

Part 1: The heart

Go to: <http://www.pbs.org/wgbh/nova/heart/>

Click on: Map of the Human Heart

1. What does your heart do?

Click on: Launch Interactive

Click on Track

Read and the Click on Step Thru

2. List the six steps that blood follows.

Click on: Anatomy

3. Why does right and left seem backward on the picture?

Click on: Facts

5. Where is your heart located in your chest?

6. What is the size of the average adult heart?

7. What is the name of the largest artery, how big is it?

8. How much blood does your body have?

9. How often does your blood travel through your body?

10. How much blood does your body pump in a lifetime?

11. What is the lub dub sound in your heart?

Part 2: The blood and vessels

Go to <http://www.pbs.org/wnet/redgold/journey/index.html>

Click on: Phase 1 Creation of Blood

12. Where are blood cells produced?

Click on: What is blood made of

13. What is blood made of?

14. What are the three kinds of cells in blood?

15. List one fact for each kind of cell in the blood.

Click: Back to Phase 1 Creation of blood

Click on: How is blood produced

16. Where are blood cells produced?

Click on: Back to Phase 1 Creation of Blood

Click on: Phase 2 The Circulatory System

17. What does blood carry?

Click on: Blood Vessels

18. What are the three types of vessels and what does each one do?

19. Why does the blood in the veins appear bluish?

Part 3: The fixing the problems of the heart

Go to <http://www.pbs.org/wgbh/nova/heart/>

Click on: Treating a Sick Heart

20. How does the heartbeat and blood vessels change in response to exercise?

21. What does it mean if a person has heart failure?

Click on the back button

Click on Troubled Hearts, look at the pictures of the hearts

22. If an artery gets blocked, what can happen to the heart?

23. What is one effect of a heart attack on the tissue?

Click on the back button

Click on Pioneers of Human Heart Surgery

24. Why did they believe that it was best not to operate on the heart?

25. Who was the doctor who first operated on the heart?

26. How did he get ready to operate on humans?

27. In 1952, the first open heart surgery was performed, Explain the steps they took.

28. How long could a body survive without a pumping heart at normal body temperature?

29. How long was the girl able to survive without a pumping heart at the lower body temperature?

30. When did the first heart transplant take place?

Go to: <http://www.pbs.org/wnet/redgold/php/bloodquiz.php>

31. Take the quiz.

Go to <http://www.pbs.org/wgbh/nova/eheart/transplantwave.html>

32. Perform the transplant operation, at the top of the screen it tells you what do, keep clicking the forward arrow after each step.

Go to

http://kidshealth.org/PageManager.jsp?lic=1&article_set=54036&cat_id=20607#a_Heart_Parts

33. Name the 4 chambers of the heart.

34. How do the atria and ventricles work together?

Go to: http://kidshealth.org/PageManager.jsp?lic=1&article_set=30465&cat_id=20190

35. Explain how your body has a highway system.