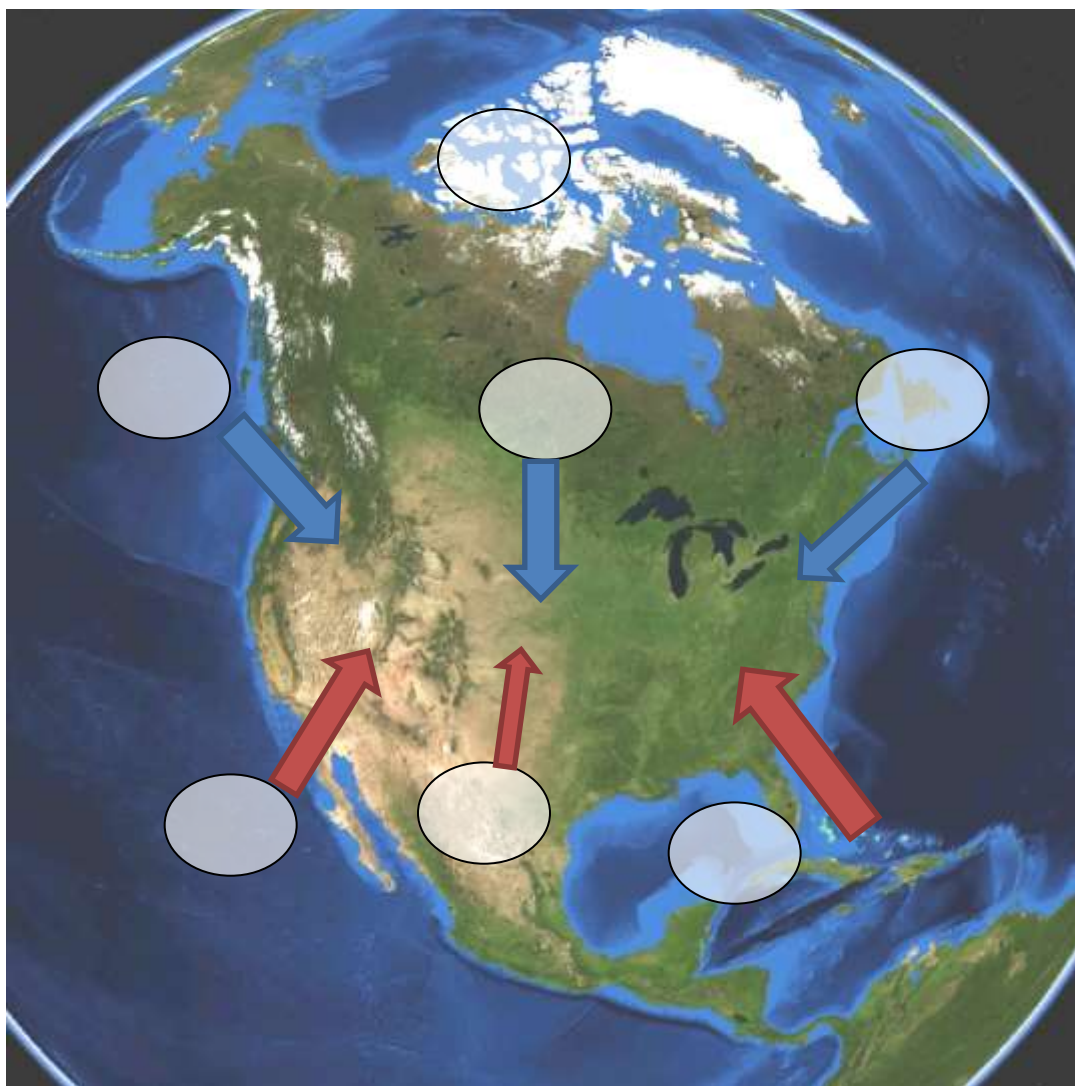
Question #1 WHERE is the air located? Over land or water?

Maritime (m) or Continental (c)



AIR MASS SYMBOLS

Label the Globe below with the correct air masses



Map Source: NASA

What type of air mass do you believe happens near deserts? _____



What type of air mass do you believe happens near South Carolina? _____



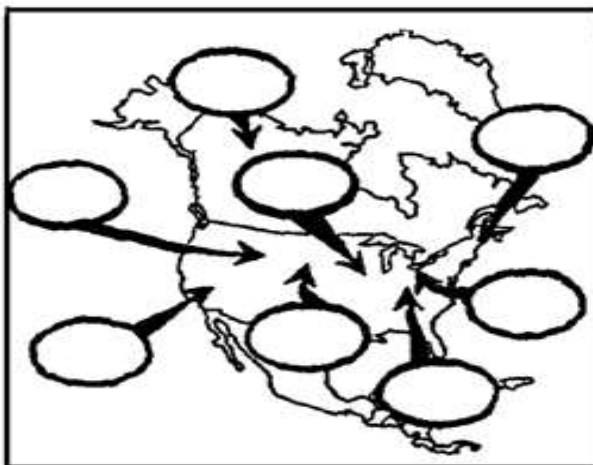
What type of air mass do you believe happens near New York City? _____



Tuesday Warm Up- AIR MASSES





Label the Air Masses and think of a clever trick to remember them.

Trick: _____



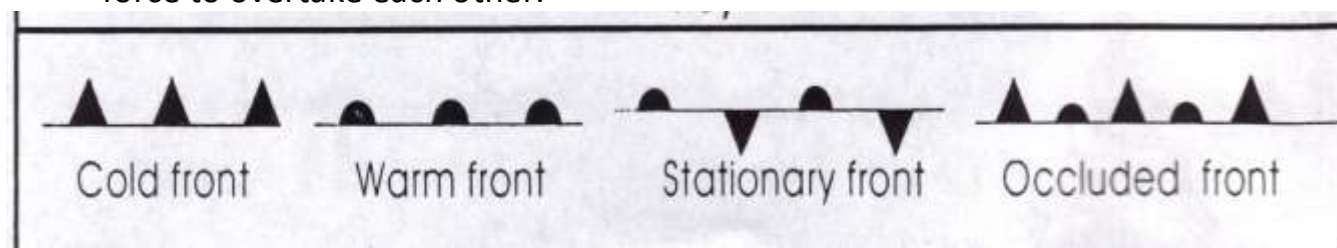
<u>Front</u>	<u>Wrestling Move</u>	<u>Picture</u>
<u>COLD</u>	<p>The wrestling move for this front is_____.</p> <p>Weather associated:</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<u>WARM</u>	<p>The wrestling move for this front is_____.</p> <p>Weather associated:</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<u>STATIONARY</u>	<p>The wrestling move for this front is_____.</p> <p>Weather associated:</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<u>OCCLUDED</u>	<p>The wrestling move for this front is_____.</p> <p>Weather associated:</p> <p>_____</p> <p>_____</p> <p>_____</p>	

FRONTS

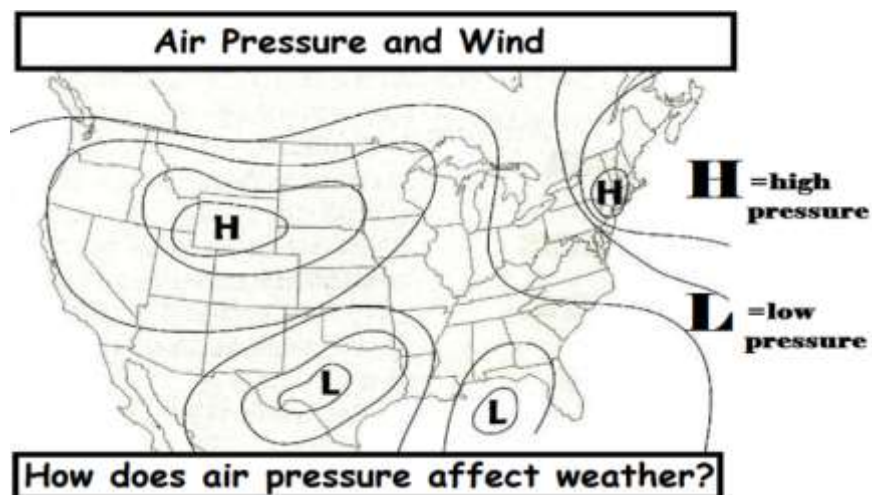
Draw Symbol	Definition	Picture: Use a "W" and a "C" to label the warm and cold fronts
Air Masses	Huge bodies of air with the same moisture and temperature throughout.	
Cold Front 	Forms when a cold air mass pushes under a warm air mass. Weather: Thunderstorms and tornadoes	
Warm Front 	Forms when a warm air mass slides up and over a cold air mass Weather: Gentle rain or light snow	
Stationary Front 	Forms when warm and cold air with the same speed meet and neither has the force to move the other out of the way Weather: Several days of rain	
Occluded Front 	Forms when a warm air mass gets caught between two cold air masses Weather: Long periods of precipitation	

Wednesday Warm-Up

1. _____ area in which two types of air masses meet.
2. _____ area where warm moist air slides up and over a cold mass.
3. _____ area where cold air mass pushes under a warm air mass
4. _____ area where warm air is caught between two colder air masses.
5. _____ warm air meets cool air and the masses do not have enough force to overtake each other.



HIGH AND LOW PRESSURE SYSTEMS



High/Low Pressure Systems



Warm air rising or cold air sinking combined with the spinning of Earth causes the air to spin forming high and low pressure regions.

_____ pressure systems usually signal more fair weather with winds

circulating around the system in a clockwise direction.

- _____ pressure systems with counterclockwise circulating winds often result in rainy and/or stormy weather conditions.

A **barometer** is an instrument used to measure _____
 _____ measured in _____ of Mercury (in Hg) or in
 _____ (mb Hg).

Barometer Reading	What does it look like outside?	What weather does it bring?
<p>Rising barometer- _____ in air pressure.</p> <p>H</p> <p>(_____ Pressure)</p>	<p>_____ air is sinking.</p>  <p>The diagram shows a circular convection loop. On the left, a red arrow points upwards, labeled 'Warm Air Rises'. On the right, a blue arrow points downwards, labeled 'Cold Air Sinks'. The word 'Convection' is written at the bottom of the loop.</p>	
<p>Falling barometer- _____ in air pressure</p> <p>L</p> <p>(_____ Pressure)</p>	<p>_____ air is rising.</p>  <p>The diagram shows a circular convection loop. On the left, a red arrow points upwards, labeled 'Warm Air Rises'. On the right, a blue arrow points downwards, labeled 'Cold Air Sinks'. The word 'Convection' is written at the bottom of the loop.</p>	

BAROMETER INFO AND PRACTICE

Ways to remember how a barometer works: Think of Dr. Phil, the psychologist on T.V. He works with people who are **LOW** and depressed. That is how he makes his money. He helps people through the *storms* and *cloudy weather* in their lives. When they are **HIGH** on life and *happy*, he doesn't have to help them or make any money from them.



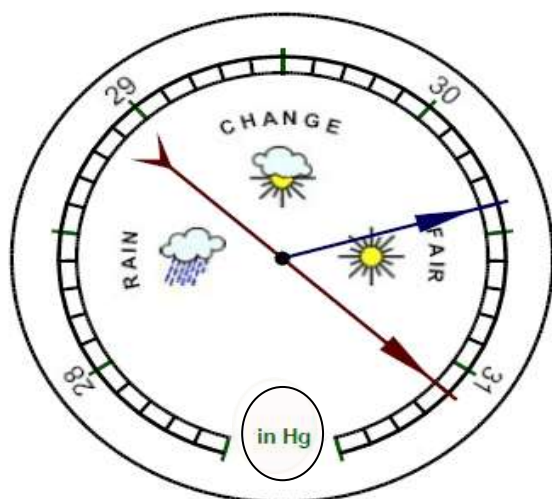
High High Happy
Happy
Low Low, Sad Bad



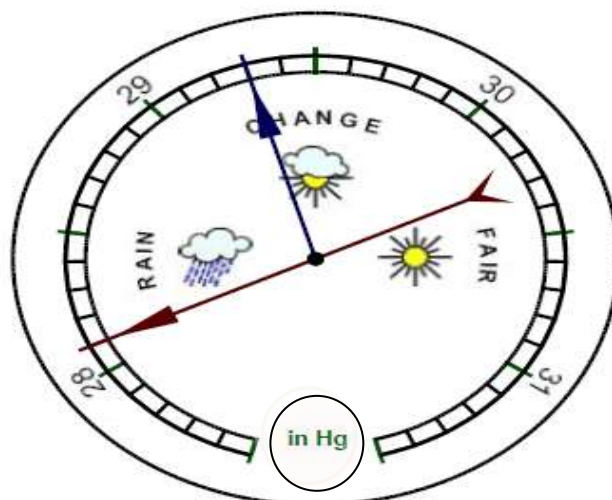
Barometer Reading	High or Low Pressure? (write H or L)	<div>Stormy</div> <div>Chance of Rain</div> <div>Sunny?</div> <div>(draw pictures to show the weather chance)</div>
950		
1050		
1030		
970		
999		
1014		

PRESSURE PRACTICE

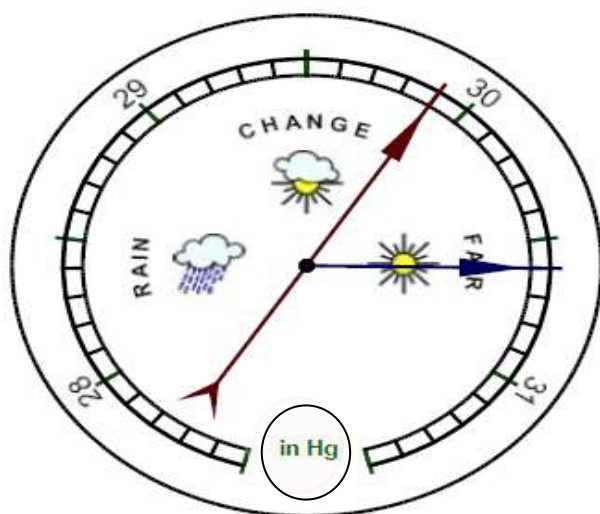
Fill out the setting hand, measuring hand, and tell whether the pressure is “high” or “low” in the blank spaces below.



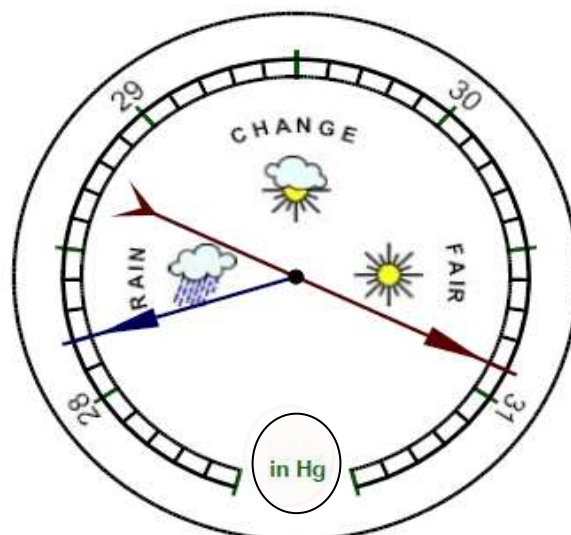
Setting Hand _____
 Measuring Hand _____
 Pressure is _____



Setting Hand _____
 Measuring Hand _____
 Pressure is _____



Setting Hand _____
 Measuring Hand _____
 Pressure is _____



Setting Hand _____
 Measuring Hand _____
 Pressure is _____