

Brain is a Computer Quiz Answers

1. Describe how your brain helps you command your arm to pick up a glass of juice.

Once your brain decides to pick up the glass, neurons in your motor cortex command the muscles in your hand to move appropriately and pick up the glass. In the process, your brain uses feedback from your eyes (such as, is it going towards the glass, picking it up, etc.) and makes sure it is done as intended!

2. Your brain is the controller for your body. List four functions it performs.

Example answers: Breathing, pumping blood by controlling the heart, walking, drawing, thinking, planning, memory, speaking, sensing, etc.

3. Is your brain similar to a computer? In what respects is it similar and in what respects is it not?

Similarities: makes decisions, needs energy, takes inputs, uses electrical signals, gives outputs, stores memories

The brain processes information, needs energy (from food), takes information from the senses and provides responses to muscles, using the nervous system as “wiring” for all communications.

A computer has a central processing unit, needs a power supply, and has lots of wiring for communications with input (sensors) and output devices (motors, speakers, etc.).

Differences: Computers are not as smart as brains; they just follow programs written by humans.

Computers can do some calculations faster than brains, but have limited numbers of sensors.

Computers would be overloaded if they had to process the number of sensor inputs (millions!) that human brains do easily.