Instructions:

Stringers & Twisted Stringers

To make stringers take your rod & heat the tip. When it is very hot & glowing orange red take a pair of needle nose pliers (or another rod that has a pointed tip) pinch a small amount of the molten glass & pull gently away from the molten glass. The stringer thickness depends upon how fast you pull & how hot the glass is. Also it is sometimes good to lift the heated tip of the rod out of the flame when pulling the stringer. What you're doing is stretching the glass string.

To use another rod to pull stringer you have to marver the tip of the pulling rod to a point.

To marver your rod, heat the tip of the rod & then place the tip onto a piece of marble or a graphite paddle at an angle (usually about 45 degrees) then roll it back & forth. Put it back into the flame just for a moment to take the chill off of the tip. Then you can use it to touch the molten glass & pull it away from the heat. Right handed people usually use their right hand to do the pulling to their right. You can also help by pulling to the left with your left hand (the one that's holding the rod.)

To make a 2 or 3 color stringer, heat you main rod a little (do not get the glass hot enough to droop). Then take another rod (with your other hand) & heat it up & make a stripe on the main rod. This will give you a 2 color stringer when you pull it out. 3 & 4 Colors are mainly the same thing just striping the main rod. You can also lay one rod on another by putting the tip of the 2nd rod about an inch below the tip of the main rod & then heat both together. Then use the flame to separate the 2nd rod from the first. Now use the 2nd rod & touch it to the center tip of the main rod (where the 2 colors meet) then pull.

Twisted Stringers

To make a twisted stringer take the 2nd color rod while still hot twist (right hand twisting away & left hand twisting toward you. Now to get the twisted stringer you twist & pull away (as above) slowly at the same time. Make sure that both colors meet at the pulling rod otherwise you'll get a twisted solid color & the 2nd color won't get twisted. If you use a clear rod as your main rod you'll get what is called "latticinio". Also if you stripe your clear rod with other colors & also stripe the clear in-between the colors it will keep the other colors from blending with each other.

Use these stringers on the surface of your marble for decoration. You can also cover the stringer with transparent glass, or "stab" it into the glass. *

Corkscrew Marble

To make a corkscrew marble heat your gather up & use the mold to round it up a bit by rolling the gather in the mold. Then heat it up to get the chill off of the gather & get it orange red hot. Now take the back of your mold (flat side) & press it down onto your gather (with the gather either laid on your work surface or another paddle. What it should look like is a fat lollie pop. You want the lollie pop to be the same diameter as the marble you are making. Now add a different color to one side of the lollie pop. Keep adding the other color to fill the void between the lollie pop & one side of the mold. It should look like a 1/2 marble. Now put another color on the other side to fill the void. Check it with the mold & make sure the gather (now 3 colors) has filled the cup of the mold & does not rattle or feel loose as you turn it back & forth. If it gets to tight it will be a strain to turn it. If is loose it may rattle around or have flat spots. Now to make it into a corkscrew, attach another rod to the opposite end of where the main rod is. (You may need to use your pliers or the tip of a bead mandrel to drag each color to the center of the other rod.) All glass colors must meet at each rod... What it should look like now is a 3 color marble with a rod at each end (or pole).

Now heat it up until the glass is red hot then lift it out of the flame & twist but do not pull it. Do not twist to hard; just make 2 or 3 twists. Enough to get the glass colors to flow around the circumference a couple of times.

Now to separate the second rod, bring the marble back into the flame at the base of the second rod & the marble. Heat it at the point where they're joined & pull the second rod away & downward (twist it down) from the marble & toward the flame, this should flame cut the second rod.

Round your marble in the mold & when you're done rounding it take the second rod & heat the tip a little. Touch it to the center of the pole where it was originally at. This rod will now be your punty. Flame cut the first rod & gently round the marble in the mold. Be careful at this point because you punty is cooler than the marble & will want to "let go" of the marble. (If you drop the marble onto your work surface just heat your punty up & touch it to the marble & bring the marble back into the flame.)

When you are satisfied with the results the heat the marble enough to take a chill marks off of the marble. Now gently place the marble into your mold & give the punty rod a sharp tap. It should let go of the marble. Very quickly put the marble into your nest of fiber blanket pieces & cover it well.

Do not put your marble into the nest if it is too hot. The glow should be off of the marble & you should be able to just start to see most of the colors. (Red will turn black when hot & if you see the color red the marble is too cold.)

Other Decorations & Techniques

You can use your stringers to decorate the marble by laying the stringers on the surface. Get the marble very hot & hold the stringer like a pencil. Don't drag the stringer across the surface just lay it down. This is especially true with twisted stringers. If you drag a twisted stringer all you'll get is sporadic colors with out a twisted look. If you twisted stringer does not have enough twist to it you can lay it down on the hot marble & twist as you lay it down. Be careful not to untwist it.

To make dots touch the tip of the stringer (or larger rod) to the surface of the marble & quickly pull away. Heat the dot (or peak) into the marble. You can stack different color dots on top of each other. **To make an eye** use a knife or sharp pick (stainless steel) touch it to each edge of the first color dot & pull slightly horizontal (sideways) just a little. Do this to the opposite side. This will pull the color into an eye shape. Then stack different colors in the center. Do the black pupil dot last.

To make pulled feathers out of your corkscrew marble you'll want to make the corkscrew with more twists than described above. After you have twisted it to your satisfaction use a bead mandrel (or tungsten pick) & touch it to the very surface of your corkscrew at the top pole. Now quickly drag it down toward the bottom pole. If the mandrel gets stuck in the hot glass, blow on the mandrel to cool it. You should be able to get it loose from the hot glass. Make several passes in different places on the marble. Then just reshape your marble in the mold.

To make flowers, put 5 dots in a circle. Pull the edge of each dot toward the center of the circle. To make the stamens * "stab" the twisted stringer in the center, break off the excess flush with the marble, and cover the center with a dot of clear.

If your pick or bead mandrel tip get to hot they will stick to the glass. Another way to cool the pick (mandrel tip) is to have a bowl of water on your work surface. Then just dip the other end of the mandrel (the back tip) into the water. You'll have to hold the marble & the rod it's on as well as the pick & rotate all if it together so that you can dip the other end of the pick into the water. Also it's good idea to dip the hot tip of the pick into the water inbetween each feather you pull. (To prevent it from sticking in the hot glass)

If you have any questions just email me.

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