Lab 6 Blood

Name _____ Seat number ____

Objectives:

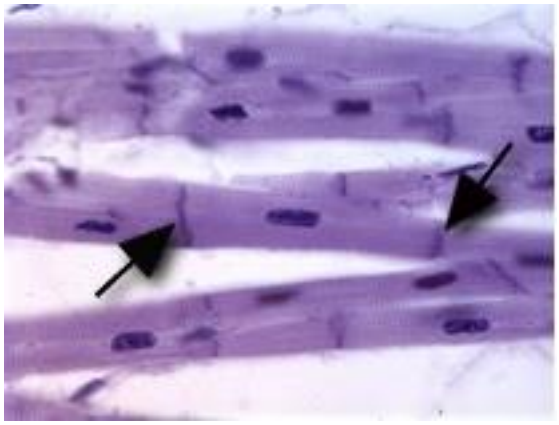
A. Cardiac histology
B. Vessels
C. Formed elements
D. Blood compatibility
E. Questions

A. Cardiac histology

Look at the slide of cardiac muscle of the heart under the microscope.

Draw what you see and identify a muscle fiber, nucleus, and the intercalated discs that separate the muscle fibers. The arrows are pointing to the intercalated discs. The muscle fiber extends from one arrow to the next. The oval structure in the middle is the nucleus.

Include the magnification used and size of one muscle fiber.



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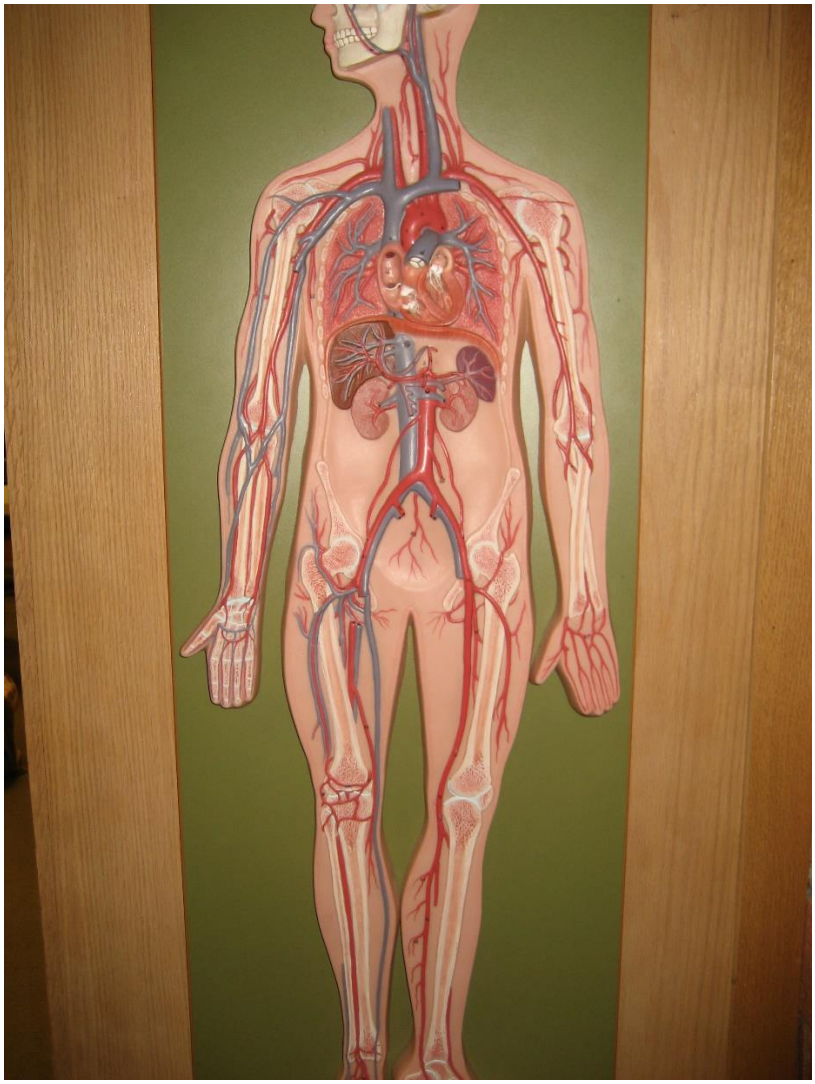
Lab 6 Blood

B. Vessels

Identify the following from the whole person plaque model

1. Superior vena cava, inferior vena cava
2. Pulmonary trunk and arteries
3. Pulmonary veins
4. Aorta
5. Carotid arteries and jugular veins
6. Subclavian artery and vein
7. Common iliac artery and vein
8. Femoral artery and vein



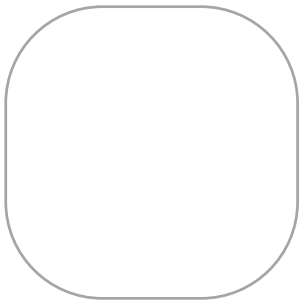
Lab 6 Blood

C. Formed elements

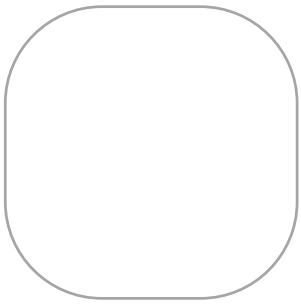
Identify the following using the models to help you and make a brief sketch showing the distinct features of each.

1. Granular leukocytes; (BEN)

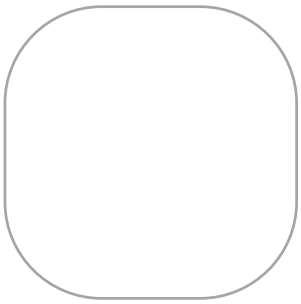
a) Basophil



b) Eosinophil

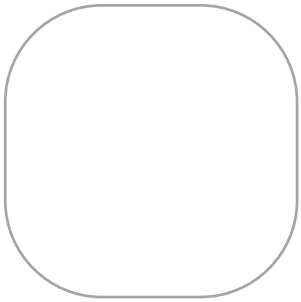


c) Neutrophil

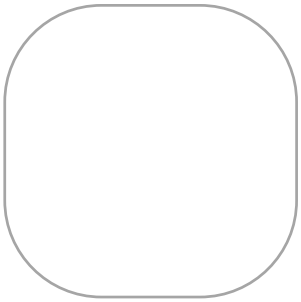


2. Agranular leukocytes

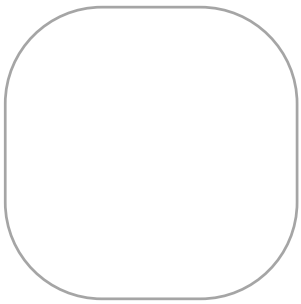
a) monocyte



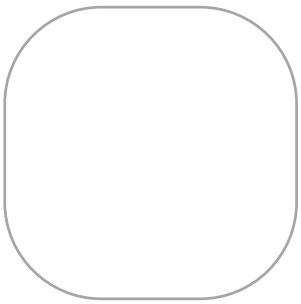
b) lymphocyte



3. Erythrocyte



4. Platelets



Lab 6 Blood

D. Blood compatibility

Using your textbook and/or the blood typing poster, list which type of antigen and antibody are associated with each blood type

blood type	antigen	antibody
A		
B		
O		
AB		

Fill in the recipient's antibodies. Use the chart above to help you. This will help you know which blood types are compatible.

Place an X wherever you expect blood to agglutinate (clot)

Recipient's blood	Recipient's antibodies	Reactions with donor's blood			
		Donor type O	Donor type A	Donor type B	Donor type AB
A					
B					
O					
AB					

Lab 6 Blood

E. Questions:

1) Adding in the blood type Rh, which blood type is the safest to give to everyone, the so called *universal donor*?

2) Adding in the blood type Rh, which blood type is the safest to receive from everyone, the so called *universal recipient*?

3) What is the problem with an Rh negative mother giving birth to her second Rh positive child, without Rhogam?

4) What is the relative abundance of the leukocytes? (Never let monkeys eat bananas)

5) Identify the white blood cell on the projection screen.