



Human Body Systems

Virtual Learning

9-12th PLTW[®] HBS

PLTW[®] 4.2.6 You've Got Nerve

April 16, 2020



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Lesson: April 16, 2020

Objective/Learning Target:

Students will be able to describe the differences between afferent and efferent nerves, draw the path of the ulnar and radial nerves in the arm, and describe the symptoms and treatments for carpal tunnel syndrome. (*Reference: PLTW[®] 4.2.6 You've Got Nerve*)



Let's Get Started/Warm Up Activities:

Watch Warm Up Videos:

- [Two-Minute Neuroscience: The Neuron](#)
- [Nerve Cells Review: Structure, Function & Types](#)



Lesson/Activity:

Watch Video:

[Difference Between Afferent and Efferent Nerves](#)

Activity #1: In your notebook or on a piece of paper, describe the difference between afferent and efferent nerves. Draw a picture to help you remember.



Lesson/Activity continued:

Activity #2: Draw a rough sketch of the [upper torso](#) of the human body. Using two different colors, label the following on your graphic organizer:

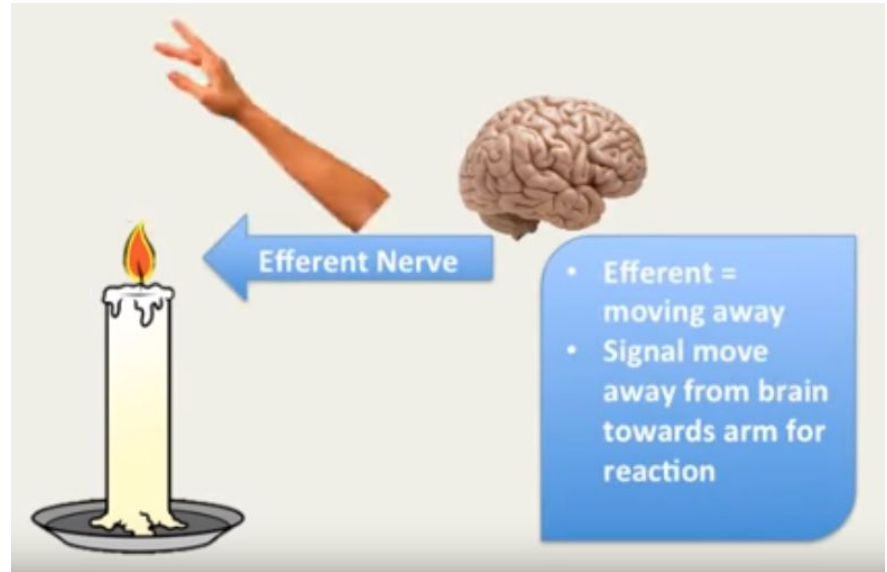
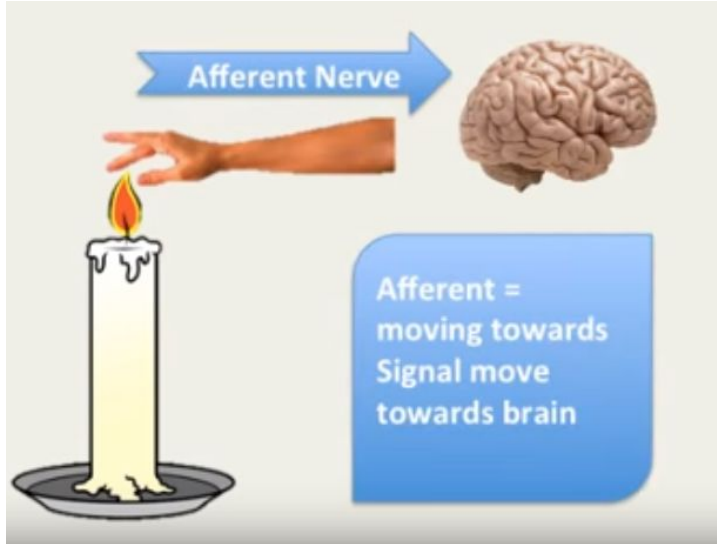
- Ulnar nerve: Click [HERE](#) to view the path of this nerve.
- Radial nerve: Click [HERE](#) to view the path of this nerve.

Activity #3: Click [HERE](#) to watch the video about carpal tunnel syndrome. Take good notes over the following:

- Where is the carpal tunnel nerve located? Draw a diagram.
- What causes carpal tunnel syndrome?
- What are the symptoms of carpal tunnel syndrome?
- What are the treatments of carpal tunnel syndrome?

Lesson/Activity Answers:

Activity #1 Answers: Click [HERE](#) or see answers below.





Lesson/Activity Answers:

Activity #2 Answers:

- Ulnar nerve: Click [HERE](#) to view the path of this nerve.
- Radial nerve: Click [HERE](#) to view the path of this nerve.

Activity #3 Answers:

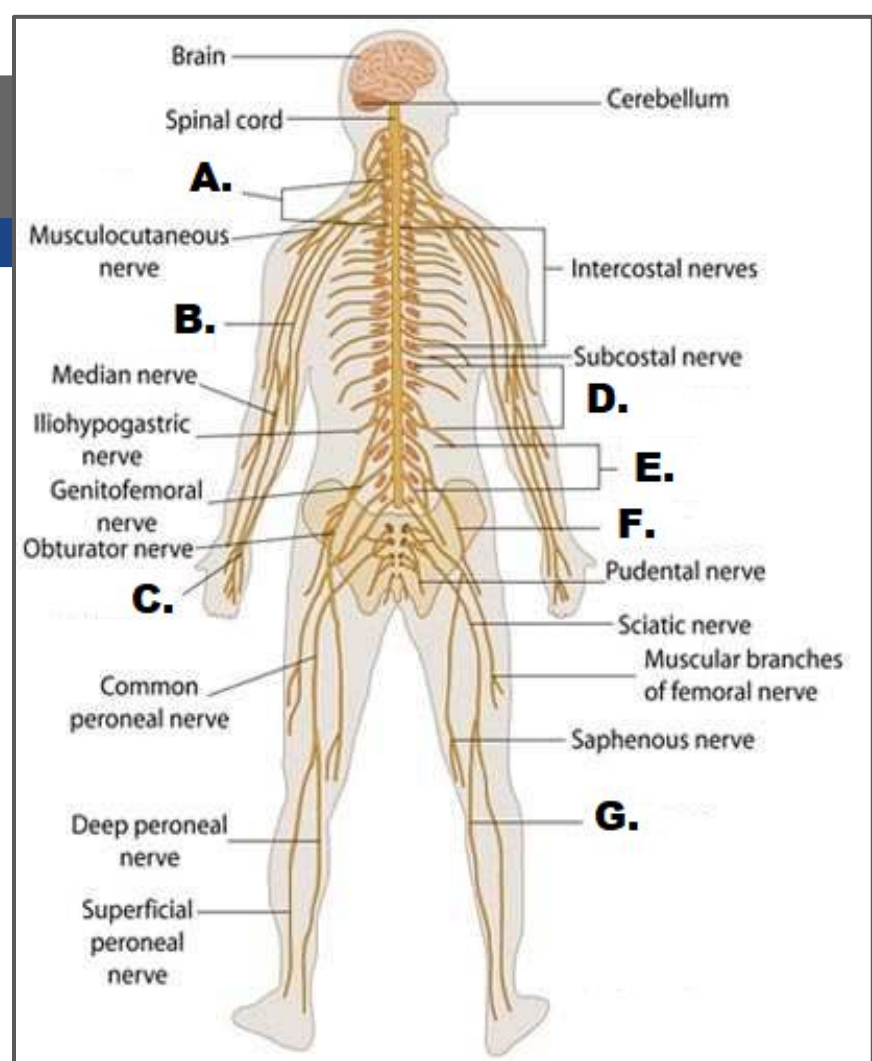
- Click [HERE](#) to see the causes, symptoms and treatments of carpal tunnel syndrome.

Practice:

Practice Activity:

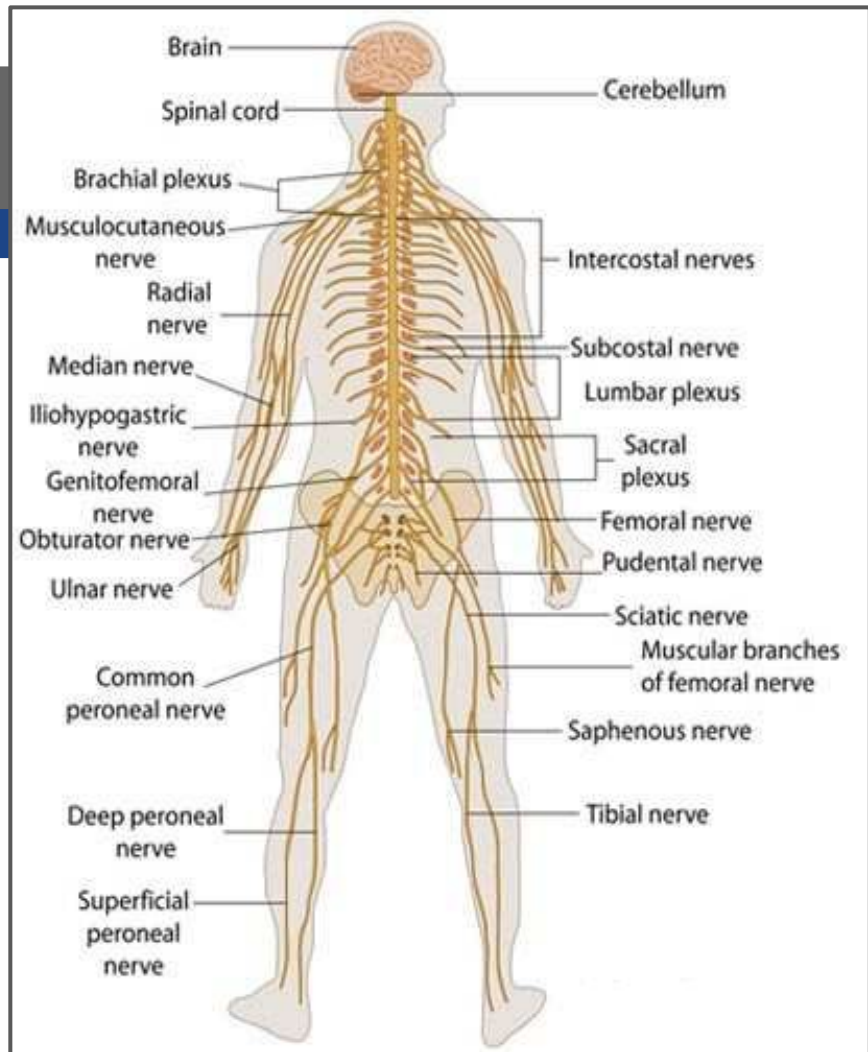
As you observed in the lesson activity, some nerves are named due to their respective locations in the body.

In your notebook or on your piece of paper, write the name of the nerves found at A-G on the diagram at the right. Use your previous anatomy knowledge to make good guesses! Note: Add the term “plexus” for non-singular, branching or networks of nerves.



Answer(s):

Practice Activity Answer:
 See the diagram on the right for answers to the practice activity.





Additional Practice and/or Resources:

Learn More:

[HBS 4.2.6 You've Got Nerve Flashcards](#)

Test your knowledge by clicking on the link above.

[Brachial Plexus Injury](#)

The brachial plexus is the network of nerves that sends signals from your spinal cord to your shoulder, arm and hand. Read this article to learn what happens when injured.

[Paralyzed from the Neck Down: Julian's Story](#)

Have you ever wondered how people become paralyzed? In this video, watch how Julian's life changed dramatically the moment a diving accident paralyzed him from the neck down.