

PRETEST 2TTO UNIT 1 THE CIRCULATORY SYSTEM

Arteries and veins each have their own function.

1. List four differences between arteries and veins
2. Explain how arteries can help to keep the blood flowing in the veins.
3. Explain why an embolus from a leg vein never gets stuck in another blood vessel than the arteries of the lungs.

Capillaries are the smallest blood vessels.

4. Explain exactly how the exchange of substances goes in the capillary network in the tissues.

The heart is the all-important centre of our circulation system.

5. Which parts of the heart carry deoxygenated blood?
6. Where does this blood come from? Also name the blood vessels that carry it to the heart.
7. Where does this blood go to?
8. How can you identify these heart parts when you have a dead heart in front of you (to dissect it)?

In rest your heart pumps about 75 times per minute, so the cardiac cycle will take about 0,8s.

9. Name the three parts of the cardiac cycle.
10. In which of these will the heart valves close?

Each ml of blood contains \pm five million red blood cells. To 600 red blood cells we have 50 platelets and 1 white blood cell. The rest is plasma.

11. What is the function of the platelet?
12. Red blood cells have no nucleus. How does this feature help a red blood cell to carry out its function effectively?
13. List five substances that are carried in the plasma.

Heart and circulation can suffer from several problems.

14. Explain cause and effect of a heart attack.
15. Explain why an embolus always gets stuck in the arteries of the lungs.

Our body can defend itself against harmful micro-organisms.

16. Which ways to defend ourselves do we have except our lymphocytes?
17. You can get antibodies in a passive, natural way. Explain when this happens and how long this kind of immunity lasts.

You can become immune against a disease by vaccination. This method of protection is called artificial active immunity.

18. What's injected into your blood when you get vaccinated?
19. Explain why lymphocytes need to have DNA to produce antibodies.
20. Explain the function of the so-called memory cells.

If you need a blood transfusion, it's important to know your blood group.

21. Suppose you have you've got A⁺. Which antibodies do you have?
22. Could you also have anti-Rhesus? Explain you answer.