

Biomedical Engineering and the Heart (8-9)

Project Equipment (tools used throughout week or common household items)

- 1 - [Crayola Air-Dry clay bucket](#), 2.5 lbs, (possible substitutions: any with air-drying clay if this is not readily available...)
- 1- Duct tape
- 1- Scissors
- 1- [Model Glue](#)
- 1- Black Marker
- 1- Scotch Tape
- 5-10 pieces- Paper for drawing plan of heart
- 1- Pencil
- 1- Eraser
- 1-Ruler

Materials for making heart pump and tubing

REQUIRED:

- 2 - 35cc. [syringes](#)
- 5- Three way plastic tubing [connectors](#)
(possible substitutions: any three-way connector from Home Depot can also work for this purpose)
- 10 feet- Clear vinyl [tubing](#) w/ $\frac{3}{8}$ " inner diameter & $\frac{1}{4}$ " outer diameter
(possible substitutions: any small-sized tubing proportionate to a life-sized (approximately the size of a fist) heart, bendy straws)

OPTIONAL

- Play-Doh, red
*if wanting to make a red heart, can also be purchased at CVS, Walgreens, etc.
- Food coloring, set of 4
- Any piece of fabric or beads, for decoration