



In December, NYSCI celebrates the holiday season with our annual ReMake the Holidays event. Over the course of the four days of ReMake, both visitors and staff are encouraged to think a bit more consciously about the waste we produce and are given opportunities to bring common recyclable materials back to life in creative new ways. In Maker Space, we tried out a brand new paint marbling project using wood and were thrilled by the response it received. The marbling process involves floating acrylic paint on top of a base of thickened water, swirling and moving the paint into unique patterns, then dipping in a piece of wood that will be stained with the pattern. This amazing art project can easily be replicated with materials you likely already have at home, using these simple instructions.



New York Hall of Science

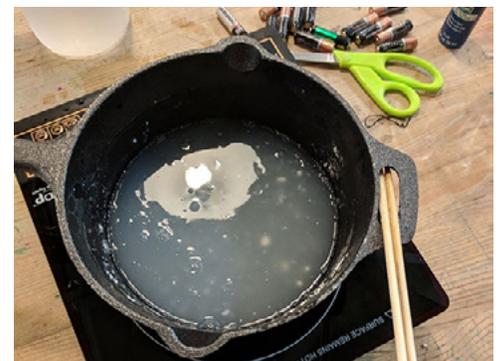
47-01 111th Street  
 Queens, NY 11368-2950  
 718 699 0005  
 Fax: 718 699 1341  
[www.nysci.org](http://www.nysci.org)



For this project, you will need the following materials:

- Pieces of thin scrap wood
- Container to dip wood into (we like 8oz deli containers for smaller scraps, and foil baking dishes for larger pieces of wood)
- Cold water
- Corn starch
- Acrylic paint
- Pot and heating element
- Toothpicks
- Containers for paint (we've used condiment cups, or paintbrush cups with lids)
- Something to drip paint (pipettes, popsicle sticks, chopsticks)

To start, you will need to create the thickened water base that your paint designs will float on top of. For this, we're going to jump into the kitchen (or wherever you have a stove/heating element set up), to cook up our thickened paint base.



The base consists of two ingredients: water and cornstarch. Begin by placing a pot containing three cups of water on the stove, and bringing to a boil. While the water is coming to a boil, mix two tablespoons of cornstarch with  $\frac{1}{4}$  cup of cold water, mixing to remove all the clumps. Once the water on the stove is boiling, pour in cornstarch/water

## Maker Tutorial: Acrylic Paint Marbling

mixture, and mix well. Stir frequently for about three minutes. After three minutes, turn off heat and let the mixture rest until cooled. You want to make sure that the mixture has fully cooled down before starting to marble, you can prepare the base mixture several hours in advance of doing the project in order to ensure that it is fully cooled to the touch.

While the base mixture cools, we will go ahead and prepare the paints that we will use to create our marbling patterns. Your goal will be to make the paint a bit thinner than it's starting consistency, but still thick enough that it will float on top of your base mixture. To do this, pour your paint into a mixing container (in the pictures below we've used condiment cups, as well as paintbrush cups like these, either work).



Slowly add small amounts of water to your paint, mixing as you go. You will want to get your paint to be a bit thicker than water, but not as thick as your base mixture. Some marble painters suggest the consistency of milk as a guide for your paint thickness. All paint is different though, so be prepared to do a bit of experimenting with your specific paint in order to find a consistency that most successfully floats on top of your base mixture.

At this point, you should have some thinned paint as well as a base mixture that is cooled to the touch. Time for some marbling!



## Maker Tutorial: Acrylic Paint Marbling

Choose a container that you will be using to hold your base mixture, and into which you will dip your wood scraps. You will want to choose that is large enough for the wood you're planning on staining. We've done larger scraps in a foil baking dish from the grocery store, and smaller pieces in 8 oz deli containers (both are pictured below). Pour enough base mixture into your dipping container to cover the bottom. You will want an inch or more of base mixture to start with.

Using a pipette, popsicle stick or whatever dripping instrument, add a few drops of paint to the surface of your base mixture. It is normal for the first few drops of paint you add to spread quite a bit, as you add more paint, the drops will stay put more easily. Add more drops slowly to the surface of your cornstarch mixture. Going slowly will help avoid oversaturating your mixture with paint too quickly.

With a toothpick, begin to gently move and swirl the floating paint droplets, creating your desired pattern.



Once you've got your paint swirled into your desired pattern, take your scrap wood and gently dip it into the surface of your paint pattern. Focus on having the surface of your wood gently touch the paint floating on your mixtures surface, you want to avoid dunking your scrap wood all the way into your base mixture. You only will need to touch your scrap wood piece to the paint for a few seconds for it to pick up the pattern you have swirled into the paint. After you dip, gently lift up your wood and lay on a flat surface to dry.

Learn more about the history and tradition of marbling here, and be sure to share any of your marbled creations with us by tagging @nysci on social media.