IB Biology		Per 1				5/4-5/8
	Unit/Theme	Objectives	Activities	Homework	Closure/Review	Assessment
M O N	No Class	No Class	No Class	No Class	No Class	No Class
T U E S	6.5 Neurons and Synapses	• Neurons transmit electrical impulses. • The myelination of nerve fibres allows for saltatory conduction. • Neurons pump sodium and potassium ions across their membranes to generate a resting potential. • An action potential consists of depolarization and repolarization of the neuron. • Nerve impulses are action potentials propagated along the axons of neurons. • Propagation of nerve impulses is the result of local currents that cause each successive part of the axon to reach the threshold potential. • Synapses are junctions between neurons and between neurons and receptor or effector cells. • When presynaptic neurons are depolarized they release a neurotransmitter into the synapse. • A nerve impulse is only initiated if the threshold potential is reached.	• Turn in DBQ 312, 318 • Notes/Lecture: 6.5 Neurons and Synapses • Practical 6: Lung Capacity Lab	• Read 6.2, 6.3, 6.6 • Lung Capacity Lab Due • Review for exams	• Review for exam	• Practical 6: Ventilation Experiments
W E D	No Class	No Class	No Class	No Class	No Class	No Class
T H U R S	6.2 The Blood System	• Arteries convey blood at high pressure from the ventricles to the tissues of the body. Arteries have muscle cells and elastic fibers in their walls. • The muscle and elastic fibres assist in maintaining blood pressure between pump cycles. • Blood flows through tissues in capillaries. • Capillaries have permeable walls that allow exchange of materials between cells in the tissue and the blood in the capillary. • Veins collect blood at low pressure from the tissues of the body and return it to the atria of the heart. • Valves in veins and the heart ensure circulation of blood by preventing backflow. • There is a separate circulation for the lungs. • The heart beat is initiated by a group of specialized muscle cells in the right atrium called the sinoatrial node. • The sinoatrial node acts as a pacemaker. • The sinoatrial node sends out an electrical signal that stimulates contraction as it is propagated through the walls of the atria and then the walls of the ventricles. • The heart rate can be increased or decreased by impulses brought to the heart through two nerves from the medulla of the brain. • Epinephrine increases the heart rate to prepare for vigorous physical activity.	• Turn in Lung Capacity Lab • Notes/Lecture: 6.2 The Blood System • Lab: Cardiovascular System *Identify and sketch an artery, capillary, and vein from a slide. *Diagram and label a model of a heart showing valves, chambers and connected arteris and veins. *Color code hear with Blue for deoxygenated blood and red for oxygenated blood *Use arrows to show direction of blood flow.	• Read 6.3, 6.6 • Review for Exams	• Flow of blood through the heart	• Practical 6 Ventilation Experiments
F R I	No Class	No Class	No Class	No Class	No Class	No Class