Investigation 3.4B1 Dr:_____
Blood Worksheet, page 1 P: ___Date:_____

Directions: Use the information you learned about blood to answer the following questions.

1. What are the three major components of blood?
    a. _____
    b. _____
    c. _____

2. What do we call the process by which we stop bleeding when we get a cut?

    _____

3. Which component of blood contains clotting factors?

    _____

4. What is the name of the disease where clotting factors are absent?

    _____

5. What is the liquid part of blood called?

    _____

6. List the five types of white blood cells.
    a. _____
    b. _____
    c. _____
    d. _____
    e. _____

7. Why is it important that we have white blood cells?

    _____

    _____

8. Which white blood cells signal the other cells to attack?

   _____

9. Which white blood cells are immediately dispatched to fight infection; they are the largest of the white blood cells?

   _____

10. Which white blood cells prevent blood clots from forming too quickly?

    _____

11. Which white blood cells provide our main source of 'immunity'?

    _____

12. Which white blood cells promote blood flow to the injured area of your body?

    _____

13. Which component of blood does NOT need to be tested for blood type before transfusing into a patient?

    _____

14. What is the other name for red blood cells?

    _____

15. What component of the red blood cell carries oxygen and carbon dioxide?

    _____

16. Where do red blood cells exchange oxygen for carbon dioxide?

    _____

17. About what percent of your blood is made up of platelets and white blood cells?

    _____%

18. In which genetic disease are the red blood cells misshaped such that it is difficult for them to carry oxygen?

    _____

19. Write a paragraph about Sickle Cell Anemia. Research information on the internet and provide evidence from your resources to back up your statements.

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Art Project: 1. Draw a picture that demonstrates all of the components of blood. 2. Then, draws two red blood cells side by side. The first should be a normal red blood cell and the second a sickled red blood cell. Label every cell in each drawing.

Draw all of the components of blood in the box below:

Draw normal red blood cells on the left and sickled red blood cells on the right: