The Heart and Coronary Circulation

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|  |  |  |  | 7  T |  |  | C |  |  |  |  |  |  |  |  |  |  |  | T |  |  |  |  | E |  |  | U |  |  |
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|  |  | 9  E | P | I | C | A | R | D | I | U | M |  |  |  |  | A |  |  | I |  |  | 10  L |  | T |  |  | M |  |  |
|  |  |  |  | C |  |  | D |  |  |  |  |  | 11  P |  |  | P |  |  | U |  |  | E |  | R |  |  | O |  |  |
|  | 12  B | I | C | U | S | P | I | D | V | A | L | V | E |  |  | I |  |  | M |  |  | F |  | I |  |  | N |  |  |
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|  |  |  |  | I |  |  |  | 13  T | R | A | B | E | C | U | L | A | E | C | A | R | N | E | A | E |  |  | Y |  |  |
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|  |  |  |  | V |  |  | 14  C | O | 15  R | O | N | A | R | Y | C | I | R | C | U | L | A | T | I | O | N |  | R |  |  |
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|  |  |  |  | L |  |  |  |  | G |  |  |  | I |  |  | S |  | 16  A | O | R | T | I | C | T | R | U | N | K |  |
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| **Across**  **3.** Dense network of connective tissue fiber that reinforces myocardium and anchors cardiac muscle fibers  **5.** The left ventricle pumps blood through this valve into the aortic trunk  **9.** Outer layer of the heart that is continuous with the pericardium  **12.** Two-cusped valve between left atrium and ventricle  **13.** The thicker myocardium of the ventricles that exherts a greater force  **14.** Functional blood supply of the heart  **16.** Large branching vessel that is the beginning of systemic circulation  **18.** Vessels that carry blood away from heart  **19.** Glistening white sheet of endothelium that lines the inside of heart chambers, 3rd layer of heart  **20.** Blood flows through the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ valve into the pulmonary trunk.  **21.** The thinner myocardium of the atria has bundles of muscles called \_\_\_\_\_\_\_\_\_\_\_\_\_. | **Down**  **1.** Lower chamber of heart that forces blood into pulmonary circulation  **2.** Blood returning from the lungs flows into this chamber  **4.** Forms the bulk of the heart and is composed of mostly cardiac muscle  **6.** This vessel branches to send blood to both lungs  **7.** AV valve that separates right atrium and right ventricle  **8.** small vessels in which blood and tissue cells exchange oxygen and carbon dioxide  **10.** Left chamber that pumps blood into systemic circulation  **11.** Double walled sac that encloses the heart  **15.** Chamber of heart that deoxygenated blood from systemic circulation enters  **17.** Vessels that carry blood back to the heart |