Chapter 35 Standardized Test Prep

TEST TIP Slow, deep breathing helps a person relax. If you suffer from test anxiety, focus on your breathing in order to calm down.

Science Concepts

1. In what direction does blood move when the AV node in the heart fires?
- **A** from the atria to the veins
- **B** from the ventricles to the atria
- **C** from the atria to the ventricles
- **D** from the ventricles to the arteries

2. What is the function of the lymphatic system?
- **F** It opens two-way vessels.
- **G** It helps the body fight infections.
- **H** It interacts with the respiratory system.
- **J** It transports fluids away from the heart.

3. Fibrin is a protein that does which of the following?
- **A** transports oxygen
- **B** helps form a blood clot
- **C** destroys invading microorganisms
- **D** stimulates the production of antibodies

4. Which of the following vessels have the lowest blood pressure?
- **F** veins
- **G** arteries
- **H** capillaries
- **J** arteorioles

5. Which antigens are on the red blood cells of a person with type O blood?
- **A** O antigens
- **B** both A and B antigens
- **C** either A or B antigens
- **D** neither A nor B antigens

6. Controllable risk factors for cardiovascular disease include all of the following *except*
- **F** older age.
- **G** being overweight.
- **H** cigarette smoking.
- **J** elevated blood cholesterol.

Writing Skills

7. Short Response Explain how concentration gradient relates to the release of O_2 by the hemoglobin molecule.

Using Science Graphics

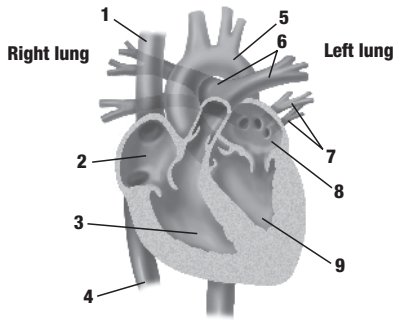
Use the table to answer the following question.

Blood Type

Blood type	Antigen on the red blood cell	Antibodies in plasma	Can receive blood from	Can donate blood to
A	A	B	O, A	A, AB
B	B	A	O, B	B, AB
AB	A, B	Neither A nor B	O, A, B, AB	AB
O	Neither A nor B	A, B	?	O, A, B, AB

8. Which blood types complete the blank cell in the table?
- **F** O
- **G** AB, O
- **H** A, B, O
- **J** A, B, AB, O

Use the model to answer the following questions.



9. Which numbers point to the vessels that bring blood into the heart?
- **A** 1, 4, and 7
- **B** 1, 5, and 6
- **C** 4, 5, and 6
- **D** 5 and 6 only

10. Which number points to the chamber in which oxygen-poor blood enters the heart?
- **F** 2
- **G** 3
- **H** 8
- **J** 9

State Resources



For specific resources for your state, visit go.hrw.com and type in the keyword **HSHSTR**.

Test Practice with Guided Reading Development

Answers

1. D **2.** G **3.** B
4. F **5.** D **6.** F

7. As hemoglobin molecules pass through body tissues, they release more O_2 because the body tissues have a lower O_2 concentration than the hemoglobin and the oxygen diffuses from an area of greater concentration to one of lower concentration.

8. F **9.** A **10.** F

TEST DOCTOR

Question 1 **A** is incorrect. Blood from the atria enter arteries, not veins. **B** is incorrect because blood moves from the atria to the ventricles, not vice versa. **C** is incorrect. The SA node fires to move blood from the atria to the ventricles. **D** is correct. The AV node fires causing the ventricles to contract and push blood out through the arteries.

Question 2 **F** is incorrect because no two-way vessels exist in the cardiovascular system. **G** is correct because the lymphatic system is a key element in the immune system. **H** is incorrect. The lymphatic system interacts with the cardiovascular system. **J** is incorrect because the fluids are returned to the cardiovascular system.

Question 3 **A** is incorrect. Hemoglobin transports oxygen. **B** is correct. Plasma proteins form fibrin that clings to a tear in a vessel. **C** is incorrect. Fibrin is involved in blood clotting. **D** is incorrect. Antigens stimulate the production of antibodies.