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| **What will we be learning?**  **GCSE Unit: Homeostasis & Response** | **Why this? Why now?**  **GCSE Course:**  AQA Separate Biology  **What other GCSE Science units does this unit relate to?**  **Cells** – 4.1.1.3 cell specialisation  **Organisation** – 4.2.3 plant systems  **Bioenergetics** – 4.4.1 photosynthesis, 4.4.2 respiration  **Inheritance, Variation and Evolution** – 4.6.1 reproduction  **Forces** – 6.5.4.3 forces and braking, reaction times | **Key Words:**  homeostasis  negative feedback  receptor  effector  muscles  glands  spinal cord  sensory neurone  relay neurone  motor neurone  stimuli  impulse  synapse  neurotransmitter  reaction time  reflex arc  response  pituitary gland  thyroid  adrenaline  pancreas  diabetes  oestrogen  progesterone  LH FSH  testosterone  IVF  accommodation  retina  iris  ciliary muscles  suspensory ligaments  optic nerve  myopia  hyperopia  cerebral cortex  cerebellum  medulla  vasoconstriction/vasodilation  kidney tubules  ADH  tropisms  auxin  gibberellin  ethene |
| **What will we learn?**  **Useful equations/formulae/maths skills for this unit:**  Extract and interpret data from graphs  Plot data onto graphs  **Misconceptions in this topic**  Hormones are only involved in puberty and reproduction - no, hormones control many different things in your body including blood glucose levels, water content, sleep cycles  People become diabetic when they are overweight – this may be true for some Type 2 diabetics, but this is not the cause of people who have Type 1 diabetes  All actions involve the brain – reflex actions bypass the brain so that they can occur very rapidly, this is important as they usually defend your body against harm | |
| **What opportunities are there for wider study?**  **If you are interested in this unit, what careers does it relate to?**  neurologist, cardiologist, doctor, nurse, paramedic, NHS careers, physiotherapist, psychologist, midwife, care worker, research scientist, pharmacologist, chiropractor, endocrinologist, embryologist, reproductive medicine  **Collins Revision guide relevant pages for this unit:**  P.46-55, 70-73, 100-103 | |
| **How will I be assessed?**  **Deep Marking Task Title for this unit:** Reaction Times RP write up | |