**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per\_\_\_**

**Altitude, Air Pressure & Temperature**

**Altitude:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Air Pressure:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Density:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

****Xl;kxcx Look at the air molecules in the bubble at lower and jjsjdjsdsjdjsdjsjdsdjksjdskjdskjdskjdkjdjdskjdskjdkdkj higher air pressures. How do you think density and air pressure pressure are related?

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 **Using the illustration of the mountain below, answer the following questions:**

1. Where is altitude the greatest? \_\_\_\_\_\_\_\_\_
2. Where is air pressure the greatest? \_\_\_\_\_\_\_\_\_\_
3. Where does air have less mass? \_\_\_\_\_\_\_\_\_
4. Where are the oxygen molecules the farthest apart? \_\_\_\_\_\_\_
5. Where is the temperature the coldest? \_\_\_\_\_\_\_
6. Where would air seem the heaviest? \_\_\_\_\_\_\_\_
7. Where might a hiker have the most difficulty breathing? \_\_\_\_\_
8. If air pressure is constantly pushing down, why doesn’t it crush things such as a empty can?
9. As you move toward sea level, from B to A, what will happen to the air pressure and the air temperature?\_\_\_\_\_\_

**A**

**B**

**Sea Level**

Look at the following data on air pressure and plot a graph to show the relationship between altitude and air pressure.

**Air pressure vs Altitude data table**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Altitude (M)** | **0** | **1000** | **2000** | **3000** | **4000** | **5000** | **6000** | **7000** | **8000** | **9000** | **10000** |
| **Air Pressure****(PSI)** | **15** | **13** | **12** | **10** | **9** | **8** | **7** | **6** | **5** | **4** | **4** |

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What is the relationship between altitude and air pressure? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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