

ROCK-IT & ROLL-IT

A Marble Game for the Family

ROCK-IT & ROLL-IT is a game for 1 to 4 players that requires cooperation and coordination. The competition is against the clock!

A single player is allowed to both lift and push down on the four corner posts to move the marble. Multiple players are only allowed to push down on their posts thus requiring all to cooperate and coordinate to move the marble down its path.

The rockers interlock and then the game board (which has two sides) is slid into place.

Side 1 is driving an ambulance through the countryside to reach the hospital. The road has lots of curves and some hills and valleys. If you run off the road then you are in virus territory and must start over. It is a race against time.



Side 2 is a challenge for Busy Bee to leave the hive, pollinate all the flowers by touching them and then to return to the hive. This also is a time challenge.



DESIGN NOTES

I used cabinet grade MDF to fabricate this. Would also be very nice done in contrasting hardwoods. The rockers are sized (15" long) to reach the corners of the game board which is 10.5" square. I used a 5" radius on the bottom of the rockers to give good rolling action in all directions. Be sure to adjust the notch sizing on the rockers and the game board to match the thickness of whatever material you use.



The router bits I used are: .25" endmill, .125" endmill, 60 degree V bit, & .5" diameter ballnose bit. The ballnose size is based on standard marble diameter of .512" and can be changed to suit whatever size ball (marble) is used in the game. The track depth should be set at about 1/3 the diameter of the ball to be used. I machined the tracks and then created the rolling hills on parts of the track of side 1 by using a fluting toolpath set to a flute depth of about .4", Ramp at Start and End, Ramp at 100%, and Ramp Type set to Smooth.

I pre-painted the game board on both sides before carving; (sorry if the colors are not pleasing but with isolation in place and art stores closed I used what I had in the shop!)

The flowers on side 2 are not difficult to paint if you follow the sequence I used:

1. I outlined the circle around each flower head with the V bit set to engrave at .02"
2. Next I colored the circles with the base color I wanted for each flower



3. After the paint had dried I V-Carved the flowers, text, and outlined the symbols, and then used the .125 endmill to clear the rest of the area within the flower circles. Then used the .5" ballnose to define the track.



4. I then did some shading and touchup on the flowers with light touches of the brush.



5. Sprayed all with clear finish.