

Making and Building Resource



Semaine canadienne de réduction des déchets

Teach students how to make recycled paper and build a recycled bird feeder

Make Recycled Paper

Making recycled paper is messy. It is also a lot of fun. Someone will have to use a food processor and an electric iron. Both can be dangerous. So make sure that you get help on today's project because it is a big one. It is best to do this with some friends and family. That way you can spread the mess and the fun around.

What you need

- 2 full newspaper pages torn into 2-inch squares
- food processor
- 2 tablespoons white glue
- 2 or 3 cups water
- sink with 4 inches water
- old panty hose
- coat hangers
- electric iron

Optional

- insect screen
- strainer
- food coloring
- dryer lint

You're going to first make the frames that you'll use to make paper with. Undo the coat hanger and use the wire to make a flat square about 6 by 6 inches big. Stretch one leg of the panty hose over it. Take your time; it could snag. If you put tape on the ends of the wire, it will snag less. Make sure it is tight and flat.

Tie knots in the hose. Use the other leg for another piece of paper. You will need one frame for every piece of paper you make. You might want to make more than one or two.

Put a handful of the paper and some water into the food processor. Close the food processor and turn it on high. Keep adding paper and water until you have a big gray blob. You may have to add a little more water to keep things moving smoothly. Keep the food processor on until all the paper has disappeared. Then leave it on for 2 whole minutes.

Put the glue in the sink water and add all of the paper pulp you just made. Mix it really well. Use your hands.

Mix up the sink water again and then scoop the frame to the bottom of the sink. Lift it real slow. Count to 20 slowly while you are lifting. Let the water drain out for about a minute. Mix up the sink every time you make a new piece

Try other things like the screen or a strainer. Try adding lots of food coloring, or lint, or leaves, to the food processor.

Now you have to hang the frames on a clothesline or put them out in the sun. Wait until they are completely dry with no dampness at all. You Can then gently peel off the paper.

Have a grown-up use the iron - set on the hottest setting - to steam out your paper. You can keep making paper until the pulp is all strained out of the sink.

See how strong your paper is. Trim it with scissors. Write on it. It is strong.

P.S. Don't be fooled. When a bag or a box says that it is 100% recyclable that means you can recycle it. It does not mean that it is made out of recycled paper.

Build a Recycled Bird Feeder

The following instructions for constructing a bird feeder using a recycled soft drink bottle, recycled foil pie plate and other materials, was downloaded from Ibarra Martinez' Recycled Birdfeeder site at Homestead.

This bird feeder is simple enough to make in the classroom. It requires simple tools and most of the materials can be easily gathered, for example, after the family had some Chinese take-out food.

The project requires some adult assistance, but the assembly is very easy. The whole project can be completed in less than one hour.

Materials

one soft drink bottle (2 litres)
two chopsticks
one aluminum plate
25 centimetres of telephone wire or thick fishing line
electrical or duct tape

Tools

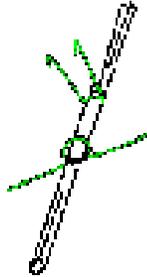
craft or "exacto" knife
ruler

Procedure

1. Wash the materials.
2. Make a horizontal cut near the bottom of the bottle. About 3 cm long.
3. Make two cuts of about 1 cm each, going up from the corners of the previous cut.
4. Together, the three cuts will look like a wide and short letter U.



5. Push the flap to the inside of the bottle, and bend it to a 90-degree angle.
6. Repeat steps 2 to 4 on the opposite side of the bottle.
7. Tape the chopsticks together, making a longer stick of about 30 cm in total.
8. With 12 cm of telephone wire, make a tight loop around the chopsticks.
9. Make little "hooks" at the ends of the wire.



10. Repeat steps 7 and 8 with another piece of wire.
11. Hang the chopsticks from the holes made in step 4. Level the chopsticks by adjusting the size of the "hooks."
12. Cut a circle at the centre of the aluminum plate.
13. Tape it upside-down to the mouth of the bottle, making sure that the cap can be screwed back in its place.



14. Tie a long piece of thick electrical wire to the mouth of the bottle.
15. Put the feeder inside a large plastic bag, and fill it 3/4 full of seeds.
16. Finally, put the cap back on the bottle; hang the feeder, and...
HAVE FUN WITH YOUR NEW FEATHERED FRIENDS!