

Cryogenic Temperatures

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Liquid Nitrogen (liquid N₂) has many different effects on different objects. These effects are caused by liquid nitrogen's extremely cold temperatures of -320 degrees Fahrenheit.

Liquid N₂ is not like any other liquid. If you put a paper towel in a liquid, like water, and you pull it back out it will be wet and dripping water for quite awhile. If you



put a paper towel in liquid nitrogen and pull it out in less than a second it will be dry.

Have you ever noticed how you get tired easier and have more trouble breathing in the winter than the summer? This is because the cold makes air/gas molecules become denser. So the air and gas molecules are not spread out near as much. Making it seem like there is less air. The same thing happens if you put a blown up balloon into liquid N₂. The air molecules become denser making the balloon appear popped, but as soon as it gets warmed up the air molecules spread out again making the balloon blow up again.

You know how when you breathe outside when it is cold you can see your breath. What you are actually seeing is the water vapor from your mouth.

I learned all of this during just an hour of Physics Class. Think of how much fun stuff you could learn if you were a physicist. You would know so much.