

How to Build a Candypult

A candypult has a variety of uses, from launching candy for Halloween to throwing snowballs in the winter. These instructions can be used alongside the Candy Science STEMCON video to understand the science behind catapults and learn how to build your own version for about \$25.

Materials:

- 10 – 2 ft sections of 1" PVC pipe*
- 1 – 3 ft section of 1" PVC pipe*
- 2 – 4 in section of 1" PVC pipe*
- 6 – 90 degree 1" elbow joints
- 4 – 1" Tee-joints
- 1 – 1.25" x 1" Tee-joint
- Bungee cord
- Duct tape
- Kitchen spoon

*PVC pipe can be cut by the hardware store if you tell them what length and quantity you will need. Alternatively, you can use your own PVC pipe cutting tool to cut it yourself (just be sure to have an adult present and take appropriate safety precautions).

Safety Considerations

- Use materials only as directed
- Use care and caution when using scissors or any sharp object while building
- Do not aim or launch projectiles toward people, pets, fragile items, and/or windows
- This activity should be done with adult supervision

Step 1:

Assemble the first half of the structure as shown. For this you will need 6 of the 2ft sections of PVC pipe, 4 of the elbow joints, and 2 of the 1" Tee joints.



Step 2:

Add the two short 4" pieces to the other ends of the Tee joints here at the red arrows.



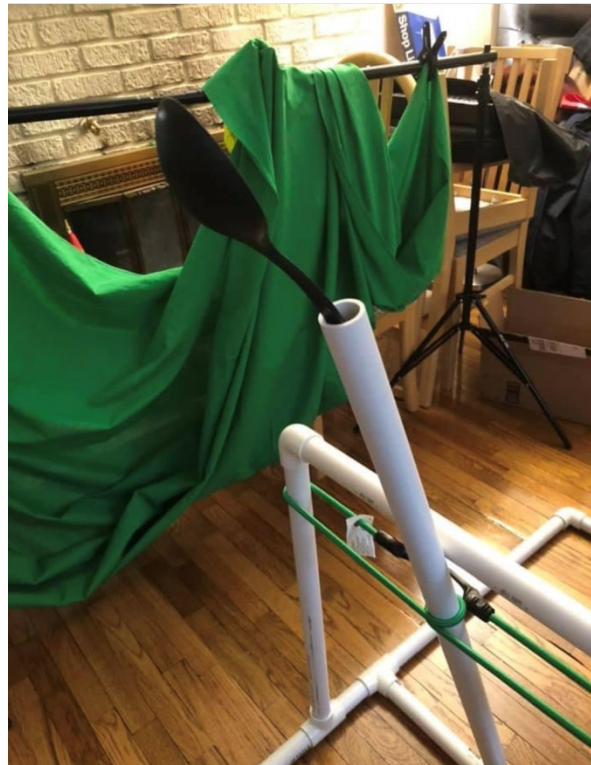
Step 3:

Slide the larger tee joint to the middle of one of the 2 ft pieces of pipe. Then, make a square out of the remaining 2 ft pieces and 1" tee joints. Attach the square to the 4" pipes as pictured to form the rest of the base, making sure the larger tee joint is near the middle. Finally, attach the 3 ft piece into the larger tee joint to make the catapult arm.



Step 4:

Wrap the bungee cord tightly around the middle bar and catapult arm, holding the arm securely in place as pictured. Then slide the kitchen spoon into the top of the catapult bar.



You are now ready to launch!