### Blood

#### Action Notes

1. Describe the 3 functions of blood.
2. Describe the composition of blood.
   - 3 types of blood cells
   - The formation of blood cells
3. Composition, characteristics, and functions of RBC, WBC, and platelets.
   - RBC breakdown
   - Formation of bilirubin
4. The stages of homeostasis
5. Blood types
6. Rh Factor

#### Project Notes

- Transportation
- Regulation
- Protection

- Composed of plasma and cells & cell fragments:
  - Erythrocytes - red blood cells
  - Leukocytes - white blood cells
  - Thrombocytes - platelets

- The formation of blood cells is called hematopoiesis; hematopoietic tissue
- Myeloid hematopoiesis - bone marrow
- Lymphoid hematopoiesis - lymphatic organs

- RBCs: most numerous (3.5-4.5 million) several million produced per second
- Erythrocytes transport oxygen
- Intracellular RBC = erythrocyte = deficiency of iron = bone marrow = anemia
- Hemoglobin = iron containing protein responsible for RBC function.

- RBC controlled by negative feedback
- Hemolysis - exceeding rate of replacement contents are recycled into globin/heme.
- Bilirubin: pigment related to liver excretion.

- WBCs: protect body from pathogens increase when infection is present called leukocytosis