1. Regarding RBC's:

a. Name the process of creating erythrocytes: \_\_\_\_\_

b. Name the hormone involved in this process, its source, and specific target.

c. Draw a representative picture of a normal RBC and give two functions.

d. Give the values for the normal range for expected numbers on a CBC; the %HCT; life span.

e. Draw and label a complete and representative picture of an adult hemoglobin molecule

f. Explain the following terms (name and meaning) & give their normal value range on a CBC

i. MCV	 	
ii. MCH	 	
iii. MCHC	 	
iv. Reticulocyte		

g. Explain the type of inheritance pattern involved with ABOD blood groups. Name the universal donor type and the universal recipient type and explain why; Why cross matching is done in addition to blood typing?

h. Name four (4) problems [using medical terms] seen with RBC's:

## 2. Regarding platelets:

- a. Name the process of creating platelets: \_\_\_\_\_
- b. Name the hormone involved in this process, the source, and specific target.

c. Draw a representative picture of a normal platelet and give its unique function.

d. Give the values for the normal range of expected numbers of platelets and its life span.

e. Explain the difference between agglutination and coagulation

f. Name four (4) problems [using medical terms] seen with platelets.

3. Properly define hemostasis and name the four phases involved and two requirements

BIOL 2402 A&P II Dr. Weis

Hematology Mini Worksheet

Initials:\_\_\_\_\_

4. Regarding plasma:

a. Name six (6) components/constituents of plasma

b. Name the hormone involved with the <u>primary/major component</u> of plasma. Give the hormone's source and specific target.

c. Give the values for the normal range of plasma based on the % HCT. Describe the appearance (color, transparency, & consistency) of plasma

d. Give the pH range for plasma {ECF} and explain how this pH is initially maintained and how kept in balance for long term homeostasis.

e. Explain the difference between plasma and serum:

f. Name four (4) tests that can be performed using plasma

5. Regarding WBC's:

a. Name the process of creating WBC's: \_\_\_\_\_

b. Name the hormone(s) involved in this process, their source, and specific target

c. Give the values for the normal range of expected numbers of the total WBC count; give the % portion for each of the 5 major types of WBCs and the life span for each major type.

d. Give the UNIQUE (and different) best function for each WBC and any subsets or modified WBC types.

6. Completely and accurately define the following terms

- a. agglutination
- b. coagulation
- c. agglutinogen
- d. agglutinin