Future Health Scientists Partnership Program Newsletter

Spring 2009 Schedule

March 28, 2009 (previously March 21st)
April 18, 2009
May 23, 2009—Dallas Science Museum!!!

Summer Schedule: Each student will attend an intensive two-week summer program from 8:00 a.m. to 5:00 p.m., Monday-Friday. Letters have been mailed requesting your 2-week preference. We will let you know which summer session you will be attending. (NOTE: Please keep in mind other planned summer activities.)

June 8-June 19, 2009       June 22-July 2, 2009       July 6-July 17, 2009

Skin Science is “No Sweat”!

It’s gigantic! It’s gargantuan! It’s your skin. It’s your body’s biggest organ. If you could lay your skin out flat, it would cover about one and one-half square meters. Your skin stops you from drying out, protects you from the weather, and keeps bacteria and viruses from getting inside your body.

Your skin is also your personal air conditioner and heater all in one. Sweating cools you off. When you’re hot, glands in your skin push a mixture of water and other chemicals onto the surface of your skin. When the water evaporates, it takes some of the heat with it, and you’re cooler. When you’re too cold, your skin muscles start twitching or shivering. Shivering makes your body warm up.

Without skin, you would not be able to feel the difference between a sheet of paper and a wool blanket. There are thousands of touch receptors inside skin. When you touch the remote control, the receptors send information to your brain about the remote’s temperature, thickness, and feel of the buttons. Your brain makes decisions about what to do with the remote control. Interesting...huh?

Quote of the Day:
Some days there won’t be a song in your heart. Sing anyway.
- Emory Austin

Episode No. 04, Bill Nye and Nye Labs, LLC. Copyright 2001
What is a fart and why does it smell?

Ever pull someone’s finger and hear a weird noise come out of his or her butt?

Ever sit in a tub of water and see bubbles come out of your hiney?

This strange noise and vibrating sensation that came from your butt is most likely caused by a fart.

A fart is a combination of gases (nitrogen, carbon dioxide, oxygen, methane, and hydrogen sulfide) that travels from a person's stomach to their anus. When a person swallows too much air or eats foods that the human digestive system cannot digest easily, gas becomes trapped in his/her stomach. The only way for this excess gas to exit the body is through the anus.

The gas that makes your farts stink is the hydrogen sulfide gas. This gas contains sulfur which causes farts to have a smelly odor. The more sulfur rich your diet, the more your farts will stink. Some foods that cause really smelly farts include: beans, cabbage, cheese, soda, and eggs.

A scientific name for a fart is flatus or flatulence.

The word fart is just one of many different terms used to describe the release of gasses from the human body. Other popular names for farts or farting include: gassers, stinkers, air biscuits, bombers, barking spiders, rotten eggs, and wet ones. You can pass gas, break wind, blast, beef, poof, rip one, let one fly, step on a duck, and cut the cheese.

Farts can be stinky, wet, loud, or silent...but deadly. Pee-eeew!!!

Did you know?

On the average, a healthy person farts 16 times a day.

Hey guys, don’t be fooled by girls who tell you that they never fart. Everyone farts, including girls. In fact, females fart just as much as males.

Many animals fart too. Cats, dogs, and cows. Elephants fart the most.

People fart the most in their sleep.

Farts that contain a large amount of methane & hydrogen can be flammable.

http://www.coolquiz.com/trivia/explain/
A gastroenterologist is a physician who specializes in diseases of the digestive system and has extensive training in the diagnosis and treatment of conditions that affect the esophagus, stomach, small intestine, large intestine (colon), and biliary system (liver, pancreas, gallbladder, bile ducts). Gastroenterology is a subspecialty of internal medicine. A Gastroenterologist understands how food moves through the digestive tract, including the absorption of nutrients and the removal of waste products. A gastroenterologist may diagnose and treat abdominal pain and discomfort, bleeding in the digestive tract, constipation and diarrhea, heartburn and reflux, hemorrhoids, stomach upset, nausea, vomiting, and unexplained weight loss.

Twitching Straw: See and Feel a Heartbeat!

Materials you will need:
- Yourself or a friend
- A drinking straw

Steps:
1. Find your heartbeat on your wrist or your friends’ heartbeat on their wrist just below the thumb by using your pointer and middle fingers, pressing gently into the wrist area. (Do not use your thumb, as it has a pulse).
2. Place the modeling clay on the same area where you have located the pulse.
3. Insert the drinking straw down into the modeling clay and watch as the straw twitches with each heartbeat.

Can you count the heartbeats?

Some people find it difficult to find a pulse in the wrist area. If this is the case, try to locate a heartbeat on the neck area (just to either side of the adam’s apple). Again, use your pointer and middle fingers. If you are checking your own heartbeat on your neck, make sure the straw you are using is long enough for you to see it as it twitches.

This surprising sense experiment uses two of your five senses.

1. Can you see the heartbeats?
2. Can you feel your heartbeat?
QUICK FACTS

Did you know that . . .

- The thinnest skin is on your eyelids?
- Without your skin’s fingerprints, it would be very hard to hold onto anything?
- Your skin is about 5% of your body weight?
- The tips of fingers and the soles of feet are covered by a thick, tough layer of skin called the stratum corneum?
- Every square inch of human skin consists of twenty feet of blood vessels?
- Some people never develop fingerprints at all; two rare genetic defects known as Naegeli Syndrome and Dermatopathia Pigmentosa Reticularis, can leave carriers without any identifying ridges on their skin? WOW!
- There are 45 miles of nerves in the skin of a human being?

Symbol Puzzle Answer

$9 + 8 - 7 + 6 + 5 + 4 + 3 + 2 + 1 = 29$