

Name _____

Anatomy & Physiology

Hour _____

Date _____

Complete Blood Count - Explanation

Red Blood Cell Evaluation

TEST	FULL NAME	EXAMPLES OF CAUSES OF LOW RESULT	EXAMPLES OF CAUSES OF HIGH RESULT
RBC	Red Blood Cell Count	Known as _____ 1 2 3 4 5 6	Known as _____ 1 2 3 4 5 6 7
Hb	Hemoglobin	Usually mirrors RBC results, provides added information	Usually mirrors RBC results
Hct	Hematocrit	Usually mirrors RBC results	Usually mirrors RBC results; most common cause is dehydration

TEST	FULL NAME	EXAMPLES OF CAUSES OF LOW RESULT	EXAMPLES OF CAUSES OF HIGH RESULT
MCV	Mean Corpuscular Volume	Indicates RBCs are smaller than normal (microcytic); 1 2	Indicates RBCs are larger than normal (macrocytic), 1 2
MCH	Mean Corpuscular Hemoglobin	Mirrors MCV results; small red cells would have a _____ value.	Mirrors MCV results; macrocytic RBCs are large so tend to have a _____ MCH.
MCHC	Mean Corpuscular Hemoglobin Concentration	May be low when MCV is low; decreased MCHC values (hypochromia) are seen in 1 2	Increased MCHC values (hyperchromia) are seen in conditions where the hemoglobin is more concentrated inside the red cells, 1 2 3 4 5
RDW (Not always reported)	RBC Distribution Width	Low value indicates uniformity in size of RBCs	Indicates mixed population of small and large RBCs; immature RBCs tend to be larger. 1 2

TEST	FULL NAME	EXAMPLES OF CAUSES OF LOW RESULT	EXAMPLES OF CAUSES OF HIGH RESULT
Reticulocyte Count (Not always done)	Reticulocytes (absolute count or %)	In the setting of anemia, a low reticulocyte count indicates a condition is affecting the production of red blood cells, such as 1 2	In the setting of anemia, a high reticulocyte count generally indicates peripheral cause, such as 1 2

Platelet Evaluation

TEST	FULL NAME	EXAMPLES OF CAUSES OF LOW RESULT	EXAMPLES OF CAUSES OF HIGH RESULT
Plt	Platelet Count	Known as _____ 1 2 3 4 5 6 7	Known as _____ 1 2 3 4 5 6

TEST	FULL NAME	EXAMPLES OF CAUSES OF LOW RESULT	EXAMPLES OF CAUSES OF HIGH RESULT
		<p>8</p> <p>9</p> <p>10</p>	
<p>MPV</p> <p>(Not always reported)</p>	<p>Mean Platelet Volume</p>	<p>Indicates average _____ of platelets is small; older platelets are generally smaller than younger ones and a low MPV may mean:</p>	<p>Indicates a high number of _____, younger platelets in the blood; this may be due to:</p>
<p>PDW</p> <p>(Not always reported)</p>	<p>Platelet Distribution Width</p>	<p>Indicates _____ in size of platelets</p>	<p>Indicates _____ in the size of the platelets, which may mean that a condition is present that is affecting platelets</p>