

Combined Science (TRILOGY) GCSE Biology

Success Criteria: Nervous system



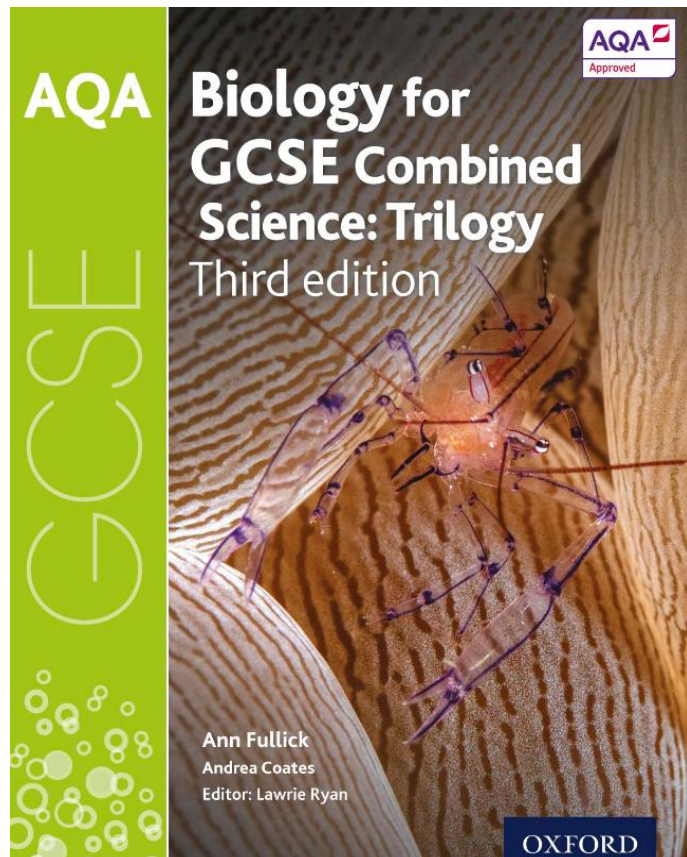
<i>I can...</i>	
Describe the function of the nervous system (how the body communicates with itself and also receives information from its surroundings.)	
State that sense organs contain receptor cells to detect specific stimuli (changes in the environment)	
Describe how upon detecting a stimulus receptor cells generate an electrical signal that can be transmitted along nerve cells (neurones)	
Identify the brain and spinal cord as the central nervous system CNS [also called coordinators]. CNS contains relay neurons.	
State that sensory neurones transmit impulses TO the CNS, motor neurones transmit impulses FROM the CNS.	
Describe the basic pathway of a nervous impulse [receptor -> coordinator -> effector}	
State that effectors carry out the response. They are either muscles (contracting to cause movement) or glands (that secrete chemicals/hormone)	
Explain the purpose of reflex actions (rapid response to evade danger.)	
Describe the pathway of a reflex arc. Only 3 neurones involved. Uses closest coordinator (not necessarily the brain, and never the conscious part of the brain) for fastest response. [receptor>sensory neurone>relay neurone>motor neurone>effector]	
State that a synapse is a physical gap between two neurones.	
Describe how the electrical impulse is converted to a chemical (neurotransmitter) to be transmitted across the synapse. Neurotransmitter diffuses across the synapse and is detected by the next neurone generating a new electrical impulse.	
Practical skills: REACTION TIMES. Plan and carry out an investigation into the effect of a factor on human reaction time.	

AQA exam specification:

- 4.5.2.1- Structure and function of the human nervous system

Additional support:

Access the GCSE Biology digital textbook by logging on to www.kerboodle.com (*you have your own login details...ask any science teacher if you are unsure*). Read the relevant pages (see below).



Combined science GCSE textbook **Nervous System** Pages 132-140

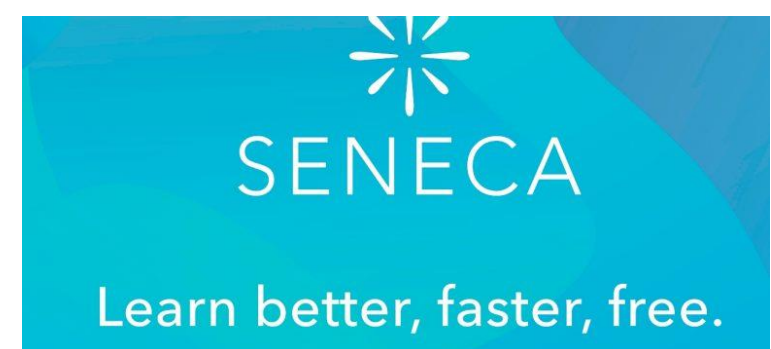
Write your own summary notes (bullet points of the key ideas /keywords list with definitions/ annotated diagrams/ mind-maps or flash cards) to go over the main content of the topic.

Attempt the textbook summary questions.



www.BBCbitesize.com has some great AQA GCSE revision resources too.

www.Senecalearning.com is a free online revision platform that is great for reviewing content too.



www.physicsandmathstutor.com has lots of practice exam style questions and mark schemes, grouped by topic, that you should try once you have revised the content.

Extension work/extra challenge:

Ask your teacher for extension task...

Pack 2 Topic 1- Alzheimer's Disease