High Tunstall College of Science Curriculum Intent

Subject: Biology (Separate) Year: 11

Thread 4—Homeostasis and Response



	Biology Thread 4		Progress		
Topic	Key ideas	R	Α	G	
Homeo-	I can describe the roles of the nervous and endocrine system				
stasis and Response	I can describe the role of hormones in the control of blood sugar, and can explain how diabetes is treated				
	I can explain how nitrogen and water levels are maintained				
	I can explain the structure and function of the kidneys, and how kidney disease is treated				
	I can describe the role of hormones in human reproduction				
	I can evaluate the different hormonal and non hormonal forms of contraception				
	I can explain the use of hormones in modern reproductive technologies to treat infertility				
	I can explain the roles of thyroxine and adrenaline in the body				
	I can describe how plant hormones can co-ordinate and control growth and responses to light and gravity				
	I can carry out a required practical to investigate the effect of light on plant shoots				
	I can describe the effects of some plant hormones and the different ways people use plant hormones to control plant growth.				

Lesson	Learning Focus	Assessment	Key Words	
1	The nervous and endocrine system	Self assessment of confi-	Hormone, nervous sys-	
		dence	tem	
2	Controlling blood glucose	Completion of exam ques-	Insulin, hormone, glu-	
		tions	cose, pancreas	
3	Diabetes	Completion of exam ques-	Insulin, diabetes, pan-	
		tions	creas	
4	Maintaining nitrogen and water	Completion of knowledge	Excretion, water, kid-	
		checks	neys	
5	The kidneys and ADH	Completion of differentiated	Kidneys, ADH, Urea	
		tasks		
6	Treating kidney disease	Completion of exam ques-	Kidney, transplant, dial-	
		tions	ysis	
7	Hormones in human reproduction	Exam questions	Hormones,	
			Ovulation	
8	Contraception	Exam questions and thinking	Contraception	
		tasks		
9	Hormones and infertility	Summative questions	Fertility,	
			Fertilisation	
10	Negative feedback	Summative questions	Feedback	
11	Control and coordination	Summative questions	Hormones, growth, aux-	
			in, phototrophism	
12	Seed growth (RPA)	Practical activity		
13	Use of plant hormones		Auxins	