BLOOD CELLS
Erythrocyte (RBC)

Stacking allows for passage through narrow blood vessels
Leukocyte (WBC)

Have a nucleus
Fight disease
  Neutrophils
  Eosinophils
  Basophils
  Monocytes/Macrophage
  Lymphocyte
Granulocyte

- This is a cell that shows granules (spots) after staining
  - Neutrophils
  - Eosinophils
  - Basophils
WBC Granulocyte: Neutrophil
WBC Granulocyte: Eosinophils

Appears darker or more red than neutrophils due to larger granules
WBC Granulocyte: Basophil
Agranulocyte

- This is a cell without granules
  - Monocytes /Macrophages
  - Lymphocytes
WBC Agranulocyte: Monocyte (Macrophage)

Nucleus can appear as several different shapes
- Remember: No granules make cytoplasm much lighter than granulated WBC
WBC Agranulocyte: Lymphocyte

Relatively similar size as RBC
Very little cytoplasm visible due to size of nucleus
Platelets (Thrombocytes)

Platelets can appear in clusters or singular
Comparison of all cells together
Hematocrit – Packed cell volume (PCV)

Percentage of erythrocytes in the blood
Differential White Blood Cell Count (DIFF)

- A test where the first 100 WBCs are categorized according to type.
- This number can then be compared to normal % to determine type of illness.
Tallquist hemoglobin test

Measures the amount of hemoglobin in the blood to help determine anemia
Blood Typing
Antigens

Located on the erythrocytes
Determines blood type
Antibodies

Identifies a specific antigen located on the erythrocytes
Agglutination

- Clumping that occurs when antibodies join to antigens.
ABO system
Rh antigen