

LABORATORY EXERCISE 37

BLOOD CELLS

WARNING

Because of the possibility of blood-borne infections being transmitted from one student to another if blood slides are prepared in the classroom, it is suggested that commercially prepared blood slides be used in this exercise. The instructor, however, may wish to demonstrate the procedure for preparing such a slide. Mammal blood other than human or contaminant-free human blood is suggested as a substitute for collected blood.

Laboratory Report Answers

PART A

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|--|---|
| 1. erythrocytes | 10. neutrophil |
| 2. biconcave | 11. neutrophils |
| 3. transporting and exchanging gases (O ₂ and CO ₂) | 12. eosinophils |
| 4. hemoglobin | 13. basophils |
| 5. oxyhemoglobin | 14. monocytes |
| 6. nuclei | 15. lymphocytes |
| 7. leukocytes | 16. collagen |
| 8. granulocytes | 17. serotonin |
| 9. agranulocytes | 18. hemocytoblasts (hematopoietic stem cells) |

PART B

(sketches)

PART C

- | | |
|---------------------------|-----------------------|
| 1. (experimental results) | 2. Answers will vary. |
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Critical Thinking Application Answer

A total white blood cell count provides the number of white blood cells in a given volume of blood; a differential white blood cell count gives the relative percentages of types of white blood cells in a blood sample.