



ACTIVITY NAME	<p style="text-align: center;">Vertical garden made by recycled plastic bottles</p> 
LEARNING OBJECTIVES	<ul style="list-style-type: none"> • Use your creativity • Learn how to reuse plastic bottles • Decorate your garden and maximize your production of organic food and plants in any small space
TRAINING METHOD(S)	<ul style="list-style-type: none"> • Short educational talk about plastic waste • Theoretical training • Demonstration • Physical example of the DIY products
TIME/ DURATION	<ul style="list-style-type: none"> • 1 hour
GROUP SIZE	<ul style="list-style-type: none"> • No limits • In general, this is an individual exercise, but also it can be done with 2 or more participants.
SETUP (ENVIRONMENT) & NECESSARY TOOLS	<ul style="list-style-type: none"> • Plastic bottles (recommended 6 L) • Marker • Knife or any sharp tool • Vermiculite for drainage • Compost mix or humus • Any kind of plant • Color (white) • A glue



DESCRIPTION

In the waste management there is a waste hierarchy/pyramid that shows all the alternative solutions for the waste. On top of the pyramid is prevention (non-waste) which is impossible in these times and it goes all the way down where we have the disposal which is the last thing we should do. Between these levels there are many alternative solutions such as minimization, reuse, recycled and energy recovery. Reusing is one of the best solutions in the waste management especially for fractions that can't be recycled. In this case we have plastic waste which is recyclable but the difference between the recycling and reusing is that in reusing there is no waste of energy (transport, treatment, processing etc.) and the life of the product is extended.

How it's done:

Vertical garden

Step 1: Components

Drink the drink and convert your plastic bottle in a sustainable garden. Best plastic bottles are 10 L bottles. Glue, sharp tools, white color, marker, vermiculite for drainage, compost mix, plant, glue.

Step 2: Cutting the bottles

Take a sharp tool and make a hole on the bottom of the bottle with dimensions of the bottle cap, then make a bigger hole in the middle of the bottle where the plant will be placed. Additionally, make holes on all the bottle caps so the water can go through. (do this on all the bottles)

Step 3: Stick the bottles together

Put them on top of each other and use glue to stick them if it's needed.

Step 4: Paint the bottle

Paint the bottle on the part where the soil will be placed with white color.

Step 5: Placing the soil

First of all put a vermiculate for drainage, than on top of that put humus or compost as a soil, after you done all of that plant the plant.

Step 6: Solidification

For this part the best option is a bolt to put the vertical garden on a wall.

I hope you have enjoyed the activity 😊

CONCERNS AND IMPLEMENTATION SUGGESTIONS

- Using bigger plastic bottle increases the space for planting bigger plant
- Always water the top bottle





SECOND HAND USE OF PLASTIC BOTTLES

<https://activegreenseniors.eu/>



	<ul style="list-style-type: none">• Use bolt for solidification on wall• Use white color for protecting the roots from sun nad repels heat
TIPS for further reading & watching	For more information and inspirations you can visit the following link: - https://youtu.be/vxrlSXG_7Oo
LEVELS & VARIATION	To adapt the exercise to the local, in-house situation if possible. Using sharp tools may cause damage. Requires adults and people with experience with knives or sharp tools as well.

