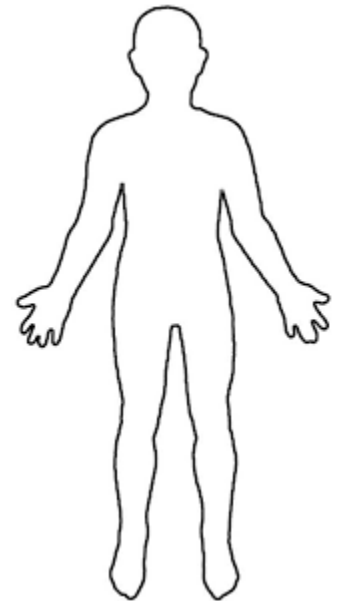


Blood and Blood Typing Reading Guide

Answer the following questions based on the reading. If you need to use additional sources, cite them as well.

1. What are the four components of blood?
2. Approximately _____ % of a human's weight is blood.
3. Using your own weight, calculate approximately how much of your mass is blood. Include units and show all of your work!
4. On the diagram at right, draw a path that blood could take as it circulates through the body. Include labels as necessary. Cite any additional sources that you used.
5. How is blood separated? Draw a sketch of the apparatus used. Cite any additional sources that you used.
6. Summarize the purpose of red blood cells.
7. List other important information about red blood cells.
8. Summarize the purpose of white blood cells.
9. List other important information about white blood cells.
10. Summarize the purpose of platelets.
11. List other important information about platelets.
12. Summarize the purpose of plasma.
13. List other important information about plasma.



14. When someone donates blood, what is it screened for?
15. Research some other conditions that could prevent an individual from donating blood. Use a credible source and cite it.
16. What are the main types of blood?
17. If a patient receives the wrong kind of blood, “a severe immune reaction” could result. Research what could happen. Use a credible source and cite it.
18. Has there been progress in converting different types of blood to a common blood? Use a credible source and cite it.
19. What are some advantages of synthetic blood over donated blood? Use a credible source and cite it.
20. Define antigens and antibodies. How do they produce a blood type?
21. Do you know what type of blood you have? (If not, have someone randomly pick one for you.) If you were to receive a blood transfusion, what types could you accept? Who could you donate to? You should include Rh factors in this as well (note that the packet does not).
22. What is cross matching? How is it accomplished? How accurate is it? Use a credible source and cite it.