Blood and Circulation Webquest

(PART I: Introduction, Parts of the Heart, and Pathway of Blood)

http://www.smm.org/heart/heart/steth.htm

1. Click on the link above. Where is your heart located? Use the stethoscope to find the location of the heartbeat and place a star on the body below where the heart is located.

http://www.smm.org/heart/heart/circ.htm

2. Observe the heart pumping blood by clicking on the above link. Which additional organ works with your circulatory system to give oxygen to all of your cells?

http://www.innerbody.com/image/card01.html

3. Click the link and roll your cursor over the heart to IDENTIFY the parts of the human heart. In addition, circle the part with a BLUE pen or pencil to represent DEOXYGENATED BLOOD and use a RED pen or pencil to represent OXYGENATED BLOOD.

WORD BANK:
Superior Vena Cava
Inferior Vena Cava
Left Atrium
Left Ventricle
Right Ventricle
Pulmonary Vein
Pulmonary Artery
Right Atrium
Aorta

**Step One:** View the flash cards a couple of times.
**Step Two:** Press on the box that is titled "LEARN." Try to type in the correct term that matches each description.
**Step Three:** Press on the box that is titled "TEST." When you are done with the test, record the number of questions you had that were correct and the number that were incorrect.

Number of Questions Correct _____/14
Number of Questions Incorrect _____/14

5. Practice will make perfect! Play the game in the link below to identify the parts of the heart below.

http://www.purposegames.com/game/label-the-hearts-parts-quiz

**NOTE:** You must click on "START" first! See how fast you can do it with 100% accuracy!

Click here: ↓

http://kidshealth.org/parent/general/body_basics/heart.html

**About the Heart and Circulatory System**

6. What are the two main parts of the circulatory system?

   A. ____________________  B. ____________________

7. Describe the following:

   Pulmonary Circulation ______________________________________________________________

   Systemic Circulation ______________________________________________________________
8. Humans have a __________ chambered heart.

9. The difference between arteries and veins is ____________________
   ___________________________________________________________________________

10. Which vessel do you think would push blood through with more force? Why?
    ___________________________________________________________________________
    ___________________________________________________________________________
    ___________________________________________________________________________

View the animation of blood flow through the heart and fill in the blanks below:
http://www.heartpoint.com/theheart.html

11. When blood circulates in the body, it enters the heart through the __________, passes through to the __________, and flows out through the __________to the __________-where it picks up __________ and gets rid of __________ and enters the __________ where it is pumped to the body through the__________.

12. Go through the link above on the pathway of blood. Write out the flow of blood from the time it enters the heart to the time it leaves the heart. In addition, outline each box with a red or blue pen/colored pencil to show low levels of oxygen (BLUE) and high levels of oxygen (RED).
**Blood Vessels**

http://biology.about.com/od/humananatomybiology/ss/blood_vessels.htm

13. Blood vessels are hollow tubes that transport ________ throughout the entire body.

14. What is the difference between pulmonary arteries and systemic arteries?

_______________________________________________________________________________________
_______________________________________________________________________________________

Click on the right arrow to go to Blood Facts and answer the following:

15. The color of blood is determined by the type of _______________ ______________ used to transport oxygen.

16. The adult human body contains approximately ___________ gallons of blood.

17. About _______ percent of the body's blood cells are produced in the _______ _________.

18. Mature red blood cells do not contain a ____________.

19. The most common blood type in the United States is ______________. The least common is _________________.

http://www.webmd.com/hypertension-high-blood-pressure/guide/blood-pressure-causes

20. Clinking on the link above, examine the causes of high blood pressure and if they are preventable or not.

<table>
<thead>
<tr>
<th>Cause</th>
<th>Preventable (Yes or No)</th>
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<tbody>
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</tbody>
</table>
21. Quiz yourself - See how well you have been paying attention so far:

22. Click on the link below to learn more about what makes up blood:


<table>
<thead>
<tr>
<th>Component of Blood</th>
<th>Job</th>
<th>Looks like...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Blood Cells</td>
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<tr>
<td>White Blood Cells</td>
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<td>Platelets</td>
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<tr>
<td>Plasma</td>
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</tbody>
</table>
23. Where are blood cells made? ______________________________________________________

24. How many blood types are there? __________________________________________________

25. Why is blood assigned a positive or negative? _______________________________________

http://www.wisc-online.com/objects/index_tj.asp?objID=AP14604

**RED BLOOD CELLS**- Use the link above for some info on RBC's

26. Blood is called the "River of" because it carries: ______________________________________

27. _____________________________ is the FLUID COMPONENT of blood and makes up %.

28. _____________________________ makes up the remaining percentage of blood.

29. Red Blood Cells are also known as ____________________ . What is their main function?


30. How are Red Blood Cells designed to perform this function? __________________________


31. What is HYPOXIA or CYANOTIC mean? _____________________________________________


32. How long do Red Blood Cells live for? ______________________________________________

http://www.sciencekids.co.nz/sciencefacts/humanbody/blood.html

**Blood Facts**- Click on the link above for some interesting blood facts

33. Blood makes up around ________________ of the weight of a human body.

34. Blood contains ______________ , ______________ and ____________________________ .

35. These blood cells float in a yellow liquid called blood ______________ . Blood ______________ is made up of ______________ water and also contains various nutrients, electrolytes, gases, proteins, glucose and ______________.