

Find Fun and Creative Ways to Repurpose & Upcycle Trash



Repurposing and Upcycling Trash

Recycling is good, but upcycling is better! Recycling is turning what we normally throw away into something we can use again either, in its current form or as something else. Upcycling is taking something we normally recycle and transforming it into something more valuable.

We create too much waste, and upcycling is a fun way to reduce the amount of garbage we generate. In these projects, students will create upcycled items for their own use, to give as gifts, or to sell as a fundraiser for a conservation or community organization. This is a fun way for kids to be creative, inventive and engineer something new and exciting out of items old and used.

Objective:

- Build and understanding on way to repurpose and upcycle items that would otherwise be place in our landfill.
- Create creative ways to upcycle items for new uses and purposes.
- Design, create and build new items out of trash.
- How does it affect our environment when we do not upcycle or recycle our trash?
- How can everyone make a difference on our environment?

Key Terms:

Repurposing – is the use of something for a purpose other than its original intended use. Repurposing an item can be done by modifying it to fit a new use, or by using the item as is in a new way.

Upcycling - creatively reuse, the process of transforming by-products, waste materials, useless, or unwanted products into new materials or products of better quality and environmental value.

Recycling - is the process of taking materials ready to be thrown away and converting (changing) them into reusable materials. ... Recycling also helps preserve natural resources, materials that occur naturally and are used to make products--like when we use trees to make paper

Here are some fun project kids can try or use as inspiration to look at used items in a new way and invent a new purpose/product!!!

#1 Bird Feeder - *Upcycle juice cartons or milk cartons*



Materials:

- Juice or milk carton
- Enamel paints for the garden
- Exacto knife
- Plastic bottle lids
- Googly eyes
- Craft stick/ lollipop stick/ nature stick/twigs
- Hot glue gun or good PVA glue
- Birdseed

Procedure:

1. Start off by painting the juice/milk carton. Two coats will be needed if you want to make the color nice and even. Used enamel paints (for flowerpots, etc.), as these are waterproof. Acrylics are water based and won't last as long. Though you could use acrylics and then add a coat of waterproof varnish.

2. Once dry, using the exacto knife (adult supervision or adults only for younger children), cut out a “tummy and wings” into the bottom half of the juice or milk carton. For the wings, do not cut them all the way out (like the tummy) - keep the “flaps” attached. This keeps the seeds a little bit more sheltered and gives it those lovely owl wings!

3. Finally, take your carton and glue on the bottle caps for eyes. Next add stick for the birds to perch (poke hole and push through the carton and glue). Now, punched a little hole at the top and sting to hang outside.

❖ Activity comes from <https://www.redtedart.com/>

Have your kids look and see what materials you have around the house and design their own bird feeder design.



#2 Upcycle Planters

Self-Watering Seed Starter Pot Planter



Materials:

- 2-Liter Bottles
- Potting Soil
- Seeds
- Cotton String
- Phillips screwdriver and hammer
- Sharp blade to cut the bottle
- Block of Wood

Procedure:

1. Cut the bottle in half.



2. Use a Phillips screwdriver and a hammer to punch a hole in the center of the bottle cap.



3. Cut a length of yarn/string about 1'-1.5' long, double it over and tie a loop on one end.



4. Thread the yarn/string through the hole in the bottle cap so that the knot is on the inside of the cap. This will act as a wick, drawing water up from the basin below and into the soil. The plant will take only what it needs, so the soil moisture will be perfectly regulated.



5. Put the cap back on the bottle top and nest the top of the bottle in the base. As the plants grow and use up the water, you can just lift off the top to add more to the base instead of pouring it over the soil. As the soil dries, water will be sucked up through the string into the pot.



6. Add potting soil and seeds.

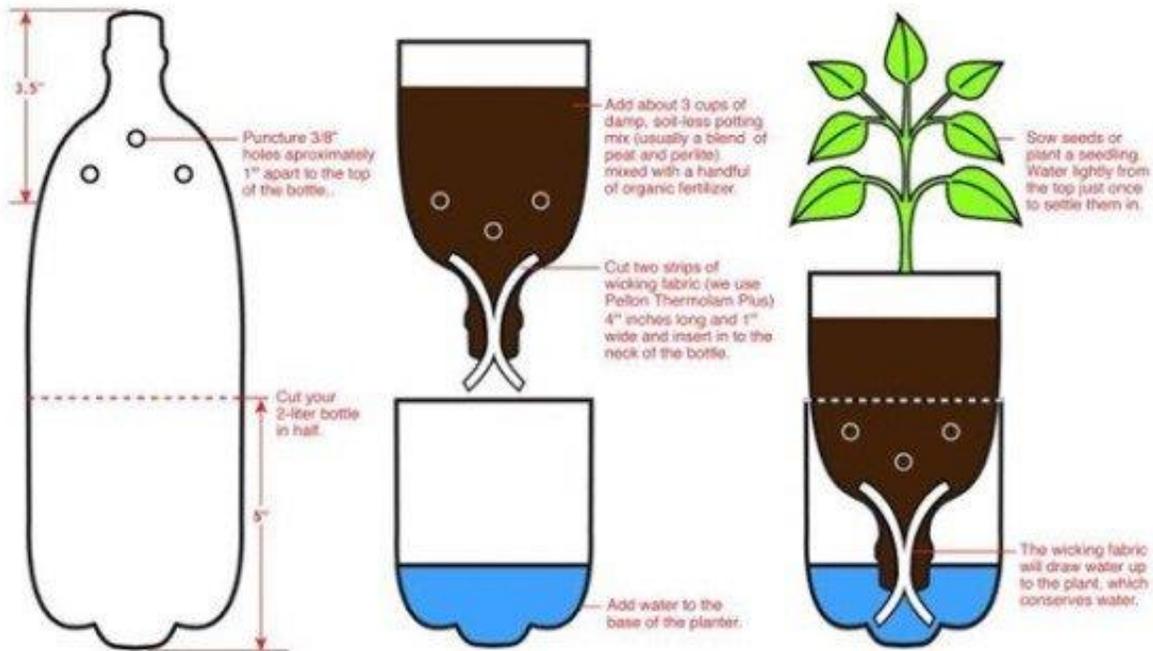


7. You need to water the soil from the top the first time in order to make sure that it is uniformly wet and that the string also is wet. Otherwise the surface tension of the water will prevent the whole thing from working correctly.



❖ This activity comes from <https://www.seattlesundries.com/>

How to make a 2-Liter SIP (sub-irrigated planter)



To learn more visit us at: greenroofgrowers.blogspot.com and The Singing Seed Design: Debbie Kong

Turtle Herb Planter



Materials:

- Pom-poms
- Fruit or jello container
- Paint
- Googly eyes
- Dirt
- Herb (like basil) seeds
- Glue

Procedure:

1. Poke a couple draining holes in the cup. Then, have students paint their container (place outside to dry faster)
2. Once dry, attach pom-poms and eyes.

3. Place dry and seeds in the cup and lightly water.



❖ Activity comes from <http://www.readingconfetti.com/>

Other Planter Designs for Inspirations:

Fun YouTube Tutorial: <https://www.youtube.com/watch?v=ef0MqJl0OgQ>



#3 Upcycle Games



Materials:

- Recycled k-cup or yogurt container
- String
- Wooden bead
- Wooden craft stick/ dowel / or anything you can find to recycle to act as the handle
- Decorative tape

Procedure:

1. Decorate recycled cup with washi tape and/or duct tape
2. Poke a hole in your cup (if using something other than a k-cup) - otherwise use the hole already punch out of the bottom by your Keurig machine.
3. Next is adding the string. Use braiding cord, string, or elastic cording to tie one end to the hole in the k cup. On the other end, tie a jumbo bead or something else of similar size.

4. Use a scissors or craft knife to cut a slit in the bottom. Poke a craft stick through the slit. Hold it in place with duct tape on the bottom.



Recycled K Cup Craft & Toy



❖ Activity comes from <https://artsymomma.com/>

Upcycled Cardboard Box Marble Maze



Materials:

- Box lid or box cut down for size
- Glue
- Scissors
- Straws
- Recycled random piece of toys/games/blocks, etc.
- Marble
- Paint (optional)



Procedure:

1. Paint your box (Optional). If hot day, can place them outside to dry fast. Have students draw out a maze in pencil. Use marble as they go to make sure its wide enough to roll through.



2. Have kids cut out straws and glue them onto their penciled maze.



3. Use the wooden bits, beads, mini wooden spools or other random pieces to act as stoppers.



4. Now play, using a wooden bead or marble and drive it around their newly constructed maze.



❖ This activity comes from <https://www.hellowonderful.co/>



#4 Upcycle Musical Instruments

Shoebbox Guitar



Materials:

- Scissors and utility knife
- markers
- Ruler
- Rubber bands
- Glue
- Tape (transparent, duct, masking, or colored)
- Gift wrap or decorative paper
- Kid-size shoe box
- Paper-towel tube
- Cardboard tube from a dry-cleaner hanger, cut into two 4-inch pieces (if not available, use other  shaped cardboard).

Procedure:

1. Remove the box lid. Cover the box, lid, and paper-towel tube with the paper of your choice. Lay the tube on a table, positioning one end against the short side of the box and centering it along the bottom edge. Trace a circle around the tube. Draw 4 lines bisecting that circle (as if cutting a pie), then, with a utility knife, cut along the lines and through the box. Slide the tube through the bisected hole until it hits the other end of the box and secure it with tape.
2. Cut an oval in the center of the lid, then put it on the box.
3. Stretch 6 rubber bands lengthwise around the box.
4. Slide the 2 dry-cleaner-tube pieces (decorated with tape or paper, if desired) under the rubber bands above and below the oval. Glue to secure. This will allow the “strings” to twang. (Cut chopsticks would work, too.)
5. Screw the brads into the top of the cardboard-tube neck for the tuning pegs.
6. Pick away with the bread-bag tag.

Amazon Boxes Guitar (Alternative Design)



Materials:

- Small Amazon Box
- Large boxes to cut the guitar-shaped facade
- Rubber bands
- Packing tape
- Cardboard tubes (wrapping paper tubes work nicely)

Procedure:

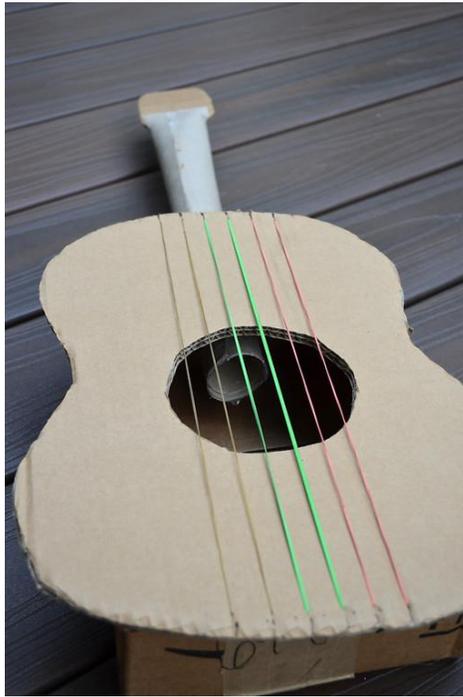
1. Start with a small cardboard box, with most of its top flaps cut away, leaving just enough material to glue on a guitar-shaped facade on top, with a hole in it.



2. Cut an "x" and pressed in the flaps of the X to form a collar and push in the cardboard tube. Glue or tape to secure the roll to the box.



3. Let the neck/cardboard roll protrude some way into the body of the guitar, for stability.



4. Then cut short slits in the top and bottom of the guitar-shaped piece, to loop rubber bands around them for strings. Note that the cardboard could fold and/or buckle under the tension in those taut strings/rubber bands. So, make sure the flutes of the cardboard are parallel to the strings.

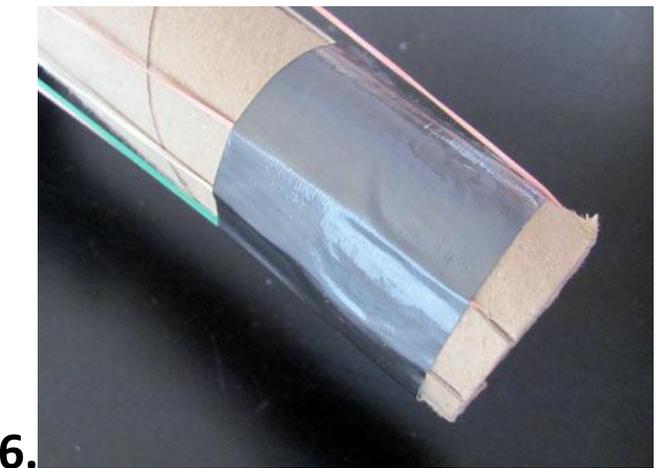
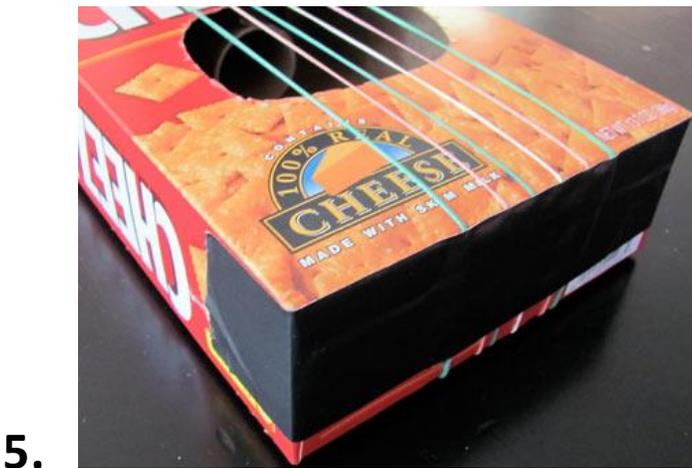
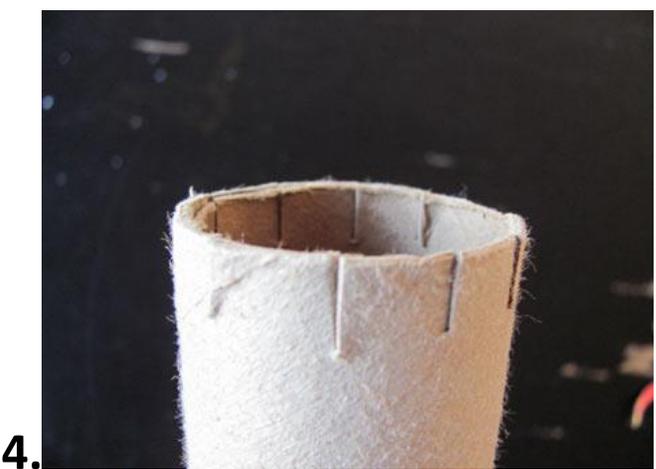


5. The head of the guitar was simply an appropriately-shaped piece of cardboard, slotted into the flattened end of the neck/cardboard roll.



❖ Activity comes from <http://www.ikatbag.com/>

Alternative Guitar Design (based on recyclables available)



Drums



Materials:

- Tin Cans
- Balloons
- Scissors
- Rubber Bands
- Chopsticks

Procedure:

1. To make a set of drums, cut the long part of a balloon, leaving the bulb intact. Wrap the bulb around the top of a clean can and secure it with a rubber band. Use chopsticks, pencils, or even just your fingers.
2. Students can decorate the outside with washi or duct tape (optional).

Other Musical Instrument Designs for Inspirations:



#5 Upcycle Piggy Bank



Materials:

- Empty Water Bottles, shorter ones
- Sheets Paper
- Small Self-Stick Googly Eyes
- Pink Pipe Cleaner
- Small Wooden Beads
- Glue Gun
- Scissors

Procedure:

1. On one side of the bottle, cut out a slit about 2 inches long and 1½ inch wide. The long length of the slit should run the same way as the length of the bottle.



2. From the paper, cut out a piece for each bottle that will fit them by wrapping it around the bottles. The paper should be sized so there is about an inch of plastic showing at the bottom of the bottles and the spout part will be showing at the top of the bottles. Wrap each paper around each bottle and glue in place. Cut out the paper where you put the slits in the plastic so those are open. Make sure before you glue things on, the slit opening is at the top of the bottle when it is laying down.



3. Cut out 2 little pig ears from another piece of pink paper and cut out a little round circle the same size as the lids to the bottles.



4. Glue each circle to each bottle cap. Glue 2 little ears on each bottle on the edge of the paper nearest to the spout part. Stick 2 googly eyes on each bottle about halfway between the cap and the ears.



5. Turn the bottle over to the bottom side, the side opposite of the slit opening. Glue on 4 pink beads so they look like the pig's legs. Spread them apart equally so when you turn it back over the pig will be standing on the four bead legs.
6. Cut a short piece of the pipe cleaner, twist it into a loose spiral, and glue it to the bottom of the bottle to look like the pig's tail.

Other Piggy Bank Design Inspirations:



#5 Upcycle Candy Wrapper Jewelry and Accessories

Candy Wrapper Pouch with Zipper



YouTube Tutorial: https://www.youtube.com/watch?v=Ff7_Um_s-so

Candy Wrapper Purse



YouTube Tutorial: https://www.youtube.com/watch?v=cdds_8Y_akQ

Candy Wrapper Bracelet



YouTube Tutorial: <https://www.youtube.com/watch?v=gQvXV8U2mxw>

Candy Wrapper Headband



YouTube Tutorial: <https://www.youtube.com/watch?v=wYEuqZtDNOQ&t=165s>

Bonus: DIY NO-SEW ZIPPER CASES...FROM PLASTIC BOTTLES



YouTube Tutorial: <https://www.youtube.com/watch?v=12mOH08ME7Y>

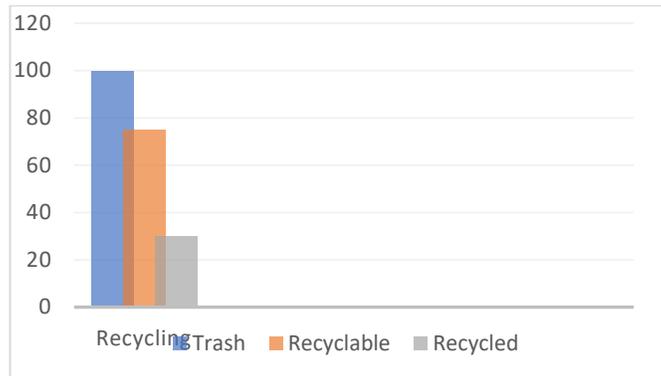
Reflective questions:

1. How is it a positive impact on our environment to upcycle items, rather than throw them away?
2. When you think about trash items, can you think of any creative way you can upcycle and create something new?
3. If you cannot upcycle an item, does your family and school have a recycling program or plan? If not, how can you help organize and teach others how they can recycle on a daily basis?
4. What items can you recycle?

Did you know....

Recycling and Trash Statistics:

- Although 75% of America's trash is recyclable, we only recycle around 30% of it.



- If we recycle one ton of plastic, it can save around 1200 gallons of gasoline.
- Recycling is one of the most effective ways to reduce pollution and waste. Currently in the U.S., only 22 percent of waste is recycled. If that amount increased to 75 percent, it would have the same effect as taking 55 million cars off the road.
- Every hour, Americans throw away 2.5 million plastic bottles every hour (about 42,000 per minute) – and recycling just one ton of plastic bottles saves the same amount of energy as the energy a two-person household uses in a whole year.
- Recycling aluminum cans can save a lot of energy. In fact, it takes 95 percent less water and energy to recycle a can than to manufacture a new one.
- Most Americans will use 25,000 aluminum cans in their lifetime.

- Recycling paper saves trees and forests. Recycling just one stack of newspaper 3 feet tall saves one tree.
- Glass and aluminum can be recycled over and over again, making it one of the most versatile materials.
- Most products are shipped in cardboard boxes, which creates a lot of waste. Fortunately, over 80 percent of companies recycle their boxes.
- It takes 500 years for an average sized plastic water bottle to fully decompose. Glass bottles take 4,000 years to decompose.
- After recycling, an aluminum can is usually repurposed within 60 days.
- The amount of plastic film and wrap produced annually could shrink-wrap the state of Texas.
- Over one million seabirds are killed by ocean pollution each year. Three hundred thousand dolphins and porpoises die each year as a result of becoming entangled in discarded fishing nets, among other items. One hundred thousand sea mammals are killed in the ocean by pollution each year.
- More than 50 percent of sea turtles have consumed plastic.



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- Every half second, this much plastic makes it into the world's oceans:

