Topic/Objectives: 11-2 WBCs and Platelets; (1) Distinguish among the five types of white blood cells, and give the functions of each type; (2) Describe the functions of each of the major components of blood plasma.	**Name:** **Date:** **Period:**

Essential Question: What are the major components of blood and their functions?

Questions:	**Notes:**
	White blood cells (_____) help defend the body against disease. They are formed from _____. Five types of white blood cells are in circulating blood and are distinguished by size, _____ appearance of the cytoplasm, shape of the nucleus, and staining characteristics. The types of white blood cells are the _____ (neutrophils, eosinophils, and basophils) and the _____ (monocytes and lymphocytes). _____ and colony-stimulating factors (CSFs) are necessary for differentiation of WBCs from hemocytoblasts in the red bone marrow.
	Functions of WBCs ◦ Leukocytes play a key role in _____ response, removal of damaged particles and debris, and blood clotting. ◦ Leukocytes can also squeeze between cells lining walls of blood vessels by _____ to attack bacteria and debris. WBC Counts ◦ Normally a cubic millimeter of blood contains _____ to _____ white blood cells. ◦ A differential white blood cell count can help pinpoint the nature of an _____, indicating whether it is caused by bacteria or viruses. ◦ _____ occurs after an infection when excess numbers of leukocytes are present; leukopenia occurs from a variety of conditions that reduce WBC count. Blood platelets (thrombocytes) are fragments of _____ that help repair damaged blood vessels.

Summary: