

Sets (s): Double Award students

YEAR 11

SUBJECT Biology LP4

Knowledge Focus: Response and Regulation



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

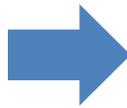
You will be studying how your nervous system and hormones respond to different internal and external stimuli. You will be able to describe how reflexes can prevent harm to your body and how hormones control glucose levels in your blood and your body temperature. Finally, you will learn how bacteria and viruses cause disease and how your body kills dangerous micro-organisms.

### Key Terms to be learned this half term:

Stimulus, receptor, reflex action, homeostasis, hormones, insulin, glycogen, glucose, diabetes, vasodilation, vasoconstriction, bacteria, viruses, fungi, pathogen, phagocytes, lymphocytes, antibodies, antitoxins, antigen, vaccination, antibiotics, resistant, side effects

#### Week 1 and 2 Learning Objectives etc:

- Describe the structure of the nervous system, including stimuli detected by sense organs.
- State the properties of reflex actions and compare them to other responses.
- SPECIFIED PRACTICAL:** Investigate factors affecting reaction time.



APP question on the nervous system

#### Objective assessments:

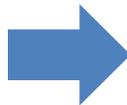
Identification of parts of the nervous system.  
Analysis of results from specified practical work.

#### Homework:

Complete the key word grid for this topic.

#### Week 3 and 4 Learning Objectives etc:

- State features of hormones and describe how hormones keep glucose levels constant in the body.
- Describe the symptoms, causes and treatments for diabetes.
- Label a section through the skin and describe how these features work together to maintain body temperature.



#### Objective assessments:

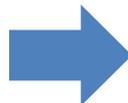
Explanation of control of glucose levels in blood using key word.

#### Homework:

Research the causes, symptoms and treatments for type 2 diabetes.

#### Week 5 and 6 Learning Objectives etc:

- Know the basic structures of bacteria and viruses. Describe ways that bacteria and viruses can be spread between people.
- Describe the ways that our bodies defend themselves against disease, including natural barriers, the role of white blood cells and how vaccinations protect us from disease.



SA Question on response/regulation

#### Objective assessments:

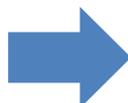
Answers to past exam questions.

#### Homework:

Revise nervous system and regulation of glucose for a test.

#### Week 7 Learning Objectives etc:

- Describe how antibiotics can be used to kill bacteria.
- Describe how drugs are tested to make sure they are safe to use.



#### Objective assessments:

Answers to past exam questions.

#### Homework:

Revision for external exams.