

## Blueprints on Fabric

**Introduction:** This activity demonstrates catalysis of chemical reactions by ultraviolet (UV) light using one of the earliest photographic processes, the *cyanotype* process.

1. Plan your design and lay it out on your shirt or fabric so you know exactly what to expect. Your design can be made using: black markers on clear acetate sheets, objects such as leaves, paper cutouts as stencils, or any flat opaque object with interesting edges. Areas exposed to UV light will be dark and areas where UV light is blocked will be light. (Remove the design before doing the next steps.)
2. Place a piece of cardboard or some newspaper between the front and back of the t-shirt so the "sensitizing solution" does not seep through to the back.
3. Put on goggles (and gloves, if desired). Apply the "sensitizing solution" to the fabric on the desired area. Apply thoroughly and evenly. Do not worry if you apply some to areas outside of the desired area, just cover it before exposure to the sun.
4. Lay out your design and pin it to the fabric.
5. Take your work out in the sun. When your blueprint turns a little darker shade than the shade you want it to be, take it out of the sun and remove all the designs. Rinse the fabric several times (wearing gloves, if desired) until the water runs clear.
6. Let your blueprint dry and enjoy your creation.