Bond-Jackson’s Heart Model Rubric

Revised April 2019

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Block: \_\_\_\_\_\_\_

Assessor’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_

Materials/Instructions:

1. \_\_\_\_Standard-sized shoebox (with detached lid); lid can be removed to expose chambers
2. \_\_\_\_Construction paper (red and blue) or odorless, non-toxicpaint; entire model is red or blue; excluding words
3. \_\_\_\_Thread or yarn-like material to simulate coronary vessels on box top, sides and bottom.
4. \_\_\_\_Thread or yarn-like material to simulate intrinsic conduction system (bundles and fibers) inside the heart
5. \_\_\_\_Material (size-appropriate) to simulate SA and AV nodes; located inside the right atrium
6. \_\_\_\_Cardboard, poster board, or material from another box to create partitions for compartmentalization
7. \_\_\_\_All vessels must “empty” into and out of the chambers to “allow blood flow”
8. \_\_\_\_Blood vessels constructed using hollow tubing that can be fashioned from stiff paper OR
9. \_\_\_\_Prefabricated tubing that varies in size depending on the vessel (i.e. aorta larger that pulmonary vessels)
10. \_\_\_\_Right Atrium (blue interior chamber)
11. \_\_\_\_Right Ventricle (blue interior chamber)
12. \_\_\_\_Left Atrium (red interior chamber)
13. \_\_\_\_Left Ventricle (red interior chamber)
14. \_\_\_\_Superior Vena Cava (a large vessel; must be blue) enters r. atrium
15. \_\_\_\_Inferior Vena Cava (a large vessel; must be blue) enters r. atrium
16. \_\_\_\_Pulmonary Arteries (vessels must be blue) leave right ventricle and enter lungs
17. \_\_\_\_Pulmonary Veins (vessels must be red) leave the lungs and enter left atrium
18. \_\_\_\_Aortic Arch (must show 3 vessels branching from an arched trunk
19. \_\_\_\_Branching Arteries (Brachiocephalic, Left Common Carotid and Left Subclavian) must be anatomically correct AND labeled with their individual names)
20. \_\_\_\_Pulmonary Semilunar Valve (located between r. ventricle and pulmonary arteries)
21. \_\_\_\_Aortic Semilunar Valve (located between l. ventricle and aorta)
22. \_\_\_\_Interventricular Septum (located between l. ventricle and r. ventricle
23. \_\_\_\_Tricuspid Valve aka Atrioventricular (AV) valve (located between r. ventricle and r. atrium) Do not include chordae tendineae!
24. \_\_\_\_Bicuspid Valve (mitral valve) aka Atrioventricular (AV) valve (located between l. ventricle and l. atrium)
25. \_\_\_\_Pacemaker aka Sinoatrial (SA) Node (located inside r. atrium)
26. \_\_\_\_Atrioventricular (AV) Node (located inside r. atrium)
27. \_\_\_\_Bundle of His aka Atrioventricular (AV) Bundle (bifurcates OR SPLITS and radiates down septum (middle)
28. \_\_\_\_Purkinje fibers radiate superiorly inside the heart ventricle
29. \_\_\_\_Coronary blood vessels located on exterior surface of heart; include AND label the LMCA and RCA. Include their branches. It is not necessary to label the branches.
30. \_\_\_\_Project was submitted on or before the due date.

All structures must be SPELLED CORRECTLY, LEGIBLE and NEATLY LABELED to garner points!

Consider printing labels if handwriting is not neat!

 \_\_\_\_\_\_Total points (maximum value 300 points)