

Science 9-Biology

Worksheet 9-2—Circulatory System Health and Excretion



10

Name _____

Due Date _____

Show Me Hand In

Correct and Hand In Again By _____

Read pages 185-189 of SP to help you answer the following questions:

1. Name **four** general steps that can lead to a healthy heart:

2. The **three** main illnesses of the circulatory system are _____, _____ and _____.

3. If the heart's own arteries (coronary arteries) are blocked, blood, which carries _____ and _____ cannot reach the _____ cells of the heart. If the blood supply is cut off for too long, what can happen to these cells? _____ This whole process is called a _____.

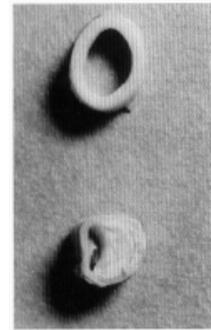
4. What determines how severe a **heart attack** is? _____

5. Can people sometimes recover from heart attacks? _____.

6. What are two ways in which **nicotine** can damage the heart?

7. The artery on the bottom of this picture is clogged with

_____ How does this
affect the flow of blood through this artery? _____



What is the name of this disease? **Ath** _____

If this was a coronary artery and it became completely plugged, what could happen to the person? _____ What could the person have done to **prevent** this artery from becoming clogged? _____

8. Describe **two medical procedures** that are sometimes used to lessen the dangers of having atherosclerosis in the coronary arteries.

Do these procedures always prevent heart attacks for the long term? _____

9. What happens to cause a **stroke**? (See margin on page 186) _____

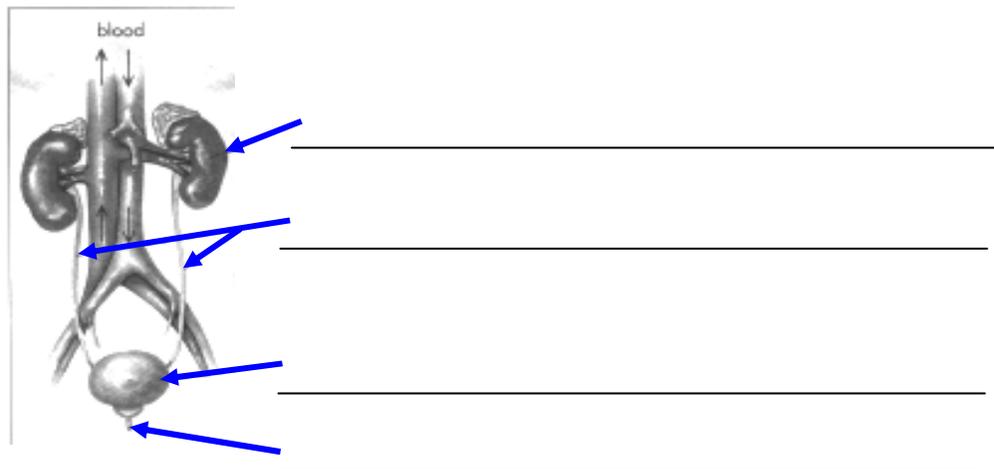
10. **Blood pressure** tells you how much _____ it takes to push your blood through your _____. Is your blood pressure always the same? _____

What factors can affect your blood pressure? _____

11. When a person's circulatory system is healthy, the blood pressure is generally (low/high) _____ and after rising during exertion it returns to normal quite (slowly/quickly) _____. Is it healthy to have the blood pressure too low? _____. Suggest something that could result in blood pressure being too low! _____
12. What is the definition of **high blood pressure**? _____

13. What can happen to smaller **capillaries** and **arteries** if the blood pressure is too high? _____. What **organs** could be damaged as a result of high blood pressure? _____
Does **atherosclerosis** (clogging of arteries) increase the blood pressure? _____
As well as too much fat, too much _____ in the diet can also cause high blood pressure.
14. At what general age can diseases of the circulatory system start? _____
15. It has been shown that regular exercise increases the _____ and the _____ of blood vessels that supply the heart. Exercise also _____ the **heart muscle**.
16. Not _____ and reducing _____ in your life helps your circulatory system.
17. Can the tendency to have circulatory system disease be **genetic** (inherited) _____
If you have a high incidence of heart disease in your family, does it guarantee that you will have the disease? _____. Can you decrease your chances? _____
18. High _____ and _____ in the diet are the main contributing factors to circulatory system disease.

19. The organ called the _____ and the _____ system act like “traffic control” in your body.
20. Your **liver** is found on the _____ side of your chest cavity. Can any substances that enter your blood bypass the liver? _____
21. Carbohydrates that you don’t need right away for energy are changed into _____ and _____ by your liver. These provide a way for your body to _____ energy.
22. Harmful substances produced by your body (like ammonia) or ingested into your body, like alcohol or drugs are _____ by your liver to less harmful forms. Too much alcohol or certain drugs (eg. Tylenol) can damage your liver by overworking it. When the liver become swollen and full of fat tissue and does not work well any more, this condition is called _____ of the liver. A viral disease that can affect the liver is _____. The “C” strain of this disease causes permanent damage to the liver and most often leads to premature death. How can this virus be passed from one person to another? _____
23. In the liver, _____ blood cells are destroyed and used to make _____, which helps us digest fats. Iron is recycled into new _____ cells.
24. Label the **parts** and their **functions** on the following diagram:



25. How does the water help remove excess salt and urea from the body? _____

26. **Excretion** is the process of removing excess _____, _____
and _____ from the body.
27. Name **five** organs that are part of your excretory system _____

28. The main function of the **kidneys** is to _____ the blood. Wastes,
excess _____ and _____ pass through the kidney's
filtering system and form a liquid called _____.
29. Why is it good that the **urinary bladder** is able to stretch? _____

30. What happens at the **urethra**? _____
