

Project: **Ventilator**

Materials: Used karaoke machine (or other similar looking device)

Cost: \$15.00

Time: Two hours

Details: Even a refurbished ventilator can be tens of thousands of dollars. Students do not need to know HOW a vent works, just the dynamics of the patient who is vented. I found a karaoke machine (Image A) on eBay. I obtained some ventilator tubing, then found a thrift store swing arm lamp (Image B). Take off the lamp from the swing arm (simple screws). I then drilled two holes the size of the tubing on the bottom/side of the ‘vent’ and placed the two tubes. I color coded one blue (oxygen) and one red (deoxy) just for grins and giggles. This tubing had O2 tubing that I squeezed into the headphone output jacks for a little added realism. I had a monitor trolley that I mounted it on and drilled a small hole to mount the swing arm. I placed some Velcro on the base of the device and on the platform to hold it. One cool thing about using a karaoke machine is that you can (1) record a CD with a looped WAV file of a vent, or (2) use a jack and plug into a computer to create the sound. Go the to the “PowerPoint is your friend” Project Blueprint for how to create a monitor. Finished product – Image ‘D.’



Image ‘A’



Image ‘B’



Image ‘C’



Image ‘D’