

# sTEEm-at-Work

## Puzzle #24

### Vacuum Pump Pumping Speed

A technician works for U-Betch-em vacuum pumps and is calibrating three different sized vacuum pumps before they are shipped out to a customer. The Tech uses a test stand vacuum chamber with a very accurate know volume. The test is conducted by connecting the vacuum pump to the vacuum chamber, and then collecting the time versus pressure measurements as the gas in the chamber is removed by the pump. Before the test begins the tech always fills the chamber with the same amount of gas. The technician knows that pumping speed indicates how fast the pump removes the gas and that the gas pressure in the chamber goes down as the gas is removed. Each pump the Tech tests has a different pumping speed value. After labeling the graph for one of the tested pumps, pump UB-437, the tech checks the pump manuals for all three pumps and reads that pump UB-437 has the highest pumping speed of the three pumps tested.

**The pump manual information about the pumping speed of UB-437 agrees with the test results. (yes or no)**

