

# Physics Practicals

## Investigating Boyle's Law

Book	Pages
2	29

### Equipment

Pressure gauge,  
Tubing,  
Value (for safety),  
Foot pump

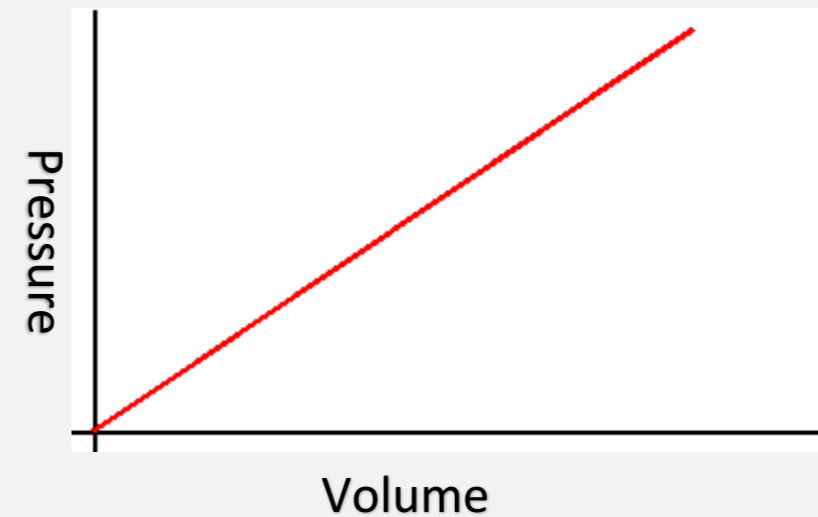
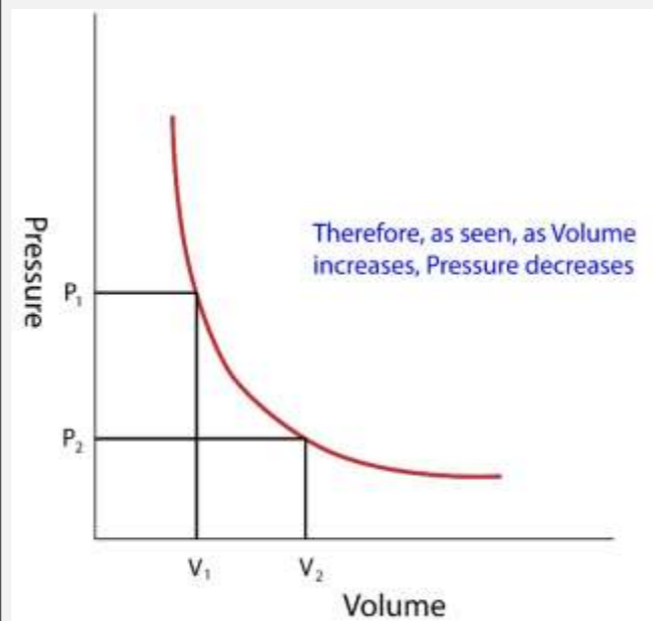
### Method

Set Up equipment as in diagram,  
The pressure on the oil is increase b  
pumping the foot pump,  
The volume of the air in the tube can be  
measured from the scale.

P plotted against  $1/V$  to check  $pV =$   
constant. If they are proportional, then  
the graph will be straight line through  
the origin.

Wear eye protection in case of  
explosion.

Plot  $p/v$  will give a  $p_1V_1 = p_2V_2$   
Plotting  $p$  against  $1/v$  is easier to  
identify Boyle's law



### Independent Variable

Pressure applied

### Dependent Variable

Volume of air

### Control Variables

Temperature  
Amount of oil,

### Improvements

Secure connections

