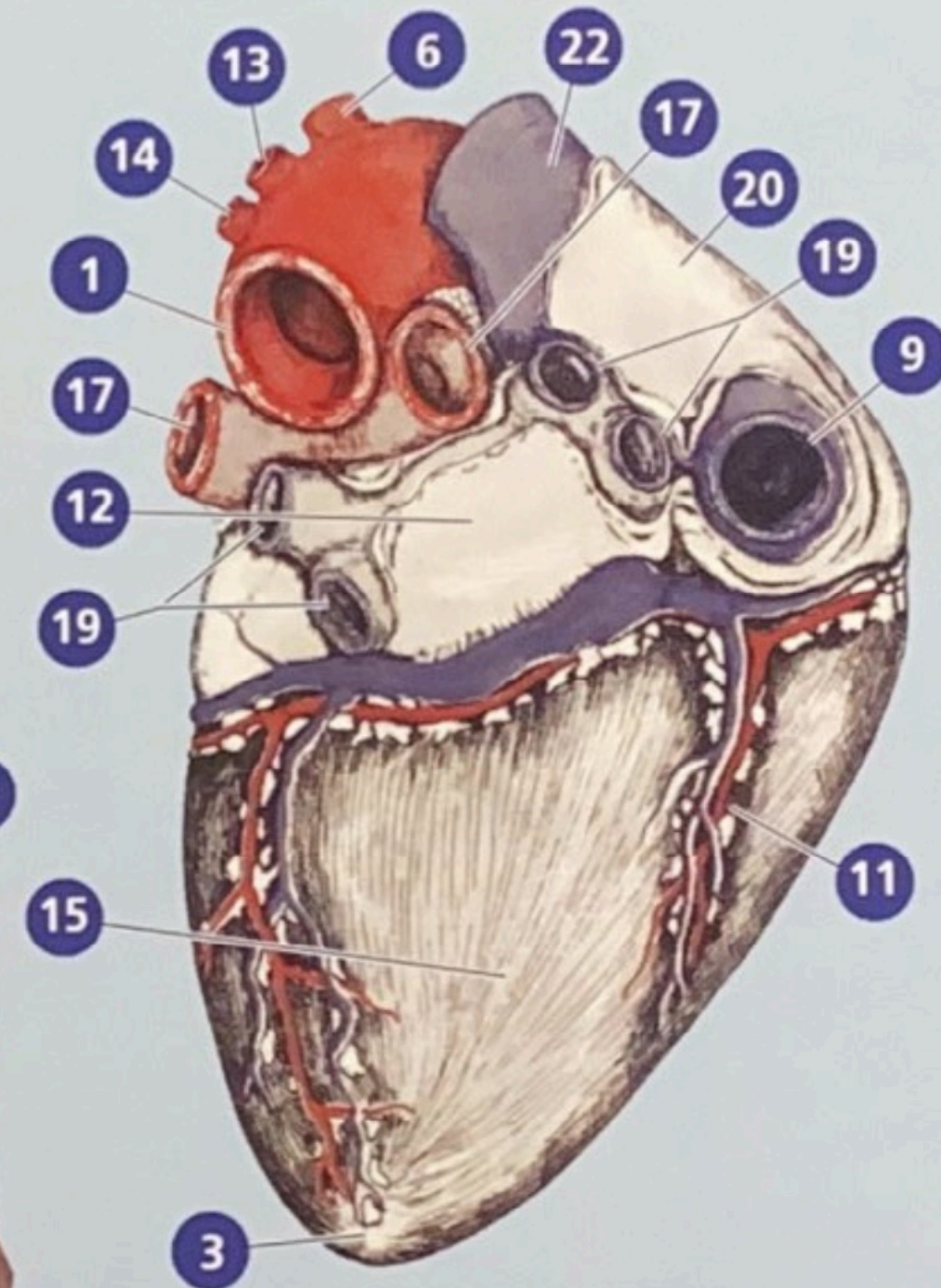
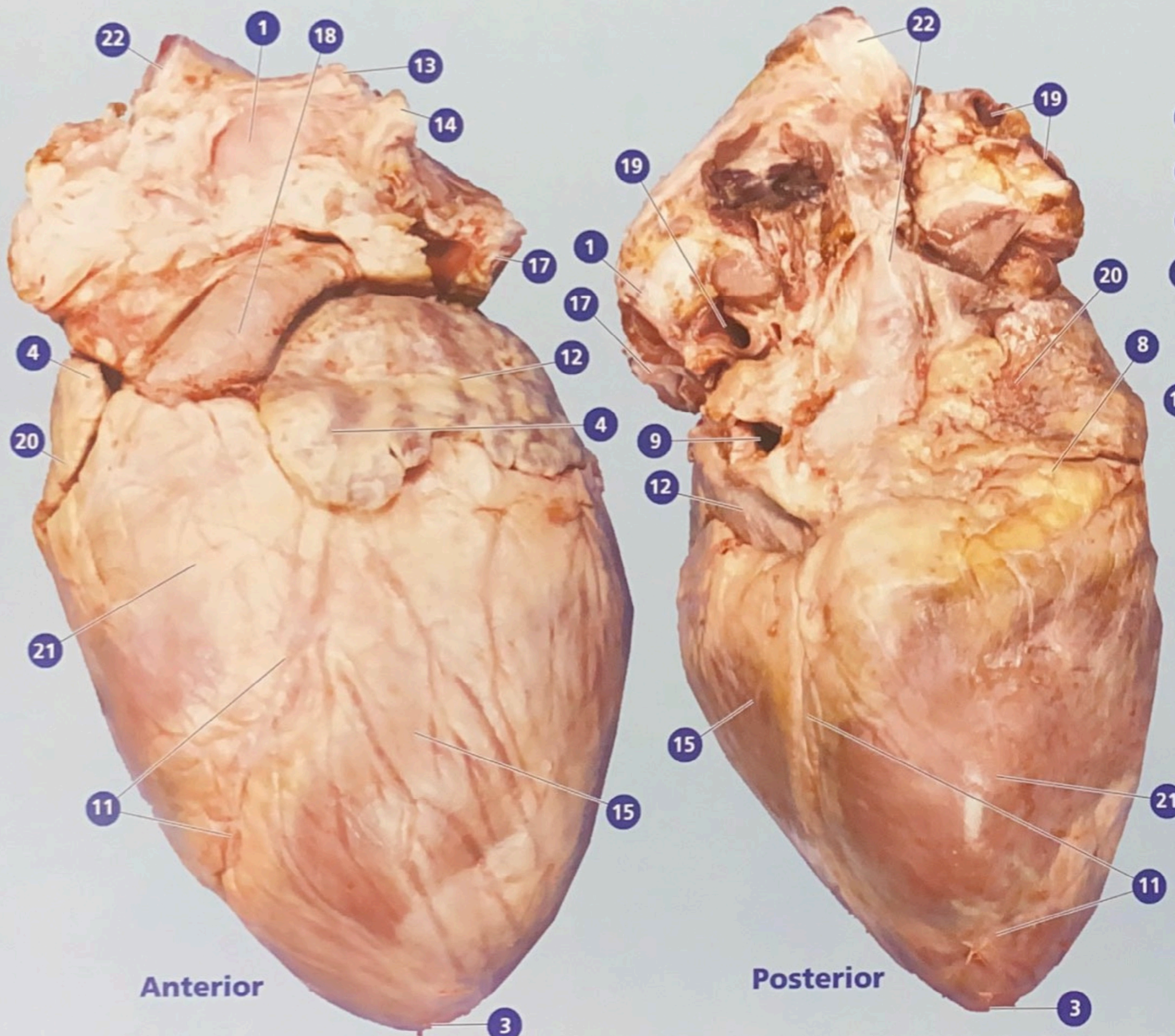


Examine the external features of the heart. Try to identify as many of the attached arteries and veins as you can.



Open the heart with a longitudinal cut, beginning below the left atrium.

- 1 Aorta
- 2 Aortic valve*
- 3 Apex
- 4 Atrial appendage
- 5 Bicuspid valve*
- 6 Brachiocephalic trunk
- 7 Chordae tendineae*
- 8 Coronary sulcus
- 9 Inferior vena cava
- 10 Interventricular septum*
- 11 Interventricular sulcus
- 12 Left atrium
- 13 Left common carotid artery
- 14 Left subclavian artery
- 15 Left ventricle
- 16 Papillary muscles*
- 17 Pulmonary artery
- 18 Pulmonary trunk
- 19 Pulmonary veins
- 20 Right atrium
- 21 Right ventricle
- 22 Superior vena cava
- 23 Trabeculae carneae*
- 24 Tricuspid valve*

*Pictured on back

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1 Aorta. Artery that carries oxygenated blood from the left ventricle; large, curved origin is referred to as aortic trunk.

2 Aortic valve. Valve that opens to allow blood to enter the aorta from the left ventricle and closes to prevent backflow.

3 Apex. The relatively pointed end of the heart, at the base of the ventricles.

4 Atrial appendage. Projection from the main chamber of each atrium; forms an earlike flap over a portion of the atrium; also referred to as auricular appendage.

5 Bicuspid valve. Valve between the left atrium and left ventricle; opens during flow from atrium into ventricle and closes during ventricular contraction; also known as mitral valve or as left atrioventricular valve.

6 Brachiocephalic trunk. Large branch from the aortic trunk; immediately branches into the right common carotid and right subclavian arteries.

7 Chordae tendineae. Fibrous cords connecting the atrioventricular valves to the papillary muscles in the ventricles; they help hold the valve closed during the force of the ventricular contraction.

8 Coronary sulcus. Surface groove that delineates the atria from the ventricles; contains some of the blood vessels for the heart muscle itself; also called the atrioventricular sulcus.

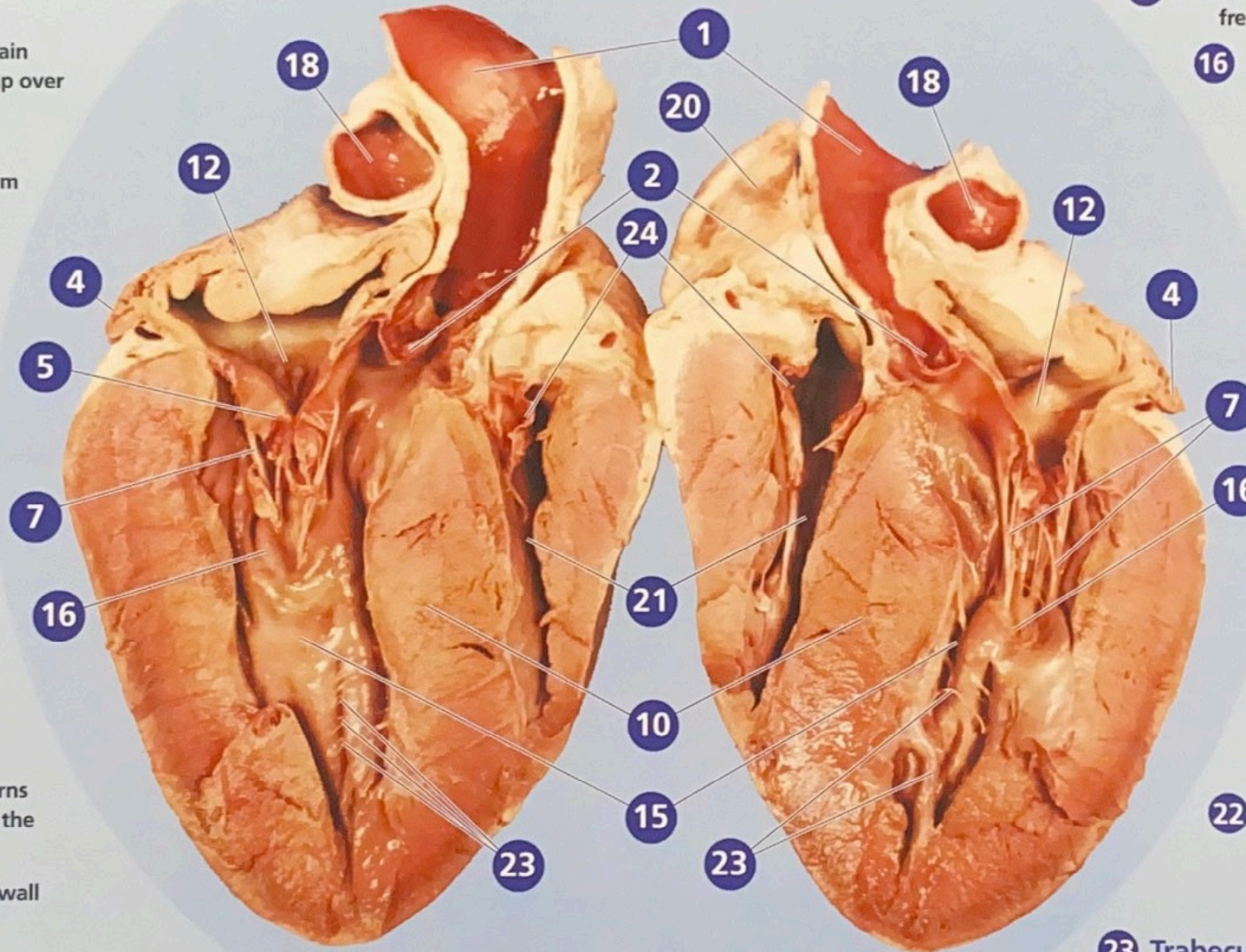
9 Inferior vena cava. The largest vein; returns deoxygenated blood to the left atrium from the portion of the body caudal to the heart.

10 Interventricular septum. The muscular wall between the left and right ventricle.

11 Interventricular sulcus. Surface groove that marks the division between the ventricles; the anterior and posterior sulci each contain a branch from the coronary arteries, which supply the heart muscle with blood.

12 Left atrium. Chamber that receives oxygenated blood from the lungs through the pulmonary vein.

**Examine the internal features of the heart.
Try to trace the path of the blood.**



13 Left common carotid artery. Branch from the aortic trunk that supplies part of the neck and head.

14 Left subclavian artery. Branch from the aortic trunk that supplies the left forelimb.

15 Left ventricle. The thick-walled chamber that pumps freshly oxygenated blood through the aorta.

16 Papillary muscles. Muscles on the inner wall of each ventricle; they attach to the chordae tendineae and contract to tighten the chordae and hold the atrioventricular valve tightly shut when the ventricle contracts.

17 Pulmonary artery. One of two main branches from the pulmonary trunk—a right, and a left.

18 Pulmonary trunk. Large artery that exits the right ventricle and immediately splits into a left and a right pulmonary artery, each carrying deoxygenated blood to a lung.

19 Pulmonary veins. Veins that return oxygenated blood from the lungs to the left atrium.

20 Right atrium. Chamber that receives deoxygenated blood from the body through the two venae cavae.

21 Right ventricle. The chamber that pumps deoxygenated blood through the pulmonary artery to the lungs.

22 Superior vena cava. Large vein that receives blood from the portion of the body cranial to the heart; in quadrupeds, usually called cranial vena cava.

23 Trabeculae carneae. Bands of muscle fibers protruding from the walls of the ventricles.

24 Tricuspid valve. Valve between the right atrium and the right ventricle; opens during flow from atrium into ventricle and closes during ventricular contraction; also known as the right atrioventricular valve.