

Sets (s): all students

YEAR 13

SUBJECT Biology LP2 (LD)

Knowledge Focus: Microbiology and the Nervous System



Ysgol Uwchradd
Prestatyn
High School

This half term : Skills, Knowledge and Understanding to be developed

You will continue learning about microbiology and carry out a specified practical using micro-organisms. You will also study the nervous system and understand how an impulse moves along a neurone and across a synapse.

Key Terms to be learned this half term:

Gram stain, gram positive and negative, aseptic technique, obligate anaerobe, facultative anaerobe, obligate aerobe, serial dilution, dilution factor, motor neurone, spinal cord, resting potential, nerve net, action potential, polarised, refractory period, saltatory conduction, neurotransmitter, organophosphorous insecticides.

<p>Week 1 and 2 Learning Objectives etc:</p> <p>Know how to grow bacteria under aseptic technique and identify different bacteria using gram staining</p> <p>Calculate numbers of bacteria in fresh and old milk using dilution plating.</p>		<p>Objective assessments:</p> <p>Calculations of bacterial numbers using dilution plating.</p>	<p>Homework:</p> <p>Complete exam question on microbiology.</p>
<p>Week 3 and 4 Learning Objectives etc:</p> <p>Learn the structure of a motor neurone and the spinal cord.</p> <p>Identify the parts of a reflex arc and their functions. State the features of a reflex arc.</p> <p>Compare mammalian nervous system with hydra nerve nets.</p>		<p>Objective assessments:</p> <p>Peer/ self-assess answers to past exam questions.</p>	<p>Homework:</p> <p>Past exam questions on the nervous system.</p>
<p>Week 5 and 6 Learning Objectives etc:</p> <p>Learn what happens inside an axon during resting potential and during an action potential.</p> <p>Understand factors that speed up the propagation of a nerve impulse.</p>	 <p>SA Test on topics studied this half term</p>	<p>Objective assessments:</p> <p>Analyse and interpret past exam questions on action potentials</p>	<p>Homework:</p> <p>Revise notes for an end of topic test on unit 3 topics studied this term.</p>
<p>Week 7</p> <p>Know what happens at a synapse. Describe how drugs and other substances can excite or inhibit synapses.</p>		<p>Objective assessments:</p> <p>Complete past exam questions on synapses.</p>	<p>Homework:</p>