**Make a Clay Heart**

**Instructions**: Follow the directions below.

*\*Note: blood vessels should be pink or red (one or the other, not both), and blue. Heart should be brown, tan, or red (the latter only if*

*using pink for blood vessels), cordae tendinae should be white or cream.*

***\*Note: Never forget anatomical position!***

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1) Make the *posterior* base of your *heart*. It should be about 3 – 3.5 inches long.

2) Pinch the *inferior* portion to represent the *interventricular septum*.

3) Pinch the center of the *anterior* portion to represent the *interatrial septum*.

4) Identify the 4 *chambers* of the heart.

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5) Create a pink tube that will represent the *aorta*, *aortic arch*, and *descending aorta*.

6) “3-Fork” the shorter end to represent the 3-*cusp* *aortic semilunar valve*.

7) Add 3 branches off the *superior* portion of the *aortic arch* to represent the

*brachiocephalic, left common carotid*, and *left subclavian arteries*.

**A picture containing indoor, pink, plastic, decorated

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8) Place the *aortic arch* so that the *semilunar valve* is connected superiorly to the *left ventricle* and the *descending aorta* lies *dorsal* to the *heart*.

9) Using blue clay, create a “T” to represent the *pulmonary trunk*.

10) “3-Fork” the *inferior end* to represent the 3-*cusp pulmonary semilunar valve*.

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11) Thread the *right pulmonary arteries* under the *aortic arch*.

12) Place the *pulmonary semilunar valve* so it is connected to the *right ventricle*.

13) Place 2 blue dots in the *right atrium* to represent the *superior* and *inferior vena cava*

delivering *deoxygenated* *blood* into that *chamber*.

14) Add 4 pink dots to the *left atrium* to represent the right & left *pulmonary veins* delivering

*oxygenated blood* into that *chamber*.

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15) Turn the heart to a *posterior* view.

16) Create 2 blue tubes, one longer (*inferior vena cava*) and one shorter (*superior vena cava*).

17) Attach the *vessels* to the *right atrium*.

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18) While still looking at the *posterior* view, create 4 pink tubes, 2 longer (*right pulmonary veins*)

and 2 shorter (*left pulmonary* veins).

19) Attach to the *posterior heart*, being careful to lay the *right pulmonary veins dorsal* to the

*vena* *cava*, and the *left pulmonary veins ventral* to the *descending aorta*.

**A close-up of a toy

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20) Turn the *heart* back to an *anterior* view.

21) Create 5 white or bone-colored “ball & string” structures. (The ball represents the

*cusp* of the *valve* and the string represents the *cordae tendinae*.

**A picture containing text, indoor, toothbrush

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22) Cluster together and attach 3 of the structures at the location of the *tricuspid valve*.

Adhere the “strings” to the *papillary muscles* of the correct *ventricle*.

23) Cluster together and attach 2 of the structures at the location of the *mitral valve*.

Adhere the “strings” to the *papillary muscles* of the correct *ventricle*.

**A picture containing indoor, handwear, toothbrush, yellow

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24) Create a “flap” that will represent the *anterior* surface of the heart. The flap should be

“dome-shaped” and should cover the internal *heart* structures already made.