



Name Key

Date _____

Atmospheric Pressure Systems

1. Define air pressure: the force applied on the Earth's surface by the weight of the air above the surface
2. What instrument is used to measure air pressure?
Barometer
3. What units are used to measure air pressure?
* millibars (mb), * inches (in.), or pounds per in² (psi)

Atmospheric Pressure Systems		
Pressure	High	Low
Temperature	COOL	WARM
Wind Rotation (Northern Hemisphere)	Clockwise -  moves out from center	Counter-clockwise  pulled to center
Moisture	dry	moist
Weather Map Symbol	(H) Blue	(L) Red
Rising or Sinking Air	Sinking	Rising
Weather Associated	clear skies, sunny, dry	cloudy skies, low levels of sunshine, wet

1. Explain the relationship between temperature and barometric pressure near Earth's surface.
As temperature rises, barometric pressure decreases. $\uparrow T \downarrow P$
2. How would a decrease in atmospheric pressure affect weather?
As pressure drops, air rises, condenses, and bad weather can occur. $\downarrow P \uparrow T$
3. How would a decrease in air temperature affect atmospheric pressure?
As the temperature gets colder, air sinks, resulting in a higher air pressure (nice weather)