

Heart Structure & Function Comprehension Questions

Hi there! These are some comprehension questions to help you check your understanding of the heart structure and functions! Before we start, these questions are **not intended to be similar to or be preparation for checkup/quiz/test questions**. These are to check your comprehension and guide you to topics you may need to focus on. If you feel ready to attempt actual practice questions as study material for an upcoming assessment, check out [\[INSERT SOURCE\]](#)!

1. *Matching*: Match the definition to its corresponding term.

(1) **Pulmonary Circulation**

(A) Oxygenated blood circulates from the base of the aorta into the coronary arteries to supply blood to the heart.

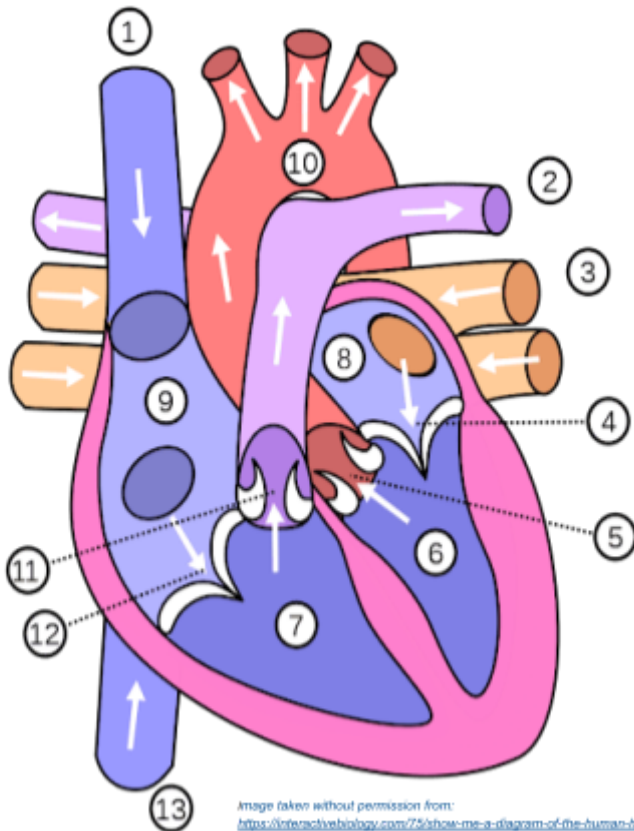
(2) **Systemic Circulation**

(B) Deoxygenated blood leaves pulmonary artery into lungs (carbon dioxide released, oxygen obtained). Oxygenated blood sent to heart through pulmonary veins into left atrium.

(3) **Coronary Circulation**

(C) Oxygenated blood travels from the left ventricle into the aorta and down the descending aorta throughout the entire body into tissues.

2. *Fill in the diagram*: Label the structures in the following heart diagram with its corresponding term.



- (1) _____
- (2) _____
- (3) _____
- (4) _____
- (5) _____
- (6) _____
- (7) _____
- (8) _____
- (9) _____
- (10) _____
- (11) _____
- (12) _____
- (13) _____

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<https://interactvebiology.com/25/show-me-a-diagram-of-the-human-heart-here-its-a-bunch/>

3. *Multiple choice:* Question 3a-d are regarding structures in the heart diagram above. Circle the most accurate choice.
- a. What is the function of Structure 2?
 - (a) Controls the flow of deoxygenated blood from the right ventricle to the lungs.
 - (b) Transport deoxygenated blood from the right ventricle to the lungs for gas exchange.
 - (c) Transport oxygenated blood from the lungs to the left atrium.
 - (d) Brings deoxygenated blood from the upper half of the body (head, brain, neck, and arms) to the right atrium.
 - b. Structure 13 brings deoxygenated blood from what 3 other body parts?
 - (a) Abdominal organs, lungs, hands
 - (b) Abdominal organs, heart, brain
 - (c) Pelvis, hands, legs
 - (d) Abdominal organs, pelvis, legs
 - c. Which structure brings oxygenated blood from the lungs to the right atrium?
 - (a) Structure 3
 - (b) Structure 1
 - (c) Structure 13
 - (d) Structure 11
 - d. What is the pathway starting with deoxygenated blood coming to the heart from the upper body and ending with oxygenated blood returning to the heart?
 - (a) 3 → 8 → 4 → 6 → 5 → 10 → Lungs → 13
 - (b) 3 → 9 → 4 → 6 → 5 → 10 → Lungs → 13
 - (c) 13 → 7 → 9 → 1 → Lungs → 3
 - (d) 1 → 9 → 12 → 7 → 11 → 2 → Lungs → 3
4. *True or false:* Arteries bring deoxygenated blood to the heart.
 - (a) True
 - (b) False
5. *True or false:* A heart attack occurs when the coronary artery gets blocked or hemorrhages.
 - (a) True
 - (b) False

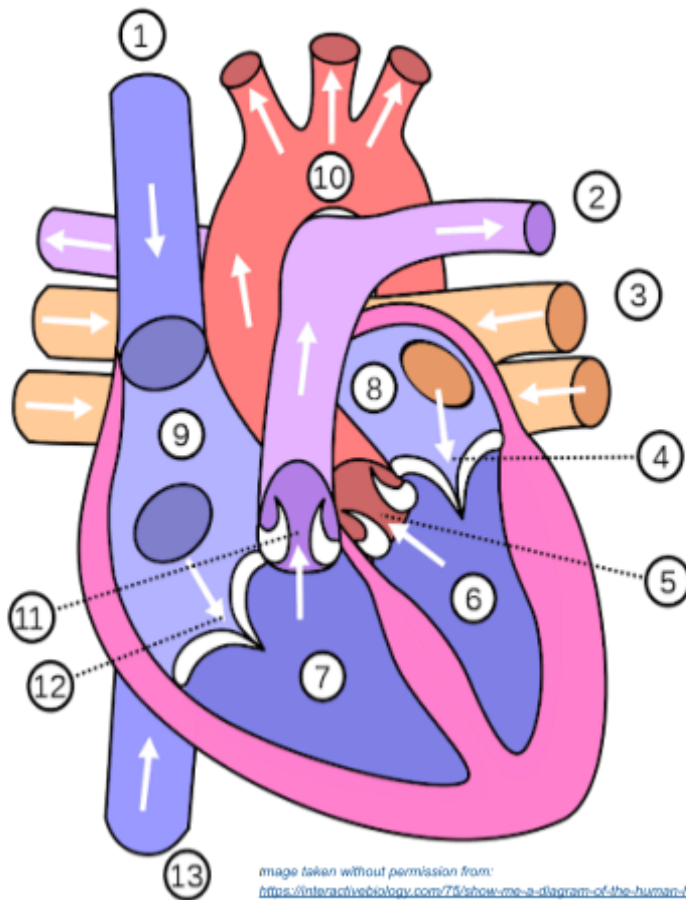
***** ANSWER KEY ON FOLLOWING PAGE *****

ANSWER KEY - Check your work after completing the previous questions!

1. *Matching:* Match the definition to its corresponding term.

- | | |
|----------------------------------|--|
| (1) Pulmonary Circulation | (A) Oxygenated blood circulates from the base of the aorta into the coronary arteries to supply blood to the heart. |
| (2) Systemic Circulation | (B) Deoxygenated blood leaves pulmonary artery into lungs (carbon dioxide released, oxygen obtained). Oxygenated blood sent to heart through pulmonary veins into left atrium. |
| (3) Coronary Circulation | (C) Oxygenated blood travels from the left ventricle into the aorta and down the descending aorta throughout the entire body into tissues. |

2. *Fill in the diagram:* Label the structures in the following heart diagram with its corresponding term.



- (1) Superior vena cava
- (2) Pulmonary artery
- (3) Pulmonary vein
- (4) Bicuspid/Mitral valve
- (5) Aortic valve
- (6) Left ventricle
- (7) Right ventricle
- (8) Left atrium
- (9) Right atrium
- (10) Aorta
- (11) Pulmonary valve
- (12) Tricuspid valve
- (13) Inferior vena cava

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3. *Multiple choice:* Question 3a-d are regarding structures in the heart diagram above. Circle the most accurate choice.

- a. What is the function of Structure 2?
 - (a) Controls the flow of deoxygenated blood from the right ventricle to the lungs.
 - (b) Transport deoxygenated blood from the right ventricle to the lungs for gas exchange.
 - (c) Transport oxygenated blood from the lungs to the left atrium.
 - (d) Brings deoxygenated blood from the upper half of the body (head, brain, neck, and arms) to the right atrium.
- b. Structure 13 brings deoxygenated blood from what 3 other body parts?
 - (a) Abdominal organs, lungs, hands
 - (b) Abdominal organs, heart, brain
 - (c) Pelvis, hands, legs
 - (d) Abdominal organs, pelvis, legs
- c. Which structure brings oxygenated blood from the lungs to the right atrium?
 - (a) Structure 3
 - (b) Structure 1
 - (c) Structure 13
 - (d) Structure 11
- d. What is the pathway starting with deoxygenated blood coming to the heart from the upper body and ending with oxygenated blood returning to the heart?
 - (a) 3 → 8 → 4 → 6 → 5 → 10 → Lungs → 13
 - (b) 3 → 9 → 4 → 6 → 5 → 10 → Lungs → 13
 - (c) 13 → 7 → 9 → 1 → Lungs → 3
 - (d) 1 → 9 → 12 → 7 → 11 → 2 → Lungs → 3

4. *True or false:* Arteries bring deoxygenated blood to the heart.

- (a) True
- (b) False - *Arteries carry oxygenated blood away from the heart!*

5. *True or false:* A heart attack occurs when the coronary artery gets blocked or hemorrhages.

- (a) True
- (b) False