

for the classroom

# Marble Raku



## Objectives

- Create colorful raku finishes
- Combine raku glazes with traditional finishes
- Apply colors without a brush

### By Michael Harbridge

People always ask me if they can use glazes not made specifically for raku on creations they plan to raku fire. The answer is, yes you can. I've played around with various traditional colors and discovered that many will result in cool metallic finishes, while others fire out pretty true to their color in a traditional cone 06 firing. The next question I get is, "How do I know what colors will do in a raku fire?" That's the fun of experimentation! If you can determine what ingredients are used in each color, it may give you a better clue as to what the fired results will be. But most of us don't have a chemistry background.

I often get students in workshops hoping for specific colors on their final raku creations. There are so many variables that can affect raku that it's nearly impossible to manipulate or predict the outcome. But if you'd like to see more shades of blue, teal, red, maroon, pink, orange or other specific colors, it's possible to work those colors into the finish. Products like Stroke & Coat and Concepts fire out pretty true to their traditional cone 06 firing. So this month I will show you a simple and fun raku method where you can control some of the colors during the method.

I work with electric kilns when creating raku. I like electronic kilns with digital controllers because they can be programmed to go to specific temperatures with holds. The process can also be done with kiln sitter kilns, manual kilns, and gas kilns. When working with non-digital kilns, it's best to have a digital pyrometer so you can see the temperature inside the chamber. Raku requires removing items from the kiln with long tongs and placing them inside a metal trash can lined with combustible materials.

**Step 1:** Begin with properly fired raku bisque. Clean with damp sponge to remove any dust.

**Step 2:** Determine the colors you want to use. It's best to select two to three Stroke & Coat colors and one to three raku glazes. Applying too many colors can result in a muddy looking finish, with little color sticking out. Each raku glaze will have a different result. Jade Gloss has a shiny finish. Duck Feathers has a matte finish. Kaleidoscope has a matte finish and can have a slight bubble finish where it combines and flows with Stroke & Coats or Jade Gloss. All raku colors can have metallic shades in copper, blue, purple, green, yellow and more. No two items ever turn out the same.

**Step 3:** Squeeze Stroke & Coat colors directly from the bottle onto the ware. It can be done vertically or horizontally. The colors are applied wet on wet, so they will run and flow together.

**Step 4:** Place raku glazes of choice in squeeze bottles. Squeeze them onto the ceramic shape in vertical or horizontal motion. Any portion of the shape not coated with Stroke & Coat or raku glaze will come out grey-black in color.





## Materials

Raku Bisque by ClayPuzzling.com  
RB151 Round Slender Raku Vase  
RB200 Tall Flat Vase  
Additional shapes of choice

## Colors

Stroke & Coat in colors of choice by Mayco  
Raku Glaze by ClayPuzzling.com  
RG650 Jade Gloss  
RG750 Kaleidoscope  
RG850 Duck Feathers

## Miscellaneous

Sponge  
Squeeze bottles  
Small metal trash can with lid  
Newspaper  
Raku tongs  
Wire brush  
Raku gloves  
Old toothbrush  
Comet cleanser



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**Step 5:** Allow the colors to dry. It's likely the glazes will run and puddle around the bottom of the ware. Use a damp sponge to remove all glaze from the bottom of the shape. Also taper any build up of glaze along the bottom edge. I usually dryfoot raku items rather than stilt. Stilts can stick to items and will often fall off as they are lifted from the kiln, which can be very dangerous since they'll be removed at 1,680 degrees Fahrenheit!

**Step 6:** Place the items inside the kiln and program the kiln to heat at full speed up to 1,730 F. Hold for 10 minutes and then allow the kiln to cool to 1,680 F and hold for several hours. Since the items are being heated so quickly, the first hold is to allow the glazes to level. The second hold is in place so that if you don't get to the kiln when it reaches 1,680 F, it won't continue to cool, and so that it will hold until all items have been removed for the raku firing. If you have a manual kiln, turn all switches to high and watch a digital pyrometer for correct temperatures. Holds are created by turning switches up and down for the 10-minute timeframe.

**Step 7:** While the kiln is firing and then cooling to the hold at 1,680 degrees, it's time to prepare your trash can or cans for the raku firing. Line each metal can with multiple layers of newspaper — about five to seven layers of paper on the bottom and hanging over the sides of the can. Keep the trash can lid handy.

**Step 8:** Once the kiln reaches the hold at 1,680 degrees, open it and reach in with raku tongs (while wearing protective gloves), remove a piece of ware, and place it inside a prepared trash can. Try to ignite the paper by touching the hot item against the side and bottom of the can. Tip and turn the items in the flames, down in the bottom of the can. Once the paper is ignited well, gently set the item in the can and attach the lid.

**Note:**

With larger kilns, you will need to hook up a pulley for opening the lid. This way you are standing away from the hot kiln when the lid is opened. Metal cable, pulley, and hooks can be purchased at a hardware store. It also works best to have one person opening the kiln and a second person to remove items.

**Step 9:** Only one item goes in each can. The item should stay in the can a minimum of 15 minutes, and it's best if they can stay in an hour or more. They could stay in for a week if you can bear to wait that long, but an hour is sufficient. After sufficient time has passed, put on your protective gloves, open the can, and remove the ware. Heat-resistant gloves are recommended for a couple of reasons: The items may still be hot, and the trash cans get a buildup of sticky, gooey coating that is difficult to wash off your skin.

**Step 10:** Once removed, use a wire brush to remove any ash from the ware. Stubborn marks can be removed later using an old toothbrush and cleaner like Comet cleanser. Allow the ware to set out for a couple of days for the smoke smell to go away.

**Step 11:** It's best not to allow raku items to sit in direct sunlight for extended periods, since that can cause the colors to fade. Raku items are not designed to hold water or be used in contact with food.

**Advanced Methods**

Try adding some glass frit to the wet glaze for added color. Keep the glass to the top of the shape, because the glass will run.

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