

Nature friendly ideas for the whole family

Eco-friendly
-nomic
make your own & save

Save
Yourself,
Money,
& the Planet



Reduce, Reuse, Recycle



A booklet by



<https://bcre.africa>

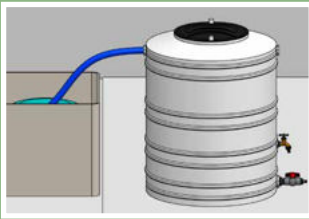


Backwash tank

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What you need

- 500L backwash tank - it needs to be black inside
- Hosepipe
- Connections for the backwash tank - if needed



Difficulty

3/5

Cost

Initial investment
(Tank + connections)

Step by step

1. Place the tank in the desired location relative to filter and pool. Ensure that it is placed on a base that is sound, level, smooth, free from any protrusions (particularly sharp etc. stones) and at least 100mm wider than the base of the tank.
2. Connect a 40mm layflat hose (flexible or rigid PVC - permanent) from your pool back-wash line to your overflow/inlet at the top of the tank.
3. Backwash your pool and fill the tank with your backwash water. Allow the water to settle for 48h.
4. Connect a hose to the bottom tap connector and return the clear water to the pool.
5. Once a year, clean the backwash tank to flush the sand that settled at the bottom. You can use rain water for the cleaning.
6. Instead of returning the water to the pool, you can also use it to water the garden if you leave it in the tank for a minimum of 7 days prior to use.
7. Remember that you can also fill your pool with rain water for extra savings ! See "Rainwater tank" card for more info.

Re-using the pool backwash water instead of throwing it away saves a very large amount of water. It is good for the planet, but also for your finances !



Bird Feeder #1

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What you need

- 1 plastic bottle
- 3 plastic spoons
- twine (NOT fishing line !)
- birdseed
- marker
- hobby knife
- hot glue gun
- drill / skewer / nail to drill the hole in the bottle cap



Difficulty

1 / 5

Cost

Recycled items

Step by step

1. Start with a clean dry bottle. Use a marker to evenly space out holes at various heights for the three spoons to go through. Mark two holes on opposite sides of the bottle for each spoon.
2. Use your hobby knife to cut an oval hole in the bottle at the points that you marked, allowing enough space for the spoon to slip through.
3. Slip the spoon all the way through the bottle. Be sure the hole is still big enough for birdseed to get through; if not, remove the spoon and make the hole bigger. Then slip the spoon back through and secure it into place with several dabs of hot glue. Repeat for the other two spoons.
4. Drill a hole into the bottle cap about the same diameter as the twine.
5. Run the twine through the cap, make a thick double knot on the inside to ensure the twine can't pull through.
6. Fill the bottle with birdseed, preferably outdoors, as some birdseed will spill through the holes while filling.
7. Re-cap the bottle and hang it from your favorite tree.

Installing bird feeders is a great way to help many garden visitors during winter.

Don't forget to fill them up regularly with seeds and other goodies to attract more birdies !



Rainwater tank

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What you need

- Plastic drum, strong dustbin with lid or barrel
- Drill with 25mm Hole Saw
- Tank stand (bricks or other), about the height of a watering can
- 20mm Threaded Tank Inlet (Bulkhead fitting)
- Brass tap
- Adjustable spanners



Difficulty

3/5

Cost

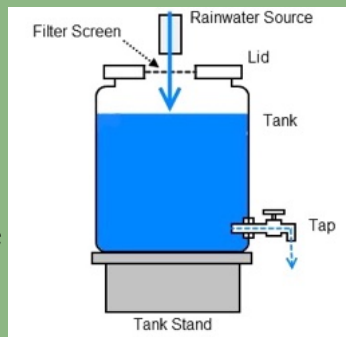
Initial investment

Step by step

1. Thoroughly clean the container and let dry.
2. Mark the location of the bottom hole for drilling. The higher you mount the tap, the more water will be left at the bottom of the tank that you won't be able to use !
3. Drill the hole in the drum.
4. Screw the Threaded Tank Inlet into the plastic drum. Use the spanners to tighten it
5. Position your tank under a gutter or a rainwater source. Don't forget to place the stand underneath and make sure it is steady before installing the tank.
6. Screw the tap in the inlet. You can add plumber tape to make sure the seal is watertight.
7. When not in use, place the lid over the top of the tank to prevent mosquitos from laying eggs inside. You can also cover the top of your tank with small mesh instead to prevent any material to fall in !
8. Clean your water tank once a year.

Rainwater is used to water the garden or wash the car.

It is an important component of a water-saving lifestyle and can help keep your garden green even during water restriction times !





Tawashi sponge

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What you need

- Old thick stockings, tights or socks
- Wooden board (at least 16-20cm per side)
- 20 nails
- Scissors
- Hammer
- Pencil
- Ruler



1



2

Difficulty

2/5

Cost

None

Step by step

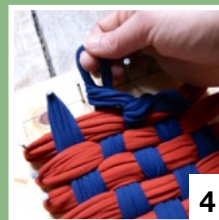
1. Prepare the board : use your pencil and ruler to draw a square 12cmx12cm. Put 1 nail every 2 cm. With your hammer, firmly plant the nails into the board onto each of the 20 dots.
2. Prepare the cloth : cut 10 rings of 3 to 4 cm width on your socks (fig.1).
3. Attach 5 rings to the nails (fig.2)
4. Weave the remaining 5 rings in and out of the already attached rings (fig.3).
5. Unhook any ring from its nail, then unhook a second ring right next to it. Pass the 2nd ring into the 1st ring. Hold on to the 2nd ring and let go of the 1st ring. The 2nd ring now becomes the "1st ring". Continue this step all around your square. (fig.4). The final loop is the hook that you'll use to hang and dry your tawashi sponge.
6. Wash your tawashi sponge regularly. Simply throw it into the laundry machine and it will be good as new !

Instead of throwing away your old socks, you can give them a second life. Use your tawashi for dishwashing or even in the bathroom depending on the material you recycled.

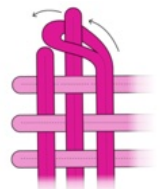
And you will never buy new sponges again !



3



4





Wrapping presents

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What you need

- 1 SQUARE of cloth (the size must be adapted to the present to wrap)
- Present
- Decoration (optional) : ribbon, flower, sticker...



Difficulty

1 / 5

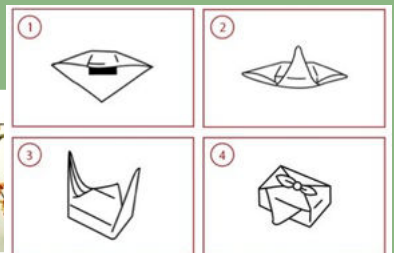
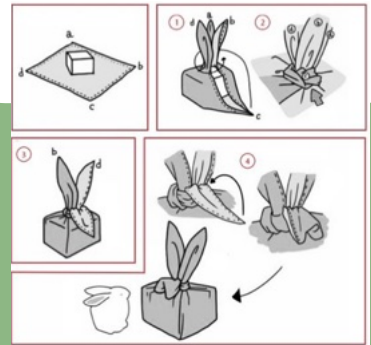
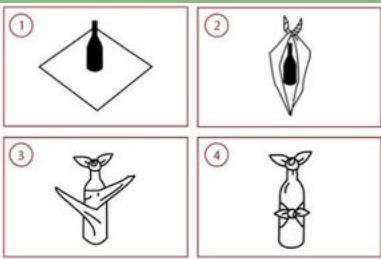
Cost

A piece of cloth

Step by step

1. Tired of all this wrapping paper that is wasted after the holiday season ? Try re-usable present wrapping : furoshiki. A simple square cloth can be used to cover a present, fold it following these simple steps and your present is ready to be offered !
2. Once the present is offered, you can get your cloth back and re-use it for your next offering ! The cloth can also be part of the present.

You can use any type of cloth, including bandanas, old bed sheets, pillow cases or napkins, as long as the cloth is cut in a square.



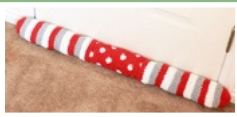


Door Sock

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What you need

- 2 to 3 socks (depending on how long they are)
- Quilt batting or polyester fiberfill (from an old pillow)
- Popcorn kernels, dried beans or dried peas
- Needle and thread



Difficulty

1 / 5

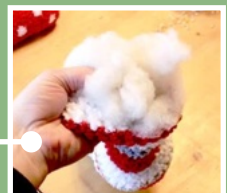
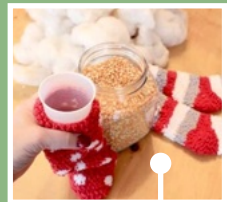
Cost

Recycled materials

Step by step

1. Starting with the popcorn kernels, alternate adding layers of the two materials inside each sock. To prevent the filling from spreading all over the floor, use a small plastic cup with the bottom cut out. The aim is to have a 1/1 ratio of the two materials inside the socks.
2. Pack each tube all the way to the end, with the final layer being the stuffing.
3. Attach the sock sections to each other by simply overlapping the open end of one sock over the closed end of another.
4. When the sock sections are fitted snugly together, a few hand sewn stitches will keep it all in place.
5. For a kiddies room, try adding eyes to the door sock and you will have your very own friendly door snake !

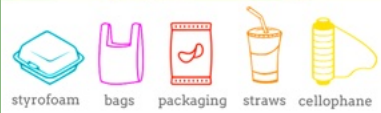
Not sure if you NEED a door sock ? To test an area, simply hold the palm of your hand up against a door or window. If you feel cold air coming through, warm air is escaping. This simple fix could save you hundreds on your heating bill this year !





What you need

- Clean and dry plastic bottle
- Clean and dry plastic filler :



- Stick (to push the plastic inside the bottle)



Difficulty

1 / 5

Cost

None

Step by step

1. Make sure all your plastic filler (see list in "what you need") is clean and dry. Cut the bigger pieces if they don't fit in the bottle.
2. Make sure your plastic bottle is clean and has a functioning lid.
3. Fill the bottle with the plastic filler, using the stick to push and compress the filler. It needs to be tightly packed.
4. Weigh the bottle and compare it to the minimum weights. If your bottle is not heavy enough, it means you can pack more plastic inside ! A bottle that is too low in density will not be strong enough and can't be used as building material.



If you would like to know more about Ecobricks, go to :



You will find building ideas, videos and much more !

ECOBRIK SIZES & WEIGHTS

PLASTIC BOTTLE SIZE	MINIMUM ECOBRICK WEIGHT
500 ML	175 GRAMS
1,000 ML OR 1 LITER	350 GRAMS
1,500 ML OR 1.5 LITERS	525 GRAMS
1,750 ML OR 1.75 LITERS	613 GRAMS

MINIMUM ECOBRICK WEIGHT = BOTTLE VOLUME * 0.35
0.35G/ML IS A GOOD MINIMUM ECOBRICK DENSITY



Laundry Soap

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What you need

- 1 large jar (to store the washing powder)
- 1 bar of soap
- 1 cup of borax
- 1 cup of washing soda
- Blender
- Grater



Why use home-made detergent ?
Less expensive
Less plastic
(re-usable jar)

Difficulty

1 / 5

Cost

Soap and cleaning products

Step by step

1. Grate the bar of soap. A fine grate will mix up easier than larger pieces, but you can use any grater that you have.
2. Add the grated soap to the blender, with the washing soda. Blend it until the pieces are cut more finely so that the soap dissolves easily in the washing machine. If you don't have a great blender, you might want to process this in smaller batches
3. Add the blended mixture to a bowl, and mix in the remaining 1 cup of Borax. Use a spoon to mix it thoroughly and break up any large chunks.

Does it need to foam to clean efficiently ?

Not at all ! We often think that bubbles = clean, but it doesn't work that way ! It can clean without making bubbles. Look for the results, not for bubbles to tell you whether it works or not.

Directions for use :

Add 1 heaped tablespoon to the washing machine as you fill it with water (it's always best to add powder before adding the clothes, so that it begins to dissolve first).

For extra dirty loads, use 2 scoops instead of 1.

It will work with cold or hot water.



Plastic bottle planter

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What you need

- Empty plastic bottles
- Acrylic paint
- Black pen (water resistant)
- Scissors / Hobby knife
- Fine Sandpaper (300+ Grit)
- Recycled Buttons or other decorations
- Glue



Difficulty

1 / 5

Cost

None

Step by step

1. Make sure the plastic bottle is clean and dry, then draw the shape of your planter on the plastic bottle. Use your imagination !
2. Use your hobby knife and scissors to cut the plastic along the drawing.
3. Sand the edges of your planter, then lightly sand the outside of the bottle to roughen the surface. This will help the paint to stick. Wipe clean (make sure bottle is clean and dry).
4. Paint the bottle with chosen shade of acrylic paint, this will take several coats. Tip: use a hair dryer to speed drying between coats.
5. Attach accessories. Use a glue stick or a glue gun and stick buttons, googly eyes and other accessories !
6. Use a black pen (water resistant) to draw the details (mouth, eyes, nose...)
7. When dry, fill with soil and plant !

Don't forget to water your plant, but be careful not to over-water it !
Always check the soil before watering :
if dry, give your plant some water. If still damp, don't water !