

How To Make a Backpack with Bryony Knox

Difficulty Level: 2

Time to make in teams : 45 mins - 1 hour



Circular Design Principles

- Design for Disassembly
- Transforming Waste to Value
- Powered by Renewable Energy

Materials (and alternatives)

- **Fabric (approx 30x70cms)** - unused colourful/ patterned skirts, shorts , leggings or trousers (can be prepared in advance)
- **Bicycle inner tubes** (from local bike repair shop) OR **ribbon** OR strips of **fabric** for straps
- **Drinks Cans** - for sheet tin (NB. I use the term tin when talking about this metal but it is actually thin sheets of aluminium) (can be prepared in advance - see film)
- **Paper Fasteners** OR **safety pins** OR **needle and wool**

Tools (and alternatives)

- Hole Punch
- Scissors
- Needle OR bradawl OR old pointy biro to make holes
- Ball of Plasticine/ Blu Tack to lean on

Materials that can be prepared in advance if wished:

- Prepping tin cans
- Cutting fabric to size

Instructions:

1. Cut your fabric to the size you would like for a backpack (here we have used a rectangle measuring 30x70cms).
2. Fold it over lengthwise at about 30cms with the pattern on the outside, leaving about 10cms at the top for the flip-down top of the backpack.
3. Make small holes down each side of the fabric (here we made about 5 holes/side), using a pointy needle/scissors/bradawl. Put a ball of plasticine or Blu Tack behind the fabric as you do this so you don't mark the table. Put a paper fastener through each hole to fix the two sides of the fabric together.
4. For the corners, cut out four of whatever shape you want from the tin can metal (here we did a square). Watch the video for how to do this safely. Remember not to have any sharp corners and to put all scraps in a separate bowl.
5. Fold over your metal shape and punch holes in it with a hole punch.
6. Cut two strips of whatever material you are using for the straps (bike inner tube/ribbon/strips of fabric) to the right size for you (here they are approx 40cms each). Here we cut down the centre of a bike inner tube in a wavy pattern to create the two straps.
7. Punch holes at either end of the straps using a hole punch.
8. Slip your metal shape onto the corner of the bag so that it covers the fabric on both sides. Slide the strap between the fabric and the metal on the back and fix the layers (metal/fabric/inner tube/metal) together with a paper fastener. The metal reinforces the corners and makes them stronger. Repeat this at all four corners.
9. To make the windmill, draw round a circle on the silver side of a piece of tin and make a hole in the middle.
10. Cut strips towards the centre but stop about 1.5cms away from the centre. Then curl the strips up on a pen to make them curl up a bit.
11. Make a hole in the middle of the flip-down top and fix the windmill on with a paper fastener.
12. Create your own decorations to personalise your backpack and enjoy!