



# Biomedical Engineering Research

At Queen's University

Biomedical engineers make devices to replace tissues in our body or help us heal. By applying biology, chemistry, and math, life-saving devices are making patient's lives better. Artificial hearts, contact lenses, skin patches, and more are all thanks to biomedical engineers!

Let's make an artificial heart at home!!

<u>Materials Included:</u>	<u>Extra Materials Required:</u>
Balloon	Cup
Straws	Red Food Dye
String/Rubber Band	Tape



## STEPS:

1. Cut the tip of the balloon off.
2. Fill a cup at home with water (add one drop of food colouring to make it red like blood!)
3. Stretch the balloon over the top of the glass and gently poke two holes with scissors.
4. Place one straw into each hole.
5. Tie the tip of the balloon over one of the straws.
6. Push down on the balloon and watch how your homemade heart will pump liquid out of one of the straws but not the sealed straw.

