**Blood**

Exercise 29A / 29 (begins: page 423 in 9th, 10th and 11th editions, page 425 in 12th edition)

Lab 2 Objectives

Read lab Exercise 29A / 29
Do Activities 3, 4, 7, 8 in 9th, 10th 11th and 12th editions

Blood cell photos:
- pages 701-702 in 9th edition
- Fig. 29A.3 & 29A.4 in 10th edition
- Fig. 29.3 & 29.4 in 11th and 12th editions

Composition of blood: identify location in hematocrit tube, and specific cell types on slides
- Plasma
- Formed elements
  - Erythrocytes
  - Platelets
  - Leukocytes
    - Neutrophil (40-70% of WBCs)
    - Basophil (less than 1%)
    - Eosinophil (2-4%)
    - Monocyte (3-8%)
    - Lymphocyte (25+%)  

Activity 3
- Do a differential WBC count on a prepared slide and compare percentages to “normal”

Activity 4
- Perform a hematocrit using sheep blood and know how to calculate using a ruler
  - Hematocrit means percent of whole blood occupied by formed elements
  - \[% = \frac{\text{height of formed elements}}{\text{height of total blood}} \times 100\]

Activity 7
- Perform ABO and Rh blood typing on simulated blood—use the kit provided and follow its instructions carefully. Understand how to read the results.

Activity 8
- Observe blood disorder slides and note difference from normal blood:
  - Sickle cell anemia
  - Lymphatic leukemia
Optional Computer Activity:
PhysioEx Exercise 29B (On the PhysioEx CD-ROM packaged with the lab book)
pages PEx-65 to PEx-82 (back of the book) in 9th edition
pages PEx-69 to PEx-86 (back of the book) in 10th edition
PhysioEx Exercise 11 pages PEx-161 to PEx-176 (back of the book) in 11th & 12th editions

For study: Review Sheet Exercise 29A / 29
pages 437-442 in 9th edition
pages 437-441 in 10th edition
pages 437-441 in 11th edition
pages 439-443 in 12th edition
Answers in the Instructors Manual at the Eastern Campus Library on reserve