MSL REVIEW WEATHER/ATMOSPHERE

Atmosphere & Weather Review Day 1

1. **List the five layers of the atmosphere starting at Earth's surface.**

2. **What are the two most common gases in the atmosphere?**

3. **What are two events that cause sudden, wide-spread changes in our atmosphere?**

Atmosphere & Weather Review Day 1

1. **List the five layers of the atmosphere starting at Earth's surface.**
   a. **troposphere, stratosphere, mesosphere, thermosphere, exosphere**
2. **What are the two most common gases in the atmosphere?**
   a. **nitrogen and oxygen**
3. **What are two events that cause sudden, wide-spread changes in our atmosphere?**
   a. **dust storms, volcanic eruptions, forest fires**

Atmosphere & Weather Review Day 2

1. **A build up of _____ gases might cause temperatures on Earth to get warmer.**

2. **Scientists say that ozone is 'good up high and bad nearby'. What does this mean?**

3. **In which layer of the atmosphere is ozone helpful?**

Atmosphere & Weather Review Day 2

1. **A build up of _____ gases might cause temperatures on Earth to get warmer.**
   a. **greenhouse**
2. **Scientists say that ozone is 'good up high and bad nearby'. What does this mean?**
   a. **ozone in the stratosphere (up high) helps block UV radiation, ozone in the troposphere is toxic to humans**
3. **In which layer of the atmosphere is ozone helpful?**
   a. **stratosphere**

Atmosphere & Weather Review Day 3

1. **What is the type radiation that is blocked by the ozone layer?**

2. **What does altitude measure?**

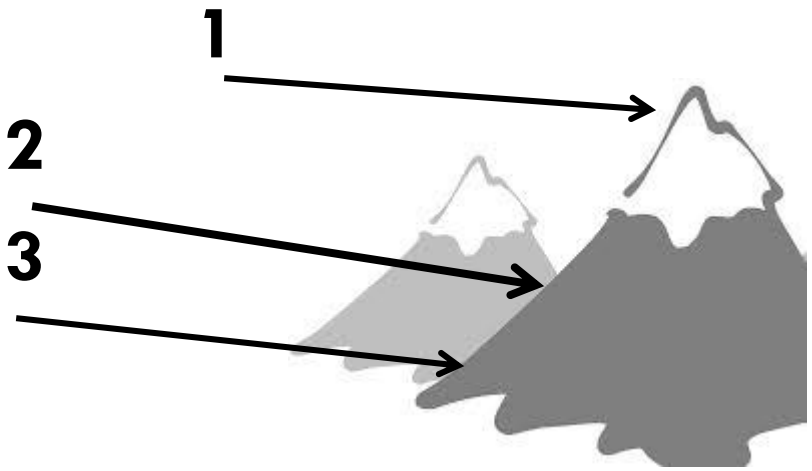
3. **Which layer of the atmosphere has the warmest temperatures?**

Atmosphere & Weather Review Day 3

1. **What is the radiation that is blocked by the ozone layer?**
   a. **Ultraviolet radiation**
2. **What does altitude measure?**
   a. **Distance above sea level**
3. **Which layer of the atmosphere has the warmest temperatures?**
   a. **thermosphere**

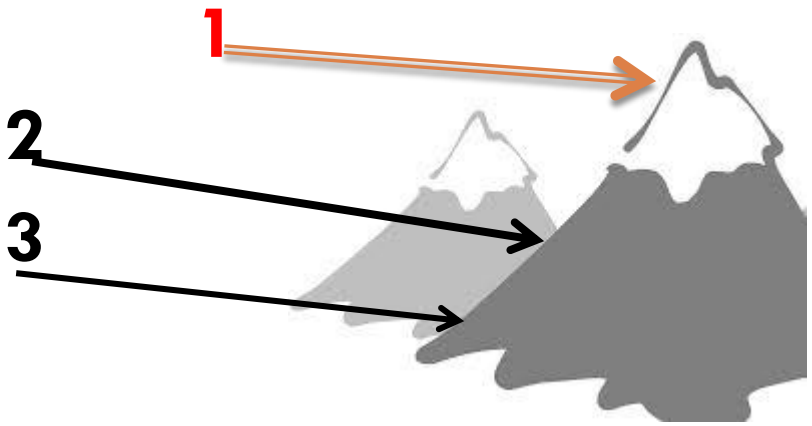
Atmosphere & Weather Review
Day 4

1. **If the air density increases, what happens to the amount of oxygen you breathe in with each breath?**
2. **At which point is the air the least dense?**



Atmosphere & Weather Review Day 4

1. **If the air density increases, what happens to the amount of oxygen you breathe in with each breath?**
   a. **Increases**
2. **At which point is the air the least dense?**



Atmosphere & Weather Review Day 5

1. Describe the difference between ‘weather’ and ‘climate’.

2. Define air mass.

3. What is a ‘front’?

Atmosphere & Weather Review Day 5

1. Describe the difference between 'weather' and 'climate'. Weather describes the current condition of the atmosphere in a specific location, climate describes weather conditions over a long period of time in a specific region.
2. Define air mass. An air mass is a large body of air with similar temperature and moisture content.
3. What is a 'front'? The boundary between two air masses that have different temperatures and/or humidity. Often where weather occurs.

Atmosphere & Weather Review Day 6

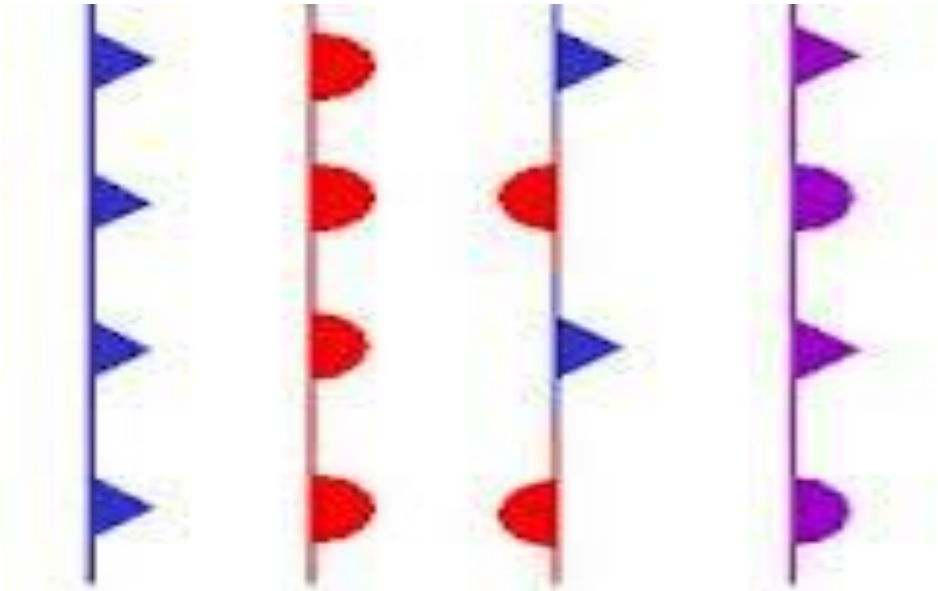
1. Describe the characteristics (where do they form, moisture content, temperature) for each of the air masses:
    a) Continental Polar
    b) Continental Tropical
    c) Maritime Polar
    d) Maritime Tropical

Atmosphere & Weather Review Day 6

1. Describe the characteristics (where do they form, moisture content, temperature) for each of the air masses:
   a) Continental Polar: Forms over land, cold, dry.
   b) Continental Tropical: Forms over land, warm, dry.
   c) Maritime Polar: Forms over water, cold, moist.
   d) Maritime Tropical: Forms over water, warm, moist.

Atmosphere & Weather Review Day 7

1. Draw and label each of the following fronts. Describe the type of weather associated with each.



Atmosphere & Weather Review Day 7

1. Draw and label each of the following fronts. Describe the type of weather associated with each.

Cold Front

Warm Front

Stationary Front

Occluded front

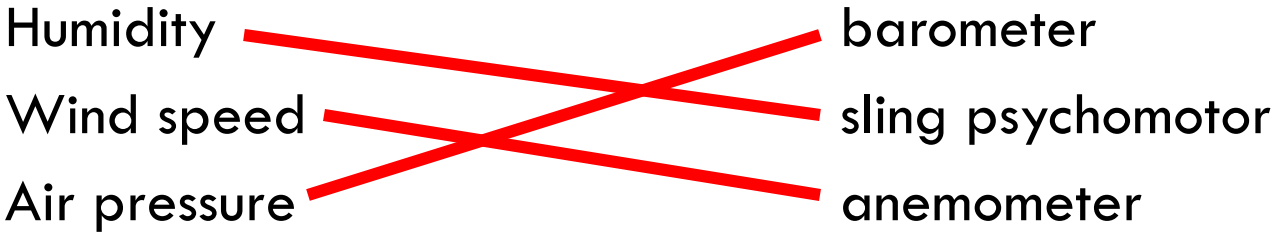
Atmosphere & Weather Review Day 7

Meteorologist use a variety of weather instruments to collect data and predict weather. What instrument could you use to find the following? (match the instrument to the condition)

Humidity	barometer
Wind speed	sling psychomotor
Air pressure	anemometer

Atmosphere & Weather Review Day 7

Meteorologist use a variety of weather instruments to collect data and predict weather. What instrument could you use to find the following? (match the instrument to the condition)



Atmosphere & Weather Review
Day 8

1. How are winds created?

2. Give an example of a global wind system that affects the weather in the US.

3. What type of severe weather affects the eastern US and begins near Africa?

Atmosphere & Weather Review Day 8

1. How are winds created? Uneven heating of earth's atmosphere air creates air masses of different temperatures. Since warm air is less dense, it rises, causing cooler air to fill in below. This movement of air is what makes the wind blow.
2. Give an example of a global wind system that affects the weather in the US. Westerlies
3. What type of sever weather affects the eastern US and begins near Africa? Hurricanes

Atmosphere & Weather Review
Day 8

4. What causes the most damage during a hurricane?

5. What type of severe weather is often associated with warm fronts?

6. In the south and southeastern US, what type of severe weather is often associated with Thunderstorms?

Atmosphere & Weather Review Day 8

4. What causes the most damage during a hurricane?
    a. Storm Surge
5. What type of severe weather is often associated with warm fronts?
    a. Thunderstorms
6. In the south and southeaster US, what type of severe weather can be associated with Thunderstorms?
    a) tornados