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| **Anemia** | | **Dehydration** | **Infection** |
| **CBC Indication: Low RBC**   * Condition in which there is a lack of sufficient healthy red blood cells (RBC) in your body * Indicator for other health issues (e.g., low iron, lung damage, low blood oxygen) | | **CBC Indication: Reduced Plasma Volume**   * Occurs when a person uses or loses more fluids than they take in * Can occur without any illness or infection | **CBC Indication: Increased WBC**   * Presence of one or more pathogens in the body * Physical indication: presence of heat, pain, redness, swelling, and sometimes loss of function |
| **Leukemia** | | **Leukopenia** | **Polycythemia** |
| **CBC Indication: High WBC**   * Malignant, progressive disease in which bone marrow produces too many, immature, or abnormal white blood cells * A term used for several different cancers of the blood and blood-forming tissues | | **CBC Indication: Low WBC**   * Can result from infection or medication * Can be caused by Rheumatoid Arthritis, vitamin deficiency, or side effect of cancer | **CBC Indication: High RBC, Reduced Plasma Volume**   * Rare condition * Blood is thicker, which increases blood pressure, which increases risk for stroke and tissue or organ damage |
| **Sickle Cell Anemia** | | **Thrombocytopenia** | **Thrombocytosis** |
| **CBC Indication: Low RBC, Misshapen Cells**   * Painful condition where red blood cells are crescent/sickle shaped, sticky, and rigid * RBCs die quickly resulting in a shortage and also low levels of oxygen in the blood | | **CBC Indication: Low Platelets**   * Can indicate anemia, leukemia, heavy alcohol use, medication, viral infection, bone and bone marrow disorders, or immune system disorders | **CBC Indication: High Platelets**   * Indicates infection * When no apparent underlying condition is known, it could be due to bone or bone marrow disease. |
| **Erythrocytes** | Red blood cells (RBC) | | |
| **Hemoglobin** | Protein carried on red blood cells; contains iron; gives blood its red color | | |
| **Leukocytes** | White blood cells (WBC) | | |
| **Macrophage** | A large leukocyte able to destroy old, damaged, and dead cells | | |
| **Thrombocytes** | Platelets | | |
| **Coagulation** | When blood becomes jelly-like and clumps together to form a clot | | |
| **Plasma** | The liquid portion of blood | | |