

Upcycled Arts & Crafts

Goal

Teach students about plastics properties through upcycling 'waste' plastics by making arts and crafts.

Introduction

The majority of plastics in the United States are not properly recycled, only about 9% actually get recycled. Upcycling plastic is one way of ensuring plastic debris does not make it to the ocean, while creating a fun craft.

Animal planter

- Link: <https://www.brudiy.com/en/blog/posts/plantpot-cat/>

Supplies

- 2 L plastic bottles & 1/2 L water bottles
 - Recommended bottles with 5 "legs"
- Scissors
- Acrylic paint/spray paint (glossy)
- Gravel
- Black and colored permanent markers
 - Uni Posca markers PC-5M
- Potting soil
- Small plants

Procedures

- Use template from link to cut out ears
 - Should be centered on two legs of base
 - Leave 4-5" between base and tip of ears
- Paint container with base color using acrylic/spray paint
 - Let dry
- Draw on animal face/design
 - Let dry
 - Posca markers can get kind of messy so be careful!
- Put layer of gravel in bottom halfway up the planter
 - Since there are not going to be holes in this planter the gravel allows for drainage
- Put down an inch-thick layer of dirt over the gravel
- Place plant gently in the center of the planter then fill in remaining space with dirt
- Gently pack some extra dirt on top to make sure roots are covered
- Keep planter somewhere it can get indirect sunlight
 - Sheltered from sun
- Water sparingly ~once a week

Chihuly inspired "glass" art

- Link: <http://www.rubberbootsandelfshoes.com/2015/09/chihuly-art-kindergarten-style.html?m=1>

Supplies

- #6 PS plastic cups
- Colored permanent markers
- Aluminum foil
- Oven/toaster oven

Procedures

- Make sure cups are clean and dry
 - Try not to crack them
- Use permanent markers to draw designs on outside of cups
 - Keep in mind the cups will warp when baked when drawing
- Meanwhile, preheat oven to 350°F
- Line oven rack with aluminum foil
- Place designed cups upside down on foil in oven
- Bake cups for no more than a minute
 - Keep an eye on the cups as they melt
- Once the cups look like they've stopped morphing take remove them from the oven
 - Be sure not to handle the cups directly as they will still be hot
 - Use the foil to take them out
- Let cups cool then gently remove from foil

Can be used for:

Ornaments

- Additional supplies
 - Ribbon or twine
- Tentative procedures
 - String ribbon through each piece and knot

Wind chimes

- Link: <https://weefolkart.com/yarn-wrapped-branches/>
- Additional **supplies**
 - String/twine
 - Yarn
 - Branch
 - Crafting glue
 - Tape

- Tentative **procedures**
 - Tape one end of yarn at one end of branch
 - Decide where on branch to begin wrapping this section
 - Wrap yarn around branch until about 1/2 inch away from where you plan to stop that section
 - Place down some crafting glue on branch
 - Continue wrap yarn over glue
 - Ensure end of yarn is secure and glued down
 - Repeat steps for other sections of branch with other colors of yarn
 - Cut length of twine/string about 2 inches longer than length of branch
 - Tie each end of twine/string to either end of the branch, leaving about an inch from the ends
 - This will be used to hang the wind chime
 - Knot one end of another piece of twine/string through each "glass" piece and cut other end to desired length
 - Cut each length about the same so each "glass" piece is level with one another
 - Knot end of each of these strings to branch base
 - Close enough so the pieces can hit each other

Snowflake ornaments

- Link:
https://artesan.blog.hu/2011/11/19/kornyezetzbarat_karacsony_karacsonyfadsiz_2?token=81db5938c6b6e47170a20aca5122b672

Supplies

- #1 PET bottles
 - Preferably in clear or blue
- Acrylic paint in white and blue
 - Alt: Posca markers (see: animal planters)
- Exact-o knife
- 10-14mm jump rings
 - Depending on ribbon width
- Pliers
- Needle/hole puncher
- Ribbon

Procedures

- Wash and dry plastic bottles
- Trace circumference of bottle 1/2 an inch from the bottom
- Using an Exact-o knife cut off bottom
 - Save top half for other projects
 - Maybe do this before kids handle them?

- Make a small hole in the side of one of the "legs" of the bottle bottom
- Put a jump ring through the hole
 - Don't put ribbon through until the end
- Paint/draw snowflake design on bottle bottom
 - Let dry
- String ribbon through jump ring and knot

Shrinky-dink plastic charms

- Link: <http://www.rustandsunshine.com/2012/04/shrinky-bracelet.html>

Supplies

- #6 PS plastic containers
- Colored permanent markers
- Oven/toaster oven
- Cookie sheet
- Parchment paper
- Scissors
- Hole puncher
- 6-14mm jump rings
 - Depends on what they'll be used for

Procedures

- Wash and dry plastic containers
 - Be sure to remove any residue
- Cut out flat piece of plastic
- Draw design on plastic using permanent markers
 - Keep in mind darker colors may appear black after baking
- Cut out smaller pieces
 - Size depends on what you want to use the charms for
- Hole punch where appropriate
 - Placement again depends on what you're making
- Trim any corners so they're rounded
- Meanwhile, preheat oven to 350°F
- Line a cookie sheet with parchment paper
- Arrange plastic on parchment and bake for a few minutes
 - Keep an eye on them as they shrink
 - They will curl up a couple times before flattening out
- Once the plastics are flat, remove from oven
 - Let cool before handling
- Put jump ring through hole(s)

Can be used for:

Jewelry

- Additional **supplies**
 - Jewelry chains/cords
 - Jewelry clasps
- **Procedure**
 - Cut jewelry chain/cord to desired length
 - Thread chain/cord through jump ring of already made charm(s)
 - Attach clasps using pliers

Mobile

- Additional **supplies**
 - Twine/string
 - Yarn
 - Branches
 - Crafting glue
- **Procedures**
 - See wrapped branch in wind chime procedures
 - Note: can be scaled down

Self-watering planter

- Link: <https://amysmartgirls.com/diyes-self-watering-plastic-bottle-planters-6783cacdd332>

Supplies

- Plastic water bottle
- Exact-o knife
- Phillips head screwdriver
- Hammer
- Cotton string/yarn/shoe laces
- Potting soil
- Seeds/small plants

Procedures

- Using exact-o knife, cut bottle in half
- Use Phillips head screwdriver and hammer to punch hole into center of bottle cap
- Cut about 1-1.5 feet of string
- Fold string in half and tie loop on one end
- Thread string through bottle cap so that loop is on the bottom of the cap
- Screw cap back on top half of bottle
- Place top half of bottle inverted on the base of the bottle
- Fill top half with potting soil, leaving about an inch from top

Trash Troop: tackling trash together!

Google Earth Rivers

- Plant seeds/small plant
- Water soil from top to wet soil and string
- Fill base of bottle 1/3 of the way with water

Build-a-cactus

- Link: <http://look-what-i-made.com/2016/09/22/plastic-bottles-upcycled-cacti-lights/>

Supplies

- Green 1/2 L plastic bottles
- Various colors of 1/2 L (or less) plastic bottles
- Exact-o knife
- Scissors
- Markers/permanent marker
- Decorative planter
- Gravel or scrap/newspaper

Procedures

- Cut bottom of green bottles to desired size
- Cut out one of the bottle "legs"
 - To put flower in later
- Cut out small triangular flaps in sides of green bottle using exact-o knife
 - Bend out to imitate spines
- Shape tops of colored bottles into flowers
- Fit flower into previously made hole
- Fill planter with gravel or scrap paper
- Gently position cactus sculpture into planter
- Bonus: add fairy lights/battery candle under cactus at home

Note:

- Maybe assemble individual components ahead of time and let kids assemble their own cacti
 - I.e. cut out flowers or at least outline flowers and cut various different cacti sizes with spines done