

UPCYCLING In STEM Class

STEM 8 Grade - Ms Aguas

Upcycling in STEM

Upcycling is a form of recycling where instead of turning waste into new materials, you can take a product that you would otherwise throw away and give it a new use in life. Rather than recycle using a recycling bin, you can use your creativity to update and renew old items.



Upcycling

Upcycling, also known as creative reuse, is the process of transforming by-products, waste materials, useless, or unwanted products into new materials or products perceived to be of greater quality, such as artistic value or environmental value.

Project 1 - The Paper Beads



Materials



- Recycled papers preferably the glossy papers
- A Pair of Scissors
- Ruler
- Glue
- Toothpick or straw
- Strings or yarn
- Beads or buttons (optional)

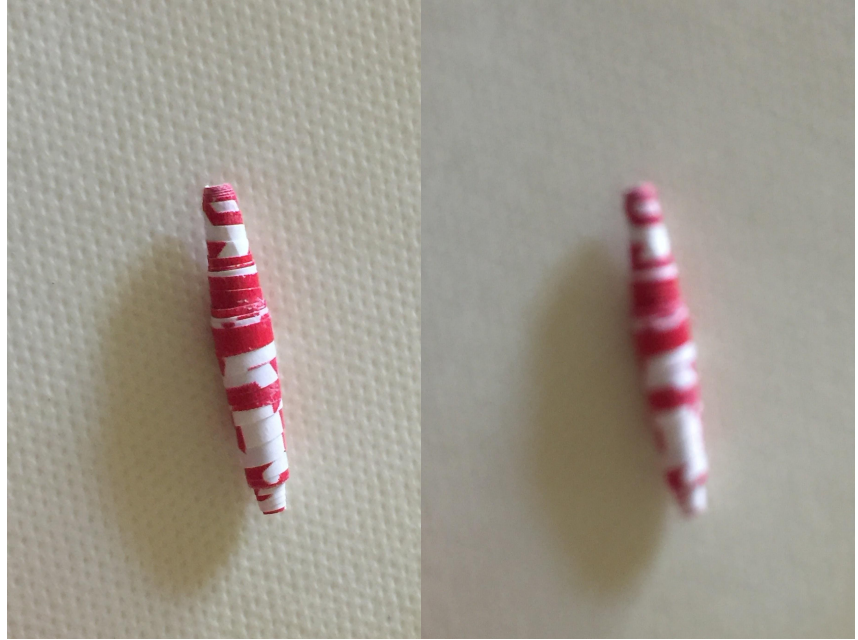
Steps - Important - apply your creativity and use your common sense

- 1. Make a pattern - about 1 inch by 7 inches for cutting out.**
- 2. Cut the pattern diagonally, so you have a width of one inch on one end, and pointed zero on the other end**
- 3. Follow the pattern and cut out 40 - 50 strips of papers of the same measurements.**
- 4. Roll 1 inch side on a toothpick about 2 times then put small drops of glue to the rest of the paper, and continue rolling.**
- 5. Roll until the strip of paper forms like a paper bead. Do the same to the rest of the papers.**

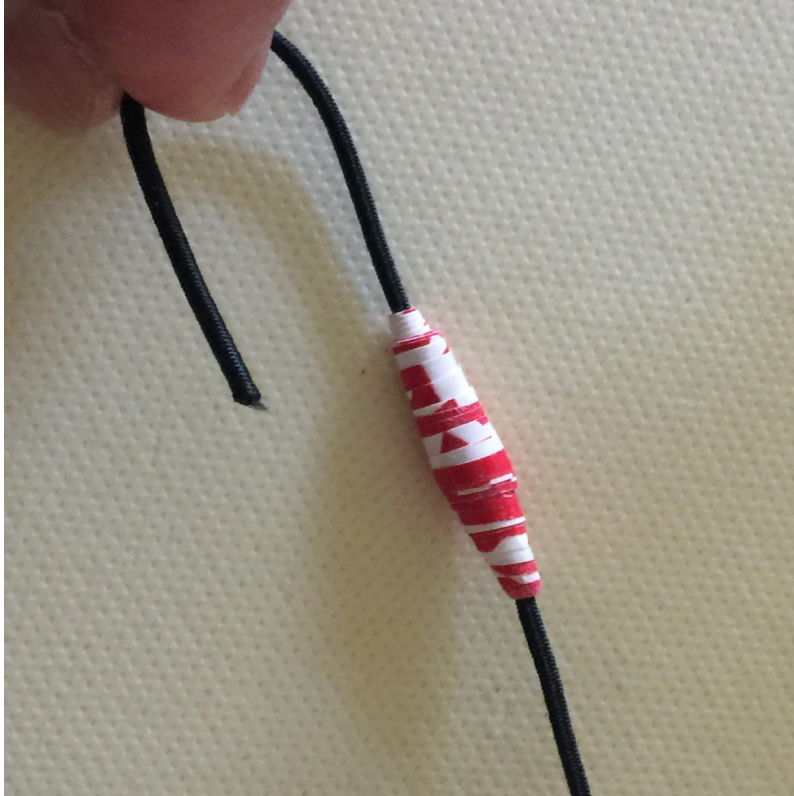
1. Make a pattern - about 1 inch by 7 inches for cutting out.
 2. Cut the pattern diagonally to have a width of 1 inch at one end, and a pointed tip
- See picture



Roll the 1 inch side on a toothpick about 2 times (avoid gluing the paper to the toothpick) then put few drops of glue to the rest of the paper, and continue rolling.



Roll until the strip of paper forms like a paper bead. Do the same to the rest of the papers. Then insert each bead to a yarn or strings. (Optional : you may add buttons)



Beautiful beautiful creations!



Other resources

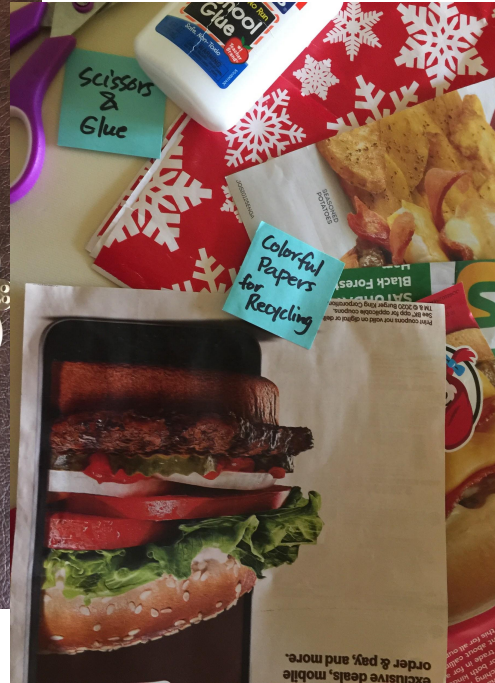
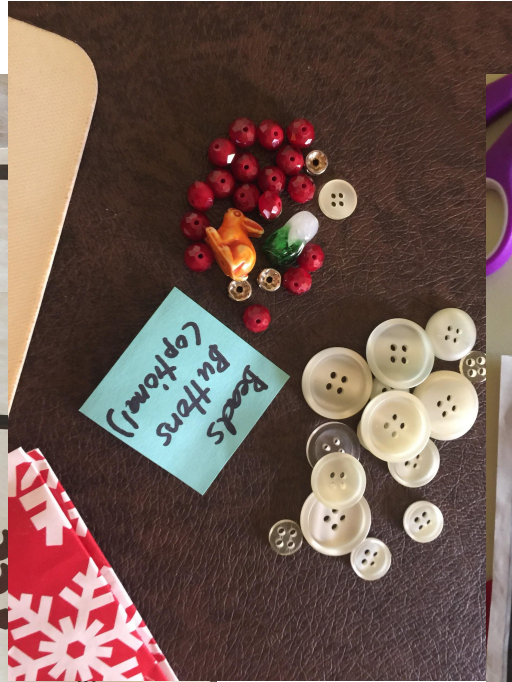
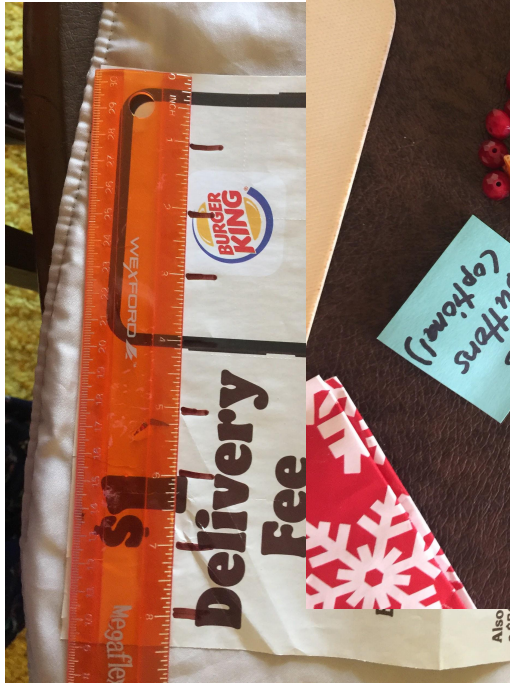
Basic Way to do the paper beads

<https://www.youtube.com/watch?v=jMG40809rws>

Advanced Level - Others make business out of their creations

<https://www.youtube.com/watch?v=uCatqDiuydg>

From TRASH to TREASURES



STEM CHALLENGE

Create your own necklace - 50 points

Create a bracelet - 50 points

*Take a picture of your creations and post it in the GC - Upcycling Google Slide = **100 points in STEM project** .*

Place the paper bead jewelries in a nice wrapper and give it to your mom, or aunt or grandma on Valentines Day = **You're the Winner!**

I always believe that my students can do great things!
- Ms Joy Aguas

Take a picture of your creations and post it in the STEM Google Classroom - Upcycling Google Slide

Project = 100 points in STEM project dated 02/02/2021

