Recycling guide for Early childhood development practitioners and parents
Toys and useful ideas from recycled materials

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Winner of the 2017 Rhodes University Environmental Unit of the year

1 All ideas herein are adapted from existing ideas, but amended to suit the local needs and local availability of recycled materials.
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Introduction to recycled materials for toys

This manual provides a very clear step by step process for making recycled toys for educational play. It is also to be used to allow young children to engage in educational play with clean recycled materials. The ideas included herein are those that have been completed with ECD centers in Grahamstown and for which there is an oversupply of raw materials in Eyethu.

Bird Feeder

**Items required**
- 2 litre plastic bottle
- String
- Scissors
- Bottle tops 2x
- Knife
- Paint (Not in image)
- Glue (not in image)
- Permanent marker (not in image)

**Step 1**
- Paint bottle.
- Tie String on top of bottle.
**Step 2**

- Use permanent marker to draw dots on bottle tops.

**Step 3**

- Use Scissors to cut opening near the bottom of bottle.

**Step 4**

- Use glue to stick bottle tops on 2-litre bottle (above opening to make eyes).
Now hang in a tree and place apple cores, left over bread and seeds for birds to eat, so young children can watch and observe this.

Lots of ideas to feed birds using recycled feeders, and leftovers inside.
**Pencil Holders**

Items required

- Toilet paper rolls.
- Paint
- Cardboard
- Glue
- Scissors
- Paint Brush
- Pencil

**Step 1**

- Cut toilet paper rolls.

**Step 2**

- Use pencil to draw circle on cardboard (use CD if you want a perfect circle).

Recycling is fun and useful!
Step 3

- Cut cardboard into circle.
- Paint toilet paper rolls.
- Stick toilet paper rolls on Cardboard piece.

Put your pens and pencils in it.
Car with moving parts

Items required

- Paint
- Plastic bottle (500ml)
- 4 Bottle tops
- Paint Brush
- Cardboard
- Cokie pen (shell)
- Kabab sticks

**Step 1**

- Take plastic bottle and Knife
- Cut Square shape near the top of bottle (this is where seat will go)
**Step 2**
- Paint the bottle and wait for it to dry

**Step 3**
- Collect kebab sticks, cokie pen and bottle tops.
- Punch holes through the bottle tops.
- Put kabab stick through bottle tops.
Step 4

- Put kabab stick which is attached to bottle through cokie pen.
Step 5

- Use Glue to stick cokie pen (wheel axis) to bottle (car body).
- Cut car board piece and attach to opening.
Sailing/floating ship

Items

- Toilet Paper Roll
- Match box
- Scissor
- Plastic Container
**Step 1**
- Use glue tick match box to plastic container.

**Step 2**
Cut toilet paper roll in half.
**Step 3**

- Stick toilet paper rolls on to of match box to finish making boat.

**Step 4**

Test boat in water, for fun!
**Human figures- Puppets**

Cloth, hairstyle, face and body characteristics make people different in appearance. Can you think of other parameters that affect the look of human beings?

![Image of human figures made from toilet paper rolls]

**Materials and tools:**
- At least one recycled toilet paper roll. For each figure you'll need one roll.
- Liquid glue.
- Scissors.
- Coloured paper.
- Coloured markers.
- Pencil.
- Knitting wool or string.
- A round mug.
**Finger Puppet cont’**

**Items**

- Glue Gun
- Permanent Marker
- Pen, Pencil and Red cokie pen.
- Acrylic Paint (Green)
- Toilet Paper roll
- Piece of blank white paper
- Cardboard (4*20cm in this case)

**Step 1**

- Cut cardboard to 4*5cm square and place toilet paper roll over it and.
- Draw a circle using the permanent marker on the outside of the toilet paper role.

**Step 2**

- Turn the Square piece upside down and paint the back (The side which the circle is not on).
- Paint the toilet paper roll.

**Step 3**
• Draw eyes and mouth on the blank piece of paper, using pen, and pencil and cokie pen.

**Step 4**
• When paint dries cut the 4*5cm square piece in circle.
• Use glue gun to glue circle on top of toilet paper role.
**Step 5**

Finally, cut out the eyes and mouth and glue them to the toilet paper roll (you can add any decorations you like, for example a moustache or hair)
Plastic Pen Holders
Simply cut plastic milk cartons as shown below.

SUPPLIES
- plastic milk containers
- scissors

INSTRUCTIONS
1. Simply cut a square out of the container about a 1/2 to 3/4 inches below the handle (as show in the photos). That's it! Oh, and remove the milk label. See! I told you it was super, super simple. :)

was super, super simple. :)

[Image of plastic milk cartons and pencils]
Egg Carton Masks

All you need is an egg carton, scissors, some paint or markers some string and tape or staples.

The cutting of the masks is a little bit fiddly and needs to be done by an adult with a sharp pair of scissors.

To begin with, cut off a section of egg carton that contains two egg complete holes, and two half egg holes so that you get a complete spike between the two sets of holes.
Then trim the edges of the section of egg carton until you have two complete egg holes and the spike. Now you can see the mask taking shape with two eyes and a nose.
Flowers from toilet paper rolls

Nobody can ever imagine that something this beautiful can be created from toilet paper rolls, check it out!

- Collect as much toilet paper roll as you can,
- a sharp scissors,
- some newspapers to lay on your art,
- super glue,
- spray paint or just paint,
- paint brushes or old toothbrush,
- Pegs for hanging clothes or hair pins to hold the rolls together while they dry.

1) Depending on how thick you want the flower to be, I would suggest one roll can make 6 oval shapes. So, take a roll and suppress the circle slightly to make an oval shape. After doing so, hold it horizontally and cut it in half. Now you have 2 pieces. From these, cut them 3 times so that from that one roll you have six oval shapes as seen below. (I have cut plenty small pieces).

2) Try and make sure that all pieces are equal, if you like, you can mark where you will cut.
3) Take two ovals, hold them together with your thumb and add a drop of glue in between one of the two ends. Press firmly for a minute with your thumb and put hair pin/ peg over the joint and put on flat ground of newspaper.

4) Join additional ovals to the other joint two ovals to make complete petals. Depending on what type of flower you intend on making, you can add or reduce ovals as you wish.

5) Lay completed flower on the newspaper and allow to dry for a few hours. Once dry, you can paint the sides and insides of the ovals with two coats and allow to dry.
6) Use wool or string or tape to hang onto the wall and adore your marvellous work.

Baskets from old papers
This can be a gift, a useful tool in the classroom, in your bedroom, a way for a family to bond or even a hobby.

- Any paper - magazine, brown paper, coloured paper, newspaper etc.
- Sharp scissors
- Long straw or thin stick with an even size
- Super glue and stapler
- Cardboard or thick paper
- Any circular / rectangle object to trace shape onto

Let’s begin!!
1) Open up the paper and tear it in half, carefully (mine was an A3 so I cut to make an A4). Cut as many as you can then take a straw and roll it inside the paper from a diagonal point. When it starts to fade into the paper, pull it out slightly and keep rolling until a small piece of the paper is left.
2) Pour a small drop of glue and roll till the end. Make sure the pencil does not disappear with the paper and one strip is complete. Leave it to dry. Continue to make as many of these strips as you can.

3) Once you are satisfied by the number of strips, press firmly on them so that they become straight and flat. Take two strips and staple them in the middle or glue them together to make a cross as shown below.
4) Take two more and staple them or glue them on the original cross so that you have 8 strips like the shape of a windmill. Continue adding strips and gluing them at the middle, allowing for each edge of the strip to be on its own. After gluing all 8 strips that now make 16, take the circular object and trace it on a cardboard and cut the shape out.

5) Take the circle and glue it at the middle of the star shape/ your windmill as shown above.

6) Hold few of the remaining strips up take another strip and circle around back and forward around the circle. Over and under. Use pins or pegs to hold the strips together.

7) When the strip is finished, add a new strip by gluing the new strip to the finishing end of the last one and continue weaving back and forward till you reach your desired height of the basket
8) Fold the remaining strips towards the inner of the circle and staple or glue the end to the inner strip that it touches and **Voila!**
Make your own camera

Supplies:

- A small cardboard box (e.g. tissue box)
- Plastic lids from cleaning bottles, shampoo bottles, or lotion bottle
- Hot glue gun
- Permanent marker/pen/crayon to decorate camera
- String

**STEP 1**
Get your material ready.

**STEP 2**
Glue the plastic lids onto the box for the lens and flash.
**STEP 3** Decorate the camera to make it more real

![Decorated Camera]

**Step 4**

Attach string to the box so it can hang around your neck.

![String and Thread]
SAY “CHEESE”! Finished project.
Make your own Binoculars

SUPPLIES

- cardboard cones (toilet roll cores)
- scrap of cardboard
- glue
- duct tape

**STEP 1** - Glue the cones together.

**STEP 2** Wrap the ends with duct tape
Step 3 Poke holes through the cones using a scissor.

Step 4 Pull string through the holes and tie it, so you can hang it around your neck.
Step 5 Decorate your binoculars to make them beautiful.

FINISHED PRODUCT
Contact numbers and how to get good clean waste materials for toys

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