

Honors Biology – Unit 7 Objectives

1. Vocabulary: open/closed circulatory system, atrium, ventricle, artery, capillary, vein, valve, cardiac cycle, vena cava, aorta, pulmonary arteries & veins, bicuspid & tricuspid valves, pulmonary & aortic semi-lunar valves, pacemaker, systolic & diastolic blood pressure, erythrocyte, leukocyte, hemoglobin, plasma, lymph, coagulate, platelet, clotting factor, fibrinogen, fibrin, hemophilia, cuticle, lignin, vascular tissue, xylem, phloem, cohesion-tension hypothesis, cohesion, adhesion, pressure-flow hypothesis, source, and sink.
2. Compare and evaluate the three types of circulatory system plans found in vertebrates.
3. Label a diagram of a human heart (including valves and attached vessels) and indicate the order of blood flow (including body regions) if given a starting location in the heart (ex: right atrium, pulmonary veins, semi-lunar valve, etc.).
4. Compare the structure of arteries, veins, and capillaries. Relate these structural characteristics to their function. Identify them correctly given a prepared, positioned, focused microscope & slide.
5. Explain how blood pressure is measured in terms of equipment use and events in the heart and brachial artery.
6. Describe events that lead to blood coagulation.
7. List the four main parts of blood and give their function(s).
8. Explain the significance of four adaptations that allowed plants to colonize the land. (Which adaptations are possessed by vascular & non-vascular plants? Limitations?)
9. Differentiate between xylem and phloem (what they transport, in what direction(s), and methods used). Identify them correctly given a prepared, positioned, focused microscope & slide.