Name: _____






10 Minutes with Science

The Nerves

Nerves are a set of fibers in the form of whitish laces that come out of each of the neurons, or nerve cells; and they branch out to spread all over our bodies. These fibers, or laces, are capable of transmitting electrical impulses called 'nerve impulses'.

Our nerves give us many sensations, such as: pain, cold, heat, sting, as well as feeling when we are caressed. In addition, they control thousands of bodily functions that we are not aware of.

Nerves are part of the Nervous System. There are two types. One type are the 'afferent nerves', which are the ones that carry sensory signals from the different parts of the body to the Central Nervous System; for example, when we hit a finger of our hand, the 'afferent nerves' of the finger carry the message to the brain that we banged our finger.

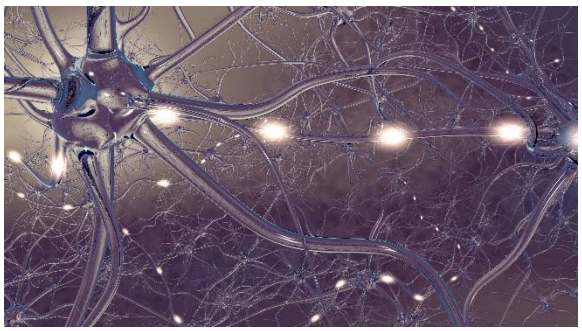
The other type, 'efferent nerves' are the ones that carry the 'orders' from the Central Nervous System to the muscles and glands. Thus, an 'efferent nerve' will carry the 'order' for our other hand to carefully grasp the finger we have hit.

Nerve impulses can only travel through the nerves in one direction, i.e. they either go one way or they go back. They can travel at a speed of one hundred and twenty meters per second. What electrical voltage do they have? A nerve impulse that travels through a nerve carries a load of -50 millivolts.

Name: _____

ANSWER THE QUESTIONS

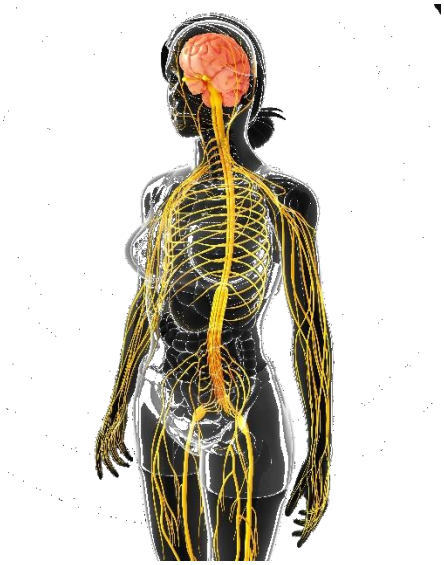
1. What color are the nerves?
   a. They're yellow
   b. They're pink
   c. They're whitish
   d. They’re transparent



2. Where do the nerves come from?
   a. Peripheral Nervous System
   b. From neurons
   c. In the spine
   d. All of the above answers are correct

3. What is a nervous impulse?
   a. It's an electrical signal
   b. It's a radio wave
   c. It's a liquid
   d. None of the above answers are correct

4. Nerves control thousands of bodily functions that we are not aware of.
   a. True
   b. False



5. How fast can a nervous impulse travel?
   a. At 50 mm per second
   b. 70 kilometers per second
   c. At 120 meters per second
   d. At 1000 miles per second