

ALPHABETICAL BRAIN™ VOCABULARY  
DETAILS ABOUT YOUR AXONS  
Brain Flash Card #4/April 12, 2016

BRAIN SCIENCE FACTS

WHAT ARE YOUR AXONS AND WHY ARE THEY SO IMPORTANT?

What is the purpose and function of your axons? Your axons are the thin threadlike fibers called axon filaments, which extend from each cell body of your 100 billion neurons to other neurons, senses, internal organs, glands, and your muscles through special end terminals known as axon terminal buttons.

It is helpful to simplify the most complex three pounds of matter in the universe (your brain) by integrating the idea of your consciousness with the overall concept of the global connectivity of your brain's structures and their functions.

You can explore how the brain idea axons relates to the new brain idea of your brain's global connectivity by momentarily focusing your attention on the following circular symbol:

THIS SYMBOL REPRESENTS A  
SIMPLIFIED HOLISTIC VIEW OF THE  
GLOBAL CONNECTIVITY NECESSARY  
FOR HUMAN CONSCIOUSNESS

This circular symbol was created to convey a powerful visual image of the previously unimaginable coalescence of the many diverse and interactive physical brain structures that form the wonderful new idea of your self-manifesting holistic brain.

The #4 red arrow points to the circle of human consciousness, which is depicted as being made up of many parts with a sum that is greater than all its separate parts.

Each of the 15 primary brain ideas in the image, which are emphasized on this website, can converge and merge in your mind to produce the mental force (brainpower) that can empower you to stand up for your self-beliefs.

An axon's filament attaches to a neuron's cell body and its function is to carry a biochemical current or signal from the cell body to the end terminals (extensions) at the other end of the neuron.

The terminals attach through biochemical junctions (electro-chemical switches) known as synapses, which relay ionic signals from neuron to neuron, and from your neurons to all of the other organs, glands, senses, and muscles in your body.

The signals can flow through very short or very long filaments.

For example, your sciatica nerve, which is the longest nerve in your body, sends biochemical signals from the cell bodies in the neuron fibers of your lower back down your two legs to the terminal extension buttons at the other end of the neuron's filament, which terminate at the back of the heels of your feet.

Typically, at least 10,000-15,000 synapses are attached to the end terminals of a neuron's filament, but there can be as few as a single one for memories of some celebrities or revered relatives such as parents and grandmothers.

**RECOMMENDATION:** Print this PDF version and read it. Underline or highlight with colors the most important new brain ideas to save them in your long-term memory. Then read your mashup of these ideas in a few hours and then in a few days to take advantage of the spaced-repetition method of learning.