

**ALPHABETICAL BRAIN™ VOCABULARY
HUMANIST FAMILY BRAIN STUDY
BRAIN SCIENCE FACTS**

**DETAILS ABOUT YOUR
CONSCIOUSNESS**

Brain Flash Card #1 / May 9, 2016

What is the purpose and the function of your consciousness? Your consciousness is what makes possible your awareness of being alive. And it gives you your experience of being you.

You cannot have a sense of self or self-awareness without being conscious.

The new scientific assumption is that your consciousness is caused by the global connectivity of all of the neuronal pathways and the nano-microscopic signaling processes in your brain and nervous system.

This nano-microscopic communication network in your brain and body is called your connectome by brain researchers who are now mapping the circuits with the new 3-D Block-Face Scanning Electron Microscopes.

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.

First, you can explore the relationship between the idea of human consciousness and the new brain idea of global connectivity by focusing your attention momentarily on the following circular symbol and all 14 red arrows:

**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 awesome new idea of your self-manifesting holistic evolutionary brain.

The symbol of 14 red arrows pointing toward the circle of human consciousness depicts a conscious living human brain that is made

up of many parts with a sum total of metaphorical meaning that is greater than all of its separate parts and functions.

Each of the 15 brain ideas in the image can converge and merge in your mind to produce the enlightened awareness (inference) of the self-directed neuroplasticity process of learning the truth about your intrinsic intellectual brainpower. Or, more simply put, you will be able to activate your intrinsic mental force.

In addition, by being aware of the massive complexity of the structures of your connectome's circuits, you will be able to understand how it makes possible your brain's plasticity and, therefore, your mind's infinite adaptability.

Now modern scientific knowledge can explain in plain English the way in which your billions of neurons and trillions of synapses are attached to each other and also how they function together to create your coherent sense of self and your incredible self-awareness.

Since the source of your mental force is now known to be your well-tuned organized mind, it is essential that you appreciate exactly how your brain enables you to thrive no matter what cultural advantages or disadvantages (benefits or limitations) you may have experienced in the past.

Also, since it is your mental force alone that gives you the free will (willpower) to make choices from either rational or irrational cultural alternatives, it is important that you use logical reasoning skills (critical thinking and reading skill-sets) to actually make better decisions regarding ethical (personal) and moral (social) humanistic decisions.

In other words, when the distinct parts of your physical (material) brain are functioning properly together, they operate both interactively and synergistically to produce your mind's virtually unlimited thinking and feeling capacity.

For you to be conscious and able to activate your awesome mental force, all of the neuronal fibers and all of their synaptic connections in your brain and nervous system, must be connected through all of your neuronal pathways and all of your nerve tracts.

This means that if your brain is healthy and its physical structures are functioning well together, your brain is using 100% of its capacity when you are aware of yourself thinking, feeling,

remembering, or doing anything.

Brain scientists have proven beyond any reasonable doubt that the global circuitry of the physical structure of your brain and nervous system is the fundamental cause of the biological and psychological functions of your neurons and synapses as they control the rest of the structures of your body.

In other words, the cosmic source that makes your life significant and worthwhile is your mental force when you activate it with your intelligence and conscientious humanistic values.

When your mind is organized around humanistic values, your plans can be focused on a philosophical perspective of life that respects the ultimate supreme meaning of your sense of self and mental force, which is typically your conscious self-awareness.

Your mental force gives you the ability to solve problems by using your own intellectual capacity to reason based upon the linguistic context of your personal knowledge and your personal vocabulary.

Biologically, your neuronal signaling processes provide a continuous flow of biochemical electrical currents or signals from neuron to neuron because of the conversion of sodium and potassium molecules at your 900 trillion synapses.

The biochemical currents or signals are generated by the cell bodies of your 100 billion neurons.

They pass through your 900 trillion synapses to connect all your 100 billion neurons to each other inside your brain and to all your muscles and other bodily organs.

Brain scientists have discovered that the traditional distinction between material and immaterial (Principles of Newtonian Mechanics) breaks down at the nano-microscopic quantum level of reality in the human brain and in the brains of other animals.

This is because your biochemical signaling processes involve potentiation (long-term potentiation) and the production of action-potential spikes.

These action-potential spikes travel only a few inches from the physical structure of your prefrontal cortex, which is just behind your forehead, to the physical structure of your hippocampus at the

inside of each hemisphere at the bottom of your limbic system.

They cause your working memory to interact with your long-term memory, which provides you with your sense of self and self-control.

Nevertheless, these biochemical currents (signals) continuously flow throughout your brain and the rest of your body, whenever you are consciously moving your body or thinking or even sleeping!

Once you learn about the massive connectivity of your billions of neurons and trillions of synapses, you will be able to understand the gigantic creative thinking potential you have due to the infinite number of interactive neuronal connections in your brain.

Even though your brain is a singular unit, it is useful to describe it as having four separate essential physical structures. The four structures are separated by dynamically connected membranes called fissures. They include your cerebrum, limbic system, cerebellum, and brainstem.

The activators associated with your conscious willpower are in your cerebrum and the activators associated with your feelings are in your limbic system and the activators associated with your unconscious behavior are in your cerebellum and brainstem.

Anytime you can replace bad thinking (such as the denial of the reality of climate change and its potential for catastrophic results) with good thinking and more creative solutions, you will be able to experience more rewarding outcomes from your decisions.

And by avoiding addictive habits and useless social behaviors, you will be able to create more time for the most important things in your life such as activities that have better results.

Each of the 15 declarative statements that define the 15 brain ideas can be consolidating into your general vocabulary quickly to prepare your mind and consciousness for sustained happiness and concrete success in the future.

RELEVANCE OF THE NEW BRAIN SCIENCE FACTS AND IDEAS

Since curiosity is the primary motivation you need to get started with your brain study, just ask yourself, "How does my brain

work"?

For example, your prefrontal cortex is the source of your "executive functions" including self-control and is located in the two frontal lobes at the front of your cerebrum just behind your forehead with neuronal connections to all of the other major areas of your brain.

The phrase executive functions denotes specifically that the prefrontal cortex is the essential source of your thoughts and that they can control your body. Also your prefrontal cortex is associated with the creation of new habits as you deal with personal and social challenges.

As you make decisions, feel emotions, or act to achieve your goals, your prefrontal cortex is working hard to help you achieve your personal best. It contains your working memory and it can access your long-term memory.

With the new scientific language about human consciousness, based on the factual knowledge about evolution, your mind's mental force will be able to control all of your feelings.

Since there are so many promising options available for optimizing your brain health, it is imperative that you use critical thinking and reading skill-sets based upon your own unique life circumstances and the best scientific evidence available.

If you want to have a healthy brain, it is crucial for you to eat, sleep, exercise, and relax enough at all ages, since good blood circulation is required for good brain health.

In addition to the free information on this website, there will be more detailed factual ideas related to the many scientific references that support the 15 core brain ideas on the Alphabetical Brain TM Vocabulary App to be launched soon.

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 edit this text to personalize it and read your edited version of these ideas in a few hours and in a few days and then a week later to take advantage of the spaced-repetition method of learning.