

		R	A	G
1	Describe and explain structure and function of Endocrine system . <ul style="list-style-type: none"> - Understand the purpose of the system - Explain the role of the pancreas - the action of insulin - action of glucagon - role of the kidney - action of ADH. 			
2	Describe and explain structure and function of Nervous system . <ul style="list-style-type: none"> - Understand the purpose of the system. - Describe a nerve cell structure and its functions. - Describe voluntary and involuntary responses. - Label a Nerve and know the function of its parts. - Describe how a nerve impulse is transmitted along an axon - Label a diagram of a synapse and be able to explain the role of the following in synaptic transmission: pre and post-synaptic membranes, synaptic vesicles, neurotransmitters (e.g. acetylcholine), synaptic cleft, Ca²⁺ channels; receptors on post-synaptic membrane. - Describe the effects of chemicals on synaptic transmission 			
3	Describe and Explain the structure and function of Musculoskeletal System . <ul style="list-style-type: none"> - Understand the purpose of the system in support and locomotion. - Describe Sliding filament theory. 			
4	Describe and Explain the structure and function of Digestive System . <ul style="list-style-type: none"> - Understand the purpose of the system. - Describe how the organs of the system are involved in chemical and mechanical digestion. - Describe bile production. - Describe metabolism of glucose (Pancreas and Liver in glucose regulation – Link to Endocrine system). - Understand the site and mechanism of final digestion and absorption of dipeptides, disaccharides, fatty acids and glycerol. 			
5	Describe and Explain the structure and function of Cardiovascular System . <ul style="list-style-type: none"> - Understand the purpose of the system. - Describe and explain the pressure changes in the heart and blood vessels during the circulation of the blood. - Understand the myogenic nature of cardiac muscle and the transfer of electrical impulses through the heart during a heartbeat. - Describe how heartbeat is controlled and coordinated (link to unit 2 here) - State how Carbon Dioxide and Oxygen are transported in the blood. 			

6	<p>Describe and Explain the structure and function of Lymphatic System.</p> <ul style="list-style-type: none"> - Explain how the Lymphatic system works - Explain the formation of tissue fluid. - Explain the formation of lymph. 			
7	<p>Describe and Explain the structure and function of Respiratory System.</p> <ul style="list-style-type: none"> - Understand the purpose of the respiratory system in humans - Describe the processes of inspiration and expiration, including the role of the intercostal muscles. - Understand how breathing rate is increased or decreased. - Know the role of pulmonary surfactant. 			
8	<p>Describe and Explain the structure and function of Integumentary system.</p> <ul style="list-style-type: none"> - Know the purpose of the skin to include thermoregulation, protection against foreign bodies, mechanical damage and solar radiation, energy storage and production of vitamin D. - Know the roles of sweating, hairs, adipose layer, blood supply in thermoregulation and the role of the hypothalamus in monitoring of blood temperature. 			
9	<p>Describe and Explain the structure and function of Immune System.</p> <ul style="list-style-type: none"> - Know the purpose of the system. - Describe the natural barriers to reduce risk of infection. - Explain the Humoral responses to infection. - Explain cell mediated responses to infection. - Understand the differences between the primary and secondary immune responses. 			