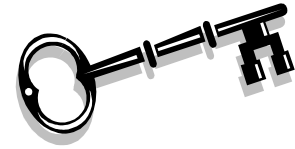
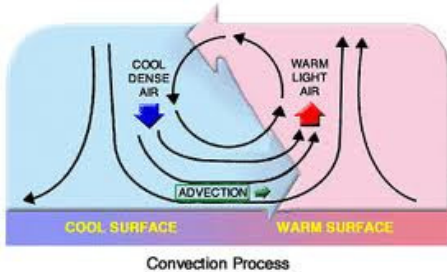


Atmosphere and Weather Test Review



1. ✓ Sun
2. ✓ moderate the climate (cold not as cold; hot not as hot)
- 3.



✓ as the Sun heats the Earth and it heats the air, the warmer air expands and rises creating an area of low pressure; cooler air sinks creating an area of high pressure; WIND flows from high to low pressure

4. ✓ warm air rises creating areas of low pressure; cold air sinks creating areas of high pressure.
5. ✓ cold front went through
6. ✓



✓ warmer, humid air rises up mountain on ocean side; as it rises, it cools, condenses and rains giving rise to lots of vegetation; once the air mass moves over the mountain, it has very little moisture in it so the side of the mountain away from the ocean gets very little rain

7. ✓ energy transfer through friction (wind drives surface water currents); ocean evaporates adding humidity to the air
8. ✓ they alter coastal area weather by moderating it; ie., ✓ Gulf Stream warms England
9. ✓ leading edge of an air mass

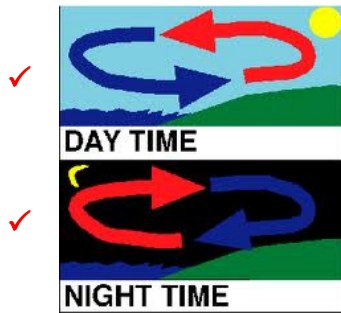
Table A	
Symbols for Surface Fronts and Other Significant Lines Shown on the Surface Analysis Chart	
	Warm Front (red)*
	Cold Front (blue)*
	Stationary Front (red/blue)*
	Occluded Front (purple)*
* Note : Fronts may be black and white or color, depending on their source. Also, fronts shown in color code will not necessarily show frontal symbols.	

10.
 - 4✓ s, one for each symbol;
 - Cold front: ✓ mass of cold air moves into an area of warmer air
 - Warm front: ✓ mass of warm air moves into an area of cooler air
 - Stationary front: ✓ mass of cold air runs into a mass of warm air from opposite directions causing them to stop moving
 - Occluded front: ✓ when a mass of cold air overtakes a mass of warm air moving in the

same direction

11. ✓ cold front: **storms, rain, wind, cold**
 - ✓ Warm front: **rain, warmer**
 - ✓ Stationary front: **cloudy, some rain possible...long lasting**
 - ✓ Occluded front: **moderate rains, winds, and cooler after**

12. ✓ **Sea Breeze:** during the day, land heats faster creating low pressure...wind moves from sea to land



- ✓ **Land Breeze:** during the night, land cools faster creating high pressure...wind moves from land to sea

13. ✓ large body of air with similar temperature and humidity throughout
- ✓ Warm/Wet: formed over ocean near equator
 - ✓ Warm/dry: formed over land near equator
 - ✓ Cold/Wet: formed over ocean near poles
 - ✓ Cold/Dry : formed over land near poles
14. ✓ move from west to east due to prevailing westerly winds and the jet stream
15. ✓ psychrometer: measures dry bulb air temperature and wet bulb evaporative temperature to determine the relative humidity in %
- ✓ Barometer: measures air pressure in millibars or cm of Hg
 - ✓ Anemometer: wind speed in kmh
 - ✓ Wind vane: measures wind direction using the compass rose
 - ✓ Rain gauge: measures precipitation in cm
16. ✓ land heats and cools faster than water creating areas of different pressures and wind.
17. ✓ amount of water vapor in the air compared to the amount the air can hold at a given temperature (%)
18. ✓ dew point is the temperature at which RH reaches 100%; ✓ it is based on the current RH
19. ✓ heated air expands, becoming less dense, and creating low pressure; ✓ since the air molecules are further apart, this allows for more water vapor in the air, thus decreasing RH