AQA Biology		Covered in Lesson	Diagnosis			Revised		
B4.5 Homeostasis and response			R	A	G	1	2	3
4.5.1 Homeostasis	Describe what homeostasis is and why it is important stating specific examples from the human body							
	Describe the common features of all control systems							
4.5.2 The human nervous system	State the function of the nervous system and name its important components							
	Describe how information passes through the nervous system							
	Describe what happens in a reflex action and why reflex actions are important							
	Explain how features of the nervous system are adapted to their function, including a reflex arc (inc all types of neurone and the synapse)							
	Required practical 7: plan and carry out an investigation into the effect of a factor on human reaction time							
	Bio ONLY: State the function of the brain and how it is structured, including identifying he cerebral cortex, cerebellum and medulla on a diagram of the brain							
	Bio ONLY: Describe the functions of different regions of the brain							
	Bio & HT ONLY: Explain how neuroscientists have been able to map regions of the brain to particular functions							
	Bio ONLY: State the function of the eye and how it is structured, including names of specific parts							
	Bio ONLY: Describe the functions of different parts of the eye, including relating structure to function							
	Bio ONLY: Describe what accommodation is, and how it is carried out							
	Bio ONLY: Explain what myopia and hyperopia are and how they are treated, including interpreting ray diagrams							
	Bio ONLY: Describe how body temperature is monitored and controlled							
	Bio & HT ONLY: Explain how the body's responses act to raise or lower temperature in a given context							
4.5.3 Hormonal coordination in humans	Describe the endocrine system, including the location of the pituitary, pancreas, thyroid, adrenal gland, ovary and testis and the role of hormones							
	State that blood glucose concentration is monitored and controlled by the pancreas							
	Describe the body's response when blood glucose concentration is too high							
	Explain what type 1 and type 2 diabetes are and how they are treated							
	HT ONLY: Describe the body's response when blood glucose concentration is too low							
	HT ONLY: Explain how glucagon interacts with insulin to control blood glucose levels in the body							
	Describe how water, ions and urea are lost from the body							
	Describe the consequences of losing or gaining too much water for body cells							
	HT ONLY: Recall that protein digestion leads to excess amino acids inside the body and describe what happens to these							
	Describe how the kidneys produce urine							
	HT ONLY: Describe the effect of ADH on the permeability of the kidney tubules and explain how the water level in the body is controlled by ADH							
	Describe how kidney failure can be treated by organ transplant or dialysis and recall the basic principles of dialysis							
	Describe what happens at puberty in males and females, inc knowledge of reproductive hormones							
	Describe the roles of the hormones involved in the menstrual cycle (FSH, LH and oestrogen)							
	HT ONLY: Explain how the different hormones interact to control the menstrual cycle and ovulation							
	Describe how fertility can be controlled by hormonal and non-hormonal methods of contraception (giving specific examples from the spec)							
	HT ONLY: Explain how hormones are used to treat infertility, inc the steps in IVF							
	HT ONLY: Evaluate the risks and benefits of fertility treatments							
	HT ONLY: Describe the functions of adrenaline and thyroxine in the body, and recall where they are produced							
	HT ONLY: Explain the roles of thyroxine and adrenaline in the body as negative feedback systems							
4.5.4 Plant hormones	*Bio ONLY: Describe hormone-linked plant responses, to include phototropism and gravitropism and the role of auxin*							
	Bio & HT ONLY: Describe the functions of gibberellins and ethene in plants							
	Required practical 8: investigate the effect of light or gravity on the growth of newly germinated seedling							
	HT ONLY: Explain the use of plant growth hormones are used in agriculture and horticulture (auxins, ethene and gibberellins)							