

I. READ THE TEXT AND ANSWER THE QUESTIONS.

Your amazing brain

You carry around a three-pound mass of wrinkly material in your head that controls every single thing you will ever do. From enabling you to think, learn, create, and feel emotions to controlling every blink, breath, and heartbeat — this fantastic control center is your brain. It is a structure so amazing that in the foreword to *Discovering the Brain*, famous scientist James Watson wrote, “The brain is the most complex thing we have yet discovered in our universe. It contains hundreds of billions of cells interlinked through trillions of connections. The brain confuses the mind.” Obviously to understand brain function, we need to confront its complexity.

Imagine your kitten is on the kitchen counter. She’s about to step onto a stove. You have only seconds to act. Accessing the signals coming from your eyes, your brain quickly calculates when, where, and at what speed you will need to dive to intercept her. Then it orders your muscles to do so. Your timing is perfect and she’s safe. No computer can come close to your brain’s awesome ability to download, process, and react to the flood of information coming from your eyes, ears, and other sensory organs.

Your brain contains about 100 billion microscopic cells called neurons — so many it would take you over 3,000 years to count them all. Whenever you dream, laugh, think, see, or move, it’s because tiny chemical and electrical signals are racing between these neurons along billions of tiny neuron highways. Believe it or not, the activity in your brain never stops. Countless messages zip around inside it every second like a supercharged pinball machine. Your neurons create and send more messages than all the phones in the entire world. And while a single neuron generates only a tiny amount of electricity, all your neurons together can generate enough electricity to power a low-wattage bulb.

Neurons send information to your brain at more than 150 miles (241 kilometers) per hour. For example, a bee lands on your bare foot. Sensory neurons in your skin relay this information to your spinal cord and brain at a speed of more than 150 miles (241 kilometers) per hour. Your brain then uses motor neurons to transmit the message back through your spinal cord to your foot to shake the bee off quickly. Motor neurons can relay this information at more than 200 miles (322 kilometers) per hour.

Riding a bike seems impossible at first. But soon you master it. How? As you practice, your brain sends “bike riding” messages along certain pathways of neurons over and over, forming new connections. In fact, the structure of your brain changes every time you learn, as well as whenever you have a new thought or memory.

It is well known that any exercise that makes your heart beat faster, like running or playing basketball, is great for your body and can even help improve your mood. But large-scale efforts of scientists from a group of institutes from the National Institutes of Health have recently showed that for a period of time after you’ve exercised, your body produces a chemical that makes your brain more receptive for gaining new knowledge. So if you’re stuck on a homework problem, go out and play a game of soccer, then try the problem again. You just might discover that you’re able to solve it.

1. According to the text, the most distinctive characteristic of the brain is its
 - 1) ability to control the body.
 - 2) elaborateness.
 - 3) size.
 - 4) weight.
2. The claims that the brain is better than any computer because it
 - 1) processes more information.
 - 2) works faster.
 - 3) can download information from different sources.
 - 4) reacts to information more adequately.
3. According to the text, the work of brain neurons influences
 - 1) electricity production.
 - 2) our dreams.
 - 3) everything we do.
 - 4) character of messages we send.
4. The narrator compares the work of neurons to a pinball machine to
 - 1) show the character of brain work.
 - 2) raise the awareness of the brain's nature.
 - 3) stress the amount of information that the brain processes.
 - 4) illustrate the shape of the neuron highways.
5. Comparing sensory and motor neurons, we can make a conclusion that
 - 1) motor neurons transmit information faster.
 - 2) there are more motor neurons.
 - 3) sensory neurons transmit information faster.
 - 4) there are more sensory neurons.
6. The structure of brain changes when
 - 1) our memory fails.
 - 2) new neurons appear.
 - 3) we are riding a bike.
 - 4) we acquire new knowledge.

7. Physical exercises proved to be good for ...

- 1) the production of brain chemicals.
- 2) solving homework problems.
- 3) giving the brain a rest.
- 4) maintaining a good mood.

II. ADD THE MISSING WORDS.

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1. He was early so he _____ the block a couple of times.
2. I try to keep meat _____ from other food in the fridge.
3. Gold has amazing physical properties, such as extreme _____.
4. He had thought only _____ about a managerial future at that point.
5. Could we _____ the small bedroom into a second bathroom?
6. The reports are _____ to the many hours of research completed by this committee.
7. The product's success cannot be attributable _____ to the ads.
8. None of the witnesses could identify the _____.
9. Two of the soldiers were killed and the rest were _____.
10. I have many pleasant _____ of the time we spent together.

III. CHANGE THE FORM OF THE WORDS.

1. Lead and tin are _____ metals. (MALLEABILITY)
2. In China, her blonde hair was _____. (CONSPICUOUSLY)
3. He spoke in a _____ voice, as if he were not sure of his ground. (WAVER)
4. Aluminium is a _____ metal. (CONDUCT)
5. The main disadvantage of this definition is its _____. (VAGUE)
6. The size classes are statistically _____ by both their width and height measurements. (SEPARATE)
7. My _____ objective is to make the information more widely available. (SOLELY)

IV. HAVE SOMETHING DONE

1. We usually _____ (the bedrooms / redecorate) every two years.
2. Sarah isn't making her own wedding dress, she _____ (it / make) by a designer in Italy.
3. _____ (you / ever/ anything / steal) from your house?
4. He didn't fix his car himself, he _____ (it / fix) at the garage.

5. Your hair is too long. You need _____ (it / cut).
6. I'm going to do my food shopping online and I _____ (the food / deliver) to my house.
7. If you can't see properly, you should _____ (your eyes / test).
8. Are they going to paint the kitchen themselves, or _____ (it / paint)?