

Blood lab



**ASSIGN
BUSTER**

Unit 10: Blood/Immunology Case Study Lab What were your three diagnoses?

1. Case 1: normal blood smear 2. Case 2: acute lymphocytic anemia 3. Case

3: mononucleosis Journal Questions for lab 1. In what ways do normal red

and white blood cells differ? Red blood cells are easier to see under high

levels of a microscope and white blood cells are better seen under low levels.

Also white blood cells are used to fight off infections as for red blood cells

carry oxygen throughout the body. 2. Which type of white blood cell would

you expect to be most common in a normal blood smear?

Neutrophils 3. A differential count of white blood cells from a patient gave

the absolute number of lymphocytes as 8000 per mm³ and the total number

of white blood cells as 12,000 per mm³. Calculate the percentage of

lymphocytes in this sample of white blood cells. Is this a normal or abnormal

percentage? Explain your answer. $8000/12000 \times 100 = 66.67\%$ and normal

lymphocytes ranges from 20% to 40% I would conclude it to be a little about

average. 4. Describe the difference between a communicable disease and an

inherited disease.

Use examples you have studied in this exploration to support your

description. A communicable disease is an infectious disease that can be

transmitted from person to person. An inherited disease is passed down to a

human by genetics. An example of a communicable disease is

mononucleosis that is transmitted through people's saliva and an inherited

disease would be sickle cell anemia. 5. Why are white blood cells in a stained

blood smear usually counted at low power under a microscope? Explain your

answer.

Because they have nuclei and when looked through a low powered microscope they appear as blue dots. 6. Why is the presence of a larger than normal number of neutrophils indicative of an infection? Explain your answer. Because neutrophils are responsible for destroying infectious agents in the body. So when an infection is present it makes sense to see more neutrophils to fight off the infection agents. 7. Why would you not expect to see tissue macrophages in a blood smear? Explain your answer. Macrophages move within the tissue so when taking a blood smear tissue will be present.