Thank you for visiting us at Questacon.

How did you do in the multitasking activity?
Are you better than your parents at multitasking?

Here are the answers to the quiz.
Label my brain

1. Parietal lobe
2. Frontal lobe
3. Occipital lobe
4. Temporal lobe
5. Cerebellum
6. Brainstem

What am I

Injure me and you ……..

a. Forget – frontal lobe – is involved in many functions including the retention of long term memories and voluntary movements
b. Stop breathing – brain stem – plays a role in heart rate, swallowing, reflexes to sight and sound, sweating, blood pressure, digestion, temperature, alertness and sleep
c. Can't hear – temporal lobe – plays a key role in auditory perception, long-term memory and some visual perception such as recognizing faces
d. Can't see – occipital lobe – responsible for sight, image recognition and image perception
e. Can't walk – cerebellum- involved in coordination and control of voluntary movement, balance and muscle tone
f. Can't taste – parietal lobe – associated with touch and pressure, taste and body awareness

True/false

1. An adult's brain weighs twice as much as a new born baby's brain
   FALSE - *Actually more! The baby brain does not reach half the adult brain size until about 90-days! The average adult human brain weighs around 1300 to 1400 grams. A newborn human baby's brain weighs approximately 350 to 400 grams.*

2. There is a type of brain cell called a mirror neuron
   TRUE – *There is a type of neuron scientists call a **mirror** neuron. A mirror neuron responds in the same way (by firing) when an animal acts and when the animal observes the same action performed by another. The neuron is said to 'mirror' the behaviour of what is being observed.*

3. Your brain has more cells than there are stars in the solar system
   TRUE –*Trick question! There is only 1 star in our solar system (the sun). Scientists estimate there may be as many as 400 billion stars in the Milky Way. There are approximately 100 billion neurons in the brain, not to mention the other types of cells. There are FAR more stars in Universe though. Have you got time to count them all?*

4. There is electricity in your brain
   TRUE – neurons communicate with each other at synapses by passing an electrical or chemical signal between the cells.

5. You only need half your brain to function
   FALSE – *there is no real limit as to how much brain you need to function that we know of. There are some regions of the brain, such as the brain stem, that you definitely need to survive;*

however, we know from human case studies that there are some parts of the brain that can be absent without effecting function. You use all of your brain. While not all of the brain is active all at once, functional magnetic resonance images (fMRI) show several brain areas are at work for any given activity, depending on what function is needed.

6. 90% of the brain is water
   FALSE – *water makes up approximately 75% of your brain.*

7. You need to drink 6 glasses of water a day to keep your brain functioning
   FALSE – *or else draught would have wiped us out a long time a go. Like the rest of our body, our brain needs to be kept hydrated but there is no magical amount of water we need to consume.*

8. The brain is capable of storing the equivalent of 10 megabytes of information
   FALSE - *In truth, no one knows how much information we can cram in to our brains (it appears to be limitless) - in physical principle, however, you can store more than 10 megabytes.*

9. Girls learn better than boys
   TRUE*!.....NO!* ***FALSE****! What do you think?*

10. Men are better at navigation/directions than women
    MAYBE – Although approximately 50% of the population believe men are better at navigation, there is little evidence to support this assertion.

11. Once you reach puberty your brain doesn't produce any more new cells.
    False – Your brain continues to produce new neurons your entire life, though the rate that new cells are produced may decline with age.

12. Children are better at multitasking than their parents
    Maybe children growing up surrounded by technology are better at multitasking than their parents. What do you think?

Want to find out more, visit the Society for Neuroscience brain facts website
https://www.sfn.org/public-outreach/brainfacts-dot-org