

	AQA TRILOGY Biology (8464) from 2016 Topic T4.5 Homeostasis and response			-
Topic	Student Checklist	R	Α	G
4.5.1 Homeostasis	Describe what homeostasis is and why it is important stating specific examples from the human body			
4. Home	Describe the common features of all control systems			
5 -	State the function of the nervous system and name its important components			
1.5.2 The human nervous system	Describe how information passes through the nervous system			
hui syst	Describe what happens in a reflex action and why reflex actions are important			
he us s	Explain how features of the nervous system are adapted to their function, including a reflex arc (inc all			
Z Z	types of neurone and the synapse)			
4.5.2 The human nervous system	Required practical 7: plan and carry out an investigation into the effect of a factor on human reaction time			
	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			
s	HT ONLY: Explain how glucagon interacts with insulin to control blood glucose levels in the body			
nar	Describe how water, ions and urea are lost from the body			
Jur	Describe the consequences of losing or gaining too much water for body cells			
on in l	HT ONLY: Recall that protein digestion leads to excess amino acids inside the body and describe what happens to these			
lati	Describe how the kidneys produce urine			
oordir	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			
4.5.3 Hormonal coordination in humans	Describe how kidney failure can be treated by organ transplant or dialysis and recall the basic principles of dialysis			
Ĕ	Describe what happens at puberty in males and females, inc knowledge of reproductive hormones			
РH	Describe the roles of the hormones involved in the menstrual cycle (FSH, LH and oestrogen)			
5.3	HT ONLY: Explain how the different hormones interact to control the menstrual cycle and ovulation			
4	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	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)			

Personalised Learning Checklists AQA Trilogy Biology Paper 2



Topic Student Checklist R A G Describe features of sexual and asexual reproduction I I I I Describe what happens at fertilisation I I I I I Describe the structure of DNA and its role in storing genetic information inside the cell I </th <th></th> <th>AQA TRILOGY Biology (8464) from 2016 Topic T4.6 Inheritance, variation and evolution</th> <th></th> <th></th> <th></th>		AQA TRILOGY Biology (8464) from 2016 Topic T4.6 Inheritance, variation and evolution			
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		domain system			

Personalised Learning Checklists AQA Trilogy Biology Paper 2



	AQA TRILOGY Biology (8464) from 2016 Topic T4.7 Ecology			
Торіс	Student Checklist	R	Α	G
, pu	Recall what an ecosystem is			
4.7.1 Adaptations, interdependence and competition	Describe which resources animals and plants compete for, and why they do this			
ati. enc tioi	Explain the terms 'interdependence' and 'stable community'			
.1 Adaptatio dependence competition	Name some abiotic and biotic factors that affect communities			
Ad epe	Explain how a change in an abiotic or biotic factor might affect a community			
7.1 erde co	Describe structural, behavioural and functional adaptations of organisms			
4. inte	Describe what an extremophile is			
4.7.2 Organisation of an ecosystem	Represent the feeding relationships within a community using a food chain and describe these relationships			
ion m	Explain how and why ecologists use quadrats and transects			
rganisatio ecosystem	Describe and interpret predator-prey cycles			
gan	Required practical 9: measure the population size of a common species in a habitat. Use sampling to			
Org	investigate the effect of one factor on distribution			
.2	Describe the processes involved in the carbon cycle			
4.7	Describe the processes involved in the water cycle			
u a	Describe what biodiversity is, why it is important, and how human activities affect it			
huma	Describe the impact of human population growth and increased living standards on resource use and waste production			
: of ms	Explain how pollution can occur, and the impacts of pollution			
odiversity and the effect of interaction on ecosystems	Describe how humans reduce the amount of land available for other animals and plants			
eff osy:	Explain the consequences of peat bog destruction			
the	Describe what deforestation is and why it has occurred in tropical areas			
no	Explain the consequences of deforestation			
y a ion	Describe how the composition of the atmosphere is changing, and the impact of this on global			
rsit acti	warming			
ive tera	Describe some biological consequences of global warming			
4.7.3 Biodiversity and the effect of human interaction on ecosystems	Describe both positive and negative human interactions in an ecosystem and explain their impact on biodiversity			
4.7.3	Describe programmes that aim to reduce the negative effects of humans on ecosystems and biodiversity			