

LUNAR'clips 2013

Livermore Unit of the National Association of Rocketry

Drill slowly and carefully, as you can see, there is not a lot of crayon between the drill and the paper. Also keep in mind that your fingers are just on the other side of the paper, and the paper is, well, paper-thin. When you are done, test fit a Micro Maxx engine. It should go in and fit snugly but not bind.



Step 3, Make the fins. I started with some 1/16 balsa and cut some $\frac{1}{2} \times \frac{1}{2}$ squares. Using sandpaper, I shortened the tip edge by about 1/16 of an inch to make a trapezoidal fin.

Step 4, Glue the fins onto the paper at the bottom of the crayon. You probably figured this out on your own but if you put the fins on the pointy end, it does not fly very well.

Step 5, Glue on a $\frac{1}{4}$ inch long Micro Maxx launch lug about $\frac{1}{3}$ of the way up the side of the crayon.

Step 6, Paint the fins and you are done. You don't need to paint the body as that part is already done for you by the Crayola Company.

Flying the Crayon.

Stick in a Micro Maxx engine and an igniter and you are ready to go. Hold in the igniter with a toothpick.

One of the more useful features of a crayon rocket is that you can use it to fill out your flight card. No more searching for a pen to fill it out, just grab your rocket and write away.



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So, how does it fly? The crayon rocket is probably the best flying of all the Micro Maxx rockets I have ever built. Most Micro Maxx rockets tend to be a little unstable and fly a little strange. The crayon rocket flew straight and stable and fast. I originally thought the weight would be a problem as the crayon is a bit heavy, but the increased stabilization brought on by the weight caused a straight, stable flight that easily overcame any altitude losses because of the weight.

