What is hematology?

List and describe the three functions of blood:

1) 

2) 

3) 

What are the two components of whole blood?

How much blood should the average male and female have?

What does the term hematocrit mean?

How are antibodies defined?

What are the formed elements of blood?

I. 

II. 

A. 

1. 

2. 

3. 

B. 

1. 

2. 

III. 

What is the process called by which these elements are formed?

Which formed elements of blood are most numerous?
Where in the body are these formed elements made after birth?

**RED BLOOC CELLS** What are **erythrocytes**?

What is the function of hemoglobin?

Why are erythrocytes biconcave?

What is responsible for the brown color of feces?

How long do red blood cells circulate in the blood stream?

How are worn out RBCs removed?

What does erythropoietin do?

What is the term for cellular deficiency of oxygen?

**WHITE BLOOD CELLS** What are leukocytes?

What is **phagocytosis**?

Please list the function of:

- Neutrophils
- Monocytes
- Eosinophils
- Basophils
- Lymphocytes

What do major histocompatibility antigens (MHC) do?

What does a differential white blood count tell you?

What is the function of platelets?
Where do they come from?

**Hemostasis** What functions help prevent blood loss?

What is **fibrin**?

What is a **thrombosis**?

What does **coagulation** mean?

Why is blood calcium important in clotting?

What are the different clotting factors present in the stages of clotting?

1)  

2)  

3)  

Often times it is not appropriate for a clot to form. What is the process of breaking down a clot called?

What plasma enzyme helps break down clots in the body?

What are two anticoagulant drugs used in medicine today?

What is a **thrombus**?

If it is transported in the blood to another location, what is it called?

**BLOOD TYPES**

What are located on the surface of red blood cells that indicate blood type?

<table>
<thead>
<tr>
<th>Blood type</th>
<th>Type A</th>
<th>Type B</th>
<th>Type AB</th>
<th>Type O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Blood Cell</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plasma</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please fill in the table above using the information about antigens and antibodies found on pg. 358.

What is the Rh factor?

A mother with what Rh factor (+ or -) needs an injection of anti-Rh gamma globulin after her second and subsequent pregnancies due to hemolytic disease of the newborn (HDN)?

What is sickle cell anemia?

What is anemia?

What is leukemia?

Why do you need sufficient iron in your diet?