In the following description, call the 3 containers of the same type and size as A, B & C.

They will be finally placed as follows:

- (A) Basin (top)
- (B) Water Supply, airtight (middle)
- (C) Air Supply, airtight (bottom)

Now construct the Heron's fountain as follows:

Things needed

3 bottles of same size and type



Straws of yellow, blue and red colour

Scissors

Glue Gun/ Fevibond

A screwdriver to make holes

• Start by cutting bottle no A horizontally . We will use the top side of the bottle and you can keep the bottom of it aside and use it for filling water later on



- Stick the caps of bottle no B & C together with glue and make 2 holes that pass through both these caps.
- Invert and stick the Bottle A with cap on the base of bottle B and drill 2 holes on the cap of Bottle A .
- Now first insert :
- The Red Pipe so that it is between Bottle B and C
- Now insert the yellow pipe such that it flows in Bottle C, B and reaches slightly above in Bottle A.
- Now Close the Bottle B above the lid of A and B as shown in the figure.
- Now insert the blue pipe from A to C at a height just above the basin's rim. The fountain will issue upwards through this

Operation:

- Initially, the air supply container (C) should contain only air.
- Fill water into Container A . The water will start flowing down into container C through the yellow pipe.
- Fill two-third of the container C like this with water.
- Invert the entire system upside down.
- When you do this water from C will flow out into container B through the red pipe.
- Now invert the system again.
- Fill water in container A. When you do this the water will gush down from yellow pipe into C.

- Air is present in Container C. When water comes into C it occupies space and this will push the air in C from the red pipe into container B.
- Since container B already has water this excess air coming into B will exert a downward pressure on water in B.
- This pressure will force water to move up from B, through the blue pipe out into container A as a fountain.
- The fountain will run till the level of water in B goes below the base of the blue straw.

