

# Review B1.2 Nerves and hormones

<i>Can you...?</i>	😊	😐	☹️
<b>B1.2.1 The nervous system</b>			
State that the nervous system enables humans to react to their surroundings and coordinate their behaviour			
Give examples of receptors and the stimuli (changes to the environment) that they detect, including those in the eyes, ears, tongue and skin			
Identify the main parts of light receptor cells (nucleus, cytoplasm and cell membrane)			
Describe how information from receptors is carried to the brain, which coordinates the response			
Describe the roles of sensory neurones, relay neurones, motor neurones, synapses and effectors in a reflex action, and state that reflex actions are automatic and rapid			
<b>B1.2.2 Control in the human body</b>			
Explain why the following internal conditions need to be controlled: the water content of the body; the ion content of the body; temperature; and blood sugar levels			
State that hormones coordinate many processes in the body			
Identify where hormones are made and how they are transported to their target organs			
Describe how hormones released by the pituitary gland and by the ovaries control the monthly release of an egg from a woman's ovaries and the changes in the thickness of the lining of the womb			
Describe the roles of the following hormones in the menstrual cycle of a woman: follicle stimulating hormone (FSH, secreted by the pituitary gland), luteinising hormone (LH) and oestrogen (secreted by the ovaries)			
Describe how hormones that inhibit FSH production can be used in oral contraceptives			
Explain why birth-control pills no longer contain large amounts of oestrogen			
Describe how FSH and LH can be used in a 'fertility drug' to a woman whose FSH level is too low (e.g. in In Vitro Fertilisation, or IVF treatment)			
Outline the steps involved in IVF treatment			
Evaluate the benefits of, and the problems that may arise from, the use of hormones to control fertility, including IVF, given data to work from			
<b>B1.2.3 Control in plants</b>			
Describe how shoots and roots grow in response to light, moisture and gravity			
Explain the role of auxin, a plant hormone, in phototropism and gravitropism			
Describe how phototropism and gravitropism result from the unequal distribution of hormones causing unequal growth rates			
State that plant growth hormones are used in agriculture and horticulture as weed killers and as rooting hormones			
Evaluate the use of plant hormones in horticulture as weedkillers and to encourage the rooting of plant cuttings			