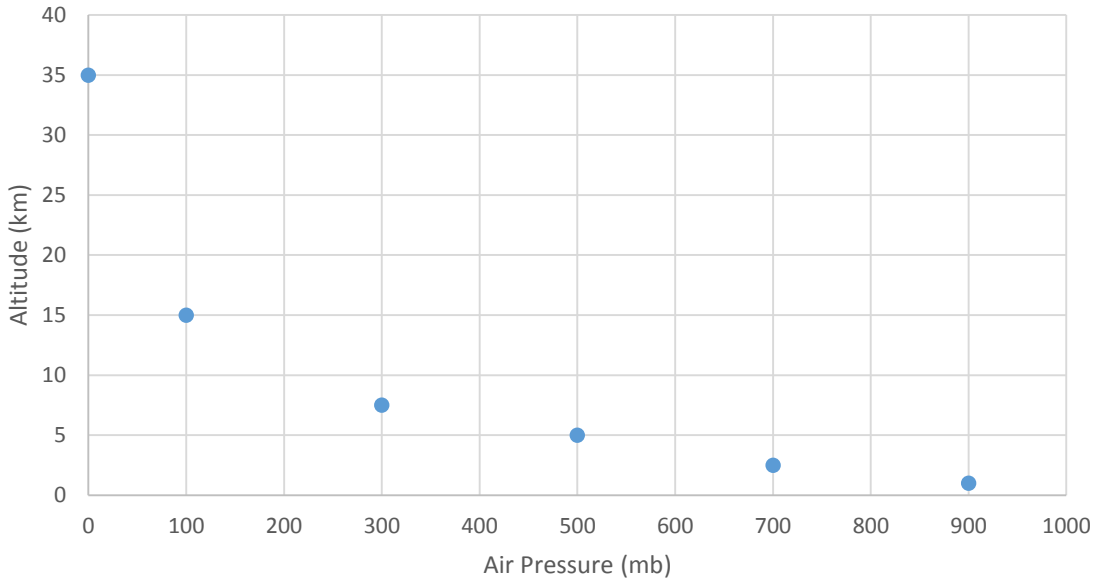
Air Pressure – Can You Feel It?

Name: _____ Date: _____ Period: _____

LT: I can identify and summarize information given in a PowerPoint presentation to gain a better understanding of the concept of air pressure.

Directions: Complete the following as you watch the presentation on air pressure.

1. Air pressure is the measure of the _____ with which _____ on a surface.
2. Air pressure is _____ at the surface of the Earth because there is more of _____.
3. As you _____ through the atmosphere, air pressure _____.
4. Draw a line on the graph showing the curve of air pressure vs. altitude.



5. Air pressure is dependent on _____. (Note: Density is the mass in a given volume. So the more molecules there are in a given space, the higher the density. Density is a measure of how many molecules are packed into a space.)
6. Air that is more dense will have a _____ because there are more air molecules in a given space to push down on you.
7. Air that is less dense will have a _____ because there are fewer air molecules to push down on you.
8. Draw molecules in the following boxes to differentiate between more dense air and less dense air.

More Dense

Less Dense

9. Air pressure is effected by three (3) factors
    - _____
    - _____
    - _____
10. The impact of _____ on air pressure is that as you move _____ through the atmosphere, air pressure _____ because there are fewer air molecules above you to push _____, so the force of the air is _____.
11. The impact of _____ or humidity on air pressure is that moist air is _____ than dry air, and therefore moist air has a _____ air pressure. This is true because a _____ has less mass than other molecules that make up air. (Note: less mass in the same area means lower density.)
12. Draw the effect of more water in the air.

Moist Air – less dense	Dry Air – more dense

13. The impact of _____ on air pressure is that _____ is less dense than cold air. This means that warm air has a _____ air pressure and cold air has a _____ air pressure.
14. Draw molecules in the following boxes to differentiate between the density of warm and cold air.

Warm Air	Cold Air

15. The piece of equipment used to measure air pressure is a _____.
16. As the air pressure increases, the mercury in a barometer _____.
17. Air pressure affects the weather. Air pressure in a weather system effects the amount of _____ in the air. _____ air pressure usually results in stormy, cloudy, overcast weather. _____ air pressure results in clear skies and no precipitation.