Unit 4 Test

Name:

Directions: Answer the questions fully on a separate sheet of paper.

1. What part of your DNA is used for DNA fingerprinting?
2. Is DNA class evidence or individual evidence?
3. How many times are those sections of your DNA copied when DNA fingerprinting is done?
4. What is RFLP? STR? Which is more accurate? Which is more commonly used today?
5. What are short tandem repeats and how many bases do they contain?
6. What is polymerase chain reactions, PCR?
7. If one side of a strand of DNA reads: GATTACA, what would the other side of the DNA strand read?
8. Today, can forensic scientists use very small and partially degraded samples for DNA testing or do they need large amounts of perfect samples?
9. What are restriction enzymes?
10. Describe what happens during gel electrophoresis?
11. What is CODIS?
12. What % of a DNA fingerprint has to match to determine paternity? Identity?
13. How many blood types are there? List them all.
14. Why would a forensic scientist do a blood type before doing a DNA test on a suspect?
15. Is blood type class evidence of individual evidence?
16. If B and Rh proteins are found on a suspect’s red blood cells during blood typing, what is their blood type?
17. If neither A, B, or Rh proteins were found on a suspect’s red blood cells during blood typing, what is their blood type?
18. Why can’t a person with A+ blood receive blood from a person with B+ blood?
19. In the United States, the largest percentage of the population has this blood type?
20. What does the blood spatter look like from:
    1. A gunshot?
    2. A strong punch to the head
    3. Being hit in the head with a baseball bat?
21. What is passive spatter? What is arterial spatter?
22. What substances can be used to find blood that appears to have been cleaned up at a crime scene? How do they work?
23. How do you know which way a bloodstain was travelling when it hit a surface?
24. How do you calculate the angle of impact for a bloodstain?
25. Calculate the point of origin for the blood drop and the height above the ground the drop fell from.