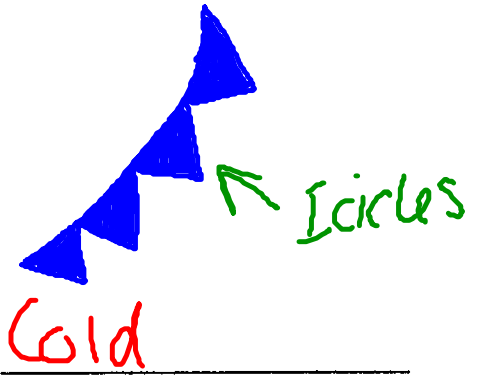
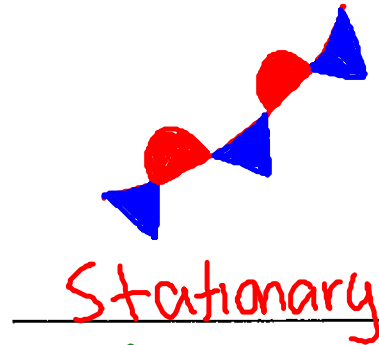
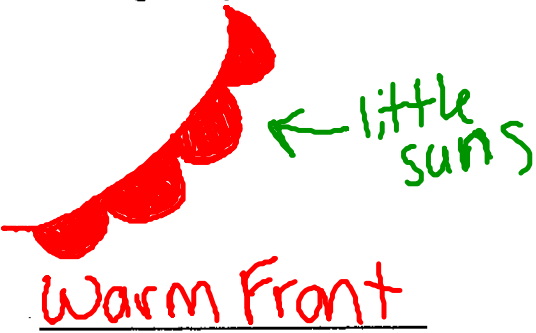


Weather Review Sheet

1. Name the layers of the atmosphere from Earth to space:
Troposphere, Stratosphere, Mesosphere, Thermosphere
2. Where would the exosphere be located? Above the Thermosphere
3. Where is the ozone layer located? in the stratosphere
4. What is the purpose/function of the ozone layer?
layer of oxygen gas that absorbs the sun's radiation
5. Name 3 ways that the earth is heated:
Radiation, Conduction, and Convection
6. Radiation: the transfer of energy from the sun through space.
7. Conduction: the transfer of heat by direct contact.
8. Convection: transfer of heat through air or a gas.
9. There are 4 things that affect weather:
 Air Pressure: The force / weight of air pushing down on earth's surface
 Wind: The horizontal movement of air
 Humidity: The amount of water vapor the air is holding
 Precipitation: Water that falls to the ground as rain, hail, sleet or snow
10. Air pressure is measured using a barometer in units called millibars
11. A High Pressure system brings weather that is fair and clear.
12. A Low (Lowsy) Pressure system brings cloudy, unstable weather with possible precipitation.
13. Earth warms the air (atmosphere) by Convection currents.
14. Warm air rise while cold air sinks because it is less dense.
15. Wind direction is measured using a wind vane and wind speed is measured using an anemometer
16. Humidity is measured using a psychrometer.
17. Dew Point is:
The temperature when the water vapor will condense into a liquid
18. The four types of precipitation are: rain, hail, sleet, and snow
19. Rain gauge measures the amount of precipitation that has fallen.
20. Name the 3 basic types of clouds: Cumulus, Stratus, and Cirrus
21. How do clouds form?
Clouds form when warm air rises up, expands and cools below its dew point temp (condensation)

14. Cirrus Clouds are light, feathery looking clouds that are made mainly of ice crystals.
15. Camulus Clouds are thick, puffy clouds that are associated with fair weather.
16. Stratus Clouds are layered and grey and associated with or possible precipitation.
17. An Air Mass is a large volume of air with the SAME TEMPERATURE AND MOISTURE.
18. A Front is a boundary between 2 air masses, warm and cold.
19. A Warm front has warm air that slides UP AND OVER COLD air and brings long periods of precipitation.
20. A cold front has cold air that PUSHES WARM AIR UPWARD.
21. A Stationary front is when a warm air mass and a cold air mass meet.
22. Using the pictures below, identify the 3 types of fronts.



23. Name the 4 types of severe weather: Blizzard, Thunderstorm, Tornado, and hurricane.

24. Draw the symbol for:
Cold Front:



Stationary Front:



Warm Front:

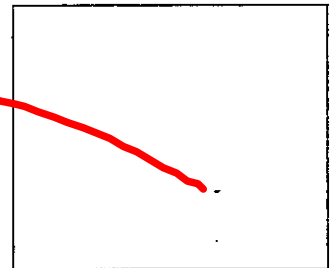
High Pressure: H

Low Pressure:

24. What are isolines? link different places that share common value
25. What do station models show?
Current weather conditions such as temp, cloud cover, wind speed + direction, visibility ect.

26. Draw the station model in the space at the right for the follow conditions.

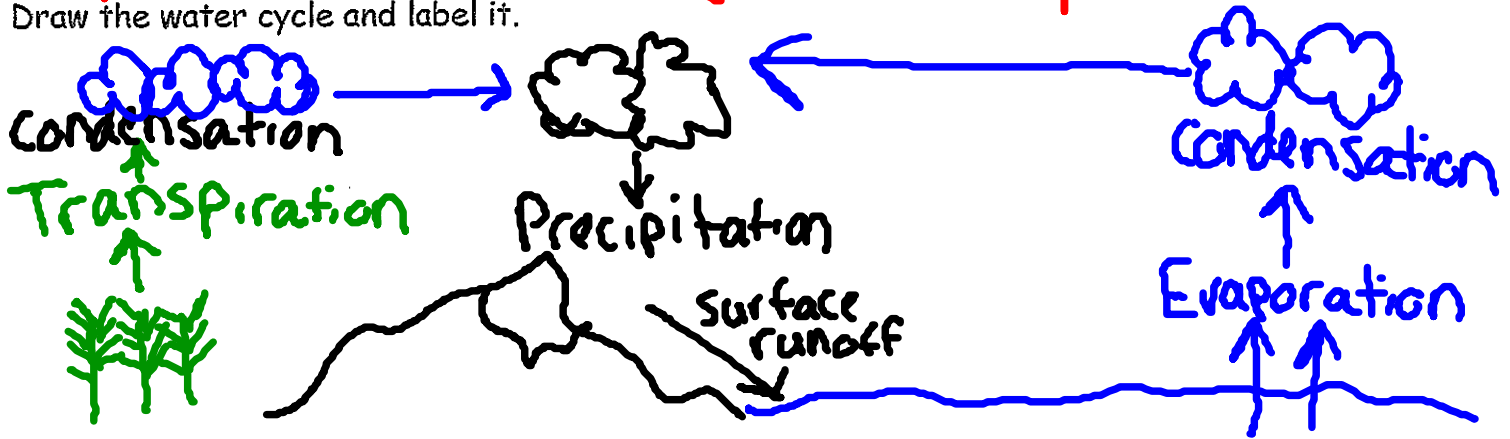
Partly sunny skies, winds from the south west at 15 mph, 1012mb air pressure, and 73°F



27. What is the greenhouse effect? Name the 2 greenhouse gases.

When CO_2 is trapped in the atmosphere.
Water Vapor and carbon dioxide in the atmosphere trap heat + do not let it into space

28 Draw the water cycle and label it.



29. Define weather:

Local Short term atmospheric conditions

30. What atmospheric layer does weather take place in?

Troposphere

31. Why do your ears pop on an airplane?

The air above Earth's surface is less dense than air near the surface, your ear has air trapped in it and as the atmospheric pressure changes, it causes pressure in ear drum.

32. What 2 main gases make up air?

Nitrogen
78%

and

Oxygen [all earth]
21%

33. What are the percentages of them?

78%

and

21%

34. Describe the difference between a land breeze and a sea breeze.

Unequal heating of air over land and water results in breezes near shorelines. While the land is warm during the day, air above it rises and a cool breeze blows in from the sea. As land cools at night, air pressure over it increases and a cool land breeze blows out to sea.

