



**THIS OLD
HOUSE**
**FAMILY
PROJECT**

PROJECT > **Building a
Soccer Goal**

How to make a backyard scoring center,
with instructions for parents and kids

By **Chrystle Fiedler** Photographs by **Wendell T. Webber**

AGE RANGE > 5 and up

COST > \$50

TIME > 2 hours

DIFFICULTY > Very easy. There are many parts, but they're a cinch to cut and fit together with simple connections.

COMPLETE INSTRUCTIONS INSIDE ➔



WHETHER YOU HAVE a budding athlete in your household or you just want to get everyone to play as a family, having a soccer goal in the backyard is a win-win. The one shown here has a basic design and a simple construction, so it can be assembled in an afternoon with tools

already on hand and materials that are easy to get at the home center. And because it's made from PVC pipes, this goal is so lightweight and easy to move that you can set it up whenever you're ready to play. Just put it where it turns the backyard into a playing field, and you'll be ready to score!

SAFETY FIRST

Teach kids good workshop habits from the start. Here are a few guidelines for the tools used in this project:



HAND TOOLS

Kids should be able to use all the tools in this project. Just be sure they understand the dangers of sharp hacksaws and scissors before they pick them up.



GLUES

All PVC pipe cement gives off fumes, even if it's labeled "low VOC." Always work in a well-ventilated area and keep the cap on the bottle when the glue is not in use.



GEAR

Though they're not absolutely necessary, a pair of fitted work gloves can protect hands from cuts and sticky encounters with glue.

Project design by **Edward Potokar**

1

Lay out the parts

> Using a measuring tape, divide the four 10-foot lengths of PVC pipe into the sections needed to assemble the frame of the goal. You will need two 5-foot sections, two 4-foot sections, four 3-foot sections, and four 1-foot sections.

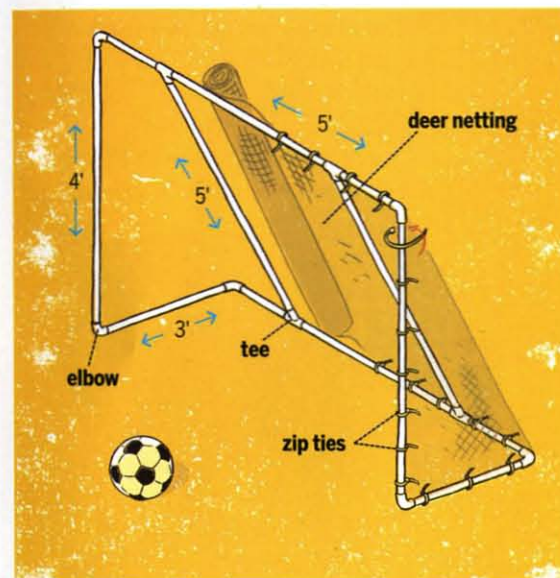


TOOLS YOU'LL NEED>

- Tape measure
- Permanent marker
- Hacksaw
- Utility scissors

MATERIALS TO BUY>

- 1½-inch PVC tubing
- 1½-inch PVC elbows
- 1½-inch PVC tees
- 80-grit sandpaper
- PVC pipe cement
- Deer netting
- Zip ties (aka cable ties)
- Small sandbags (optional)



TO PARENTS:

Use the goal to teach older kids about right triangles and the Pythagorean theorem: $a^2 + b^2 = c^2$. The base is a (3 feet), the side is b (4 feet), and the brace is the hypotenuse, or c (5 feet).



MAKE IT EASY

Get expanded step-by-step instructions and download a cutting guide for this and other family projects at thisoldhouse.com/family



2

Cut the pipes

> Lay a marked-up pipe on a worktable with your first cut mark hanging off the edge. Using a hacksaw fitted with a fine-toothed blade, cut the pipe at the mark. Continue until all the pieces are cut. You should be

left with one unused 6-foot piece. If any of your pieces doesn't match the others in length, you can use this extra to make a replacement piece.

> Smooth out the cut ends of the pipes with 80-grit sandpaper so there are no sharp edges or splinters.

HEY, KIDS!
Try out your hacksaw skills. Start with slow, small strokes to make a groove on your mark. Then use long, straight strokes to cut all the way through.

3

Assemble the frame

> Dry-fit the pieces together: 3-foot and 1-foot pieces together for the top and bottom, 3-foot pieces for the horizontal sides, 4-foot pieces for the vertical sides, and 5-foot pieces for the back braces. Use elbow and tee connectors at the joints, and mark each joint with a line to keep track of how the pieces fit.

> One by one, take apart each joint, wipe PVC pipe cement on the outside of the pipe and the inside of the connector, then fit the two back together. Line up your marks quickly, because pipe cement sets up in seconds.



ONLINE BONUS Watch a video of building this soccer goal—as well as other family projects—at thisoldhouse.com/family