



### **Nervous System Lesson 1: *The Solve***

#### **Student Handout**

#### **I. Watch the Mosa Mack Mystery**

Either on your own, in a small group, or as a class (your teacher will let you know), read Mosa Mack's Comic Mystery on the Nervous System. Then, fill out the questions below. Include a page number in your answer as evidence of where you found your answer.

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

#### **Episode Questions**

1. What problem is Otis the bat experiencing?
2. How does Otis normally use echolocation to catch insects and avoid obstacles in the dark?
3. What type of neuron first receives the echo that bounces off the rock?
4. What is a stimulus? Name a few examples, from the comic or your own experience.
5. What is the job of the nerve cells? Where can we find them?
6. The brain is where the signal gets figured out. How does a signal get to the brain?
7. What is the job of nerve cells connected to the muscles?



8. What did Mosa figure out? Why can't Otis catch Bert?

### II. Vocabulary Activity

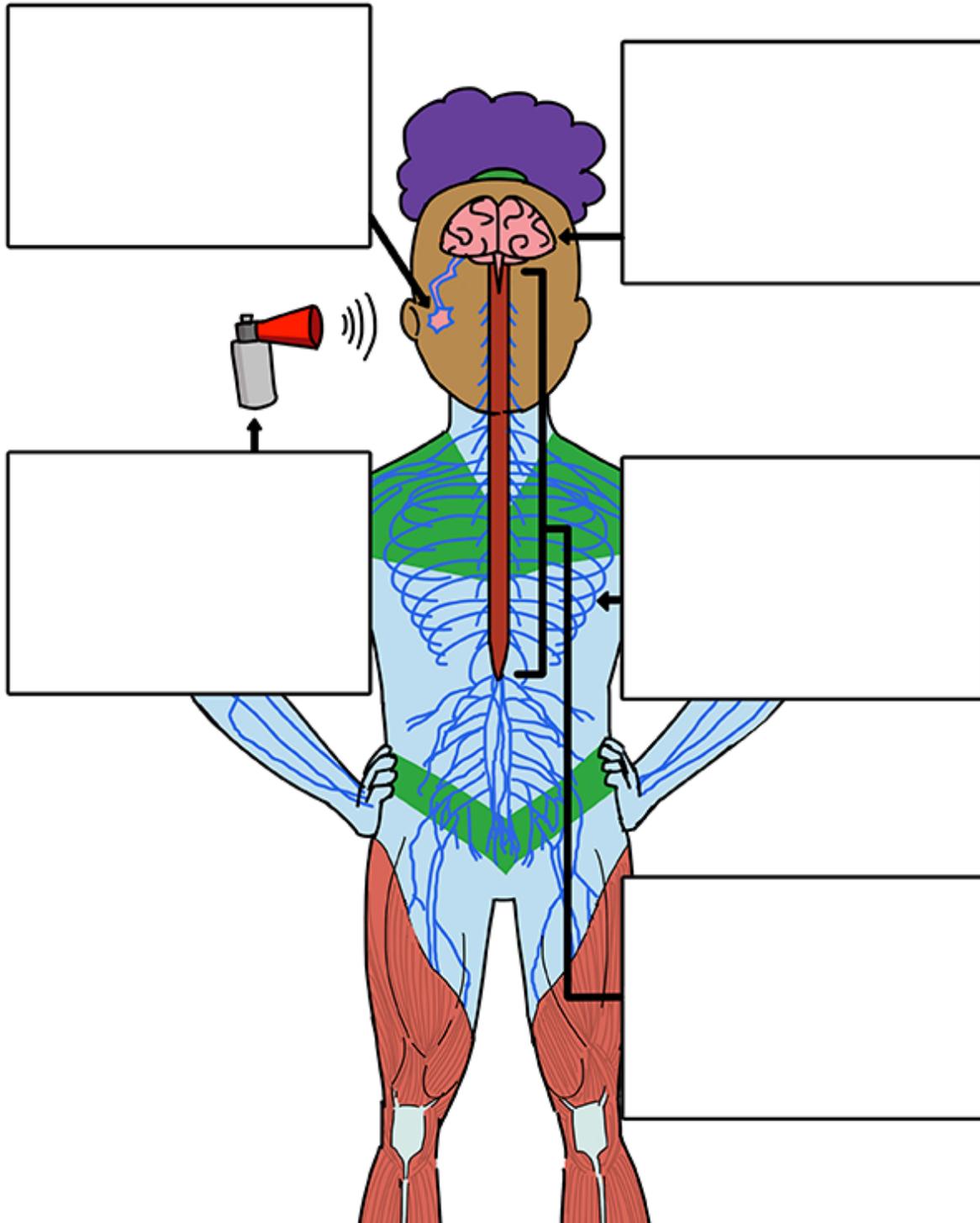
Note: Your teacher will tell you whether you will complete this activity [online here](#), or offline by following the instructions below.

1. Using the materials at your table, cut out your vocabulary cards along the **solid lines**.
2. Write the definitions on the back of the cards. Then, match the vocabulary word with the correct picture on the Nervous System Mind Map. When you're ready to glue, raise your hand so you can check your Mind Map with your teacher.
3. Fold along the dotted line on each vocabulary card to create a flap. Put glue **ONLY** on the hinge of your vocabulary cards ( the word should be on top). **You should be able to open the flap to see the definition and the picture underneath.**
4. Discuss with your group:
  - a. What happens inside your body when you accidentally touch the handle of a hot pan?
  - b. How does a message travel from the outside world into your body and then back out again?
  - c. Which part of the nervous system seems to be the part that figures out what to do with information received?





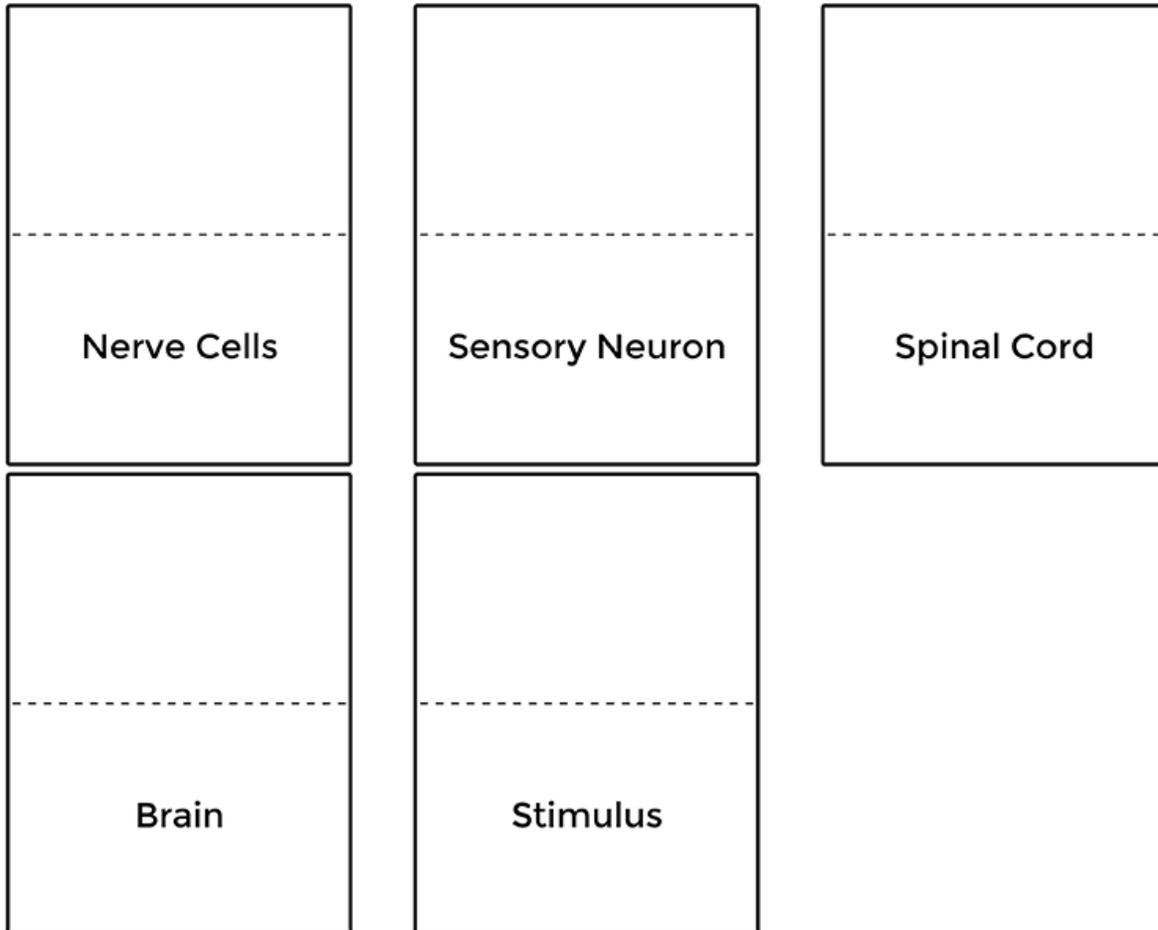
### Mind Map





# MOSA MACK SCIENCE

## STUDENT GUIDE



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### Vocabulary

- **Brain:** An organ protected by the skull; the coordinator of the nervous system
- **Nerve Cell:** A cell that passes signals throughout the nervous system
- **Sensory Neuron:** A type of nerve cell that transmits stimulus information from the outside world
- **Spinal Cord:** A bundle of nerves enclosed in the spine, which connects almost all parts of the body to the brain
- **Stimulus:** An outside event that causes a response in the nervous system



### III. Exit Ticket: Check for Understanding

Complete the exit ticket below *or* you can take the quiz online!

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

1. When you see a car approaching, what type of neuron receives this information first?
  - a. Sensory neuron
  - b. Spinal cord
  - c. Brain
  
2. The sensory neuron is a type of:
  - a. Spinal cord
  - b. Brain
  - c. Nerve cell
  
3. The sound of a cheering crowd is an example of a:
  - a. Signal
  - b. Stimulus
  - c. Response
  - d. Echolocation
  
4. What is the name of the body part that passes messages from the sensory neurons to the brain?
  - a. Lungs
  - b. Nerve cells
  - c. Brain
  - d. Stimulus
  
5. This part of the nervous system is the decision-maker for the rest of the nervous system. What is it called?
  - a. The brain
  - b. Sensory neurons
  - c. Motor neurons
  - d. The spinal cord
  
6. What path will an incoming stimulus follow?
  - a. Spinal cord to sensory neuron to brain
  - b. Brain to sensory neuron to spinal cord
  - c. Sensory neuron to spinal cord to brain