



# Marshmallow Blaster

## 1

Here's what you need to make your Marshmallow Blaster:

- 1 manila file folder (or thick paper, such as cardstock)
- 1 fresh large marshmallow
- Tape
- Scissors (optional)



## 2

**Cut the tape ahead of time**

It's handy to have a piece of tape ready so you can keep the tube from unrolling once you get it to the right size.



# 3

## Roll the tube

Roll the file folder diagonally. You want to end up with it being slightly cone shaped. The wide end of the tube should be a bit bigger than the marshmallow.



# 4

## Adjust the opening

- When you push the marshmallow into the wide end of the tube, you want to end up with it wedged tightly near the end of the tube.
- If the tube is too small, relax your grip. The folder will unroll a bit, making a larger tube.
- If the tube is too big (and the marshmallow ends up near the middle of the tube), re-roll the tube tighter.
- *TIP: If the marshmallow drops far into your tube... The tube is too big. Trim the end or roll it again, tighter.*



# 5

## Tape the tube

When you've found the right size for the opening, tape the tube.



# 6

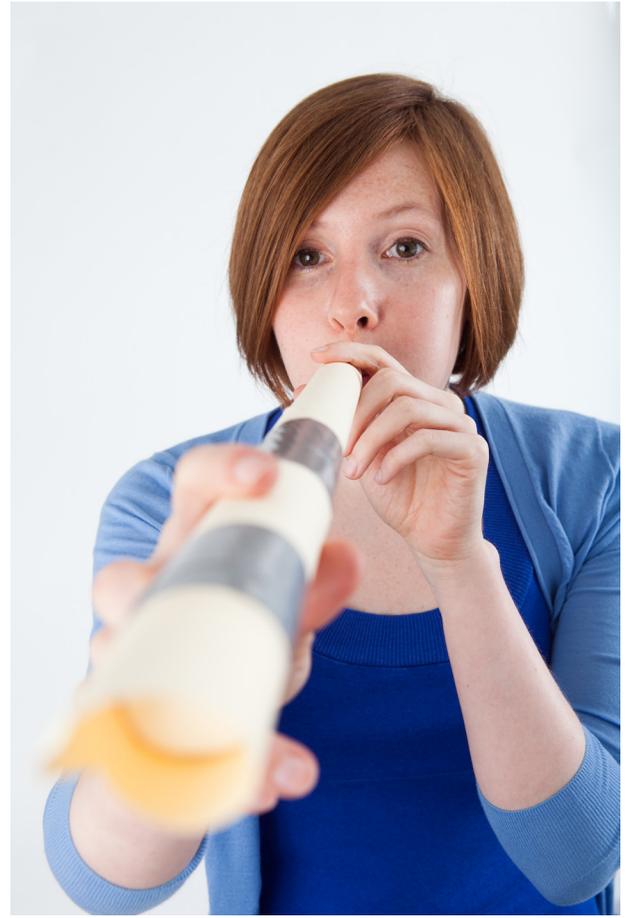
## Load the marshmallow

The marshmallow should sit snugly inside the tube. Think of the marshmallow as a plug that seals the tube closed. Use your finger, a marker, or the handle of a spoon to wedge it firmly into place.



# 7

Take a deep breath...



# 8

Blow through the tube!

- *TIP: If the marshmallow gets gooey... Dust it with flour or use a new marshmallow.*
- *TIP: If the inside of the tube becomes sticky... Rub the stuck bits of marshmallow off the walls of the tube. Also, dust it with flour.*



# 9

## Did you know?

Because the marshmallow sits tightly in the tube, no air can get past. The marshmallow is a plug that has sealed the tube. When you blow into the tube, you increase the air pressure. At some point the air pressure overpowers the marshmallow seal. When the seal fails, the air rushes out, carrying the marshmallow with it. This is exactly how a leaf blower works. It blasts out a column of air that carries off the dirt and leaves.



# 10

## Try this next!

- **Use other ammo.** Load your Marshmallow Blaster with other things like a grape, cherry tomato, or a table-tennis ball. Make sure to use things that can form a tight seal. Be careful where you aim!
- **Micro-size.** Make a tiny Marshmallow Blaster that launches mini marshmallows.



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