

Biology 4.25 Homeostasis

Content	RAG
Define homeostasis and explain why it is important.	
Give examples of factors which must be controlled in the human body.	
Describe the structure, function and adaptations of the nervous system	
Describe a reflex arc and explain why it is important.	
Identify the main parts of the brain.	
HT – explain some difficulties in investigating brain function	
Identify structures of the eye and explain how they are adapted to their function	
Describe accommodation of the eye and common eye defects.	
Describe thermoregulation (HT – explain how mechanisms lower/raise body temperature)	
Describe the role of hormones and the endocrine system in homeostasis.	
Identify the position of the main organs of the endocrine system in the human body.	
Describe the control of blood glucose concentration.	
Describe and compare type 1 and type 2 diabetes.	
HT only – describe the role of glucagon in the control of blood glucose.	
Describe the control of water levels and nitrogen levels.	
Describe the role of the kidneys in maintenance of water balance.	
Describe the role of hormones in human reproduction including the menstrual cycle.	
Evaluate different methods of contraception (hormonal and non-hormonal)	
Explain the use of hormones in fertility treatments	
Explain negative feedback mechanisms including adrenaline and thyroxine	
Describe the role of plant hormones in coordination and control, and uses in horticulture and agriculture	