

Constructing a Four-Chamber Heart

In this activity, we will build a four-chambered heart model such as the type found in most mammals. In order to get started make sure your group has obtained the following materials:

- Four (4) Cups
- Four (4) Straws
- Two (2) Paper plates
- Tape
- Scissors
- Hole punching tool
- Labels

Procedure:

1. Remove the bottom of one of the cups using the scissors. (this is the ATRIUM)
2. Poke a hole in the bottom of this cup.
3. Using the handout, trace the circle onto one of the paper plates and it cut-out
4. Cut the flap (this is a VALVE) out and poke hole out of one of the cut-out circles.
5. Tape the bottom of the cup to this circle. Make sure the opening of the cup is over the flap, but not over the hole! The flap should be pointing away from the cup.
6. Tape this cup/paper unit to one of the other cups. (this is a VENTRICLE) See figure 1.
7. Repeat steps 1-5 using the remaining 2 cups and paper-circle.
8. Once you have two atrium/ventricle units formed, tap them together. This is the complete four-chamber model! But, we are still not done. We need to add the veins and arteries.
9. Push straws though the holes leading to the atriums and those leading to the ventricles
10. Finally, use the labels to correctly identify each chamber of the heart. Additionally, label the major veins and arteries.

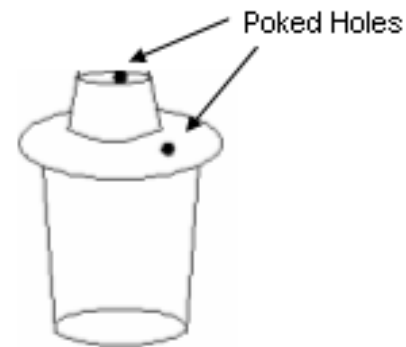


Figure 1