Recycled Plastic Flowers

Through the magical chemistry of polymers, you can turn recycled plastic into a beautiful flower garden or bouquet. So save your plastic cups and plates from that party or snacktime at school and make someone just as happy as real flowers do.

Recycled Plastic Flowers Supplies Needed

- Clear plastic plates, cups, bowls, shot glasses, etc. – look for recycling number 6 {affiliate}
- Sharpies {affiliate}
- Cloth covered stem wire, 18 gauge {affiliate}
- Glue gun
- Scissors
- Terracotta pots, floral foam, vases for display (optional)

Make Your Flowers

1. Preheat the oven to 350 °F.
2. Color your plates, cups & bowls with Sharpie marker. I found that it helps to color them as completely as possible, especially in the very center because that's where the glue to hold the stem goes. The glue shows if you don't color that part.

3. Cut slits in the sides of each using scissors. Careful as sometimes plastic pieces go flying.
4. Place plastic pieces on foil covered baking sheet and bake for 2-5 minutes. Be sure to watch your pieces in the oven, both because it's cool to see them melt and curl up, but also to make sure you don't leave them in too long. Also, it's a good idea to put the fan on or open a window for ventilation because melting plastic can get a little smelly.

5. Let cool and hot glue gun your covered floral stem to the back center of the flower. You can also glue on an additional pieces of plastic that you want to add to the flower. I used one of the shot glasses to make a center petal trumpet like a daffodil's.

What's the Science Behind These Flowers?

This flower forming works because of the characteristics of the plastic in the cups & plates. The heat of the oven changes the alignment of the polymer chains within the plastic. In the cup and plate manufacturing process, a polymer resin is heated, extruded, rolled into flat sheets and then molded. This process aligns the polymers into an orderly pattern, but the heat of the oven returns them to their naturally disordered, clumped state. Gravity and the placement of the cuts define how they crumple. #6 plastic works well in this project because its melting point is low enough for the oven to reach.