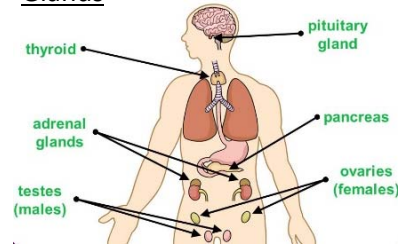


Biology 5: Homeostasis

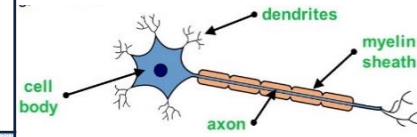
1	Homeostasis	<ul style="list-style-type: none"> ❑ Maintaining a constant internal environment ❑ Body temperature, blood glucose and blood water content are all regulated
2	Stimulus	<ul style="list-style-type: none"> ❑ A change in the environment
3	Effector	<ul style="list-style-type: none"> ❑ An organ that carries out a response (a muscle or a gland)
4	Hormone	<ul style="list-style-type: none"> ❑ A chemical messenger that travels in the bloodstream and causes a response over a wide area
5	Gland	<ul style="list-style-type: none"> ❑ An organ that releases hormones into the bloodstream (e.g. pituitary gland / pancreas)
6	Insulin	<ul style="list-style-type: none"> ❑ Released by the pancreas when blood glucose levels are too HIGH ❑ Causes glucose to be converted to glycogen
7	Glucagon	<ul style="list-style-type: none"> ❑ Released by the pancreas when blood glucose levels are too LOW ❑ Causes glycogen to be converted to glucose
8	Type 1 diabetes	<ul style="list-style-type: none"> ❑ A condition where the pancreas does not release insulin ❑ Controlled by insulin injections, dietary restrictions and exercise
9	Type 2 diabetes	<ul style="list-style-type: none"> ❑ A condition where body cells no longer respond to insulin ❑ Linked to obesity and genetics ❑ Controlled through dietary restrictions and exercise
10	Adrenaline	<ul style="list-style-type: none"> ❑ A hormone produced by the adrenal glands in times of fear or stress ❑ It increases the heart rate and boosts the delivery of oxygen and glucose to the brain and muscles, preparing the body for 'flight or fight'.
11	Thyroxine	<ul style="list-style-type: none"> ❑ A hormone released from the thyroid gland to control basal metabolic rate

12	FSH	<ul style="list-style-type: none"> ❑ A hormone released by the pituitary gland to control the menstrual cycle ❑ Causes eggs to mature in the ovary and stimulates the ovary to produce oestrogen
13	Oestrogen	<ul style="list-style-type: none"> ❑ A hormone released by the ovary to control the menstrual cycle ❑ Causes the uterus lining to thicken the stops the pituitary gland releasing FSH
14	LH	<ul style="list-style-type: none"> ❑ A hormone released by the pituitary gland to control the menstrual cycle ❑ Causes the ovary to release an egg into the oviduct
15	Progesterone	<ul style="list-style-type: none"> ❑ A hormone released by empty egg follicle to control the menstrual cycle ❑ Maintains the lining of the uterus and inhibits the release of FSH and LH
16	IVF	<ul style="list-style-type: none"> ❑ In Vitro Fertilisation ❑ Women are treated with FSH and LH, then eggs are collected ❑ Eggs are fertilised in the lab using a sample of sperm ❑ Embryos are surgically implanted into the mother
17	Neurone	<ul style="list-style-type: none"> ❑ A nerve cell; carries electrical messages ❑ Adaptations are dendrites (for connection to other nerve cells) and myelin sheath (insulates the nerve and speeds up electrical impulses)
18	Synapse	<ul style="list-style-type: none"> ❑ A gap between two neurones ❑ Messages are carried across by chemicals called neurotransmitters
19	Sensory neurone	<ul style="list-style-type: none"> ❑ A neurone that carries a message from a receptor to the central nervous system
20	Relay neurone	<ul style="list-style-type: none"> ❑ Part of a reflex arc, so only involved in involuntary actions (e.g. blink reflex / knee jerk reflex) ❑ Connects a sensory neurone to a motor neurone, bypassing the brain
21	Motor neurone	<ul style="list-style-type: none"> ❑ Connects the central nervous system to effectors

Glands



Neurone



Reflex arc

