Open Your Class With This Tomorrow- Brain Bytes: Quick Answers and Quirky Questions About the Brain

Directions: Provide students with the list of questions below about the brain and the nervous system and have them add any questions they have to the list. Have students working in small groups or pairs each choose a couple of questions to research. Have each group create an infographic or video that answers the question using reliable scientific sources and present their findings to the class. Alternatively, have groups chose a couple of topics that sound interesting to them and do some quick research. After presenting their preliminary findings, have students participate in a group discussion using a fishbowl, or jigsaw desig

Quirky Questions to Explore About the Brain

- Why do we dream?
- Why do we only sometimes remember our dreams?
- What is lucid dreaming, and can it be used to change unhealthy habits?
- What does it mean that the brain is not fully formed until about age 25?
- What is the purpose of contralateral control? Why does the left motor cortex control the right side of the body and the right motor cortex control the left side of the body?
- What is anarchic hand syndrome?
- What is ventral pontine syndrome or locked-in syndrome?
- How does religion change your brain?
- How does religious faith relate to longevity?
- Do atheists have higher IQs than religious individuals?
- What causes car sickness?
- Why might your right ear be better at understanding language?
- Was there anything different about Albert Einstein's brain?
- Why is the human cortex folded into gyri and sulci?
- What is synesthesia and how is it tested?
- What is blindsight and how is it tested?
- What is prosopagnosia?
- Where are the motion detection areas of the human brain and what happens if they are damaged?
- What causes sleepwalking and should you wake a sleep walking person?
- Why can't you tickle yourself?
- How does sugar impact the brain?
- What is the connection between gut bacteria and the brain regarding mental health?
- What are the evolutionary purposes of emotions such as disgust and fear?
- Where is taste perceived in the brain?
- What causes phantom limb pain and how is it treated?
- Why does the brain not feel pain and how can this be used in brain surgery?
- How are the placebo and nocebo effects related?
- What is the Wada test and how can this be used in brain surgery?
- How is the brain activity of stutterers different from nonstutterers and how can it be treated?
- What is hyperlexia?
- How is dyslexia impacted by language (e.g., English-speaking vs. Spanish-speaking individuals with dyslexia)?
- How can transcranial magnetic stimulation be used to study the brain?

- How does alcohol impact specific brain structures (e.g., cerebellum, medulla, hippocampus, prefrontal cortex)?
- How are dopamine levels impacted by substance abuse?
- Can playing certain types of video games increase cognitive abilities such as visual attention?
- What is chronic traumatic encephalopathy (CTE) and how is it diagnosed?
- Why might nerve stimulation restore consciousness in people in comas?
- What is gene engineering?
- What is CRISPR?
- How are researchers exploring the use of fMRI to treat Tourette's syndrome?