Do your own recycling instead of putting it in the bin. How green is that?

Humans first communicated by drawing stories on the walls of caves. 6000 years ago, Sumerians scratched their thoughts onto heavy clay tablets. We eventually tried many portable writing surfaces from wood to cloth. Ancient Egyptians learned to layer strips of a wetland plant (papyrus, from which the word paper is derived) and pound them together to make flat sheets. Much later, the Chinese made a slurry of water and the shoots or bark of certain plants and poured it through woven screens. As the water drained through the screen, fibers adhered to the surface and fused into paper. That is essentially how we do it today.

A. Gather materials

scrap paper (see step B 1, below for details).
1 or 2 wooden frames (build your own or use old picture frames that are 5"x7 or larger)
window screen for 1 frame (a bit larger than the frame)
staples (for tacking screen to frame)
rubber or plastic tub (large enough to immerse frame)
blender (for making pulp)
felt or wool fabric (a bit larger than your frame)
sponge
rolling pin
optional: bits of fresh or dried flowers, aromatic herbs, seeds, even dryer lint (which helps make stronger paper)

Newspaper does not make great homemade paper; the ink can turn your product gray. Try it to compare to other sources.

Good envelopes have long fibers that help strengthen homemade paper.

Junk mail comes in a variety of paper qualities and colors.

Colored paper can add spark to your creation. Strong dyes can impart bright hues but can add soft tints if used in small quantities. Mixing too many colors could make your paper look muddy. Try using tiny pieces of colored paper to add interesting flecks to your product.

Copy paper from office recycling bins, flyers, and junk mail recycles well.

The inks in magazines and glossy paper tend to make the pulp gummy. Small amounts can add interesting flecks.

Uncoated gift wrap is a great base for homemade paper.

B. Make your pulp:

First create pulp; make a slurry of plant fibers (in our case, recycled paper) pulverized in water:

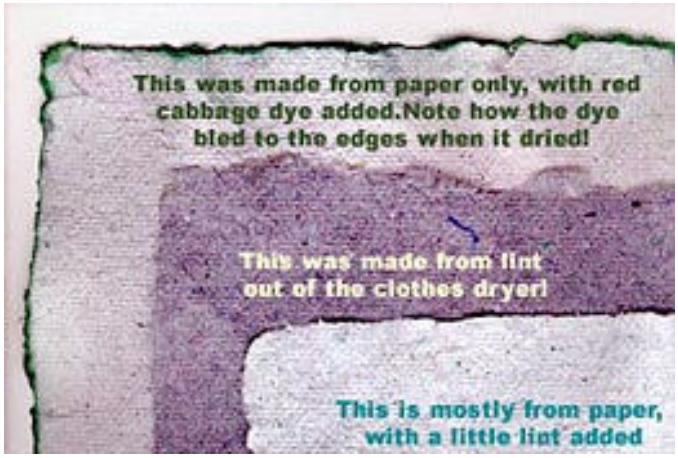
1. Collect scraps of many kinds of paper that needs recycling. Each will have different qualities that affect your final product (see box, to right). If you want a paper light enough to write on, consider using about four times as much white (or light) paper as colored paper. Limit or avoid paper with black ink, as it may make your paper gray.
2. Tear the paper into pieces about one inch square. Separate different types and colors of paper to give you more control during blending. Consider adding small amounts of foil wrapping paper, dried wildflower petals, herbs, food coloring, glitter, bits of thread, etc.
3. Soak torn paper in a tub or bucket of warm water and let it soak for at least two hours; overnight is better; fibers begin to break down, so the mixture is easier to blend.
4. Blend soaked paper and water in your blender using one cup of paper to two or three cups of water. Start with your base color (usually light); add other colors bit by bit, so you can see the emerging hue. Blend on medium high until it has the consistency of thin oatmeal.
5. If you want to use your paper to write or paint on, you can blend in a tablespoon or so of white glue, corn starch, or gelatin (dissolved in hot water), or 2 teaspoons of liquid starch. These additives, which are called "sizing," will make the paper less porous to ink and paint.

C. Turn Pulp into Paper

Make the magic that will make turn your pieces whole again. Here's how:

1. Make your mold, a screen-covered frame. Cut your window screen an inch or two larger than the frame in all directions, hold it tight, and staple it to the back of the frame. If you want your paper to have straight edges and be a specific size, you can use a second frame (with no screening) called a "deckle." (This rests on the mold and defines the shape of the finished paper.) For interesting, uneven edges don't bother with the second frame.
2. Fill the tub with two to six inches of water. You want to put the pulp in a watery suspension so it will be evenly distributed on your screen. Add about one blender full of pulp for every two inches of water. How much pulp you put in the water determines the thickness of the paper, so experiment with different ratios.
3. Stir the mixture and gently lower the mold at an angle, screen side up, into the tub starting with one edge and slide it to a horizontal position near the bottom. If you're using a deckle, place it on top of the screened frame. Gently shake the frame(s) back and forth, then quickly lift the screen straight up, allowing fibers to cover it and the water to drain through. Drain excess water back into the tub, resting the screen on the corner of the tub.
4. Instead of dipping the screen, you may simply pour blended pulp directly through the screen and tip it side to side so the pulp spreads out evenly.

5. Flip and dry it. Use a sponge, cloth, or paper towels to gently pat off excess water from the back side of the screen. Lay a piece of felt on top of the paper on the screen and turn it over onto a hard surface such as a cookie sheet. Water will run right through the felt. If your newly made paper doesn't come off the screen, dry the back of the screen some more, tap the frame gently, or carefully peel the wet paper off.
6. You may now add dried flowers or herbs, spices, thread, seeds, and other items. Paper with embedded seeds makes a great gift that can actually be planted. You can also make imprints by pressing in plants or heavy lace and leaving them on until the paper has dried.
7. To help your paper dry faster and lay flatter, cover it with another sheet (or more) of felt, or towels, and press down with your hands, a cookie sheet, or a rolling pin. This also helps bind the fibers. You can continue to pile up layers as new sheets are made.
8. Try weighing down your paper sandwiches for a half day or so with books or boards and then carefully peeling off your final creation. Lay the paper in a dry spot, turning it every now and then to keep if from sticking, or hang it on a line to dry.



How green are you?

Experiment and see what you can do with recycle paper. Can you do better than the mist skilled ancient Egyptians?