To make the funnel device you will need:
1) a 500 ml water bottle cut in half (with the cap)
2) a 1/4 inch fitting with a barbed hose end.
3) a 5/8 inch O.D. O-ring
4) 3 inches of 1/4 inch latex tubing

To assemble the funnel device:
1) Drill a 7/16 inch hole in the cap of the bottle and screw in the 1/4 inch fitting of the barbed hose end. The O-ring goes between the cap the fitting (so the water does not leak out) and the latex tubing goes over the end of the barbed hose fitting (see image below).

2) Place the cap assembly on the bottle, now you are ready to add in the filter materials.
These are the types of materials you'll need for the filter system

1) 1/2 inch rocks

2) 1/4 inch gravel

3) prewashed sand

4) Charcoal

5) Filter Paper

Filling the filter system:

1) First fill with the small gravel (closest to the cap)

2) Then load the sand

3) The 1/2 inch rocks sit on top

4) flush the filter to remove dirt from the sand (before using the filter to clean the foul water sample)