

Name \_\_\_\_\_

# Neuron Cross-Word Puzzle

The crossword puzzle grid is overlaid on a background illustration of a neuron. The neuron's cell body is pink, its branching processes are yellow, and its axon is cyan. The grid consists of black squares and white squares for letters. The numbered starting points are:

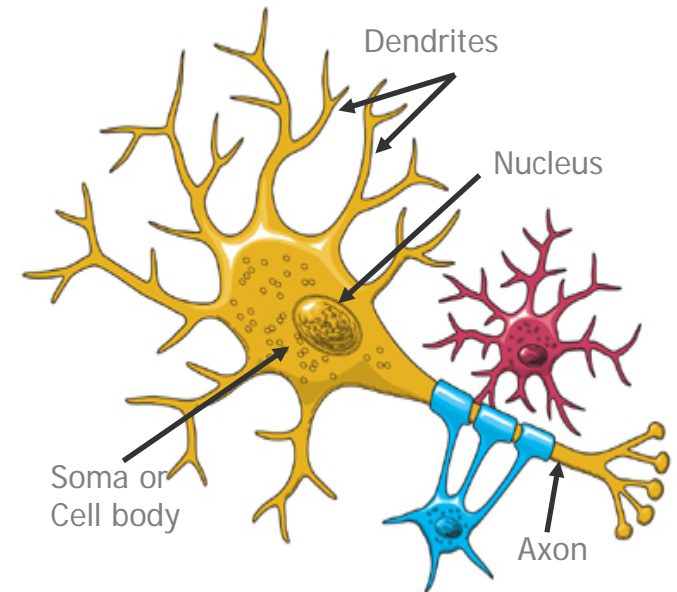
- 1: Down, 1st row, 2nd column.
- 2: Down, 1st row, 4th column.
- 3: Down, 1st row, 6th column.
- 3: Across, 3rd row, 1st column.
- 2: Across, 2nd row, 3rd column.
- 6: Across, 1st row, 7th column.
- 5: Down, 3rd row, 7th column.
- 4: Across, 3rd row, 4th column.
- 1: Down, 3rd row, 2nd column.
- 7: Across, 4th row, 1st column.
- 4: Down, 4th row, 6th column.
- 5: Down, 4th row, 4th column.

## Across

- 1) The \_\_\_\_\_ is the small space between neurons which uses neural transmitters to conduct the electro-chemical signal from the axon to the dendrite.
- 2) A \_\_\_\_\_ is a specialized cell in the nervous system which is electrically active.
- 3) The \_\_\_\_\_ nervous system is comprised of the brain and spinal cord.
- 4) Neurons receive, \_\_\_\_\_ and transmit small electrical currents to each other known as action potentials.
- 5) The \_\_\_\_\_ releases chemicals known as neural transmitters onto the dendrite in order to propagate action potentials.
- 6) In a cell, including neurons, the \_\_\_\_\_ contains the DNA and is sometimes called the cells "brain".
- 7) The word \_\_\_\_\_ means "tree" in Latin and is the highly branched portion of the neuron.

## Down

- 1) The \_\_\_\_\_ nervous system contains sensory and motor neurons. It links the external environment and the internal environment to the central nervous system.
- 2) An \_\_\_\_\_ is a small electrical current which is characteristic to a neuron.
- 3) The \_\_\_\_\_ nervous system is comprised of the stomach, intestines and bowels also known as the gut.
- 4) Neurons contain \_\_\_\_\_ within the nucleus, however red blood cells do not have a nucleus therefore they do not have \_\_\_\_\_.
- 5) Neurons contain a lot of \_\_\_\_\_, which is an organelle within cells; it is considered the "power-house", and is responsible for producing energy in the form of ATP.



|            |          |                  |              |         |
|------------|----------|------------------|--------------|---------|
| peripheral | central  | neural           | mitochondria |         |
| synapse    | dendrite | neuron           | axon         | nucleus |
| enteric    | conduct  | action potential |              |         |