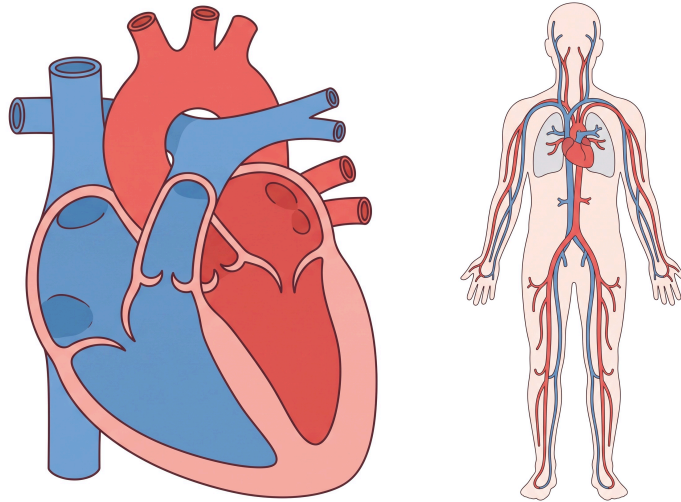


Heart and Circulation

The heart and the circulatory system



10

printable sheets

22

pages

All

answer keys included

Heart and Circulation Teaching Pack

The heart and the circulatory system

How to use this pack. The sheets are in a suggested teaching order: show the labeled diagrams, have students label the blank ones, then work through the practice sheets and finish with the quiz. Use them all over a week or pick the ones you need. The answer keys are together at the back.

What is inside

1. Teach

Heart Diagram	3
Circulatory System Diagram	4

2. Label

Blank Heart	5
Blank Circulatory System	6

3. Match

Parts of the Heart and Their Jobs	7
Parts of the Circulatory System	8

4. Read

Your Heart and Your Blood	9
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5. Order

The Path of Blood Through the Heart	11
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6. Review

Heart and Circulation Crossword	12
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7. Check

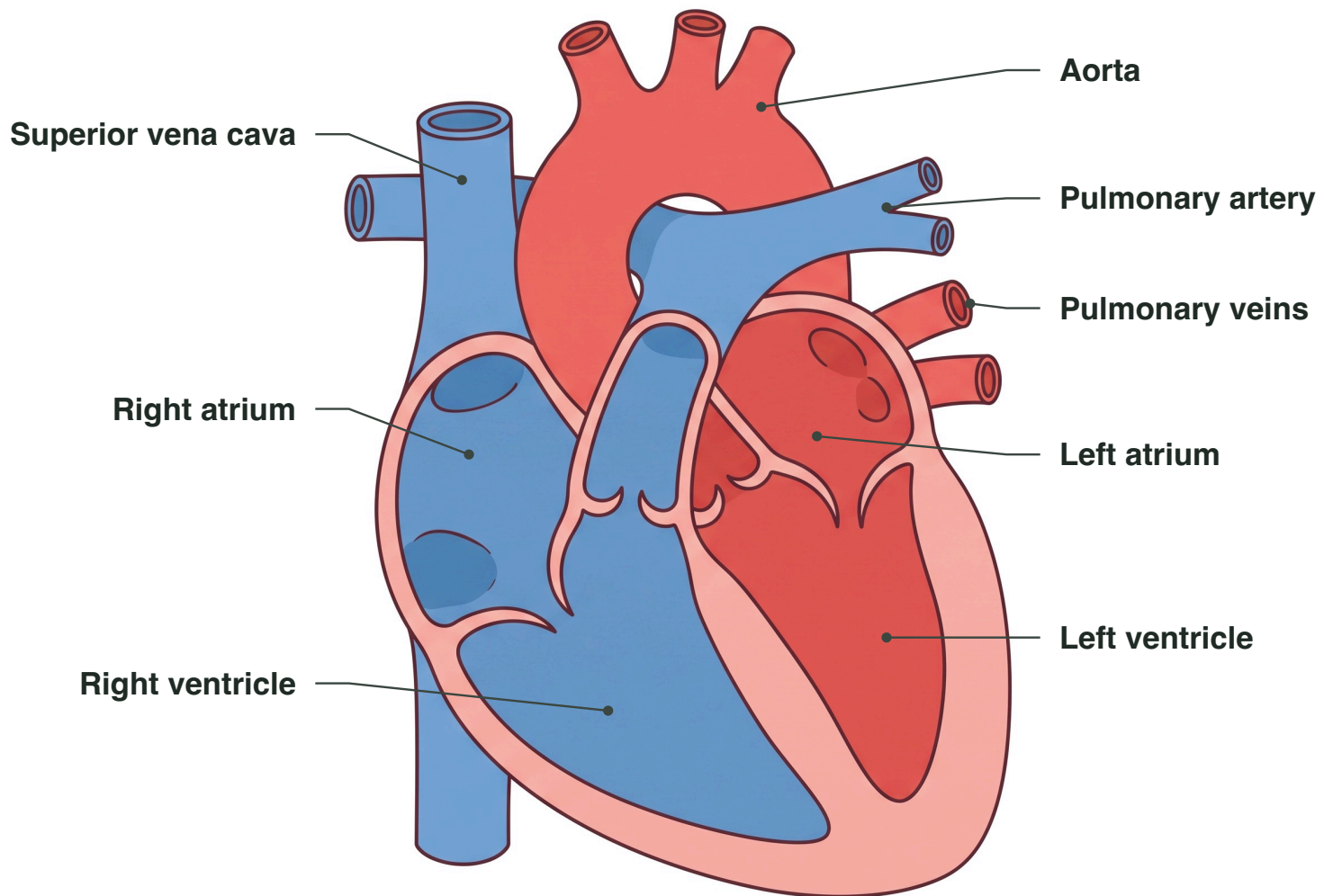
Heart and Circulation Quiz	13
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Answer keys

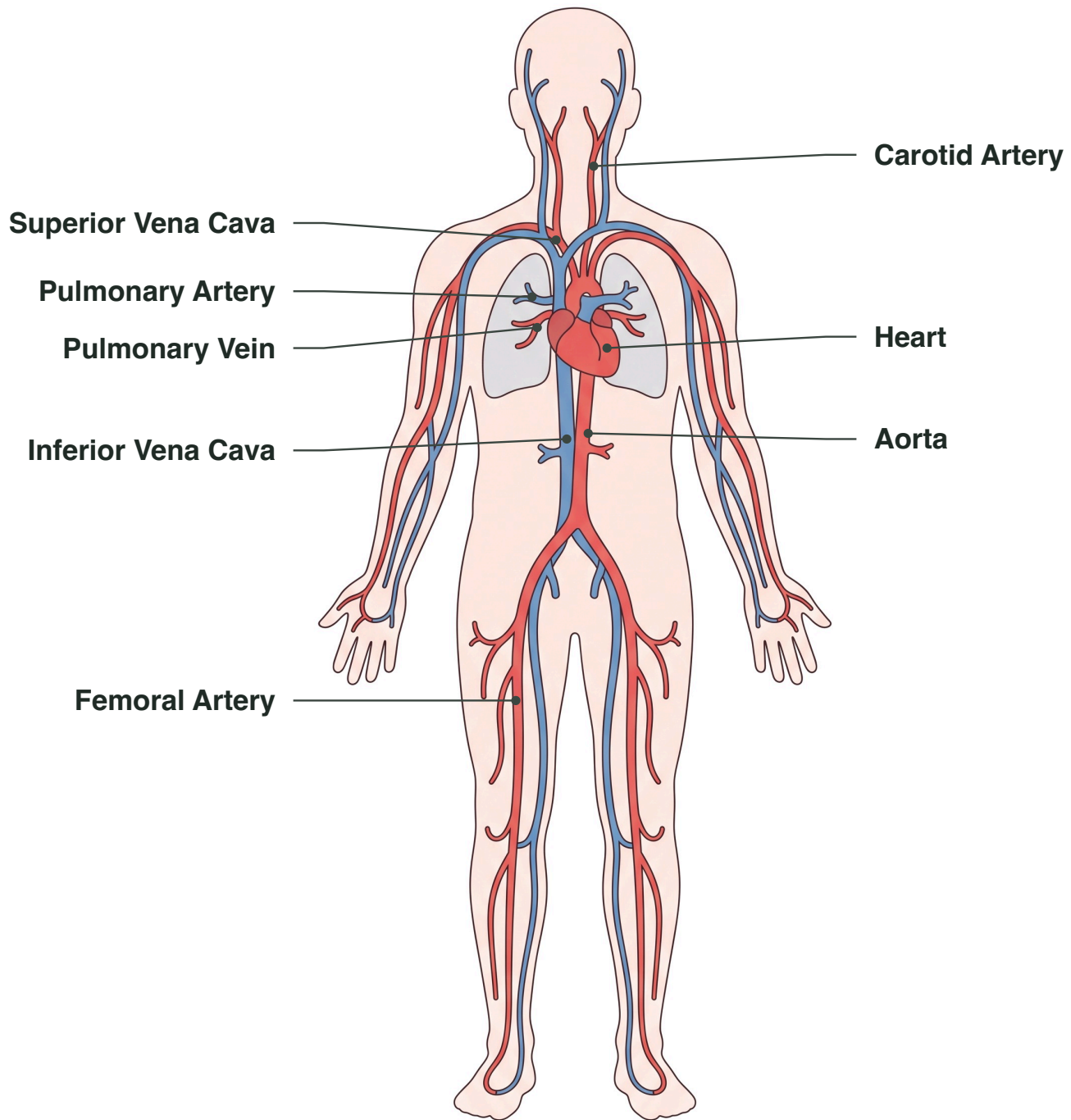
Every answer key, in the same order	15
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More free teaching packs. Skeletal System, Muscular System, Digestive System, Respiratory System, Excretory System, Nervous System and Brain, Eye and Ear, Endocrine System, Immune System and more at printablescholar.com/teaching-packs/

The Human Heart



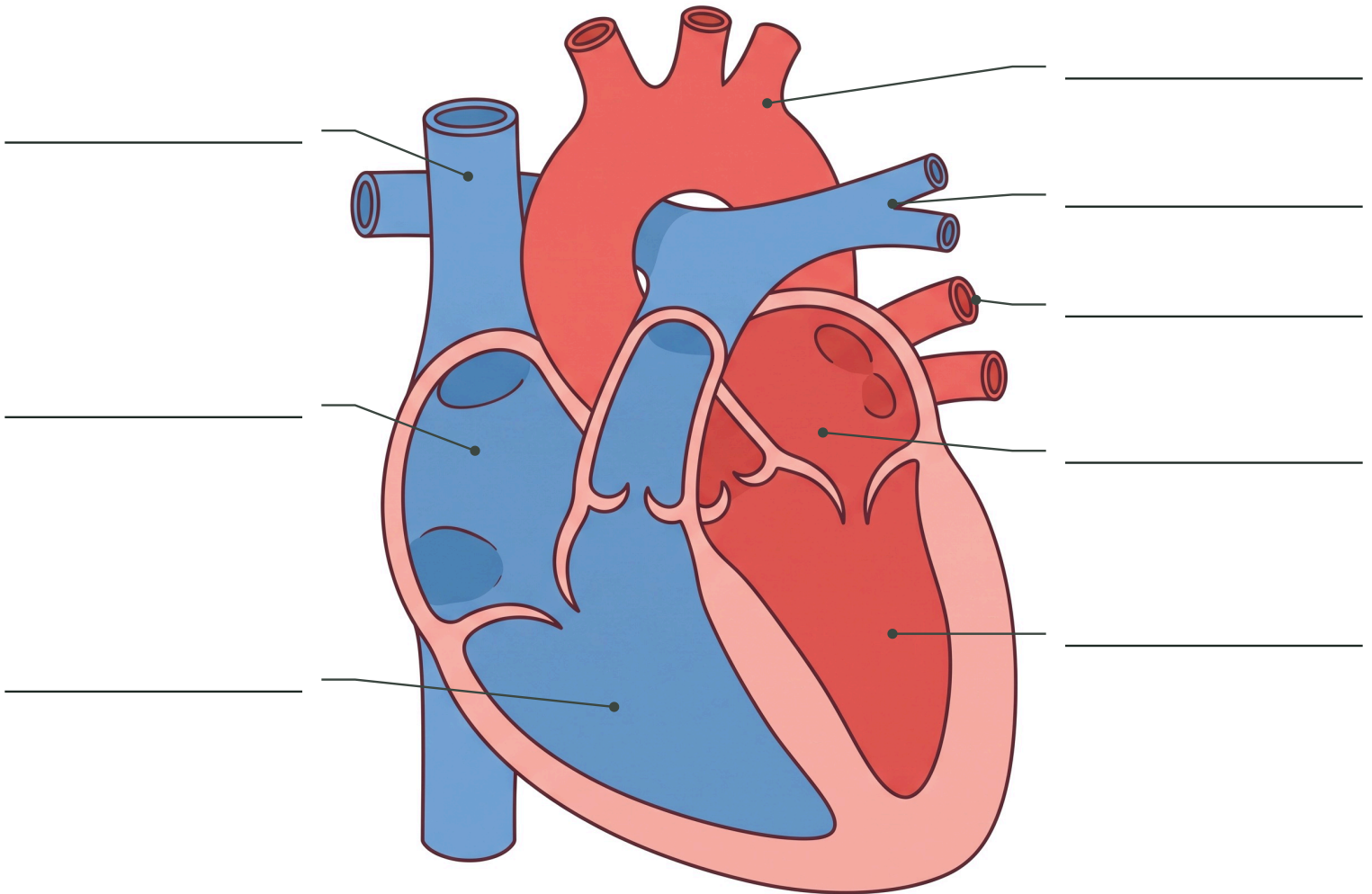
The Circulatory System



The Human Heart

Name: _____

Write the name of each part on its line. Use the word bank.



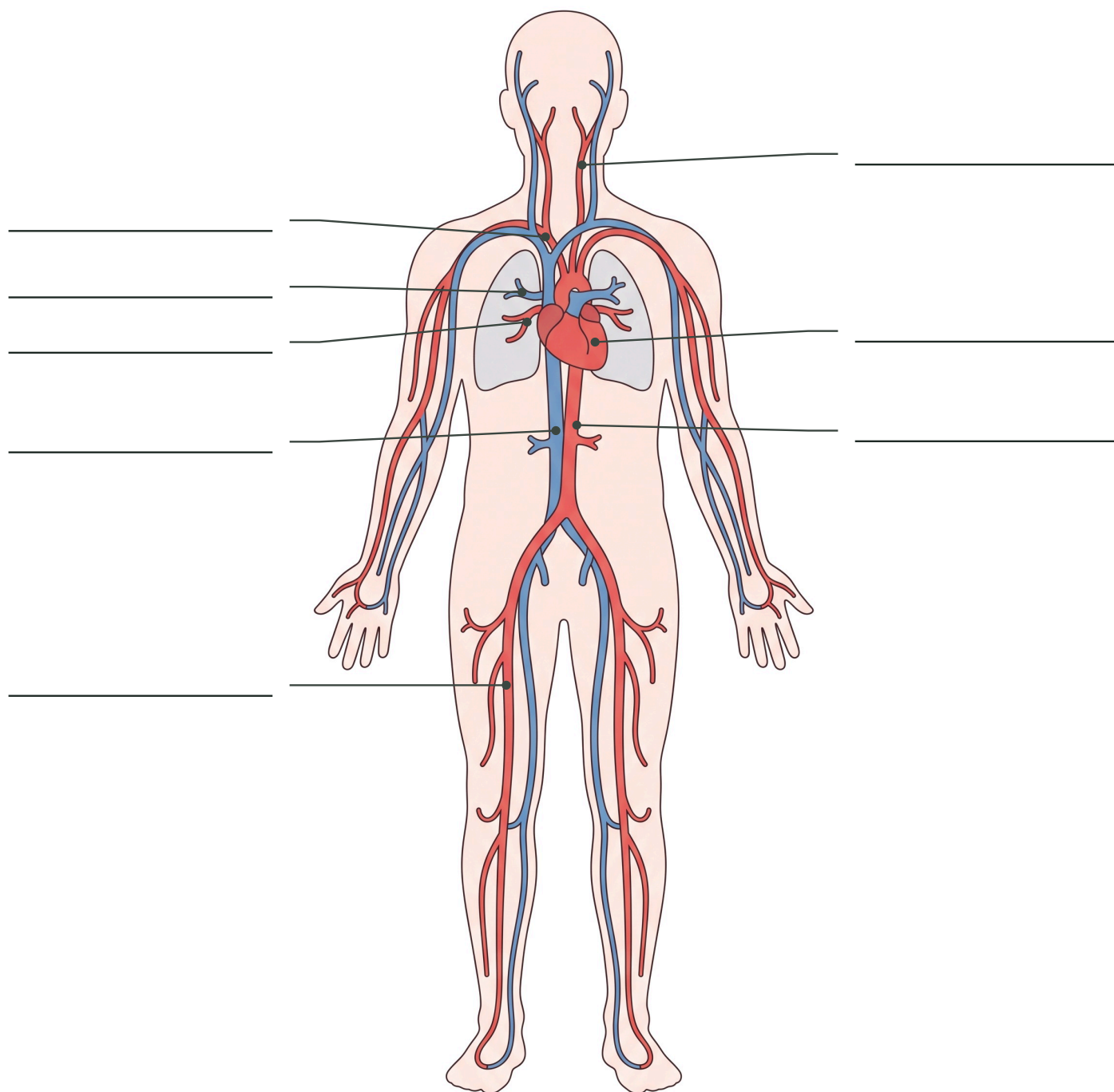
Word bank

Aorta Left atrium Left ventricle Pulmonary artery Pulmonary veins
Right atrium Right ventricle Superior vena cava

The Circulatory System

Name: _____

Write the name of each part on its line. Use the word bank.



Word bank

Aorta Carotid Artery Femoral Artery Heart Inferior Vena Cava
Pulmonary Artery Pulmonary Vein Superior Vena Cava

Parts of the Heart and Their Jobs

Use the labeled heart diagram to help you. The heart's right side is on the left of the picture.

Part A. Write the part that does each job.

Word bank

Aorta

Left atrium

Left ventricle

Pulmonary artery

Pulmonary veins

Right atrium

Right ventricle

Superior vena cava

1. The lower left chamber. It pumps oxygen-rich blood out to the body. _____

2. A large vein that returns oxygen-poor blood from the head and upper body to the heart. _____

3. The upper right chamber. It receives oxygen-poor blood coming back from the body. _____

4. They bring oxygen-rich blood back from the lungs to the heart. _____

5. The body's largest artery. It carries oxygen-rich blood out to the whole body. _____

6. The lower right chamber. It pumps oxygen-poor blood to the lungs. _____

7. The upper left chamber. It receives oxygen-rich blood from the lungs. _____

8. It carries oxygen-poor blood from the heart to the lungs. _____

Part B. Answer the questions.

1. Which two chambers hold oxygen-poor blood?

2. Most veins carry oxygen-poor blood. How are the pulmonary veins different?

3. The left ventricle has a thicker wall of muscle than the right ventricle. Why do you think that is?

Parts of the Circulatory System

Use the labeled circulatory system diagram to help you.

Part A. Write the part that does each job.

Word bank

Aorta

Carotid Artery

Femoral Artery

Heart

Inferior Vena Cava

Pulmonary Artery

Pulmonary Vein

Superior Vena Cava

1. The largest artery in the body. It carries oxygen-rich blood out to the rest of the body.

2. A large vein that returns oxygen-poor blood from the lower body and legs.

3. It runs up the side of the neck and supplies blood to the brain and head.

4. The muscular pump at the center of the system.

5. It returns oxygen-rich blood from the lungs.

6. The main blood supply to the leg. It runs through the thigh.

7. A large vein that returns oxygen-poor blood from the head and upper body.

8. It carries oxygen-poor blood to the lungs.

Part B. Answer the questions.

1. Which two large veins return oxygen-poor blood from the body to the heart?

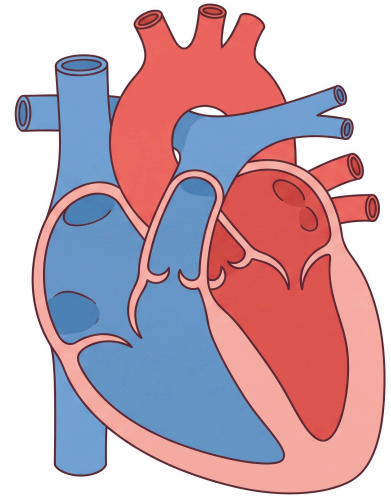
2. Most arteries carry oxygen-rich blood. Which artery on the diagram carries oxygen-poor blood?

3. An artery is a vessel that carries blood away from the heart. Name three arteries on the diagram and tell where each one takes blood.

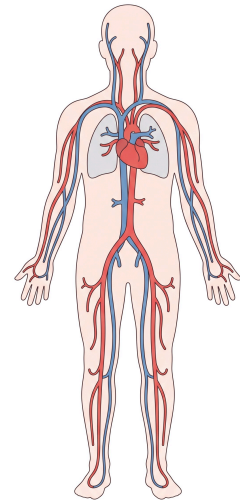
Your Heart and Your Blood

Read the text. Then answer the questions on the next page.

- 1 Your heart is a muscle about the size of your fist. It sits in your chest between your lungs. Its job is to pump blood. Blood carries oxygen and nutrients to every cell in your body and carries wastes such as carbon dioxide away. The heart, the blood and the blood vessels make up the **circulatory system**.
- 2 The heart has four chambers. The two upper chambers are the **atria**. One of them is called an atrium. The atria receive blood coming into the heart. The two lower chambers are the **ventricles**. They pump blood out of the heart. A wall of muscle divides the heart into a right side and a left side. It keeps the oxygen-poor blood on the right from mixing with the oxygen-rich blood on the left.
- 3 Blood follows the same path again and again. Oxygen-poor blood from the body enters the right atrium and flows down into the right ventricle. The right ventricle pumps it through the **pulmonary artery** to the lungs. There the blood drops off carbon dioxide and picks up oxygen. The oxygen-rich blood returns through the **pulmonary veins** to the left atrium and flows down into the left ventricle. The left ventricle pumps it out through the **aorta** to the whole body.
- 4 Blood travels in three kinds of vessels. **Arteries** carry blood away from the heart. **Veins** carry blood back to the heart. **Capillaries** are tiny vessels that connect the two. Their walls are so thin that oxygen can pass through them from the blood into the cells. Most arteries carry oxygen-rich blood and most veins carry oxygen-poor blood. The pulmonary artery and the pulmonary veins are the exceptions.
- 5 Each time your heart beats, it pushes blood into your arteries. You can feel that push as your **pulse** at your wrist or on the side of your neck. When you exercise, your muscles need more oxygen, so your heart beats faster.



The heart. Blue shows oxygen-poor blood. Red shows oxygen-rich blood.



Blood vessels reach every part of the body.

Your Heart and Your Blood: Questions

Go back to the text to find each answer. The paragraphs are numbered to help you.

1. What is this text mostly about?

- ☐ How the lungs take in air
- ☐ How the heart pumps blood around the body
- ☐ Why exercise is good for you
- ☐ How to take your pulse

2. Which chambers pump blood out of the heart?

- ☐ The atria
- ☐ The ventricles
- ☐ The capillaries
- ☐ The pulmonary veins

3. What does the wall of muscle between the right side and the left side of the heart do?

4. Number the steps 1 to 4 to show the path of blood (paragraph 3).

- ☐ In the lungs, the blood drops off carbon dioxide and picks up oxygen.
- ☐ Oxygen-poor blood from the body enters the right atrium.
- ☐ The left ventricle pumps the blood out through the aorta.
- ☐ The right ventricle pumps the blood to the lungs.

5. Which vessels carry blood away from the heart?

- ☐ Arteries
- ☐ Veins
- ☐ Capillaries
- ☐ Atria

6. Which vessel carries blood from the left ventricle out to the whole body?

- ☐ The pulmonary artery
- ☐ The pulmonary veins
- ☐ The aorta
- ☐ A capillary

7. Why do capillaries need very thin walls?

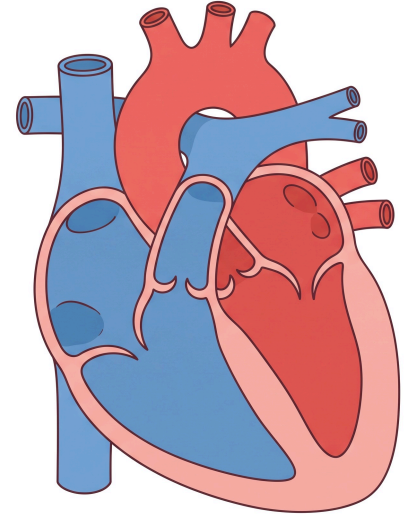
8. Why does your heart beat faster when you run?

The Path of Blood Through the Heart

Start with blood coming back from the body. Blue shows oxygen-poor blood. Red shows oxygen-rich blood. The heart's right side is on the left of the picture.

Part A. Number the steps from 1 to 7.

- ☐ In the lungs, the blood drops off carbon dioxide and picks up oxygen.
- ☐ The left ventricle pumps the blood through the aorta to the whole body.
- ☐ Oxygen-poor blood comes back from the body and enters the right atrium.
- ☐ The right ventricle pumps the blood through the pulmonary artery to the lungs.
- ☐ The blood flows down into the right ventricle.
- ☐ Oxygen-rich blood returns through the pulmonary veins to the left atrium.
- ☐ The blood flows down into the left ventricle.



Part B. Answer the questions.

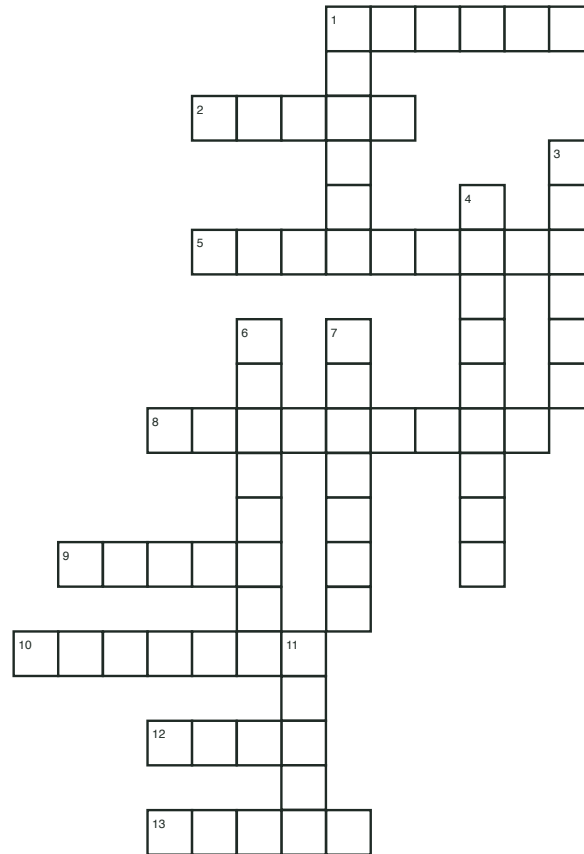
1. Where does the blood pick up oxygen?

2. Which side of the heart holds oxygen-rich blood?

3. Blood leaves the heart twice on each full trip. Where does it go each time?

Heart and Circulation Crossword

Read each clue. Write the answer in the puzzle, one letter in each box. Use the word bank if you get stuck.



ACROSS

1. A vessel that carries blood away from the heart.
2. The muscular pump that keeps blood moving.
5. The ____ artery carries blood from the heart to the lungs.
8. A lower chamber of the heart. It pumps blood out.
9. The largest artery in the body.
10. The ____ artery is the main blood supply to the leg.
12. A vessel that carries blood back to the heart.
13. The beat you can feel at your wrist or on the side of your neck.

DOWN

1. An upper chamber of the heart. It receives blood.
3. The gas that blood carries to every cell.
4. The tiniest kind of blood vessel. Its walls are very thin.
6. A large vein that returns oxygen-poor blood from the body to the heart (2 words).
7. The ____ artery supplies blood to the brain and head.
11. Where blood picks up oxygen.

Word bank

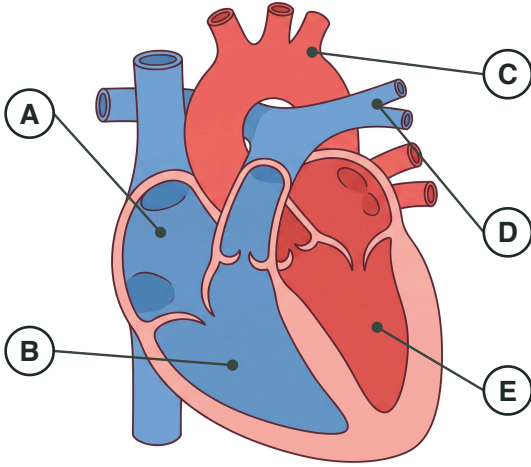
aorta artery atrium capillary carotid femoral heart lungs oxygen
pulmonary pulse vein vena cava ventricle

Heart and Circulation Quiz

Score _____ / 13

Remember: the heart's right side is on the left of the picture.

Part A. This is the heart. Write the name of each part.



A _____

B _____

C _____

D _____

E _____

Aorta · Left ventricle · Pulmonary artery · Right atrium · Right ventricle

Part B. Choose the best answer.

- Which chamber pumps oxygen-rich blood out to the body?
☐ Right atrium
☐ Right ventricle
☐ Left atrium
☐ Left ventricle
- Where does blood pick up oxygen?
☐ In the heart
☐ In the lungs
☐ In the aorta
☐ In the legs
- How many chambers does the heart have?
☐ Two
☐ Three
☐ Four
☐ Six
- What is the largest artery in the body?
☐ Carotid artery
☐ Femoral artery
☐ Pulmonary artery
☐ Aorta
- Which vessel carries blood from the heart to the lungs?
☐ Aorta
☐ Pulmonary artery
☐ Pulmonary vein
☐ Superior vena cava
- Which vessels let oxygen pass into the cells?
☐ Capillaries
☐ Arteries
☐ Veins
☐ Ventricles

Part C. Write your answer.

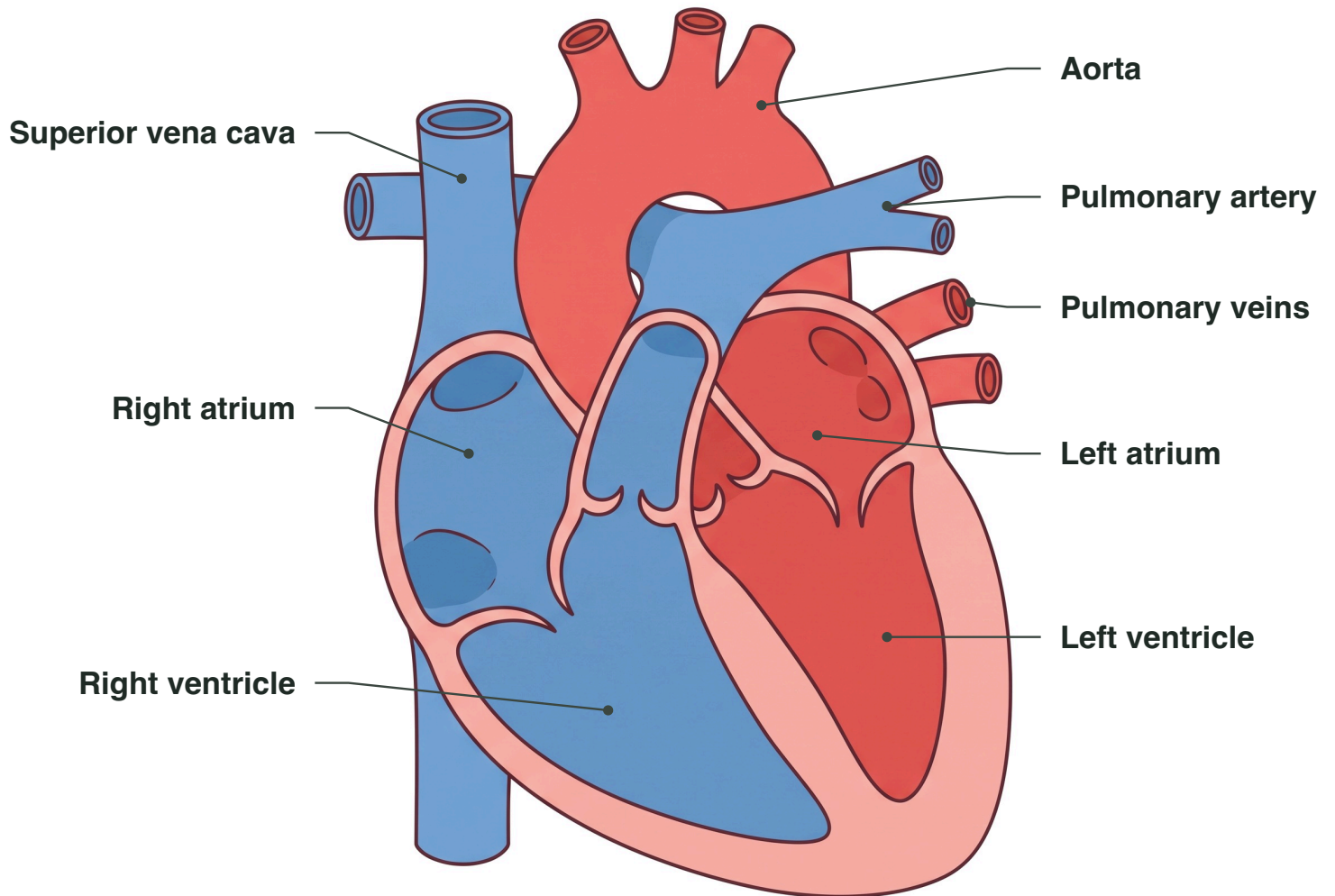
7. What is the difference between an artery and a vein?

8. Which two chambers of the heart hold oxygen-rich blood?

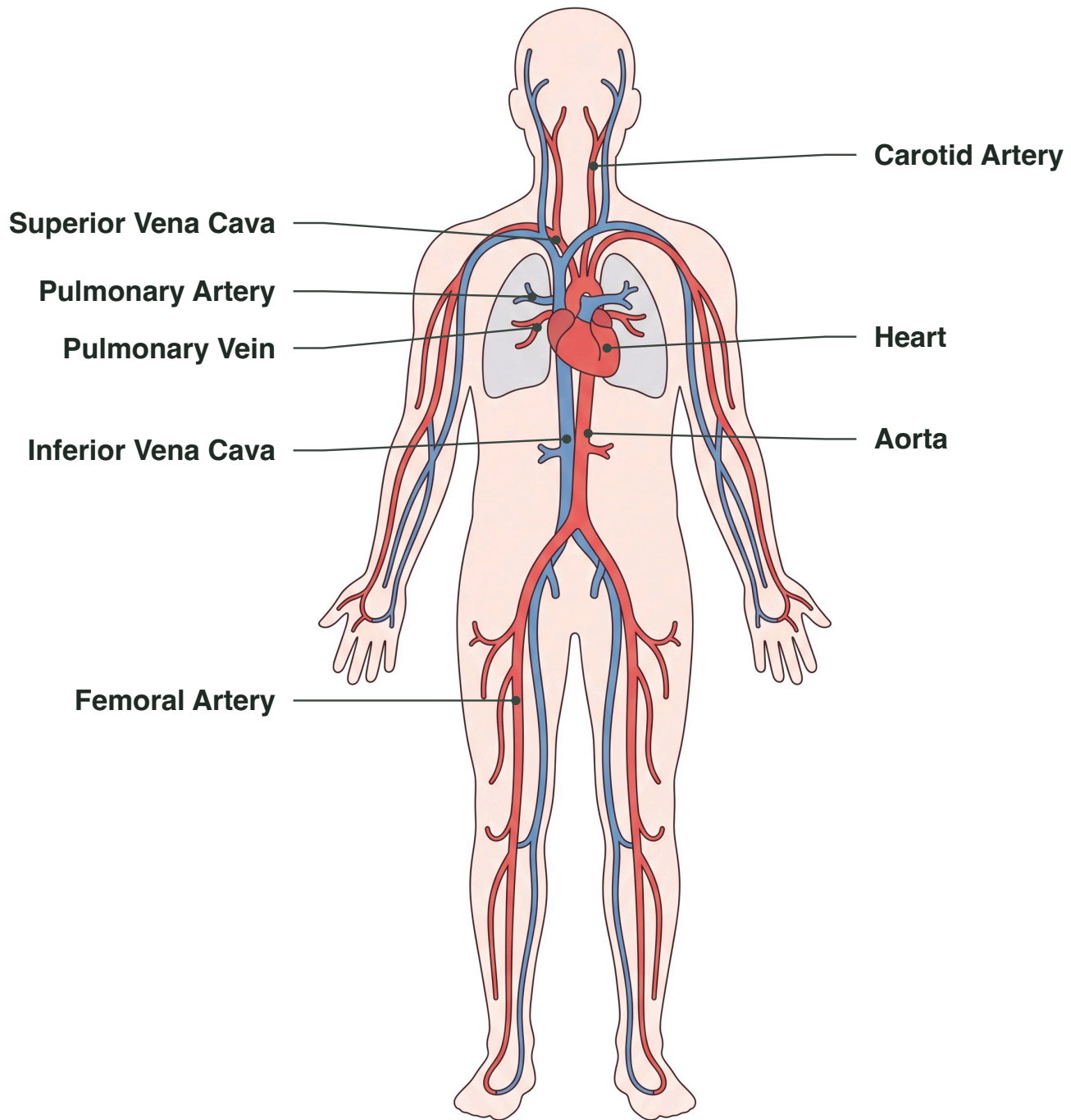
Answer Keys

In the same order as the sheets.

The Human Heart: Answer Key



The Circulatory System: Answer Key



Parts of the Heart and Their Jobs: Answer Key

Answers are in green. Written answers will vary; these are examples.

Part A. Write the part that does each job.

Word bank

Aorta Left atrium Left ventricle Pulmonary artery Pulmonary veins Right atrium
Right ventricle Superior vena cava

- | | |
|---|---------------------------|
| 1. The lower left chamber. It pumps oxygen-rich blood out to the body. | Left ventricle |
| 2. A large vein that returns oxygen-poor blood from the head and upper body to the heart. | Superior vena cava |
| 3. The upper right chamber. It receives oxygen-poor blood coming back from the body. | Right atrium |
| 4. They bring oxygen-rich blood back from the lungs to the heart. | Pulmonary veins |
| 5. The body's largest artery. It carries oxygen-rich blood out to the whole body. | Aorta |
| 6. The lower right chamber. It pumps oxygen-poor blood to the lungs. | Right ventricle |
| 7. The upper left chamber. It receives oxygen-rich blood from the lungs. | Left atrium |
| 8. It carries oxygen-poor blood from the heart to the lungs. | Pulmonary artery |

Part B. Answer the questions.

- Which two chambers hold oxygen-poor blood?
The right atrium and the right ventricle.
- Most veins carry oxygen-poor blood. How are the pulmonary veins different?
They carry oxygen-rich blood. It is coming back from the lungs.
- The left ventricle has a thicker wall of muscle than the right ventricle. Why do you think that is?
The left ventricle pumps blood to the whole body. The right ventricle only pumps it to the lungs, which are close by.

Parts of the Circulatory System: Answer Key

Answers are in green. Written answers will vary; these are examples.

Part A. Write the part that does each job.

Word bank

Aorta Carotid Artery Femoral Artery Heart Inferior Vena Cava Pulmonary Artery
Pulmonary Vein Superior Vena Cava

1.	The largest artery in the body. It carries oxygen-rich blood out to the rest of the body.	Aorta
2.	A large vein that returns oxygen-poor blood from the lower body and legs.	Inferior Vena Cava
3.	It runs up the side of the neck and supplies blood to the brain and head.	Carotid Artery
4.	The muscular pump at the center of the system.	Heart
5.	It returns oxygen-rich blood from the lungs.	Pulmonary Vein
6.	The main blood supply to the leg. It runs through the thigh.	Femoral Artery
7.	A large vein that returns oxygen-poor blood from the head and upper body.	Superior Vena Cava
8.	It carries oxygen-poor blood to the lungs.	Pulmonary Artery

Part B. Answer the questions.

- Which two large veins return oxygen-poor blood from the body to the heart?
The superior vena cava and the inferior vena cava.
- Most arteries carry oxygen-rich blood. Which artery on the diagram carries oxygen-poor blood?
The pulmonary artery.
- An artery is a vessel that carries blood away from the heart. Name three arteries on the diagram and tell where each one takes blood.
Any three: aorta, to the rest of the body. Carotid artery, to the brain and head. Femoral artery, to the leg. Pulmonary artery, to the lungs.

Your Heart and Your Blood: Answer Key

Answers are in green. Written answers will vary; these are examples.

1. What is this text mostly about?

- ☐ How the lungs take in air
- ☒ **How the heart pumps blood around the body**
- ☐ Why exercise is good for you
- ☐ How to take your pulse

2. Which chambers pump blood out of the heart?

- ☐ The atria
- ☒ **The ventricles**
- ☐ The capillaries
- ☐ The pulmonary veins

3. What does the wall of muscle between the right side and the left side of the heart do?

It keeps oxygen-poor blood from mixing with oxygen-rich blood.

4. Number the steps 1 to 4 to show the path of blood (paragraph 3).

- 3** In the lungs, the blood drops off carbon dioxide and picks up oxygen.
- 1** Oxygen-poor blood from the body enters the right atrium.
- 4** The left ventricle pumps the blood out through the aorta.
- 2** The right ventricle pumps the blood to the lungs.

5. Which vessels carry blood away from the heart?

- ☒ **Arteries**
- ☐ Veins
- ☐ Capillaries
- ☐ Atria

6. Which vessel carries blood from the left ventricle out to the whole body?

- ☐ The pulmonary artery
- ☐ The pulmonary veins
- ☒ **The aorta**
- ☐ A capillary

7. Why do capillaries need very thin walls?

So oxygen can pass through them from the blood into the cells.

8. Why does your heart beat faster when you run?

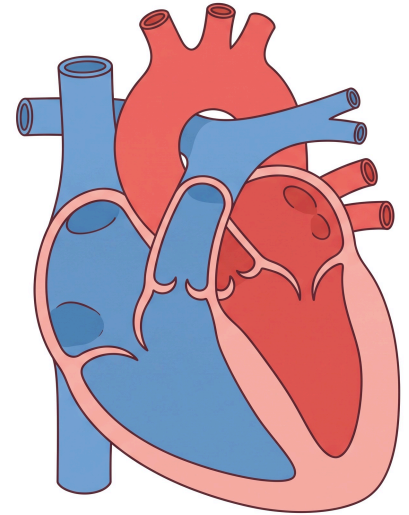
Your muscles need more oxygen, so the heart pumps blood to them faster.

The Path of Blood Through the Heart: Answer Key

Answers are in green. Written answers will vary; these are examples.

Part A. Number the steps from 1 to 7.

- 4** In the lungs, the blood drops off carbon dioxide and picks up oxygen.
- 7** The left ventricle pumps the blood through the aorta to the whole body.
- 1** Oxygen-poor blood comes back from the body and enters the right atrium.
- 3** The right ventricle pumps the blood through the pulmonary artery to the lungs.
- 2** The blood flows down into the right ventricle.
- 5** Oxygen-rich blood returns through the pulmonary veins to the left atrium.
- 6** The blood flows down into the left ventricle.



Part B. Answer the questions.

1. Where does the blood pick up oxygen?

In the lungs.

2. Which side of the heart holds oxygen-rich blood?

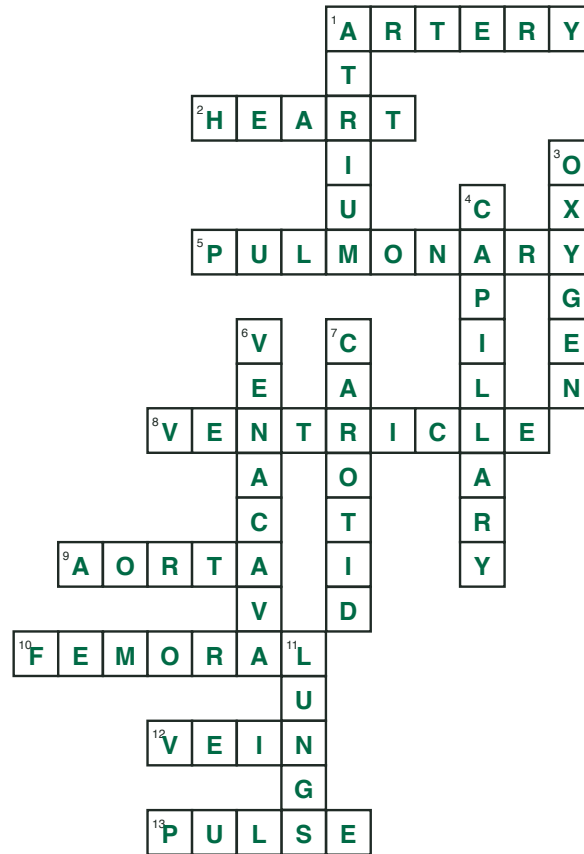
The left side (the left atrium and the left ventricle).

3. Blood leaves the heart twice on each full trip. Where does it go each time?

First the right ventricle pumps it to the lungs. Then the left ventricle pumps it to the rest of the body.

Heart and Circulation Crossword: Answer Key

Answers are in green.



ACROSS

1. A vessel that carries blood away from the heart.
2. The muscular pump that keeps blood moving.
5. The ____ artery carries blood from the heart to the lungs.
8. A lower chamber of the heart. It pumps blood out.
9. The largest artery in the body.
10. The ____ artery is the main blood supply to the leg.
12. A vessel that carries blood back to the heart.
13. The beat you can feel at your wrist or on the side of your neck.

DOWN

1. An upper chamber of the heart. It receives blood.
3. The gas that blood carries to every cell.
4. The tiniest kind of blood vessel. Its walls are very thin.
6. A large vein that returns oxygen-poor blood from the body to the heart (2 words).
7. The ____ artery supplies blood to the brain and head.
11. Where blood picks up oxygen.

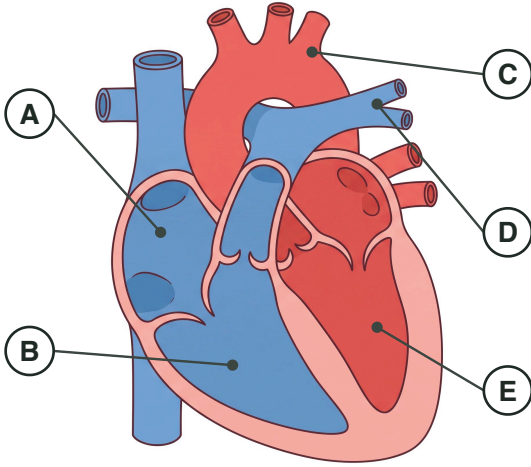
Word bank

aorta artery atrium capillary carotid femoral heart lungs oxygen
pulmonary pulse vein vena cava ventricle

Heart and Circulation Quiz: Answer Key

Answers are in green. Written answers will vary; these are examples.

Part A. This is the heart. Write the name of each part.



A **Right atrium**

B **Right ventricle**

C **Aorta**

D **Pulmonary artery**

E **Left ventricle**

Aorta · Left ventricle · Pulmonary artery · Right atrium · Right ventricle

Part B. Choose the best answer.

1. Which chamber pumps oxygen-rich blood out to the body?

- ☐ Right atrium
- ☐ Right ventricle
- ☐ Left atrium
- ☒ **Left ventricle**

2. Where does blood pick up oxygen?

- ☐ In the heart
- ☒ **In the lungs**
- ☐ In the aorta
- ☐ In the legs

3. How many chambers does the heart have?

- ☐ Two
- ☐ Three
- ☒ **Four**
- ☐ Six

4. What is the largest artery in the body?

- ☐ Carotid artery
- ☐ Femoral artery
- ☐ Pulmonary artery
- ☒ **Aorta**

5. Which vessel carries blood from the heart to the lungs?

- ☐ Aorta
- ☒ **Pulmonary artery**
- ☐ Pulmonary vein
- ☐ Superior vena cava

6. Which vessels let oxygen pass into the cells?

- ☒ **Capillaries**
- ☐ Arteries
- ☐ Veins
- ☐ Ventricles

Part C. Write your answer.

7. What is the difference between an artery and a vein?

An artery carries blood away from the heart. A vein carries blood back to it.

8. Which two chambers of the heart hold oxygen-rich blood?

The left atrium and the left ventricle.