



## Assessment 2 Instructions: Homework: Neuromuscular Lab

The lab will focus on the patients' eyes as an indicator of neuromuscular fitness.

### Neuromuscular Control in the Body

As you have already learned, the nervous system works closely with all body systems but is considered part of the infrastructure in the human body. The first aspect of the nervous system to consider is the anatomy of the nerve cell and how electrical signals travel along the axon of the cell. This is a good place to start because it illustrates generally how all nerves work. The nervous system is specialized, in that there are different types of nerves. For example, some nerves carry signals to the brain while others carry messages from the brain. Some nerves control voluntary action and others are strictly involuntary.

Special senses utilize organs that receive signals such as light, sound, touch, taste, and smell. For each of the five senses, receptor cells pick up a signal (for example, light), and undergo a transformation in response to the signal. The transformed molecules within the receptor cell cause an electrical impulse to be generated and it is passed along the nervous system to the brain for interpretation.

In this unit, you will examine the role of yearly physicals and test results that focus on neuromuscular fitness.

### Overview

The Neuromuscular Lab focuses on three friends of Tanya who are getting their yearly physical, including an eye exam and reflex test. It will have you go through the process of conducting the eye exams from an optometrist's point of view.

Since the eyes are the receptors of light and a multitude of other information, this lab will focus on the patients' eyes as an indicator of neuromuscular fitness. There are many diseases of the eye that can impact overall health, such as those mentioned in the MedlinePlus website article, "Eye Diseases," listed in the Resources.

- [Neuromuscular Lab](#).

### Instructions

Remember the following as you go through the lab:

- Complete the assessment at the end of the lab. To do this, fill out the items requested within the lab, download that document or documents to your computer, and save it. You must attach the documents to the assignment and then submit the assignment.
- Make sure that you read the Homework: Neuromuscular Lab Scoring Guide prior to submitting your document to ensure you have met all of the expectations for this assignment.
- It is recommended to review the scoring guide prior to downloading your document or documents to your computer, since all work must be completed within the lab.

## Competencies Measured

By successfully completing this assignment, you will demonstrate your proficiency in the following course competencies and assessment criteria:

- Competency 1: Describe the organization of the human body.
  - Explain the importance of a yearly eye exam.
  - Explain why doctors measure reflexes during the diagnostic exam.
  - Evaluate symptoms and results of patient 1 in a lab scenario.
  - Evaluate symptoms and results of patient 2 in a lab scenario.
  - Evaluate symptoms and results of patient 3 in a lab scenario.



### SCORING GUIDE

Use the scoring guide to understand how your assessment will be evaluated.

[VIEW SCORING GUIDE](#) 