

~Background Info~

Tie-dye is a resist method of dyeing where string, rubber bands, wax, clothespins, or stitching keeps dye from being absorbed into the fabric and leaves a pattern behind. The dyes can be applied by dripping or squirting it onto the fabric as well as by dunking the material into a dye bath. A cousin of tie-dye is batik, which uses wax painted or stamped onto the fabric to create designs where the dye is not absorbed. The resist material used for today's class will only be rubber bands.

Tie-dye may be most well-known for its popularity in the 1960s, but the earliest examples of the technique go as far back as 400 A.D. in Eastern Asia. Although there are records mentioning tie-dye going back even further. Natural fibers, such as hemp, cotton, and silk have been used throughout history along with natural dyes from roots, flowers, leaves, and berries of plants. However, synthetic dyes won't fade over time from sunlight like natural dyes do and with proper care synthetic dyes will hold fast even with repeated washing.

Hence, today we are using a popular dye called Procion, which is fiber-reactive and does not need hot water. It only works with natural fibers, so the t-shirts we will use are 100% cotton. The first step, soaking the shirts in soda ash, raises the pH level of the fabric which allows the dye molecules to bond with the fibers. If we accidentally put soda ash (sodium carbonate) in the dye squirt bottles, the colors would weaken because the dye would bind with the water! Urea is mixed with the dye in the water so the powder dissolves better. Otherwise, clumps might land on the t-shirt and create explosions of color like fireworks, which could be done intentionally if you want to experiment with it!

Beware of how colors will creep into each other near the rubber bands and blend into other colors- a primary (red) and secondary (green) color will make brown, but two primaries (red and yellow) will make a secondary (orange). Yellow dye will easily be overpowered by other colors and cannot be re-obtained once lost.

~Day After & Care Instructions~

- 1) After 12-24 hours (longer is better), while wearing gloves to avoid staining your hands, carefully cut the rubber bands.
- 2) Rinse the t-shirt in running lukewarm water or repeatedly in fresh water until the water is nearly clear. Make sure to rinse the sink/bathtub afterward so none of the dye leaves a stain.
- 3) Wash the shirt like normal with detergent and add fabric softener if you like afterward, but it is not necessary.
- 4) Once it finishes the rinse cycle, air dry or put in dryer machine.

Voila! Your very own unique, hand-made tie-dye shirt!

****In the future wash with like colors and do not use bleach.****