

SECTION IV:

DID YOU KNOW FACTS?



DID YOU KNOW?



Did you know?

- Your grandmother may have used baking soda under her arms as a deodorant. The reaction between an acid (odor) and a base (baking soda) is called a neutralization and the baking soda helps to ‘neutralize’ the odor. Many of today’s deodorants not only help neutralize the odor, but they prevent the production of the odor by preventing moisture formation. The smell under the arms, between the toes, and behind the ears is due to the activity and growth of bacteria that require moisture. Agents that prevent the production of perspiration (or sweat) also prevent the bacteria from metabolic activities that cause the odor. These deodorants are called “anti-perspirants”.

Did you know?

- It’s easier to sweeten tea when it is warm because the amount of sugar that dissolves in water increases as the temperature rises. If you make your tea very sweet while it is hot and then cool the temperature down by adding ice, some of the sugar may come out of solution and sit at the bottom of your glass!

Did you know?

- The microwave oven works on the principal of vibrating water molecules, which causes heat and the buildup of steam. Vents are needed in order to allow the steam to escape (pierce a whole potato with a fork or lift the cover of a container), or explosions may occur. Foods low in water content do not cook well in microwave ovens and that is why microwave popcorn was engineered, to increase the amount of water in the kernel!

Did you know?

- “Tin cans” are actually steel cans electroplated with a thin layer of tin or chromium (because it is more resistant to corrosion). Electroplating is the process of covering an object made of one metal with a layer of another metal by means of electrolysis. It is also used by jewelers to coat inexpensive metals with a thin layer of gold.

Did you know?

- Humans exhale a metabolic gas known as carbon dioxide. Yeast used by brewing companies and bakeries release this same gas, which will make drinks become fizzy or will cause bread to rise. **Carbonated** drinks (so called because they contain **carbon** dioxide) dissolve more of the gas when they are cold, hence they are more “fizzy” and allow the gas to escape from the liquid portion of the drink when they are warm, hence they become “flat” when warmer.

DID YOU KNOW?



Did you know?

- Homemade popsicles (with plenty of sugar in them) will never freeze in a freezer whose temperature is 0°C (or 32°F). Water solutions freeze at lower temperatures with dissolved materials in them. That is the reason salt melts ice.

Did you know?

- If you dry yourself while in the shower, you will not feel as cool as when you dry yourself after stepping out of the shower. The humidity (amount of water in the air) of the shower protects you from the cooling effects of using your body heat to evaporate water on your skin. There is so much water in the air already, it cannot hold much more, therefore the water stays on your body and your overall temperature does not decrease significantly. When you step out of the shower, where the amount of water in the atmosphere is lower, your body is used as a heater to change the liquid water to gaseous water and add to the humidity of the room. Energy drained from your body lowers your temperature and you feel cool until you dry yourself.

Did you know?

- You can increase the rate of a reaction by increasing the surface area. A cake cooked in a tube pan cooks more slowly than the same cake cooked in a sheet pan because there is less surface area exposed. Likewise, your mother cuts up her potatoes before she boils them to help cook them faster. There is more potato surface exposed when cut up than when placed in the pot whole.

Did you know?

- Attractive forces between molecules cause them to move more slowly. Molasses is thick and slow moving (due to a property called viscosity) because of the strong attraction of one molecule for another. If you break the attraction by heating the syrup (in the microwave or on the stove top) it becomes 'thin and runny'.

Did you know?

- You can cook a boiled egg faster by adding salt or sugar to the water. Water boils at a higher temperature when substances are dissolved in it. (Boiling grits are hotter than plain boiling water!)

