**NOTES 8.3: Fluids under pressure**

* The atmosphere is a mixture of gases such as **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* The pressure of the atmosphere is called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* Atmospheric pressure **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** as you move higher in altitude because there are less air particles at higher altitudes
* Air moves naturally from **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* Example. When you drink juice from a straw an area of low pressure is created in your mouth. High pressure air from outside rushes in through the straw carrying liquid with it
* “science never sucks”
* Weather is created by differences in pressure between cold air and warm air
* Warm air is a \_\_\_\_\_\_\_\_ pressure system
* Cold air is a \_\_\_\_\_\_\_\_ pressure system
* Cold air moves into areas of warm air creating wind
* If you are underwater, you can feel the pressure of the water all around you. The deeper you go the pressure increases because there is more water above you



* Buoyancy refers to low density floating on high density



Bill Nye

While watching, answer the following questions

1. How much water must an object displace in order to float?
2. What do negatively, positively and neutrally buoyant mean?