

Blood Unit Study Guide

Part 1: Written Exam

1. For the 4 major components of blood:
 - a. Name
 - b. Function
 - c. Percentage
2. If hair color has the alleles B and b where (B) is dominant and black hair and (b) is recessive and blonde hair, give the genotype and phenotype for the following:
 - a. Homozygous dominant
 - b. Heterozygous
 - c. Homozygous recessive
3. What percentage of offspring would have type O blood from the following cross: $I^A i \times I^A i$
4. Blood as class evidence
5. Blood as individual evidence
6. Fill in the chart:

Blood type	Antigens present	Antibodies made	Can receive what blood types	Can donate to blood types
A+				
O-				
B-				
AB+				
O+				
B+				
A-				
AB-				

1. Define or describe:
 - a. Genotype
 - b. Phenotype
 - c. Rh factor
 - d. Cohesion
 - e. Adhesion
 - f. Presumptive blood test
 - g. Confirmatory blood test
 - h. False positive
 - i. Transfer patterns
 - j. Wipe
 - k. Swipe
 - l. Skeletonization
 - m. Spiking patterns
 - n. Satellite drops
 - o. Blood flow
2. Blood shapes: air vs surfaces

3. What is the percent of the US population that has a certain blood type?
 - a. Ex: A+
 - b. Ex. O-
4. How are distance travelled and width of blood spatter related?
5. What is a scalloped edge and what can investigators learn from it?
6. Fill in the table:

Presumptive test	Positive indicator for blood	Important notes/limitations
Kastle-Meyer		
Leucomalachite Green		
Hemastix		
Luminol		

Part 2: Lab Practical – Need to know all of the above **and also** need to know:

7. Define/describe:
 - a. Velocity vs impact force
 - b. Cast-off pattern
 - c. Area of convergence
 - d. Blood trail pattern
 - e. Arterial bleeding pattern
 - f. Blood pool pattern
 - g. Angle of impact
8. How do you tell directionality of blood spatter?
9. How to write a report (see unit 2 from last semester if you forgot!)