Simple silkscreening part 1: screens and resists.

Making your own screen, 4 ways.

*Note: references to "mesh" here are to the fabric you put on your frame to push the paint through, whether it is genuine mesh for silkscreening, or non-stretch sheer synthetic, or a combo mesh/resist, like a thermofax/riso print

1 Cutting a simple cardboard frame will give you a reasonable temporary screen, but is not rigid enough if you are going anything over about A4 size. Works best if the mesh has some body to it e.g. from thickened dye, photoemulsion, thermofax.

2 Wood frame, stapled. Good sources of wood frame are those cheap prestretched canvasses, or op shop pictures. Look for a soft wood, like pine, and a frame that is not too narrow (or staples will split it). Place the frame on your proposed mesh, parallel to the grain, and draw a line around the outside; this will help you see if you are stretching it evenly. Cut mesh if you need to, leaving at least 3cm all around to pull on.

Using your staple gun, staple mesh every few cm, on the flattest face of the frame, along one long side, stretching it as you go-firmly, but not so it buckles or distorts. Then do one short side. Then remaining sides,trying to staple directly opposite staples already put in, pulling the mesh taut at each point.

If any staples stick up a bit, tap them in with a hammer. Tape up screen with strong sticky waterproof tape to cover wood all around. Then ensure that on both sides of the screen you put tape on the mesh as well, parallel with the frame, extending at least a finger's width onto the mesh. This is to help control the paint when you start to print.

3 Wood frame, just taped. This probably won't be quite as firmly stretched as the stapled frame, but the mesh will be removable for reuse, and is good if you don't have a staple gun, or lack the grip strength to use one.

The procedure is similar to 2 above, but you omit the staples and instead stick the fabric firmly to tape all along 2 long sides, stretching as you do, then apply that to the frame, pulling taut as you do the second long side, then tape the 2 short sides, pulling as taut as you can without having the tape pull off. Then tape up all over, as in 2 above. You'll need to leave it at least a day before using, to encourage the tape to bond to the mesh.

4 Flyscreen style. All you need is available at Bunnings, and I think will be about $20 for several smaller screens. (If you already own or can borrow a hacksaw) The main advantage is that the mesh is removable, the main disadvantage is that it is just slightly trickier to hold them in place while printing.

Buy lengths of metal flyscreen frame and cut to desired size with a 45 degree angle each end (you need a hacksaw and, ideally, a mitre box for this). Use special little plastic joiners to make the frame-tap in gently, or buy more than you need ,as they can break. Put frame on mesh, on grain, mark all around outside. Cut fabric, leaving a good 6cm border to get a grip on.

Place frame channel side up, lay mesh on top. Starting at one corner, with a spline tool (the better ones have a pointy end for pushing things into corners, and a roller wheel)take the rubber (the "spline") that goes in the frame's channel , and push one end of that into the channel, taking your mesh with it. Holding the mesh taut, run your roller along the channel, pushing the mesh and spline in as you go.

Then do the remaining sides- some people like to keep the spline in one length, and go all the way around the frame with it. I find it easier to cut 4 lengths, each slightly shorter than the frame sides (it stretches as you roll it in) and do 2 opposite sides first. If you aren't happy with your result, just pull the spline out and redo.

Tape up the screen as in 2 above.

Resists.

Anything that stops the paint getting through. And is thin and flat enough to allow for a crisp(ish) print.

Resists can be permanently part of the mesh; thermofax or photoemulsion process, screen filler, or some people use household paints (especially the latex ones). These can give very fine detail, or even painterly effects, but because they are permanent you either need lots of screens, or the ability to remove the mesh from the screen.

They can be semi-permanently part of the mesh, e.g. dried thickened dye, flour and water paste.

Or they can be separate from the mesh and more or less durable e.g. a leaf (until it disintegrates) a piece of lace (until the paint soaks through), torn paper or a stencil. If using a commercial stencil, make sure it will be suitable for screenprinting; it needs to be quite thin, or it will be hard to get a crisp print.

If you make your own stencil, acetate gives you a more durable one but costs a bit more and is a bit of a pain to cut with a pointy craft knife, and slightly more fiddly to use. Paper is less durable but so long as the detail is not too fine you can get a good half dozen or so prints from ordinary copy paper.

There are 3 important things to remember when cutting a stencil. The first is that the finer your lines, the more fragile it will be. Go for chunky if you are a beginner. The second is that everything that isn't resist will be paint- it is worth drawing out your proposed stencil and colouring in everything except the resist part, to see how it looks. And the third is that any detail inside a continuous outline will be lost, as the outline just creates a hole; so if you draw a flower inside a circle, for example, when you cut it out you will just have a stencil of a circle. Any continuous line must have breaks in it - little bridges linking it to the rest of the stencil - if you want to save any detail inside.

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