# Measuring Heart Rate
## with Your Own Stethoscope

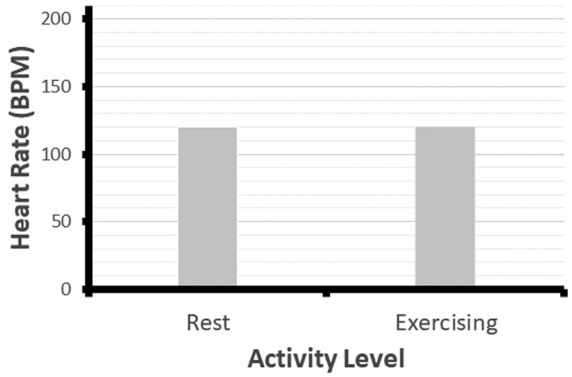
Student quiz — Answer key

**Directions:** Circle the best answer for each question below.

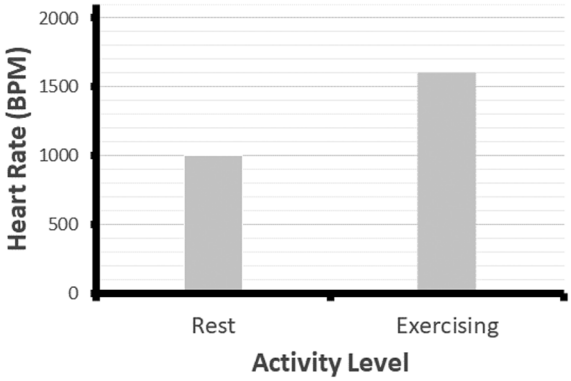
1. What is the main function of blood in the body?
   a. Help us think clearly
   b. Transport oxygen and nutrients throughout the body
   c. Make our muscles contract and relax
   d. Pump blood through the body

2. Which bar graph below shows the expected heart rate of a person at rest and after exercising?

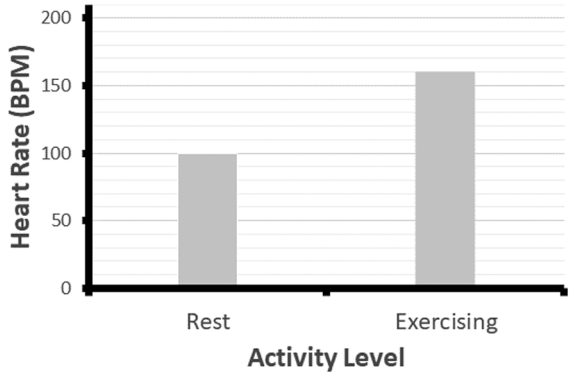
a.



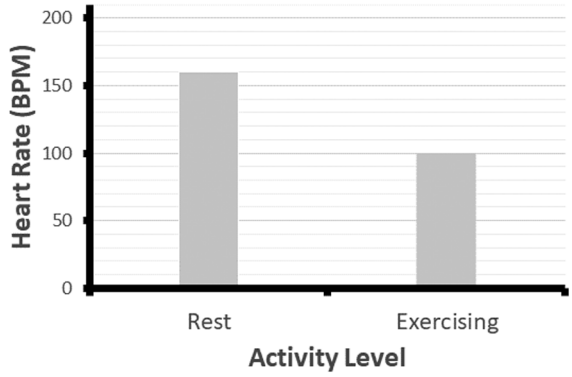

b.




c.




d.



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**Directions:** Circle the best answer for each question below and write your answer for the final question.

3. How do you expect the heart rate to change if a person switches from jogging to sprinting?
    a. Stay the same, as the person is exercising in both cases
    b. Decrease, as the person increases the intensity of the exercise
    c. Increase, as the person increases the intensity of the exercise

4. Why does our heart help us to survive by being able to quickly increase our heart rate?
    a. A quick increase in heart rate helps us to build muscles fast, and thus, get stronger.
    b. A quick increase in heart rate helps us to react to danger quickly, as it delivers extra oxygen to the muscles and organs, which in turn, leads to an increase in energy and alertness.
    c. A quick increase in heart rate helps to relax the muscles and give them the rest they need.

5. In your own words, state why we can measure the heart rate by feeling the pulse. How does this connect with what we know about the function of the heart?

    Answers may include that the function of the heart is pumping blood through the body. With each contraction of the heart (each heartbeat), we can feel a throbbing in the artery. Therefore, counting heartbeats or counting felt pressure changes in the arteries is identical.