

# **Blood Basics Quiz**

Name \_\_\_\_\_

## **Part A: Match each term to its best definition.**

- \_\_\_\_\_ 1. Most abundant cells in our body that are produced in the bone marrow
- \_\_\_\_\_ 2. Protein found in red blood cells that carries oxygen
- \_\_\_\_\_ 3. Component of blood that is part of the our immune system and destroy pathogens in our body
- \_\_\_\_\_ 4. Yellowish liquid part of the blood
- \_\_\_\_\_ 5. Clotting factors in our the plasma that clot together to prevent blood loss from a wound
- \_\_\_\_\_ 6. Our blood type is determined by these, which are inherited from our parents
- \_\_\_\_\_ 7. Blood type that contains A agglutinogens
- \_\_\_\_\_ 8. Blood type that contains B agglutinogens
- \_\_\_\_\_ 9. Blood type that contains both A and B agglutinogens
- \_\_\_\_\_ 10. Blood type that does not contain A or B agglutinogens
- \_\_\_\_\_ 11. Indicates the presence of a specific protein; discovered while studying Rhesus monkeys
- \_\_\_\_\_ 12. People with Type AB blood are called universal \_\_\_\_\_, because they can receive blood from anyone.
- \_\_\_\_\_ 13. People with Type O blood are called universal \_\_\_\_\_, because they can give blood to anyone
- \_\_\_\_\_ 14. Stands for bloodstain pattern analysis
- \_\_\_\_\_ 15. Patterns created when a bloody object comes in contact with another surface; also called contact patterns
- \_\_\_\_\_ 16. Bloodstains created by the application of force to the area where the blood originated
- \_\_\_\_\_ 17. Pointed edges of a droplet that radiate out from the spatter and can help to determine the direction of force
- \_\_\_\_\_ 18. Type of blood stain created by the force of gravity an appears as drops or blood pools
- \_\_\_\_\_ 19. Type of bloodstain that is created when a force is applied to the source of the blood, such as cast-off, impact spatters, and arterial spurting
- \_\_\_\_\_ 20. Used by investigators to detect the presence of blood
- \_\_\_\_\_ 21. Test used at a crime scene to enhance a bloodstain to make it more visible in photographs

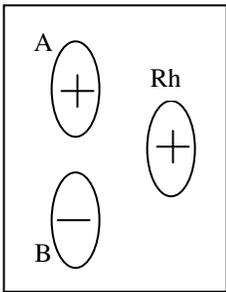
- A. BPA
- B. Donors
- C. Genes
- D. Hemoglobin
- E. LCV
- F. Luminol
- G. Passive
- H. Plasma
- I. Platelets
- J. Projected
- K. Receivers
- L. Red blood cells
- M. Rh factor
- N. Spatter
- O. Spines
- P. Transfer
- Q. Type A
- R. Type AB
- S. Type B
- T. Type O
- U. White blood cells

**Part B: Blood Typing & Transfusions**

22. Identify the blood type of each sample given the test results.

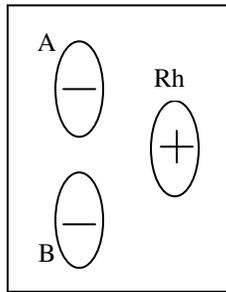
+ = Clumping    - = No clumping

**Suspect 1:**



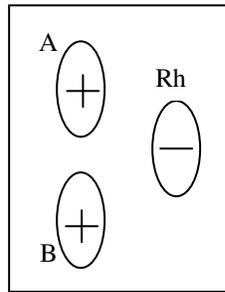
**Blood Type:** \_\_\_\_

**Suspect 2:**



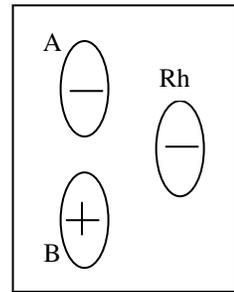
**Blood Type:** \_\_\_\_

**Suspect 3:**



**Blood Type:** \_\_\_\_

**Suspect 4:**



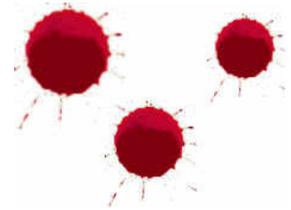
**Blood Type:** \_\_\_\_

23. If Suspect 1 were injured during the crime and needed blood, what blood types could he receive? \_\_\_\_\_

24. If Suspect 4 volunteered to donate blood, which blood types could receive his blood? \_\_\_\_\_

**Part C: Blood Spatter**

25. Which of the three blood droplets shown would have been created by a wound in the lower part of the leg? Explain.



26. If you found a blood droplet as shown below at a crime scene, what does it tell you? Explain



27. If you find a trail of blood with droplets that are very close together, what could this mean?