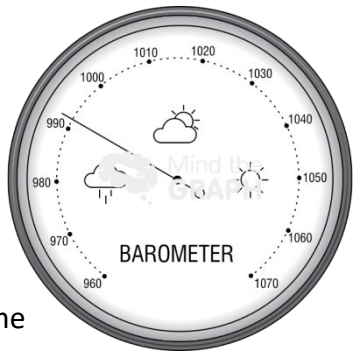
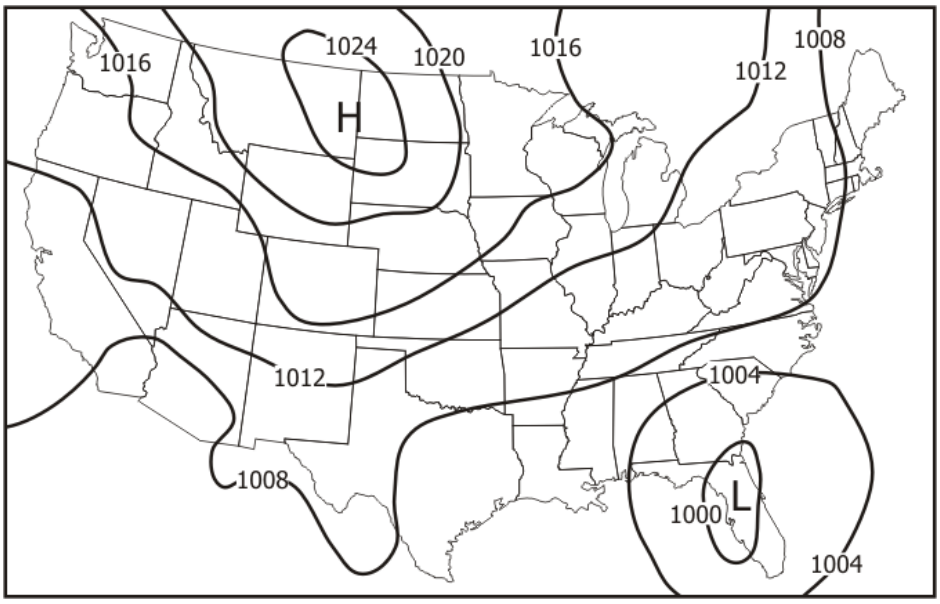
CH 19 NOTES

name _____hr __

19.1 UNDERSTANDING AIR PRESSURE



A) _____ _____ – the pushing of air in _____ directions, up, down, and sideways
   1) _____ - tool used to measure air pressure that is pressing downward
   2) _____ - the unit used to label pressure measurements
   3) _____ - lines drawn on a weather map that indicate the same pressure



B) _____ - air that is moving _____
   1) Air flows from _____ pressure to _____ pressure
   2) The _____ heating of Earth's surface creates _____ differences
   3) Air is always trying to _____ out the pressure
   4) When _____ are close together on a map, wind speed is _____

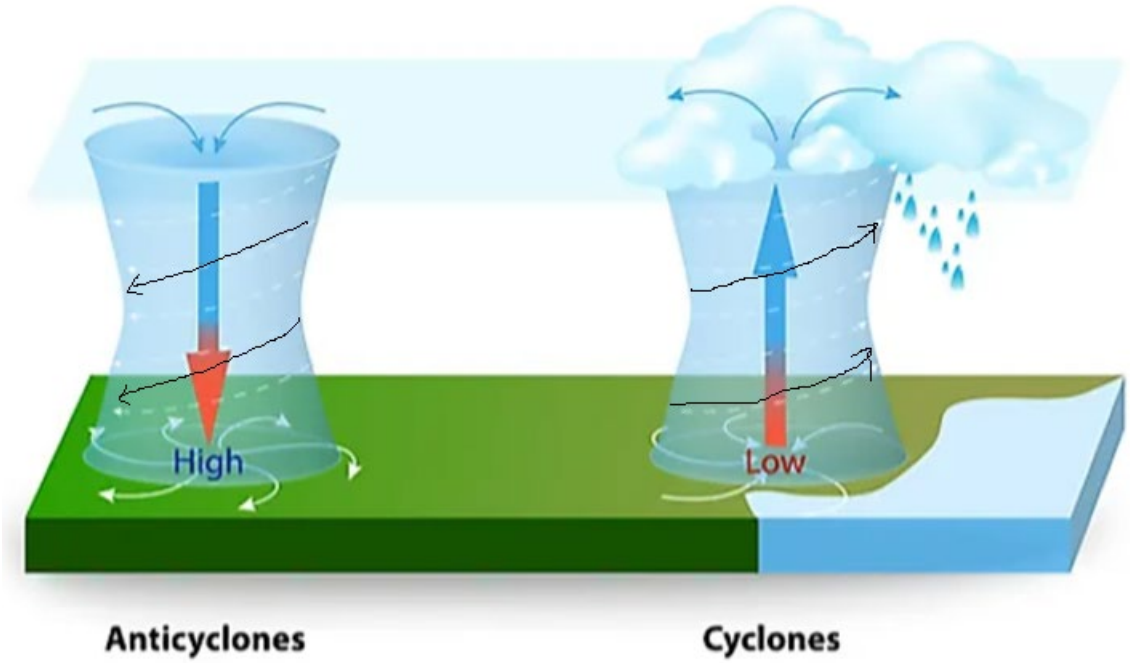
C) _____ - fast moving river of air at the top of the _____

19.2 PRESSURE CENTERS AND WINDS

D) _____- _____spin of air
   1) _____pressure
   2) air is _____
   3) causes _____, thus condensation, thus clouds and _____
   4) air _____at base

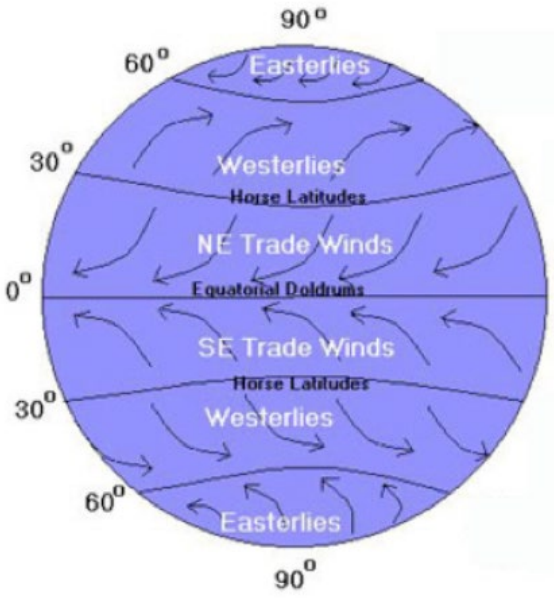
E) _____- _____spin of air

1) _____pressure
2) air is _____
3) causes heating, thus _____, thus the _____of clouds, thus _____weather
4) air _____at base



F) GLOBAL WINDS

1) Non-rotating model:
   a) if the earth didn't _____, cold air from the poles would _____down and move toward the equator, forcing warm equator air to _____. It would then hit the top of the troposphere and start _____towards the _____.
2) Rotating model:
   a) But, we _____ _____, so those currents of air get _____to the west and east in predictable patterns
      (1) _____- come from the _____ and blow toward the west--Located between____ and _____ degrees
      (2) _____ _____- come from the west and blow toward the _____--Located between ___ and ___ degrees
      (3) _____ _____- come from the east--Located between ___ and ___ (the poles)



3) _____ _____- the Earth's spin _____and _____ air movements that would normally just go _____and _____

G) Convection cells

1) _____cell

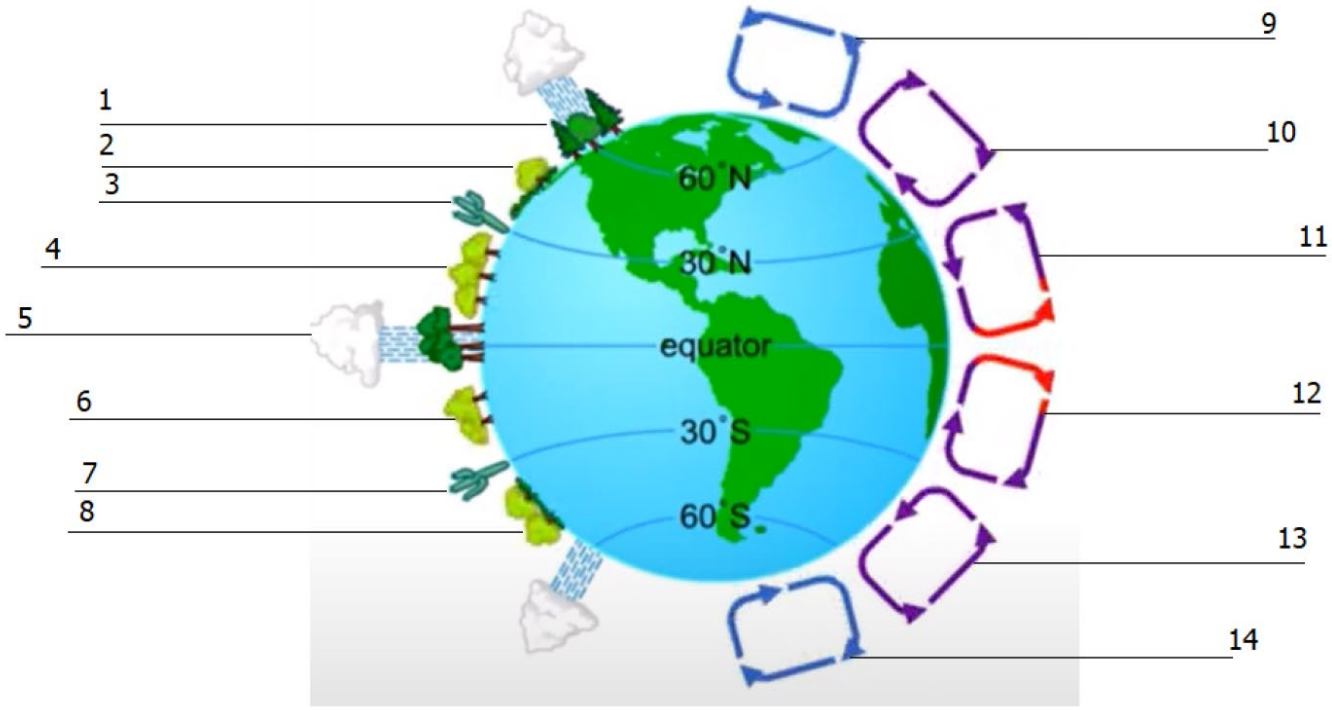
a) Hot air _____at _____then
b) _____and _____at 30
c) Moves _____at the surface of Earth (wind)
d) Some goes _____and
e) Some hits the _____ (and heats up again)

2) _____cell

a) The air squirting north from the Hadley cell _____with
b) Air squirting _____from the polar cell
c) They hit and then squirt _____ (convergence)
d) Once aloft the air _____, some headed back to the _____and some going back to the _____of the Ferrel cell

3) _____cell

a) Air is _____, sinking and headed toward the _____
b) _____with Ferrel cell air and
c) Squirts _____eventually
d) Returning to the _____to get chilled again



H) BIOMES

1) Latitudes with _____air bring a lot of _____
2) Latitudes with _____air bring _____ precipitation
3) Rising air at 0 degrees – lots of rain, thus _____
4) Rising air at 60 degrees – lots of rain, thus _____/ evergreen _____
5) Sinking at at 30 degrees – no rain, thus _____
6) All areas in between these latitudes= _____forests or _____