

## **SATISH CHANDRA MEMORIAL SCHOOL CHAKDAH**

### **CLASS. 4. EVS**

#### **ACTIVITY – HOME-MADE WATER FILTER**

WRITE DOWN THE FOLLOWING STEPS OF MAKING A WATER FILTER AT HOME AND ALSO DRAW THE PICTURE OF IT IN YOUR EVS ACTIVITY COPY.

Students can use their own innovation and creativity while making the water filter.

### **Materials**

- ☐ 1-2 empty plastic water bottles
- ☐ Scissors
- ☐ Towel or paper towels (for spill clean up)
- ☐ Cheesecloth or gauze to cover the mouth of the bottle
- ☐ Rubber bands
- ☐ Any materials you think will make a great filter (cotton balls, sand or gravel, uncooked pasta noodles, coffee filters, etc.)
- ☐ \*Don't worry if you don't have all of the materials. Get creative and substitute materials with what you have! It's all part of the design process.

## Instructions

1. Cut off the bottom of an old plastic soda or juice bottle using scissors or a knife.
  2. Place the bottle upside down into the vase or tall drinking glass.
  3. Place cotton balls, cloth, or a coffee filter inside the bottle as the first layer. The first layer should be about one to two inches thick.
  4. Add an inch of activated charcoal as the second layer on top of the cotton layer.
  5. Over the charcoal, add about two inches of gravel or small stones as the third layer.
  6. Add about three to four inches of clean sand on top of the gravel.
  7. Add gravel to the bottle as the final layer. Leave about a half inch of space from the top of the upside down bottle.
  8. Add dirt to a glass of water to create muddy water. Alternatively, get creative and add other things like glitter, beads, cooking oil or other materials to make dirty water.
  9. Pour the glass of muddy water on top of the homemade water filter and watch the water drip clean into the glass below.
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Bottle top

Rocks

Coarse sand

Charcoal

Fine sand

Cloth

Bottle bottom

clean water

