## Simple stomp rocket Launcher

Assemble the parts below. Joints can be glued or simply press fit. Do not glue the elbow fitting as it should rotate to adjust the launch angle.
The $1 / 2$ inch PVC pipe will slip inside the neck of a soda bottle - tape for a better seal if desired or bore a closely fitting hole through the bottle cap, slip the tubing through the cap and screw the cap down to seal.
If using $3 / 4$ inch pipe, agrey conduit coupler is more flexible than white PVC and will allow the soda bottle's neck to be jammed/screwed in securely to attach it.

Rockets are made by loosely wrapping a half sheet ( $41 / 4 \times 11$ ) of card stock or construction paper around the removable launch tube and taping the seam lengthwise. Fins are added or cut into the bottom of the tube. Pinch the top shut and tape securely.

Slide rocket over tube and stomp away!

# Launcher can be made from $1 / 2$ or $3 / 4$ inch PVC tubing. Size rockets to fit the tubing used. 

## Side view

Launch tube can be removed for storage and to wrap rockets.

12-18"
pipe
Top view
soda bottle

12-18"
pipe
elbow \& launch tube

Materials
1 - 8 ' stick of $1 / 2$ " PVC pipe (uses $51 / 2{ }^{\prime}$ )
$1-1 / 2$ " PVC cross fitting
2-1/2" PVC end cap
1-1/2"PVC elbow
2 liter soda bottle
Card stock (65 or 110lb)
Tape (to seal bottle neck if desired)
PVC glue (if desired)

A Product of Yogi's Workshop
Idiosyncratic Carpentry \&
Shade Tree Engineering

## $1 / 2$ inch PVC pipe stomp rockets



Glue over crimped top if desired


Roll and secure into a cone.


Roll into a cylinder and secure cone to the top. Assembly will slip over the top of the rocket for a nose cone.


Roll into a cylinder and secure cone to the top. Assembly will slip over the top of the rocket for a nose cone.

After forming the tube:
Cut solid red lines to free fins, then fold out on dotted line.
$1 / 2$ inch PVC pipe stomp rockets


Decorate with your own design using colored pens or markers.

Glue over crimped top if desired



Roll and secure into a cone.


Roll into a cylinder and secure cone to the top. Assembly will slip over the top of the rocket for a nose cone.


Roll and secure into a cone.


Roll into a cylinder and secure cone to the top. Assembly will slip over the top of the rocket for a nose cone.

After forming the tube:
Cut solid red lines to free fins, then fold out on dotted line.

Roll into a cylinder. $1 / 2$ inch PVC pipe stomp rockets

$\uparrow$ Afterforming the tube:Cut solid red lines to freé fins, the $\uparrow$ fold outpon dotted fine.

Roll into a cylinder. $1 / 2$ inch PVC pipe stomp rockets

| Crimp shut and tape or glue |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |


$\uparrow$ Afterforming tite tube:C4t solid red lines to free fins, the $\uparrow$ fold out $\boldsymbol{f}$ on dotted fine.

Roll into a cylinder. $1 / 2$ inch PVC pipe stomp rockets

| Crimp shut and tape or glue |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |


$\uparrow$ Afterforming the tube:CAt solid red lines to freef fins, thê fold out on dotted fine.

Roll into a cylinder. $1 \not 212$ inch PVC pipe stomp rockets-Easy to Cut Fins


$\uparrow$ Afterforming tife tube:Cut solid red lines to free fins, then fold out on dotted line.

Roll into a cylinder. $1 \not 12$ inch PVC pipe stomp rockets-Easy to Cut Fins


After forming the tube:Cut solid red lines to free fins, then fold out on dotted line.

## $3 / 4$ inch PVC pipe stomp rockets



Glue over crimped top if desired


After forming the tube:
Cut solid red lines to free fins, then fold out on dotted line.

## $3 / 4$ inch PVC pipe stomp rockets



Glue over crimped top if desired


After forming the tube:
Cut solid red lines to free fins, then fold out on dotted line.

Basic $3 / 4$ " caliber stomp rocket.
Half sheet (either way) of letter sized paper or card stock. Roll loosely around $3 / 4$ " launch tube and tape seam.
With rocket on the launch tube, crimp the top shut at the dotted line and tape securely. You can glue on a reinforcing disk or nose cone if desired - not required.
Cut out and fold fins at bottom after assembling the rocket tube - cut on the solid black and fold on the red dotted lines. Or, cut separate fins and tape/glue in place.
Place on $3 / 4$ " launch tube and stomp away.

Add graphics to this section
Crimp
line 5/8"
from top


Overlap to this line - should be loose fit to slide easily on launch tube

Start rolling here



