

Upcycle

Educator Guide

Age Group: Any Number of Participants: 20-30 Time Frame: 20-30 minutes

Lesson:

T-Shirt Craft

How to Repurpose a T-shirt into a Bracelet

Adapted from: "ChrysN" http://www.instructables.com/id/How-to-Make-T-shirt-Bracelets/

Materials

- Old, clean t-shirts
- Scissors
- Binder Clip

Procedures:

- Cutting the Strips
 - Using scissors, remove and discard the hem from the bottom of the t-shirt.
 - Cut up along the seam several centimeters, then begin to cut strips about 1-2cm wide along the bottom. If the t-shirt is thinner material (not cotton), cut 2-3cm strips.





- Once cut, grab the ends and pull, this will result in the material curling at the edges.
- You will need two strips about 4 feet long so you will likely need to combine several strips.
- How to Combine Strips (See photos at right)
 - Cut a small slit near the ends on both strips.
 - String the slit-free end of one strip through the hole of the other strip then it's own slit, forming a loop.
 - Pull the ends to tighten the loop.

**NOTE: The Cutting and combining of the t-shirt strips can be done before camp to save time.

• Weaving the Bracelet

- Take the two strips of fabric ~4ft long and fold each in half.
- Clip together at the fold giving you four strands (in my example two blue and two white).
- Take the two strands on the right (white) and fold them over the two strands on the left then loop back under the blue and over the white.
- Tighten the knot.
- Take the blue strands and fold them over the white, then loop back under the white and over the blue. Tighten the knot.
- Repeat, alternating colours and making sure the knots are tightened evenly. Continue until it is long enough to wrap around your wrist.









• Remove the clip and feed the free ends through the loops.

- Knot a couple of times.
- Cut off the excess strands.









How to Repurpose a T-shirt into a Dog Toy

Easy, eco friendly and machine washable!

Materials:

- Old cotton t-shirts in various contrasting colors
- Scissors





Recycled Paper

Materials:

- Screens
- Bucket
- Gloves
- Scratch paper
- Water
- Iron
- Sponge
- Blender
- Small bowls
- Press bar

Procedure:

- 1. Have students each take one sheet of paper from recycled paper bin in the classroom. Each student will then be able to color the paper, covering as much as possible in an attempt to help turn their new sheet of paper that color.
- 2. Each student will be given a small bowl. Once they are finished coloring their paper, students will rip up their paper into small pieces and place them into the bowl.
- 3. One by one students will bring their bowl with the small pieces of paper up to a facilitator who will be stationed at a blender. Place the small pieces of paper into the blender and fill the blender with enough water to cover the paper pieces. Blend until smooth (a few seconds).
- 4. Once blended, place the paper "smoothie" back into the students bowl and have them move onto to the next station.
- 5. The next station will also have a facilitator there to assist students. The materials needed at this station are: screens, bucket, water, sponge, and scratch paper.
- 6. Lay the white paper making screen on the mold, and the drain rack on top of the screen. Pull the straps across the drain rack as tightly as you can.
- 7. Lower the mold at a slanted angle into water in tub or dishpan. Water must be deep enough to come within a quarter inch of the mold's top. Place paper "smoothie" into hand mold. Using your hand, spread the pulp evenly be wiggling your fingers in the water. Lift the mold out of the water, holding it level. Let the water drain.
- 8. Set the mold in a tray or cookie sheet and pull the straps loose.
- 9. Life the mold up and away from the white papermaking screen and drain rack. Carefully put gray cover screen over the new sheet.



- 10. With a sponge, press firmly on top of the gray cover screen. Press the sponge-then wring it. Press and wring until there is no more water. Carefully lift a corner of the gray cover screen. Peel the screen off slowly.
- 11. Pick up the white papermaking screen. Turn it over. Place it-new sheet down-on a dry piece of scrap paper. The new sheet will be between the screen and scrap paper.
- 12. Press a sponge down hard all over the surface of the white papermaking screen. Wring out sponge. Press again to remove more water.
- 13. Place one hand at the middle and one hand at the corner of the white papermaking screen. Life the corner. Remove the screen by lifting the corner while sliding the other hand back. If the new sheet comes up with the screen, try the other corners.
- 14. Place a dry scrap piece of paper over the new sheet. Use the press bar to press down as hard as you can on top of the paper and new sheet. Press everywhere.
- 15. Take off the top scrap piece of paper and carefully lift one corner of the new sheet.
- 16. Slowly peel the new sheet from the bottom scrap piece of paper. If the new sheet isn;t strong enough, remove more water by repeating step 14.
- 17. Place the new sheet on an ironing board or cloth or other flat surface. Place a thin cloth over the sheet. With an iron at high heat, iron slowly and without stopping over the new sheet until it is dry.
- 18. When the sheet is dry, you can write, type, or draw on it.

Discussion:

- What is "upcycling"?
- Apart from old t-shirts and paper, what are other materials that you can upcycle at home?
- How does upcycling (and recycling) influence the environment?