

Inside the BRAIN: An Online Exploration

Name _____

Period _____

WEBSITE ADDRESS

<http://faculty.washington.edu/chudler/introb.html>
(make sure to type it exactly as you see it above!)

INTRODUCTION

Neuroscience for Kids is a website about the brain and nervous system maintained by the University of Washington in Seattle. Despite the name, this is an excellent website for anyone interested in learning more about how the brain works, not just kids.

When you go to the page above, you'll see the content organized into the following categories:

- The World of Neuroscience
- Brain Basics
- Higher Functions
- Spinal Cord
- Peripheral Nervous System
- The Neuron
- Sensory Systems
- Methods and Techniques
- Drug Effects
- Neurological and Mental Disorders

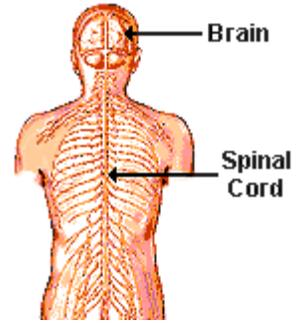
Under each of the above category headings, you'll see links to pages on specific topics (e.g., Disorders of the Brain, Nutrition and the Brain, etc., Brain Development, etc.)

INSTRUCTIONS

For this assignment, you'll learn more about the brain by exploring the pages on this site answering questions on a wide variety of topics..

One of the goals of this assignment is to have people to explore a wide variety of topics within the site. So to answer the questions, you'll have to do some "digging" around! You don't need to answer them in order. If you get stuck, move on to another and then go back. Write all your answers on this handout. Good luck and have fun!

Questions start on the next page...



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BRAIN QUESTIONS

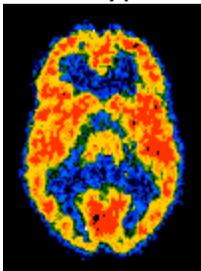
1. What does the following **hieroglyphic** mean?



2. Who won the first **neuroscientist** to win a **Nobel Prize**?
3. What protects the brain from **foreign substances** in the blood that might injure the brain?
4. What part of the brain plays a role in **yawning**? Are yawns contagious?
5. What is the name for someone who studies brain/behavior relationships, especially cognitive function?
6. What is the general term for someone who studies the action of drugs on the nervous system and/or behavior?
7. What is the function of **Wernicke's Area**? What happens if this area is damaged?
8. What is the function of **Broca's Area**? What happens if this area is damaged?
9. What is it called when a person "sees" sounds or "hears" colors? How many people have this condition?
10. What does brain **size** have to do with **intelligence**?

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11. What are two physical changes commonly seen in the brains of the **elderly**?
12. What are **neurotoxins**? Who uses them?
13. On average, a man's brain weighs what percent **more** than a woman's?
14. List three ways to treat **pain** that are not drugs.
15. List 4 physiological effects of **laughter**.
16. In what way does **chocolate** act like a drug?
17. If you wanted to know which parts of the brain are active when a person feels a certain **emotion**, which type of technology should you use?
18. How many **bones** surround the brain, and what are they called as a group?
19. Can listening to classical music make babies smarter? Give evidence for your answer.
20. Which type of **scan** is pictured below?



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21. What evidence is there that **soccer** can cause neurological problems?
22. What is **dementia**? What percent of the US population has some form of dementia? How can you prevent dementia?
23. How does heroin affect the brain?
24. Why does alcohol get into the blood stream and cross the **blood-brain barrier** so easily?
25. Which invertebrate animal has the most **complex** brain?
26. What is the only multicellular animal with no nervous system?
27. What term refers to the “ability of the brain to change with learning?”
28. If a part of a rat’s brain is damaged, what happens to the brain cells surrounding it? Do you think this would happen in a human? Why or why not?
29. What is **prosopagnosia**? Which part of the brain is this related to?
30. Label the animal brains pictured below with the appropriate animal.

