

## HOW TO BUILD A STOMP ROCKET

**STEP 1:** Cut the sheet of paper in half so you have 2 pieces 11 by 4 inches. Next cut 1 of the pieces of paper in half so you have 2 pieces of paper each 5 ½ by 4 inches.

**STEP 2: MAKING THE ROCKET ENGINE:** Lay the 11 by 4 inch piece of paper on a flat surface with the 11 inch side away from you. With 3 pieces of tape about 2 inches long tape the 11 inch side of paper to the flat surface; placing the tape on the top left side, top right side, and top middle. Pull the paper and tape off the flat surface. Turn the paper over and lay it on the flat surface so the sticky side of the tape is up and away from you. Place the jig (the PVC pipe with the straw on it) on the bottom of the paper (the long side without the tape on it) with the straw facing away from you. Roll the paper on the jig going across the tape. Tape up the seam without any gaps **NOTE: DO NOT TAPE ANY PART OF THE ROCKET TO THE JIG.**

**STEP 3:** Push the paper about ½ inches off the end of the jig, fold it across the end of the jig (do not poke in down into the jig) and tape it up so that it's air tight.

**STEP 4: MAKING THE NOSE CONE:** Take one of the 5 ½ by 4 inch pieces of paper and make a cone. Tape up all seams. Requirements are that the cone must fit over the taped up end of the rocket on the jig. The cone must come to a point, if it has a hole at the tip tape it up. Trim up the bottom of the cone and place this inside the cone. Place the cone on the taped up end of the rocket engine. Crimp the bottom of the cone around the rocket and tape it to the rocket. Name the rocket.

**STEP 5: MAKING THE FINS:** Take the playing card and cut it in half, cutting from one long side to the other long side. You will have 2 rectangles when you finish. Cut each rectangle diagonally making 4 triangles. Make a ¼ cut on the longest side of 3 of the triangles. Fold one side of the cut one way and the other side the other way making 2 tabs on each of the 3 triangles.

**STEP 6: PUTTING THE FINS ON THE ROCKET:** Tape the fins to the rocket (be sure that the tape covers the front of each of the tabs on the fins) and the fins straight up and down on the rocket. The fins should be evenly spaced around the rocket base and be sure you don't tape the fins to the jig.

**STEP 7: PUTTING ON THE VERTICAL GYRO STABILIZERS;** Tape the 2 paper clips on the rocket where the nose cone is taped to the rocket. One on either side of the rocket.

**STEP 8:** Remove the rocket from the jig.

**LAUNCHING THE ROCKET:** Ensure the bottle of the launcher is inflated. Place the rocket onto the launcher, aim the launcher, and stomp on the bottle to launch the rocket.

**ITEMS IN KIT:** 1 sheet of paper 8 by 11 inches, 1 jig 12 inch PVC pipe with straw taped on it, 1 playing card, 2 paper clips, and 1 launcher.