

**Lab 3: Blood**

In this lab on blood you will examine the formed elements of blood on a stained microscope slide and learn to identify the various components of blood. (Table 29.1 & Figure 29.4). Be sure to understand functions of the various leukocytes and relative count in a normal blood smear.

Each student will type their blood. Become familiar with what blood typing is and how/why different types can and cannot be mixed (Table 29.2). Directions will be provided in lab.

Name the most common leukocyte. \_\_\_\_\_

Name the least common leukocyte. \_\_\_\_\_

Name two characteristics of erythrocytes. \_\_\_\_\_

Name the agranulocytes. \_\_\_\_\_

Name the granulocytes. \_\_\_\_\_

Type A blood has \_\_\_\_\_ antigens on the surface of the erythrocytes and \_\_\_\_\_ antibodies in the plasma.

It is often said that type O (rh<sup>-</sup>) people are universal blood donors. This is a somewhat deceptive statement. Why? \_\_\_\_\_

Do rh<sup>-</sup> people have anti-rh antibodies in their blood when they are born? \_\_\_\_\_

Explain. \_\_\_\_\_

Type B blood has \_\_\_\_\_ antibodies in the plasma.

Anti-B antibodies are found in blood of type(s) \_\_\_\_\_ and cause coagulation when mixed with blood of type(s) \_\_\_\_\_.

If someone's blood smear has a high Neutrophil count, what sort of ailment might you suspect & why? \_\_\_\_\_

If a blood smear has a low Platelet count, what might that person suffer from? Why?

\_\_\_\_\_

## Slide Assignment: Blood

(Exercise 29 in Lab Text, Chapter 6 in Histology Text)

Draw the following slides using the figures in the lab and histology texts as a reference. Use whichever magnification works best to show all given structures. Please note that not every slide will show everything; you will need to look at multiple slides and/or sources. Your drawings should artistically combine views to include all structures.

- **Blood** – label and understand function of the following.  
Be sure to draw them to scale relative to each other!
  - Erythrocytes (RBCs)
  - Platelets
  - Plasma
  - Leukocytes
    - Granulocytes
      - Neutrophil
      - Eosinophil
      - Basophil
    - Agranulocytes
      - Lymphocyte
      - Monocyte

