

Summer Transition Work Applied Science

Produce an illustrated report which:

* Assesses and explains how the coordination and normal functioning of the respiratory and cardiovascular systems can be impaired by two specific neurological diseases. Include detail of how nerve impulses are initiated, coordinated and transmitted in the sympathetic and parasympathetic nervous systems and how disease processes can disrupt these pathways. Consider the role of chemoreceptors and baroreceptors in detecting and responding to changes in the internal environment.

Your assessment and explanation of two diseases related to the cardiovascular and respiratory systems must explain the physiological processes that are affected by each disease so include:

* An illustrated flow chart describing the organisation and basic structure and function of the nervous system.

Sensory and motor neurons and their role in transmitting information for involuntary control of heart rate and ventilation must be described.

Your report must meet the below requirements:

P1.

Describe the organisation and function of the nervous system in relation to cardiovascular and respiratory requirements

M1. Explain how nervous impulses are initiated, transmitted and coordinated in the control of the cardiovascular and respiratory systems

D1. Explain how nervous impulses are initiated, transmitted and coordinated in the control of the cardiovascular and respiratory systems

The ANS is divided into the sympathetic and parasympathetic nervous systems. Any disorder that disrupts these systems can lead to the failure of normal respiratory and cardiac functions.

Useful websites

<http://www.cliffsnotes.com/study-guides/anatomy-and-physiology/the-respiratory-system/control-of-respiration>

<http://health.howstuffworks.com/human-body/systems/respiratory/lung3.htm>

<http://www.livescience.com/22665-nervous-system.html>

<http://www.cliffsnotes.com/study-guides/anatomy-and-physiology/nervous-tissue/transmission-of-nerve-impulses>

<http://www.medbullets.com/step1-cardiovascular/8022/baroreceptors-and-chemoreceptors>

<https://www.boundless.com/physiology/textbooks/boundless-anatomy-and-physiology-textbook/the-central-nervous-system-cns-12/parts-of-the-brain-stem-117/functions-of-the-brain-stem-637-6728/>

Do your own research too.