

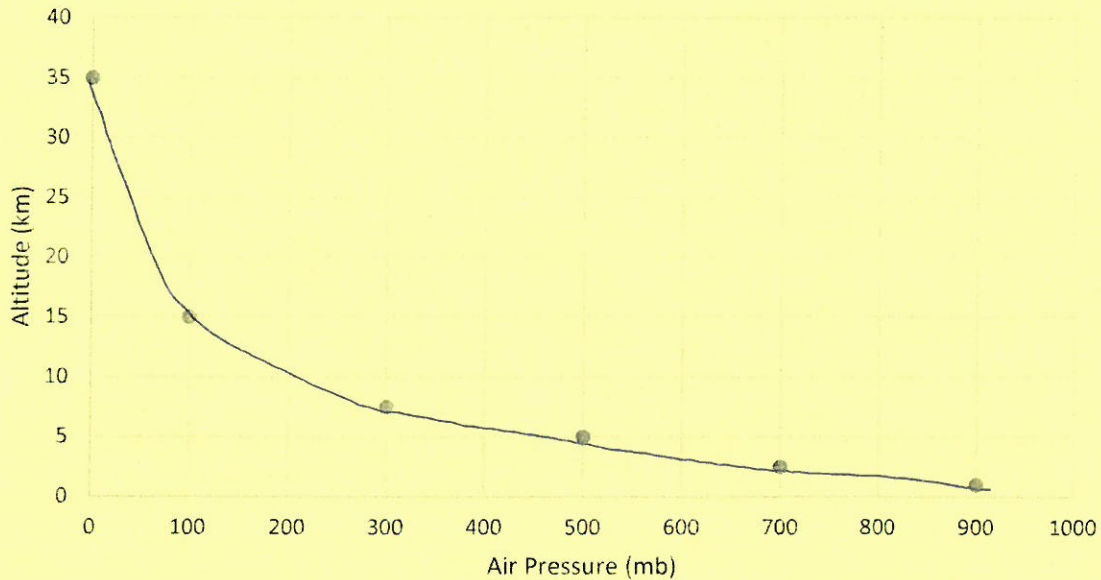
Air Pressure – Can You Feel It?

Name: Mrs. Renn Date: 01/16/20 Period: 1

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

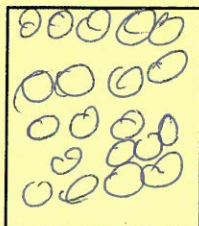
Directions: Complete the following as you watch the presentation on air pressure.

1. Air pressure is the measure of the force with which air molecules push on a surface.
2. Air pressure is greatest at the surface of the Earth because there is more of air the atmosphere above you to push down on you.
3. As you move up through the atmosphere, air pressure decreases.
4. Draw a line on the graph showing the curve of air pressure vs. altitude.

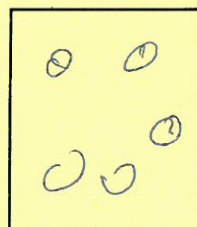


- 5th period*
5. Air pressure is dependent on density. (Note: Density is the mass in a given volume. So the more molecules there are in a given space, the higher the density. Density is a measure of how many molecules are packed into a space.)
 6. Air that is more dense will have a higher air pressure because there are more air molecules in a given space to push down on you.
 7. Air that is less dense will have a lower air pressure 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



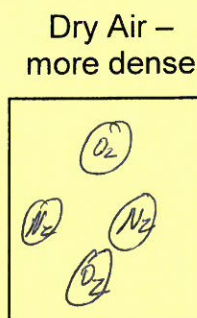
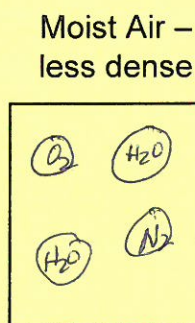
9. Air pressure is effected by three (3) factors

- elevation or altitude
- water content (humidity)
- temperature

10. The impact of elevation on air pressure is that as you move up through the atmosphere, air pressure decreases because there are fewer air molecules above you to push down, so the force of the air is less.

11. The impact of water content or humidity on air pressure is that moist air is less dense than dry air, and therefore moist air has a lower air pressure. This is true because a water molecule has less mass than other molecules that make up air. (Note: less mass in the same area means lower density.)

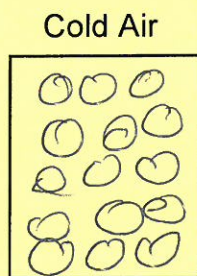
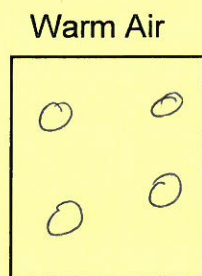
12. Draw the effect of more water in the air.



H₂O weighs 18
O₂ weighs 32
N₂ weighs 28

13. The impact of temperature on air pressure is that warm air is less dense than cold air. This means that warm air has a lower air pressure and cold air has a higher air pressure.

14. Draw molecules in the following boxes to differentiate between the density of warm and cold air.



15. The piece of equipment used to measure air pressure is a barometer.

16. As the air pressure increases, the mercury in a barometer rises.

17. Air pressure affects the weather. Air pressure in a weather system effects the amount of water in the air. Low air pressure usually results in stormy, cloudy, overcast weather. High air pressure results in clear skies and no precipitation.

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