



You Will Need...

For the Rocket

- ❑ A 2-liter pop bottle (one per child/rocket)
- ❑ Cardboard
- ❑ Scissors
- ❑ Duct tape
- ❑ Cone cup (or you can make one out of paper)
- ❑ A handful of gravel

Optional:

- ❑ Paper and pen (to sketch rocket designs)
- ❑ Construction paper
- ❑ Markers
- ❑ Glitter
- ❑ Glue

For the Launch Pad

- ❑ A 5/8" leg tip rubber stopper
- ❑ A drill
- ❑ A 3/8" drill bit for metal and wood
- ❑ A 5/16" drill bit
- ❑ One car tire stem
- ❑ A 7/64" drill bit to clean out the tire stem
- ❑ Four tent stakes
- ❑ 13 feet (4 meters) long, 1/4" nylon rope
- ❑ A 6 3/4" mending brace
- ❑ A piece of wood that's approximately 1 x 2 feet (30 x 60 cm) long and 1/2" (1 1/4 cm) or thicker
- ❑ Two 5/16" x 6" carriage screws (threaded the entire length)
- ❑ Four 3 1/2" inside corner braces
- ❑ Six 5/16" nuts
- ❑ Four 1/2" screws
- ❑ A hacksaw

The Launch

- ❑ Water
- ❑ A bicycle pump with needle (what you would use to pump up a basketball)

Preparation Time: 1-1½ hours to build the launcher (doesn't include shopping time)

Activity Time: 30+ minutes

Location

You can build the launcher and rocket anywhere, but PLEASE go outside to a large open area away from buildings and power lines to launch the rocket. We have seen rockets fly as high and far as 150 feet.