

the

Staying Sharp

puzzle packet from the Dana Alliance for Brain Initiatives



Exercise your mind with these puzzles and you may help your brain STAY SHARP!

Staying Sharp: Tenets of Successful Brain Aging

We all know people who stay sharp as a tack well into old age, or who seem to blossom creatively late in life. It turns out that that these “successful agers” seem to share some common characteristics. **Below are some key words related to aging successfully.** For more information please read the “Staying Sharp” booklet *Successful Aging and Your Brain* from the Dana Alliance for Brain Initiatives, www.dana.org.

Words may appear in all directions, including diagonally and backwards.



aerobic
 mental stimulation
 learning
 cell network
 community
 exercise
 function
 education
 cards
 neural reserve
 children

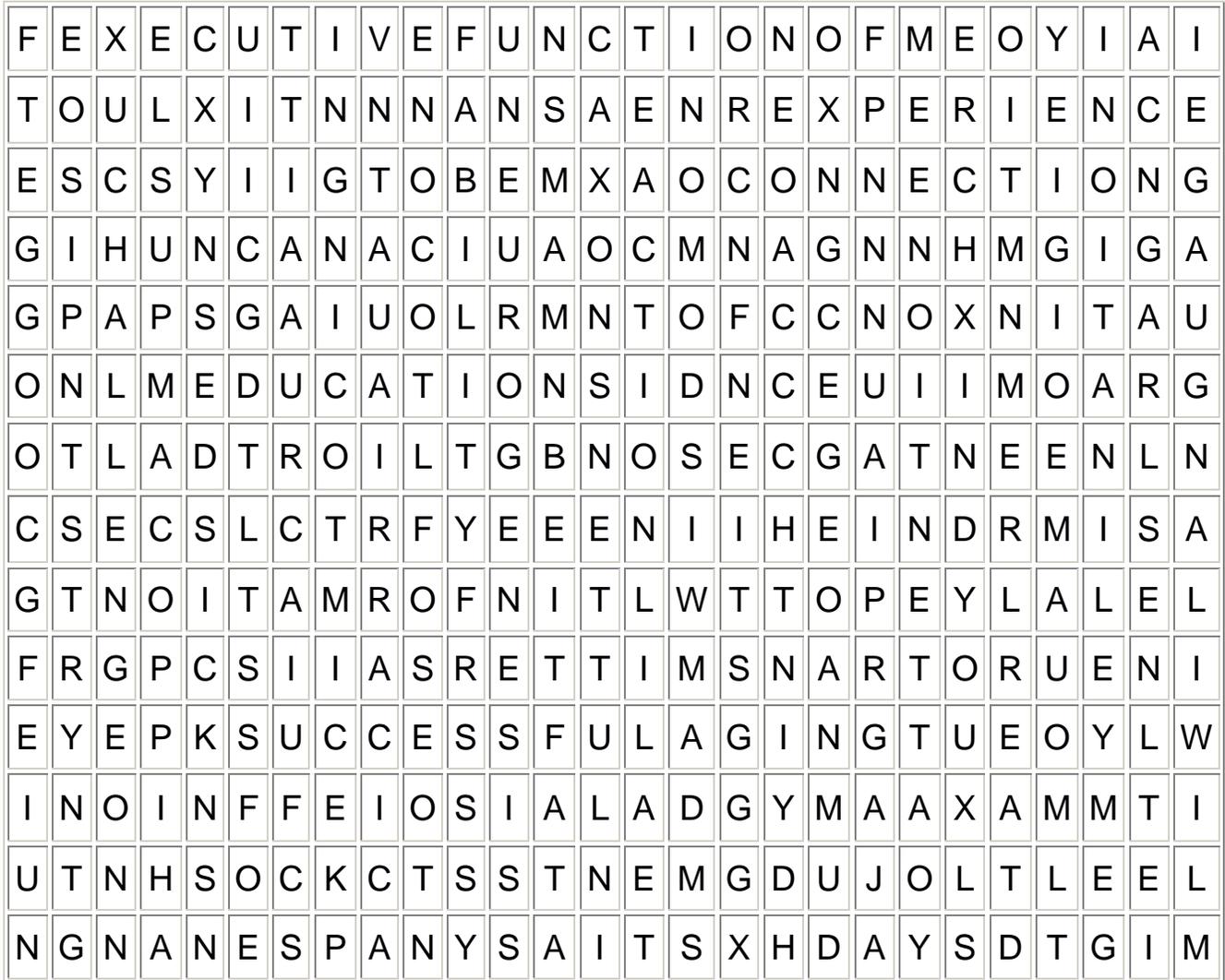
puzzles
 volunteer
 think
 plasticity
 friends
 playing games
 dancing
 novelty
 lifestyle
 diet
 chess

reading
 family
 network
 sleep
 skills
 practice
 sharp
 laughter
 mental

Staying Sharp: Learning as we Age

From the day we are born our brain is primed for learning, ready to capture the experiences of our lives and encode them into its web of nerve connection. **Below are some key words related to how the learning and memory happen within the brain.** For more information please read the “Staying Sharp” booklet *Successful Aging and Your Brain* from the Dana Alliance for Brain Initiatives, www.dana.org.

Words may appear in all directions, including diagonally and backwards.



plasticity
 cognition
 learning
 memory
 axons
 neurotransmitters
 hippocampus
 neurogenesis
 wisdom
 self efficacy
 amygdala

successful aging
 multitasking
 synapse
 lobe
 education
 social
 experience
 ability
 attention
 language
 executive function

judgment
 engage
 connection
 information
 thought
 action
 myelination
 focus
 conceptual
 challenge

Staying Sharp: Here's to your vascular health!

Eating well and controlling vascular risk factors such as blood pressure, cholesterol, and stress may contribute to the maintenance of cognitive function throughout life. **Below are some key words related to diet, exercise, and vascular health.** For more information please read the "Staying Sharp" booklet *Successful Aging and Your Brain* from the Dana Alliance for Brain Initiatives, www.dana.org.

Words may appear in all directions, including diagonally and backwards.



risk factor
stroke
diabetes
heart disease
obesity
diet
exercise
cardiovascular
calories
nutrition
vitamin D

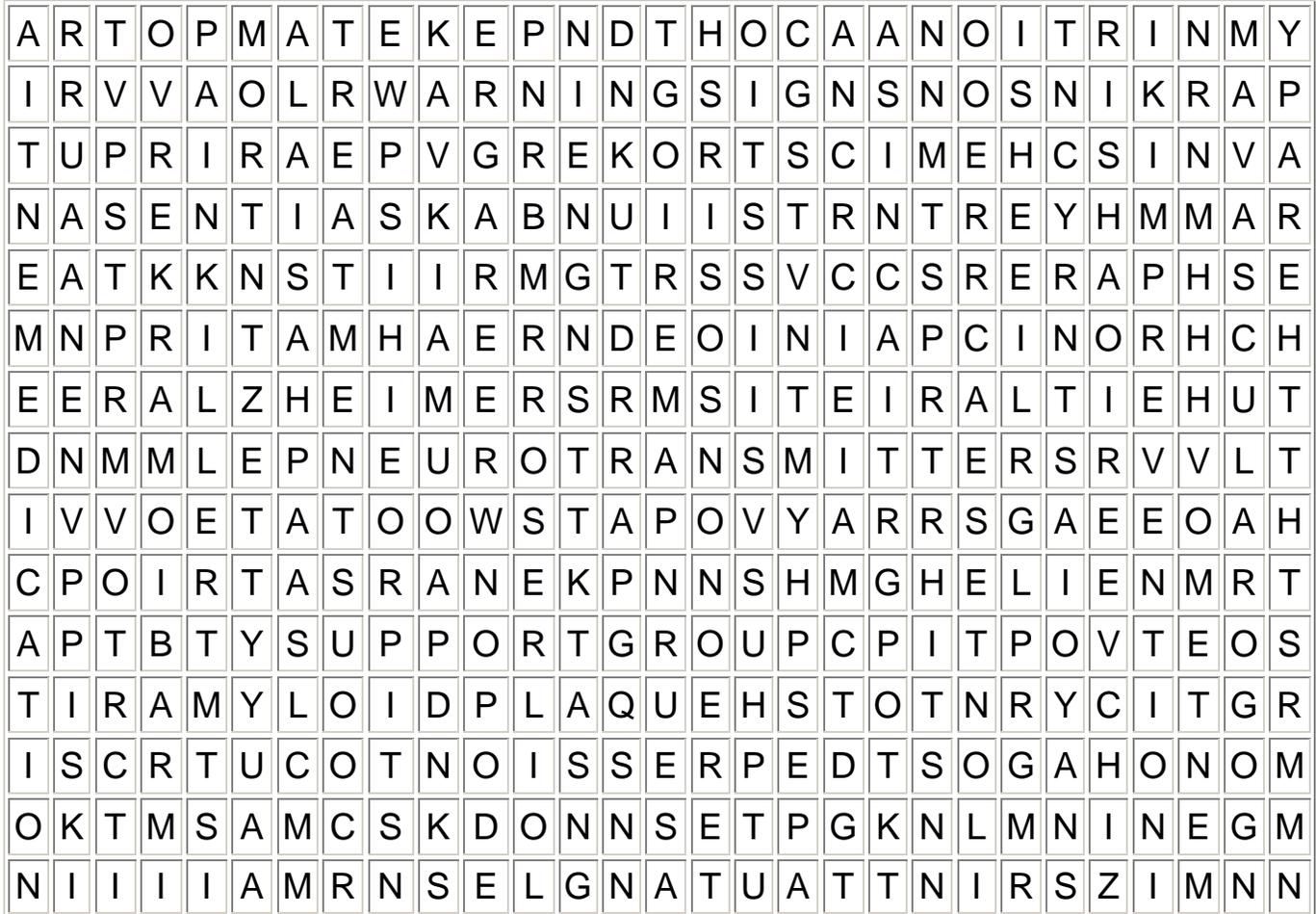
weight management
blood pressure
cholesterol
water
vegetables
wholegrain
lowfat
food pyramid
aerobic activity
walking
strength

flexibility
balance
sleep
energy
antioxidants
blood glucose
walking
sports
neurogenesis
growth factors
mass body index

Staying Sharp: The Aging Brain

Brain disorders and diseases are among the most feared medical problems. But becoming well-informed about serious neurological conditions that may develop can help allay those fears—and can help you respond if you or someone you love develops one. **Below are some key words related to late-life brain disorders.** For more information please read the “Staying Sharp” booklet *Successful Aging and Your Brain* from the Dana Alliance for Brain Initiatives, and visit the Dana Foundation at www.dana.org.

Words may appear in all directions, including diagonally and backwards.



dementia
Alzheimer's
vascular
memory loss
genes
Tau tangles
treatments
neuroimaging
diagnostic test
amyloid plaque
caregiving

MRI
brain attack
depression
hypertension
ischemic stroke
Parkinson's
neurotransmitters
warning signs
medication
prevention
chronic pain

aphasia
stress
support group
therapy
symptoms
tremor
biomarker
arthritis
painkiller

Get moving! jumble

Unscramble the words below to see what regular exercise can do for your body (hint: for help for some answers, and for more information about exercise and your brain, see the “Staying Sharp” booklet *Successful Aging and Your Brain*, www.dana.org). Once you figure out the answers, unscramble the highlighted letters to answer the riddle (two letters have been filled in for you):

“What happened to the mollusk that went to the gym?”

“It _____ !”

Regular exercise can...

Prevent... **BIOTYSE**

--	--	--	--	--	--	--

Promote... **SOENIEGESNUR**

--	--	--	--	--	--	--	--	--	--	--	--	--	--

Boost... **DOMO**

--	--	--	--

Slow... **NEBO SOLS**

--	--	--	--	--	--	--	--	--

Decrease risk of some... **SIAEDSES**

--	--	--	--	--	--	--	--

Increase... **REGNYE**

--	--	--	--	--	--

Combat high blood... **PERURESS**

--	--	--	--	--	--	--	--

Improve overall... **HHTELA**

--	--	--	--	--	--

	U											L	!
--	---	--	--	--	--	--	--	--	--	--	--	---	---

Keep Your Memory Sharp jumble

The following jumbled words are skills you can practice to help keep your memory sharp (hint: we've underlined the first letter of each word for you). Once you figure out the answers, unscramble the highlighted letters to answer the riddle (one letter has been filled in for you):

“Why do reptiles have such good memories?”

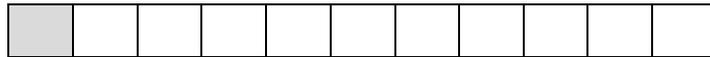
“Because they have _____ !”

What may seem like a faltering memory may in fact be a decline in the rate at which we learn and store new information. Visit www.dana.org for more information on memory, and practice these memory skills to enhance learning and make remembering easier:

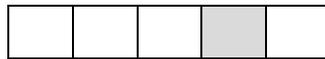
XEARL



RENNECATCTO



COSFU



LSWO NOWD



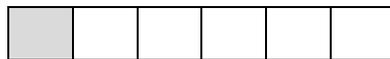
NAOZIGRE



WITRE



PETREA



IUZAVISLE



ICESTAASO



A Simple Problem?

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	12	13			14	4	10						2		21			20				5			

<u> </u> 24	<u>F</u> 14	<u> </u> 22	<u> </u> 10	<u> </u> 1	<u> </u> 10	<u>H</u> 11	<u> </u> 15	<u> </u> 7	<u> </u> 2	<u>N</u> 12	<u>B</u> 19	<u> </u> 7	<u> </u> 24	<u> </u> 2	<u>N</u> 5	<u>W</u> 1	<u> </u> 19	<u> </u> 1		
<u>S</u> 20	<u> </u> 25	<u>S</u> 20	<u> </u> 24	<u> </u> 15	<u>P</u> 21	<u> </u> 6	<u> </u> 1	<u> </u> 22	<u>H</u> 10	<u> </u> 7	<u> </u> 22	<u> </u> 5	<u> </u> 1	<u> </u> 13	<u> </u> 25	<u> </u> 11	<u> </u> 6	<u> </u> 17		
<u> </u> 11	<u>N</u> 2	<u> </u> 17	<u> </u> 1	<u> </u> 19	<u>S</u> 20	<u> </u> 22	<u> </u> 7	<u>N</u> 2	<u> </u> 17	<u> </u> 24	<u> </u> 22	<u> </u> 5	<u> </u> 1	<u> </u> 5	<u> </u> 25	<u> </u> 11	<u> </u> 6	<u> </u> 17	<u> </u> 12	<u>B</u> 1
<u>S</u> 20	<u> </u> 25	<u>S</u> 20	<u> </u> 24	<u> </u> 15	<u>P</u> 21	<u> </u> 6	<u> </u> 1	<u> </u> 22	<u>H</u> 10	<u> </u> 7	<u> </u> 22	<u> </u> 5	<u> </u> 1	<u> </u> 13	<u> </u> 25	<u> </u> 11	<u> </u> 6	<u> </u> 17	<u> </u> 2	<u>N</u> 22
<u> </u> 1	<u> </u> 15	<u> </u> 1	<u> </u> 19	<u>S</u> 20	<u> </u> 25	<u> </u> 2	<u> </u> 15	<u> </u> 21	<u> </u> 11	<u> </u> 4	<u> </u> 10									

An Ancient view?

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
					17	15					3	7			6		13								

<u>M</u> 7	<u> </u> 18	<u> </u> 23	<u> </u> 20	<u> </u> 12	<u>G</u> 15	<u> </u> 2	<u> </u> 9	<u> </u> 9	<u> </u> 20	<u> </u> 24	<u> </u> 23	<u> </u> 20	<u> </u> 14	<u> </u> 9	<u> </u> 2	<u> </u> 8	<u> </u> 9	<u>F</u> 17	<u>R</u> 13	<u> </u> 20	<u>M</u> 7	
<u> </u> 9	<u> </u> 2	<u> </u> 18	<u> </u> 4	<u> </u> 13	<u>R</u> 8	<u> </u> 5	<u> </u> 23	<u> </u> 8	<u> </u> 23	<u> </u> 19	<u>F</u> 17	<u>R</u> 13	<u>M</u> 20	<u> </u> 7	<u> </u> 9	<u> </u> 2	<u> </u> 18	<u> </u> 4	<u> </u> 13	<u> </u> 8	<u> </u> 5	<u> </u> 23
<u> </u> 20	<u> </u> 23	<u> </u> 3	<u> </u> 22	<u> </u> 8	<u>R</u> 13	<u> </u> 5	<u> </u> 21	<u> </u> 18	<u> </u> 20	<u> </u> 12	<u> </u> 13	<u>R</u> 6	<u>P</u> 3	<u>L</u> 18	<u> </u> 8	<u> </u> 21	<u> </u> 12	<u> </u> 13	<u> </u> 18	<u> </u> 21		
<u> </u> 10	<u> </u> 20	<u> </u> 22	<u> </u> 3	<u>L</u> 8	<u>G</u> 12	<u> </u> 15	<u> </u> 2	<u> </u> 9	<u> </u> 18	<u> </u> 13	<u> </u> 8	<u> </u> 23	<u> </u> 19	<u> </u> 10	<u> </u> 18	<u> </u> 21	<u> </u> 9	<u> </u> 21	<u> </u> 8	<u> </u> 21		
<u> </u> 14	<u>L</u> 18	<u>L</u> 3	<u> </u> 3	<u> </u> 8	<u> </u> 21	<u> </u> 20	<u> </u> 12	<u> </u> 13	<u> </u> 21	<u> </u> 20	<u> </u> 13	<u> </u> 13	<u> </u> 20	<u> </u> 14	<u> </u> 21	<u> </u> 6	<u> </u> 8	<u> </u> 5	<u>P</u> 23	<u> </u> 21		
<u>G</u> 15	<u>R</u> 13	<u> </u> 5	<u> </u> 18	<u>F</u> 17	<u> </u> 21	<u> </u> 8	<u> </u> 23	<u> </u> 19	<u> </u> 9	<u> </u> 18	<u> </u> 8	<u> </u> 13	<u> </u> 21									
<u> </u> 2	<u> </u> 5	<u>P</u> 6	<u>P</u> 6	<u> </u> 20	<u> </u> 16	<u>R</u> 13	<u> </u> 8	<u> </u> 9	<u> </u> 18	<u> </u> 21												

Brain Diseases and Disorders

Nearly one in five Americans is afflicted with a brain disorder – conditions that range from learning disabilities to depression to traumatic brain injury. Did you know that all of the following diseases and disorders are related to the brain? See how many you can find, and then visit the Dana Foundation at www.dana.org to learn more.

Words may appear in all directions, including diagonally and backwards.



Addition
Alzheimer's
Anxiety
Ataxia
Autism
Birth defects
Blindness
Cerebral Palsy
Coma
Deafness
Depression

Dyslexia
Dystonia
Eating disorders
Epilepsy
Lou Gehrig's Disease
Mental illness
Migraine
Muscular Dystrophy
Pain
Panic disorder
Paralysis

Parkinson's
Schizophrenia
Shingles
Sleep disorders
Spina Bifida
Spinal Cord Injury
Stroke
Tourette syndrome

Words in a word puzzle

Neuroscience is the study of the brain and nervous system, including their structure, function, and disorders. How many four- and five-letter common English words (no proper names or abbreviations) can you find in the word NEUROSCIENCE? We found 49 four letter words and 53 five letter words. See how many you can find, and then check your words against ours in the answer key. **Good luck!** Visit www.dana.org for more information about the brain and neuroscience.

NEUROSCIENCE

Four letter words: _____

How many did you find? _____

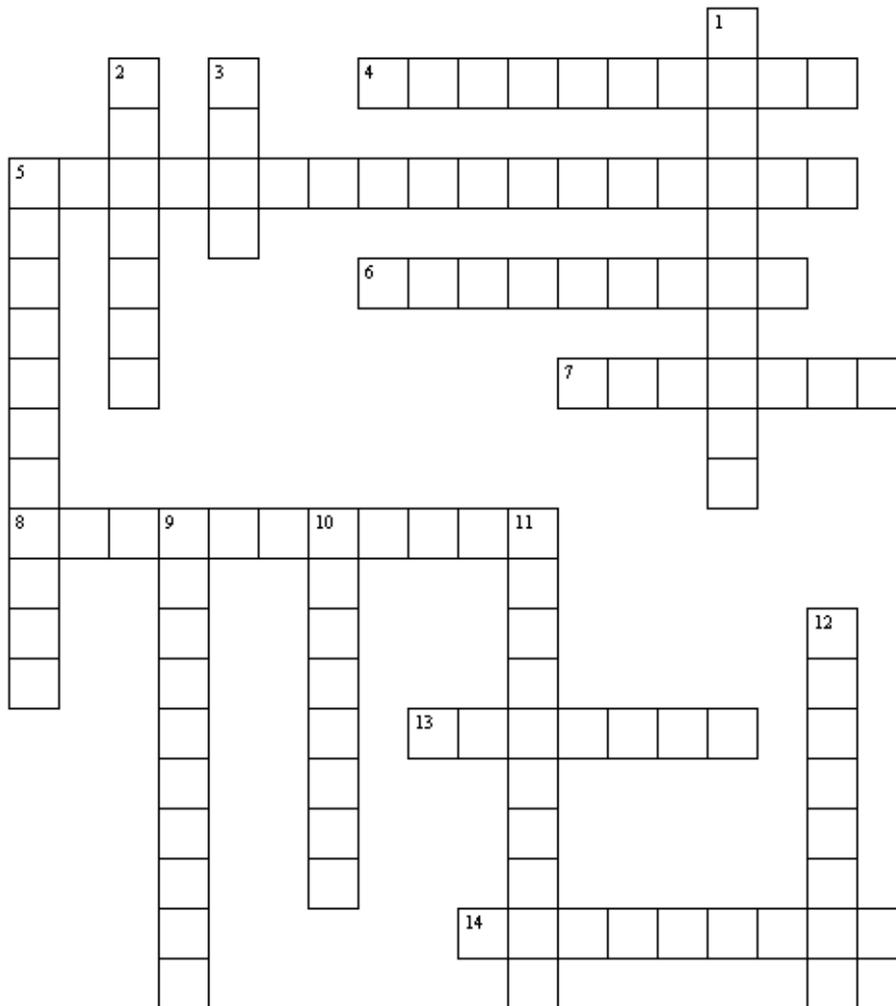
Five letter words: _____

How many did you find? _____

If you're ready for a bigger challenge, see how many six letter words you can find!

Brain-y Crossword

Use the Dana Alliance's 'Mindboggling' booklet series and "Q&A: Answering Your Questions About Brain Research," available at www.dana.org, to solve this BRAIN-Y crossword puzzle!



ACROSS

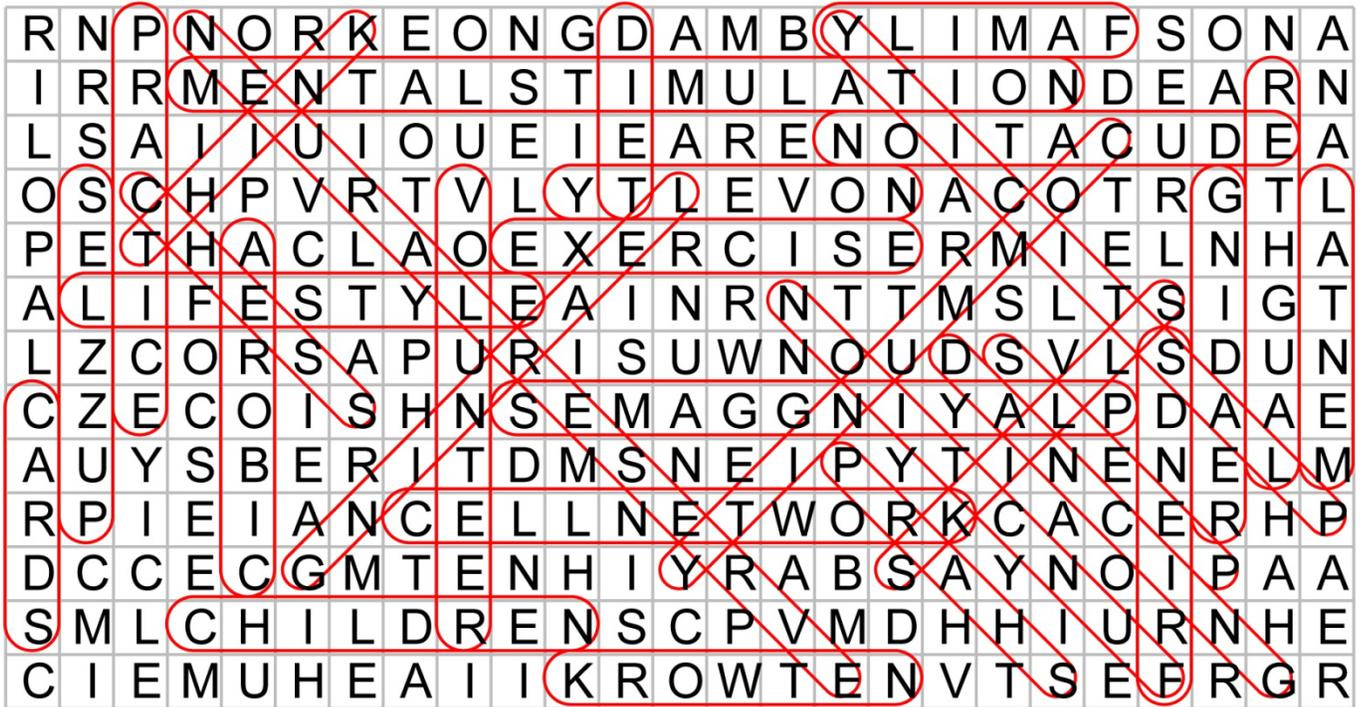
4. One of the most prevalent neurodegenerative disorders that greatly reduces a person's memory.
5. The general name for the chemicals that are released by one neuron and taken up by another.
6. The branches of a neuron on which information is usually received.
7. You have more than 100 _____ neurons. (spell out the number)
8. An area of the brain located deep inside the brain and involved in memory.
13. What does the "I" in MRI stand for?
14. The part of the brain that connects directly with the spinal cord and is responsible for some of the automatic functions of the body.

DOWN

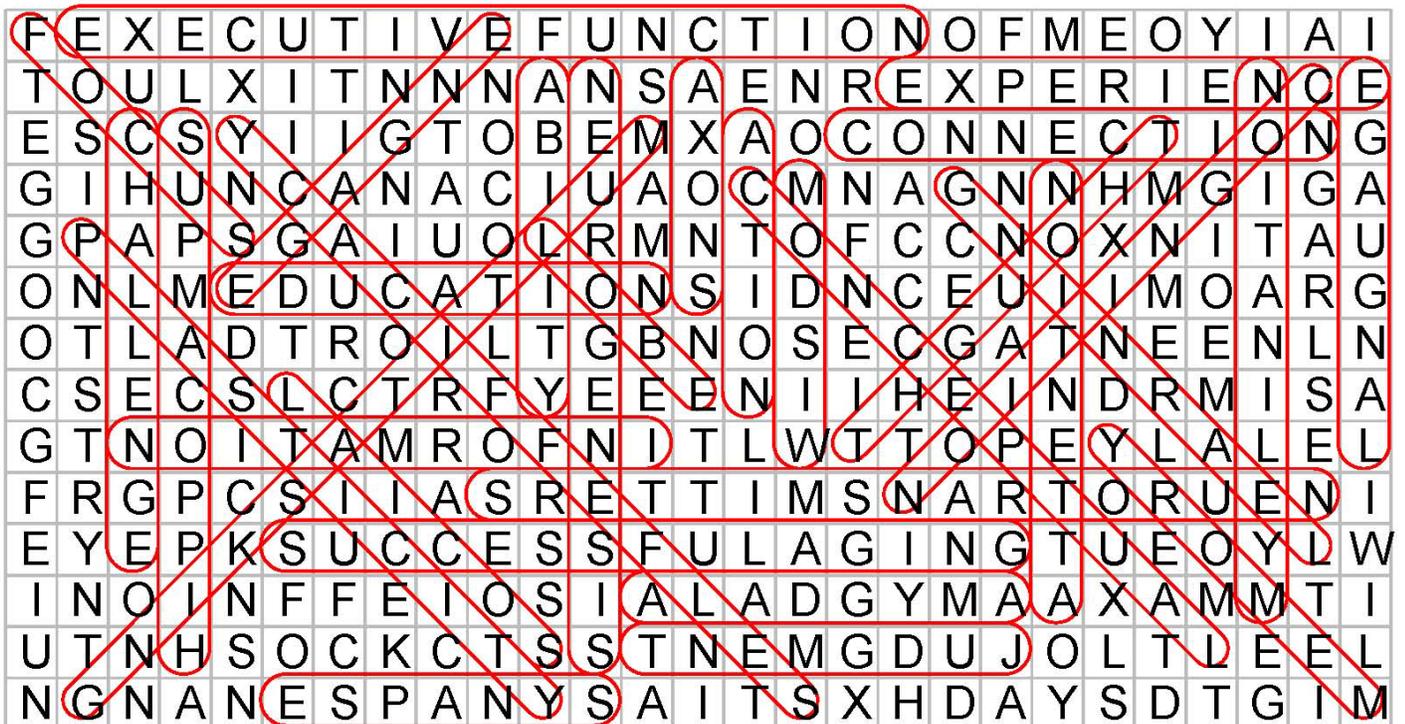
1. The tennis ball-sized area at the back of the brain responsible for balance and movement, as well as some types of memory.
2. The nerve cells in the brain.
3. The long, tail-like branch that extends from a neuron's cell body and transmits information.
5. The exploration of ethical issues surrounding advances in neuroscience.
9. The brain's ability to adapt and rewire its synaptic connections.
10. The area of the brain involved with emotions, especially fear, anger, and happiness.
11. The pathway for nerve signals to and from the brain. (two words, no space)
12. The junctions where neurons make connections to one another.

Answer Key

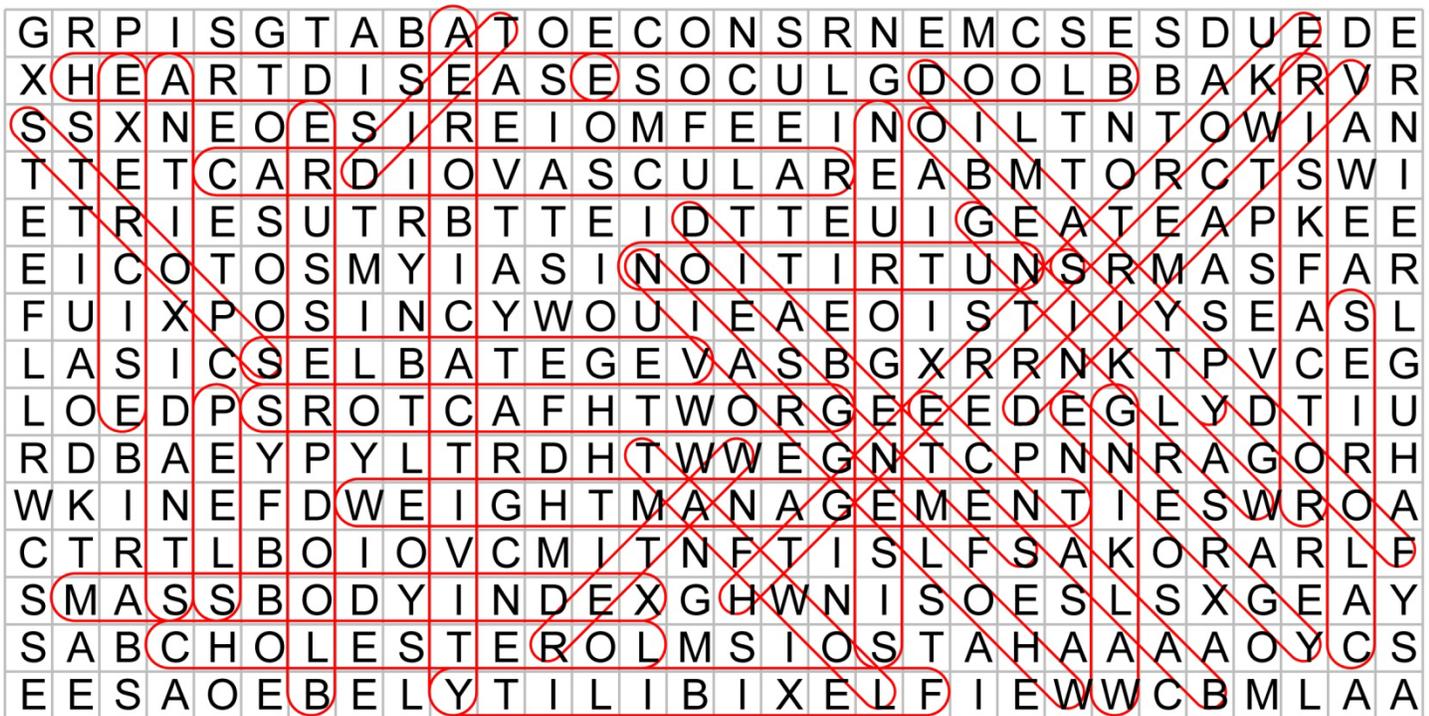
Staying Sharp: Tenets of Successful Brain Aging word search:



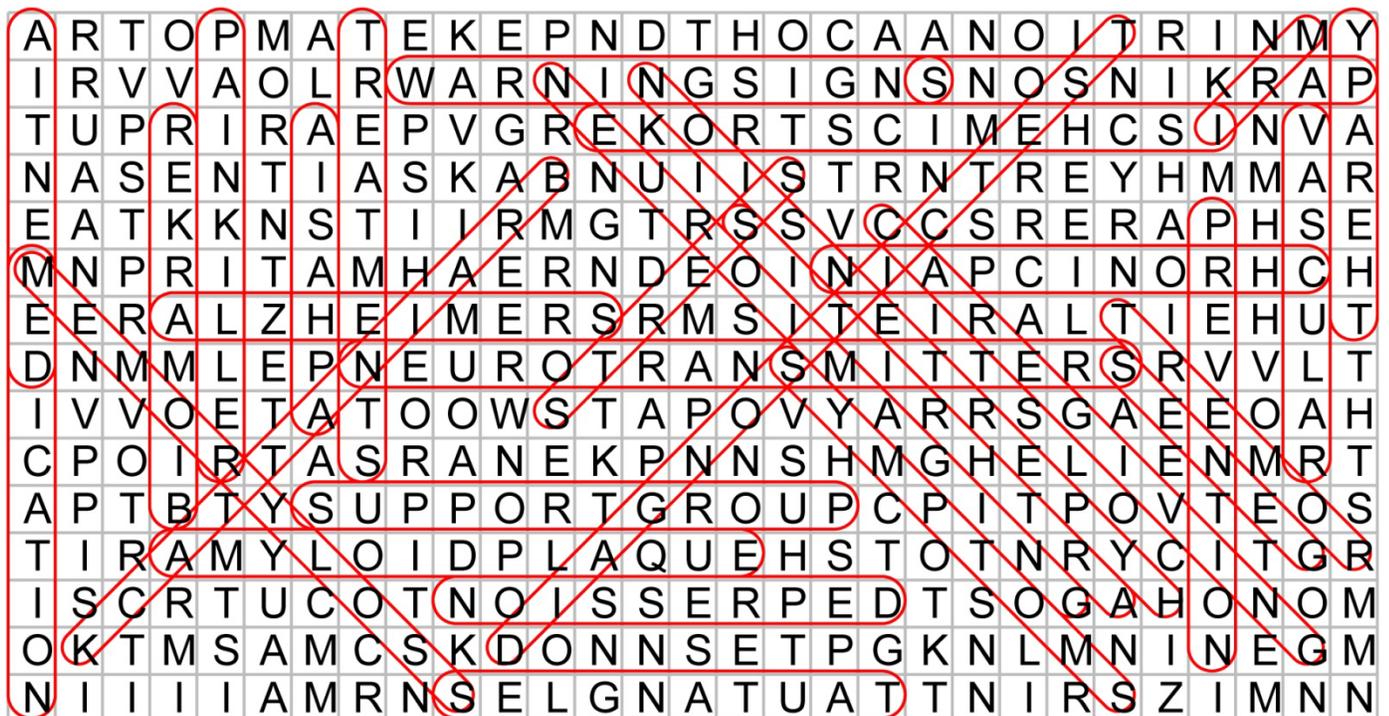
Staying Sharp: Learning as we Age word search:



Staying Sharp: Here's to your vascular health! word search:



Staying Sharp: The Aging Brain word search:



Get Moving! jumble:

Prevent...OBESITY
Promote...NEUROGENESIS
Boost...MOOD
Slow...BONE LOSS
Decrease risk of some...DISEASES
Increase...ENERGY
Combat high blood...PRESSURE
Improve overall...HEALTH

“What happened to the mollusk that went to the gym?” “It **PULLED A MUSSEL!**”

Keep Your Memory Sharp jumble:

RELAX
CONCENTRATE
FOCUS
SLOW DOWN
ORGANIZE
WRITE
REPEAT
VISUALIZE
ASSOCIATE

“Why do reptiles have such good memories?” “Because they have **TURTLE RECALL!**”

Brain Quote Cryptograms:

We're Not in Kansas Anymore: And my head I'd be scratching while my thoughts were busy hatching. If I only had a brain. --The Scarecrow

The Sci-Fi Brain: The human brain, then, is the most complicated organization of matter that we know. --Isaac Asimov

The Poetry of the Brain: The brain is wider than the sky, for put them side by side, the one the other will contain, with ease and you beside. --Emily Dickinson

Beam Me Up! : The knowledge to reconnect a brain does not exist yet in the galaxy.
--Mr. Spock

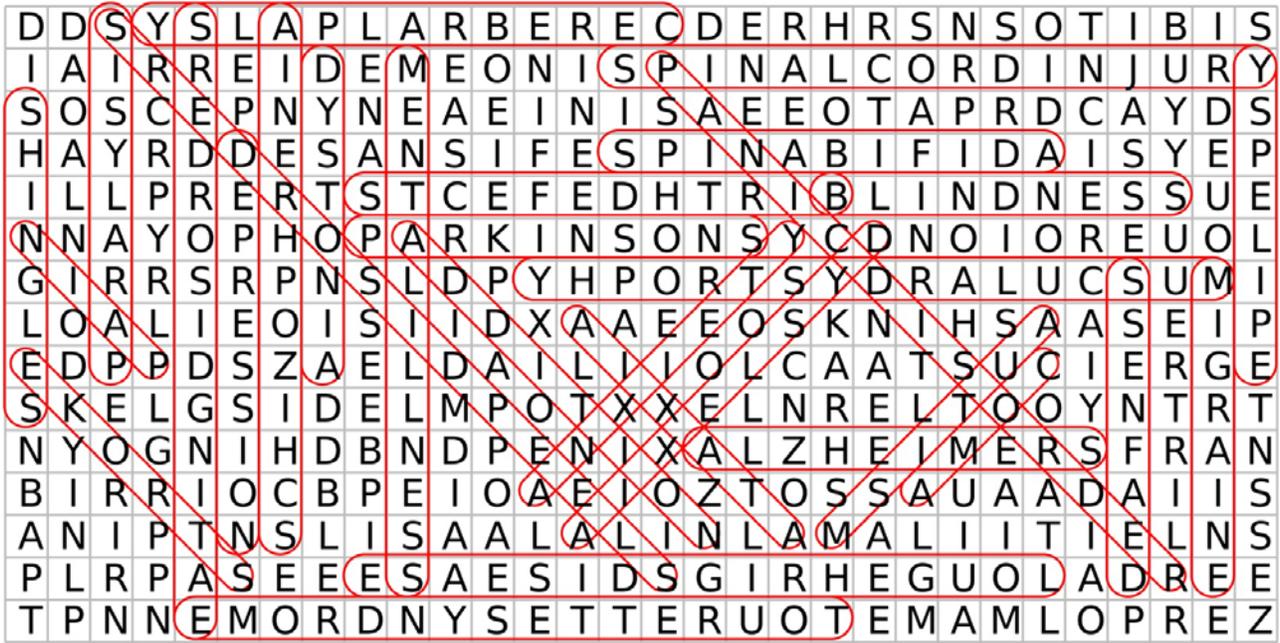
Oh, the places you'll go!: You have brains in your head. You have feet in your shoes. You can steer yourself any direction you choose. --Dr. Suess

Renaissance Brain: A man paints with his brains and not with his hands, and if he cannot have his brains clear he will come to grief. --Michelangelo

A simple problem?: If the human brain were so simple that we could understand it, we would be so simple that we couldn't. --Emerson M. Pugh

An ancient view? : Men ought to know that from the brain, and from the brain only, arise our pleasures, joy, laughter and jests, as well as our sorrows, pains, griefs, and tears. --Hippocrates

Brain Diseases and Disorders word search



Words in a word puzzle

The 49 four-letter words we found in "NEUROSCIENCE" are:

coin	euro	nose	rise	sere
cone	ices	noun	roes	sine
cons	icon	nuns	rose	sire
core	inns	once	rues	sore
corn	ions	ones	ruin	sour
cues	iron	onus	rune	sure
cure	neon	ores	runs	uric
curs	nice	ours	ruse	urns
ecru	nine	rein	seen	user
eons	none	rice	seer	

The 53 five-letter words we found in "NEUROSCIENCE" are:

coins	eerie	noise	rinse	scour
cones	ennui	nonce	risen	seine
conic	ensue	norse	rosin	since
cores	icons	nouns	rouse	siren
corns	incur	nurse	ruins	sneer
cries	inner	occur	runes	snore
crone	inure	osier	scene	sonic
cures	irons	ounce	scion	union
curie	nicer	reins	scone	urine
curio	niece	resin	score	
curse	nines	reuse	scorn	

Brain-y Crossword

ACROSS: 4. Alzheimer's, 5. neurotransmitters, 6. dendrites, 7. billion, 8. hippocampus, 13. imaging, 14. brainstem

DOWN: 1. cerebellum, 2. neurons, 3. axon, 5. neuroethics, 9. plasticity, 10. amygdala, 11. spinal cord 12. synapses