1. The "double pump" function of the heart includes the right side, which serves as the ______ circuit pump, while the left side serves as the ______ pump.
   a. systemic; pulmonary   b. pulmonary; hepatic portal   c. hepatic portal; cardiac   d. pulmonary; systemic

2. The major difference between the left and right ventricles relative to their role in heart function is:
   a. the L.V. pumps blood through the short, low-resistance pulmonary circuit   b. the R.V. pumps blood through the low-resistance systemic circulation   c. the L.V. pumps blood through the high-resistance systemic circulation   d. the R.V. pumps blood through the short, high-resistance pulmonary circuit

3. The average maximum pressure developed in the left ventricle is about:
   a. 15-28 mm Hg   b. 50-60 mm Hg   c. 67-78 mm Hg   d. 80-120 mm Hg

4. Assuming anatomic position, the best way to describe the specific location of the heart in the body is:
   a. within the mediastinum of the thorax   b. in the region of the fifth intercostal space   c. just behind the lungs   d. in the center of the chest

5. The function of the chordae tendinae is to:
   a. anchor the semilunar valve flaps and prevent backward flow of blood into the ventricles   b. anchor the AV valve flaps and prevent backflow of blood into the atria   c. anchor the bicuspid valve flaps and prevent backflow of blood into the ventricle   d. anchor the aortic valve flaps and prevent backflow into the ventricles

6. The expandable extension of the atrium is the
   a. ventricle   b. coronary sulcus   c. coronary sinus   d. auricle

7. The portion of the pericardial membrane that lies on the surface of the heart is the
   a. visceral pericardum   b. visceral endocardium   c. parietal pericardium   d. parietal myocardium

8. The visceral pericardium is the same as the
   a. mediastinum   b. epicardium   c. parietal pericardium   d. myocardium

9. The functions of the pericardium includes which of the following?
   a. returning blood to the atria   b. pumping blood into circulation   c. removing excess fluid from the heart chambers   d. anchoring the heart to surrounding structures

10. The chambers in the heart with thin walls that are highly distensible are the
    a. atria   b. ventricles   c. epicardium   d. perioardium
11. Each cardiac muscle fiber contacts several others at specialized sites known as
   a. auricles
   b. intercalated discs
   c. the SA node
   d. Purkinje fibers

12. Blood returning from the systemic circuit first enters the
   a. right atrium
   b. right ventricle
   c. left atrium
   d. left ventricle

13. Blood returning from the lungs enters the
   a. right atrium
   b. right ventricle
   c. left atrium
   d. left ventricle

14. The right ventricle pumps blood to the
   a. left ventricle
   b. lungs
   c. left atrium
   d. systemic circuit

15. The left ventricle pumps blood to the
   a. lungs
   b. right ventricle
   c. left atrium
   d. systemic circuit

16. The atrioventricular valve located on the right side of the heart is the
   a. tricuspid
   b. mitral valve
   c. bicuspid valve
   d. aortic semilunar valve

17. Blood leaving the right ventricle enters the
   a. aorta
   b. pulmonary artery
   c. pulmonary veins
   d. inferior vena cava

18. The pulmonary semilunar valve guards the entrance to the
   a. aorta
   b. pulmonary veins
   c. pulmonary trunk
   d. left ventricle

19. The bicuspid or mitral valve is located
   a. in the opening of the aorta
   b. in the opening of the pulmonary trunk
   c. where the vena cavae join the right atrium
   d. between the left atrium and the left ventricle

20. The entrance to the ascending aorta is guarded by
   a. an atrioventricular valve
   b. the bicuspid valve
   c. a semilunar valve
   d. the tricuspid valve

21. The function of an atrium is
   a. to collect blood
   b. to pump blood to the lungs
   c. to pump blood into the systemic circuit
   d. to pump blood into the heart muscle
   e. all of the above
22. The following is a list of vessels and structures that are associated with the heart.
1. right atrium
2. left atrium
3. right ventricle
4. left ventricle
5. vena cavae
6. aorta
7. pulmonary trunk
8. pulmonary veins

What is the correct order for the flow of blood entering from the systemic circulation?

a. 1,2,7,8,3,4,6,5
b. 5,1,3,7,8,2,4,6
c. 1,7,3,8,2,4,6,5
d. 5,3,1,7,8,4,2,6

23. The left and right pulmonary arteries carry blood to the
a. heart
b. intestines
c. lungs
d. brain

24. The left and right pulmonary veins carry blood to the
a. heart
b. intestines
c. lungs
d. liver

25. The outer wall of the heart is called the
a. endocardium
b. myocardium
c. epicardium
d. cardiac layer

26. The muscular portion of the heart wall is called the
a. myocardium
b. epicardium
c. endocardium
d. intercalation

27. The cardiac cells are found in the
a. epicardium
b. myocardium
c. endocardium
d. all of the above

28. The kind of tissue making up the endocardium and epicardium is
a. muscle tissue
b. serous membrane
c. connective tissue
d. nervous tissue
29. In the drawing below identify the valves A thru H and indicate whether the valve is open (O) or closed (C). Place your answers in the spaces provided.

<table>
<thead>
<tr>
<th>pulmonary semilunar valve (O)</th>
<th>bicuspid AV valve (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td>tricuspid (right AV) valve (C)</td>
<td>aortic semilunar valve (O)</td>
</tr>
<tr>
<td>tricuspid valve (O)</td>
<td>bicuspid valve (C)</td>
</tr>
<tr>
<td>pulmonary semilunar (C)</td>
<td>aortic semilunar valve (C)</td>
</tr>
</tbody>
</table>

A _______________
B _______________
C _______________
D _______________

Diagram is on last page of this packet.

E _______________
F _______________
G _______________
H _______________

30. Identify and label the structures in Figure 13-1. Place your answers in the spaces provided.

<table>
<thead>
<tr>
<th>base</th>
<th>right side</th>
<th>apex</th>
<th>coronary vessels</th>
<th>left side</th>
<th>pulmonary trunk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>aortic arch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A _______________
B _______________
C _______________
D _______________

Diagram is on last page of this packet.

E _______________
F _______________
G _______________
31. Using the following terms, identify the structures of the heart by labeling Figure 13-2.
Place the labels in the spaces below the drawing.

<table>
<thead>
<tr>
<th>interventricular septum</th>
<th>left pulmonary veins</th>
</tr>
</thead>
<tbody>
<tr>
<td>pulmonary trunk</td>
<td>right ventricle</td>
</tr>
<tr>
<td>coronary sinus</td>
<td>right pulmonary arteries</td>
</tr>
<tr>
<td>myocardium</td>
<td>superior vena cava</td>
</tr>
<tr>
<td>right pulmonary veins</td>
<td>chordae tendinae</td>
</tr>
<tr>
<td>aortic arch</td>
<td>left pulmonary arteries</td>
</tr>
<tr>
<td>aortic semilunar valves</td>
<td>pulmonary semilunar valves</td>
</tr>
<tr>
<td>left ventricle</td>
<td>bicuspid valve</td>
</tr>
<tr>
<td>left atrium</td>
<td>inferior vena cava</td>
</tr>
<tr>
<td>tricuspid valve</td>
<td>right atrium</td>
</tr>
</tbody>
</table>

A ______________________  Q ______________________
B ______________________  R ______________________
C ______________________  S ______________________
D ______________________  T ______________________
E ______________________
F ______________________
G ______________________
H ______________________
I ______________________
J ______________________
K ______________________
L ______________________
M ______________________
N ______________________
O ______________________
P ______________________
Figure 13-3 Valves of the Heart
(a) Ventricular relaxation
(b) Ventricular contraction

Figure 13-1 External View of the Heart