Science Experiment: Replica of the Human Heart

Materials Needed:
- Scissors
- 2 straws (clear)
- 1 Balloon
- Tape
- Food Coloring
- Jar half full of water

Experiment Instructions

For a video visual click here

Step 1: Add a little food coloring to the jar and shake it a bit. The jar represents the heart, the red liquid represents blood.

Step 2: Cut the neck of the balloon off and set skinnier park of balloon off to the side.

Step 3: Take the larger part of the balloon and stretch it over top of the jar.

Step 4: Take your scissors and poke two holes in the top of the balloon about an 1” or 1.5” apart. Holes don’t have to be too big, just enough to put the straws through. (parents, please supervise children on this step!)

Step 5: Place one straw in one of the holes. Place the other straw in the other. The straws represent your arteries.

Step 6: Take the skinnier part of the balloon (that was set aside) and tape the non-cut side closed.

Step 7: Take the cut part of the balloon and place it over one of the straws, and tape it down.

Voila! You made the replica of the human heart, now lets see how it works! By pressing down on the jar — that resembles a pumping heart and how the blood flows through. The right side of your heart receives oxygen-poor blood from your veins and pumps it to your lungs, where it picks up oxygen and gets rid of carbon dioxide. The left side of your heart receives oxygen-rich blood from your lungs and pumps it through your arteries to the rest of your body.

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