

Nervous System Unit

To the Student:

1. Create a plan for this unit by choosing activities from Level A, Level B and Level C.
2. Meet with your teacher to get approval for the plan.
3. Follow the directions provided when completing each activity/product.
4. Complete activities each day in class unless otherwise stated by your teacher.
5. All activity products must include scientific data to support opinions expressed.
6. All activities should be completed by _____
7. Please refer to the check off list to make sure you are completing each activity at the right time and each activity has been approved by your teacher.

Whole Class Activities: All work must be completed in your notebook

1. Complete nervous system vocabulary sheet.
2. Read Chapter 8: Section 1 in your science textbook and complete a KWL in your notebook.
3. Copy lecture notes.
4. Label Lateral View of Brain and Neuron.
5. Read Chapter 8:Section 2 in your science textbook and complete the 11 questions on page 239.

Level C: Choose 3 activities from this section.

1. Create mnemonics/strategies for remembering 10 vocabulary words in the nervous system.
2. Research the cerebrum, cerebellum and brain stem and write a 1 page paper comparing the three.
3. Complete the worksheet entitled "Which Brain Side is Dominant?".
4. Read an article from Mrs. Purcell and answer the questions.
5. Create a game that can be used to review key terms and their definitions.
6. Make a poster to display the different parts of the brain and their functions.
7. Create a concept map using the following words: *nervous system, spinal cord, medulla, peripheral nervous system, brain, cerebrum, central nervous system and cerebellum*. Think about "what does it consist of?"

Level B: Choose 2 activities from this section.

1. Write new song lyrics for a favorite song. Your lyrics should include 10 vocabulary words that are glued into your notebook.
2. Create a brainy newspaper/magazine article. Stories might include:
 - a. "Cerebellum Goes into Overtime" - explain how the cerebellum was used during a basketball game.
 - b. "Colorblind" - explain colorblindness and what physiologically occurs for one to be colorblind.
 - c. "Owls Hunt by Hearing" - explain the many adaptations that help owls hear well.
 - d. "Create your own article" - please approve your article with your teacher before you begin.

3. Create a children's book explaining the nervous system to a 3rd grade science student. Book should include: cover, at least 10 pages and each page should have an illustration.
4. Brain Resume: Pretend your brain was going on an interview for a particular job. Why would your brain be best for the position? What parts of your brain are best for the job? Develop a resume (a summary of qualifications, experience and education) for your brain. You may want to pick an occupation. For example, why is your brain best suited for a teacher? Why is your brain best suited for a basketball player?
5. Brain Travel Guide: Someone wants to take a trip to your brain. What will they find there? What does each part do? What can people do at each "location?" Write a travel guide for your brain explaining what someone can see and do when they visit your brain.

Level A: Choose 1 of the following activities to complete. You may choose to present your answer in any CREATIVE way that you wish i.e. poster, short play, poem, model, movie critic, etc.

1. Create an edible model of the brain. Refer to page 231 in your science textbook. Each brain function should be included (9) as well as the main areas (3) of the brain.
2. Build a neuron. Build a model of a neuron by using edible or other types of products for the various parts of the neuron. Refer to page 232 in your science textbook for ideas and directions.
3. What do you think is the single most important scientific event/innovation regarding neuroscience (nervous system/5 senses) that has happened for modern day America? Why? How has it shaped our lives for the better/worse today.
4. Model of a Sense Organ. Choose one sense organ and make a model showing how that organ interacts with the brain. You can use an assortment of materials for your model. Include a diagram or paper explaining the interactions between the sense organ and brain.
5. Life in America has changed drastically since colonial times. Based on what you have learned, how do you think neuroscience will be different in America in 50 years? What happened in the past that caused you to think this?

Check Off List
Nervous System Unit

_____ Teacher approval: Choose specific activities for Level A, Level B and Level C
(circle the activities that you have chosen)

_____ Nervous system vocabulary sheet is completed and glued your notebook

_____ KWL of chapter 8: section 1 is completed and glued into notebook

_____ Lecture notes are completed and glued into notebook

_____ Picture of brain is completed and glued into notebook

_____ Picture of neuron is completed and glued into notebook

_____ Chapter 8: section 2 reading and 11 questions is completed and turned in
(hand written or typed)

Once all of the 7 statements listed above are checked off by the teacher, you may begin to work on your activities from Level A, Level B and Level C. Remember this assignment is designed for each student **to come into class and work on each activity everyday**. This assignment is NOT designed for you to take home and complete in one/two nights.

_____ Level C _____

_____ Level C _____

_____ Level C _____

_____ Level B _____

_____ Level B _____

_____ Level A _____