

SC.912.L.14.36 – Circulatory System – Example 1 Answer

The rate at which blood flows through the human body changes in response to many factors. Which statement describes one of these factors and its effect on blood flow?

A. A high viscosity of blood causes an increased resistance in the blood vessels and leads to slow blood flow.

B. A low blood pH decreases the rate of diffusion through the blood vessels and leads to slow blood flow.

C. The changing of the shape of red blood cells to a crescent shape decreases resistance and lead to a faster blood flow.

D. The narrowing of blood vessels increases pressure and leads to a faster blood flow.

Answer

A. A high viscosity of blood causes an increased resistance in the blood vessels and leads to slow blood flow.

Viscosity refers to the thickness of blood. This thickness is caused by the number of red blood cells. Thick blood travels through blood vessels at a slower rate than thin blood.