

Boyle's Law Soundtrack

This is the soundtrack for the Boyle's Law video. It is keyed to the scene number.

Scene	Voice Track
1.	This video is part of a web-based package on the Boyle's Law experiment. It introduces the apparatus that will be used to perform the experiment.
2.	Here is the apparatus for the Boyle's Law experiment. There is a metal scale mounted on the apparatus. There is a U-shaped glass tube with mercury in it. We have removed a clear plastic guard in front of the tubes so that you may see it more clearly. The mercury in the tubes is connected using a flexible hose to a container, a reservoir, of mercury.
3.	The reservoir may be moved up and down. This will change the heights of the mercury in the glass tubes.
4.	The top of the right hand tube is open to the atmosphere.
5.	There is a glass sphere at the top of the tube to collect any possible mercury spills, but it <i>is</i> open to the atmosphere.
6.	The left-hand tube is closed at the top. A fixed quantity of dry air is trapped between the mercury and the top of the tube.
7.	The volume of the air in the closed end of the tube is proportional to the length of tube between the top of the column mercury and the top of the tube. You may wish to note that the top of the glass tube is not perfectly square, but is slightly rounded.
8.	You will need to know the height of the mercury in both tubes for various positions of the reservoir. The plexiglass T allows you to accurately measure those positions.
9.	(none)
10.	You align the T against the frame holding the glass tubes. Then you align the line inscribed on the T with the height of one of the mercury columns and read the value from the metal scale.
11.	You will also use the T to measure the position of the closed top of the left-hand tube.
12.	This completes the video introduction to the Boyle's Law apparatus. There is still important information to learn on doing this experiment from the associated web page.