

Health Science 20 – Nervous System Project

Work alone or with a partner to research one of the following topics and present your research to the class. Special permission may be granted to a group of 3 but you then must do 1 topic plus a disease. Your presentation can be in the form of a PowerPoint or a Prezi.

- Keep in mind this is a **20 Level Science Course**. The expectation is that your PowerPoint be very thorough and professional looking. Your topic/concept must be well researched, clearly explained and include **many** relevant examples.
- Accurate content, clear and audible Presentation.
 - Aim for **20 slides minimum**. Organized with headings and logical flow of content.
 - Limited word count (20 word max per slides) and **minimum font size of 28**.
 - Maximum of 2 **large** pictures per slide.
 - **MAKE REFERENCE OR POINT TO AND EXPLAIN EVERY PICTURE/DIAGRAM YOU INCLUDE**. Take the time to explain what we are seeing and why it is helpful in understanding your topic/concept. If you don't understand the picture/diagram then see me beforehand or don't include them.
 - Length: 4-9 minutes (**Rehearse and time as you will be stopped if you go over**). Know how to pronounce ALL words. Do not use words you do not know the meaning of.
 - No embedded videos.
 - The last slide should include sources cited.
 - Prepare a script that you can read that matches the slides (you do not hand this in).
 - Email or share your presentation to me **BEFORE** the class presentation d.wickenheiser@rcsd.ca
 - Print off all sheets **before** the day of the presentations. You **will not** be able to log on to my computer and **will not** be given time to run to the library to print things off.
 - The order of the presentations will be random. If your group is called and you are not ready or it is not emailed or shared with me you will be automatically docked 15 percent.

Topics

Group 1: Central and Peripheral Nervous Systems

Explain the differences and similarities between the CNS and the PNS.

What is each comprised of?

How do they work? What do they control? (General overview of each)

Interesting FYI's about them.

How it is typically damaged and what specific functions are lost/impaired as a result of that damage.

Diseases that affect them including prevention and a variety of treatments if applicable.

Include as many pictures as possible to enhance your presentation.

Group 2: Autonomic vs Somatic Nervous System

Explain the differences and similarities between Autonomic vs Somatic Nervous System.

What is each comprised of?

How do they work?

Interesting FYI's about them.

How it is typically damaged and what specific functions are lost/impaired as a result of that damage.

Diseases that affect them including prevention and a variety of treatments if applicable.

Include as many pictures as possible to enhance your presentation.

Group 3: Neurons and Action Potential

Explain the different types of neurons and provide a detailed anatomy of a neuron.

How it works. The details of an action potential.

Interesting FYI's about them.

How it is typically damaged and what specific functions are lost/impaired as a result of that damage.

Diseases that affect them including prevention and a variety of treatments if applicable.

How various narcotics and drugs affect them?

Include as many pictures as possible to enhance your presentation.

Incorporate a classroom model into your presentation if available.

Sensory Systems

What is each comprised of? The anatomy of the organ system.

A detailed explanation of how it works?

Interesting FYI's about them.

How it is typically damaged and what specific functions are lost/impaired as a result of that damage.

Diseases and disorders that affect them including prevention and a variety of treatments if applicable.

Include as many pictures as possible to enhance your presentation.

Incorporate a classroom model into your presentation if available.

Group 4: Taste

Group 5: Smell

Group 6: Vision

Group 7: Hearing

Group 8: Touch and Pain

Group 9: Cerebrum

Explain the detailed anatomy.

Explain the basic function and role.

Explain and diagram the different regions and what they are responsible for.

Interesting FYI's about it.

How it is typically damaged and what specific functions are lost/impaired as a result of that damage.

Diseases that affect them including prevention and a variety of treatments if applicable.

How various narcotics and drugs affect them?

Include as many pictures as possible to enhance your presentation.

Incorporate a classroom model into your presentation if available.

Group 10: Cerebellum

Explain the detailed anatomy.

Explain the basic function and role.

Explain and diagram the different regions and what they are responsible for.

Interesting FYI's about it.

How it is typically damaged and what specific functions are lost/impaired as a result of that damage.

Diseases that affect them including prevention and a variety of treatments if applicable.

How various narcotics and drugs affect them?

Include as many pictures as possible to enhance your presentation.

Incorporate a classroom model into your presentation if available.

Group 11: Brain Stem

Explain the detailed anatomy.

Explain the basic function and role.

Explain and diagram the different regions and what they are responsible for.

Interesting FYI's about it.

How it is typically damaged and what specific functions are lost/impaired as a result of that damage.

Diseases that affect them including prevention and a variety of treatments if applicable.

How various narcotics and drugs affect them?

Include as many pictures as possible to enhance your presentation.

Incorporate a classroom model into your presentation if available.

Group 12: A Disease of the Nervous System (must be approved by your teacher)

Detailed history. Specific causes. Comprehensive list of symptoms and how they change or increase as the disease progresses.

Details as to how it specifically impairs a particular function of the nervous system.

Treatments (traditional and non-traditional)

Prevention (traditional and non-traditional)

Include as many pictures as possible to enhance your presentation.

The following links to an alphabetical list of over 400 neurological disorders.

<https://www.disabled-world.com/health/neurology/disorders-list.php>