

Nervous System Webquest

Directions: Log in and visit the following sites to answer the questions below. Your answers should be written in full sentences.

Site # 1 - The Brain is the Boss

http://www.kidshealth.org/kid/body/brain_SW.html

Questions

1. What does the cerebrum do?
2. What does the cerebellum do?
3. What does the brain stem do?
4. Give an example of an involuntary muscle.
5. What does the hypothalamus do and where is it located?
6. What part of your brain controls your emotions?
7. What are two important minerals for the nervous system?

Site # 2- Neuroscience for Kids

<http://faculty.washington.edu/chudler/neurok.html>

Questions

1. Click on the "Explore" link on the navigation bar on the left. Scroll down to "The Neuron" heading and click on "Millions and Billions of Cells: Types of Neurons".
2. Read the passage and label the following diagram.

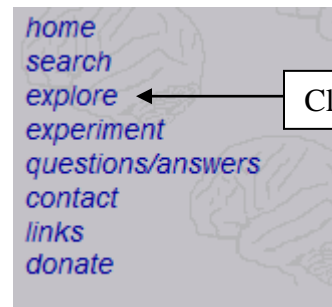
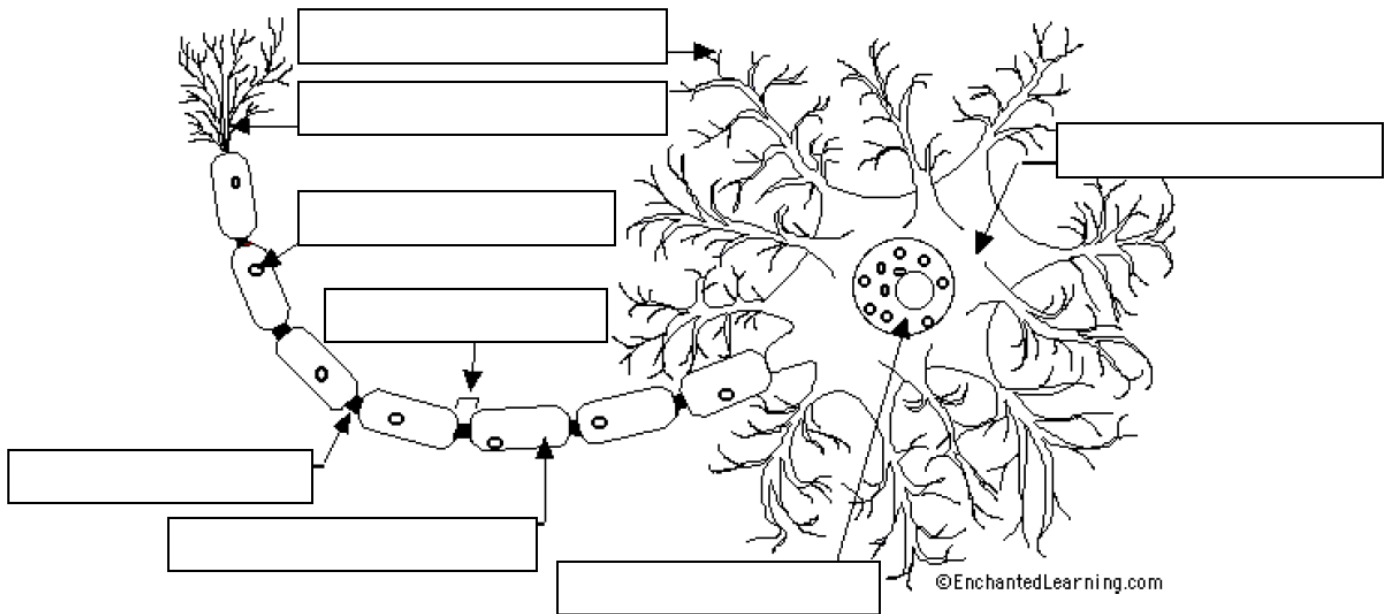


Diagram of a Neuron

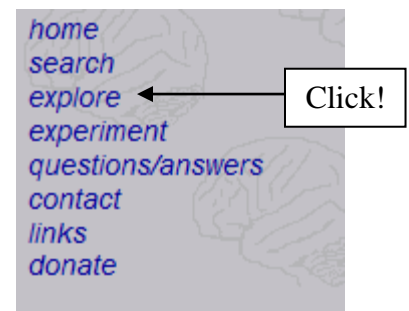


4. Neurons are classified by the way they send information. Compare and contrast motor (efferent) neurons, sensory (afferent) neurons and interneurons.

5. Take the Neuron quiz at the bottom of the link by clicking the link: "quiz about the parts of a neuron..".

Extension

1. Click on the "Explore" link on the navigation bar on the left. Scroll down to "The Neuron" heading and click on "Lights, Camera, Action Potential".
2. Explain or diagram how nerves create electrochemical signals by an action potential. Include a description of the how sodium and potassium pumping relates to the resting and action potentials.



Site # 3 – The Secret Life of the Brain

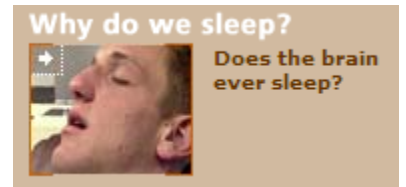
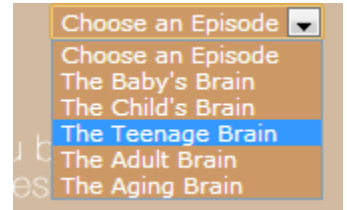
<http://www.pbs.org/wnet/brain/index.html>

Questions

1. Click on “mind illusions” and try one of the illusions. List which illusion you chose and explain how it tricks your brain.

2. Click on “The Teenage Brain” then the “Why do we sleep?” link and read the passage answer the questions below.

- a. Why do humans sleep? What is the benefit or role of sleep?
- b. Propose an explanation for why teens sleep more than adults.



Site # 4 – Phineas Gage

<http://www.uakron.edu/gage/story.dot>

Question

1. Read “Phineas Gage’s Story” and explain why Phineas’s personality changed due to his injury.

The Phineas Gage
Information Page

| Phineas Gage's
Story

Click!