



Name: _____ Date: _____ Period: _____

Chapter 11 Review Questions – KEY

1. What three questions should the investigator answer when examining an apparent dried bloodstain?
Is it blood? If so, animal or human? What is the blood type?
2. Define a presumptive test.
A screening test that presumes the presence of a substance
3. What property of blood is used in most presumptive tests?
Catalytic decomposition to oxygen
4. A forensic veterinarian may be asked to identify a specific animal's blood. How would this be done?
A precipitin test using serum with antibodies specific to the test animal.
5. What is a secretor?
A person whose blood antigens are found in other body fluids. About 80 percent of the population are secretors.
6. Define serology. How is it used in forensic investigations?
The study of body fluids using antigen-antibody reactions. Serology can be used to exclude suspects.
7. How much blood is there in an average adult human?
About 5 quarts
8. What test can determine whether blood is human or animal?
What is the basis for this test?
The precipitin test.
Why is the serum used in this test called human antiserum?
Specific antibodies in an animal serum react to human antigens
9. What are the four major blood types for humans?
A+/-, B+/-, AB+/-, O+/-
10. What happens if a person with type AB blood is given a transfusion of type A blood? Explain.
There will be no adverse reaction because there are no antibodies to attack antigens
11. To whom can a person with type B blood donate blood and from whom can that person receive blood?
He or she can donate to someone with B or AB blood and receive from someone with B or O
12. Can a bloodstain be used for individualization?
Not with serology, but with DNA fingerprinting. Many of the blood factors begin to degrade immediately.
13. What is the probability of an AB and Rh- blood type combination?
 $0.04 \times 0.15 = 0.0060$, or 1 in 167
14. If a bloodstain found at the scene of a crime is found to be B, N, or Rh-, what is the probability that a suspect would have this combination of antigens?
 $0.11 \times 0.27 \times 0.15 = 0.0045$, or 1 in 222 persons

Chapter 11 Review Section 1 Answer Key

K Morrison



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