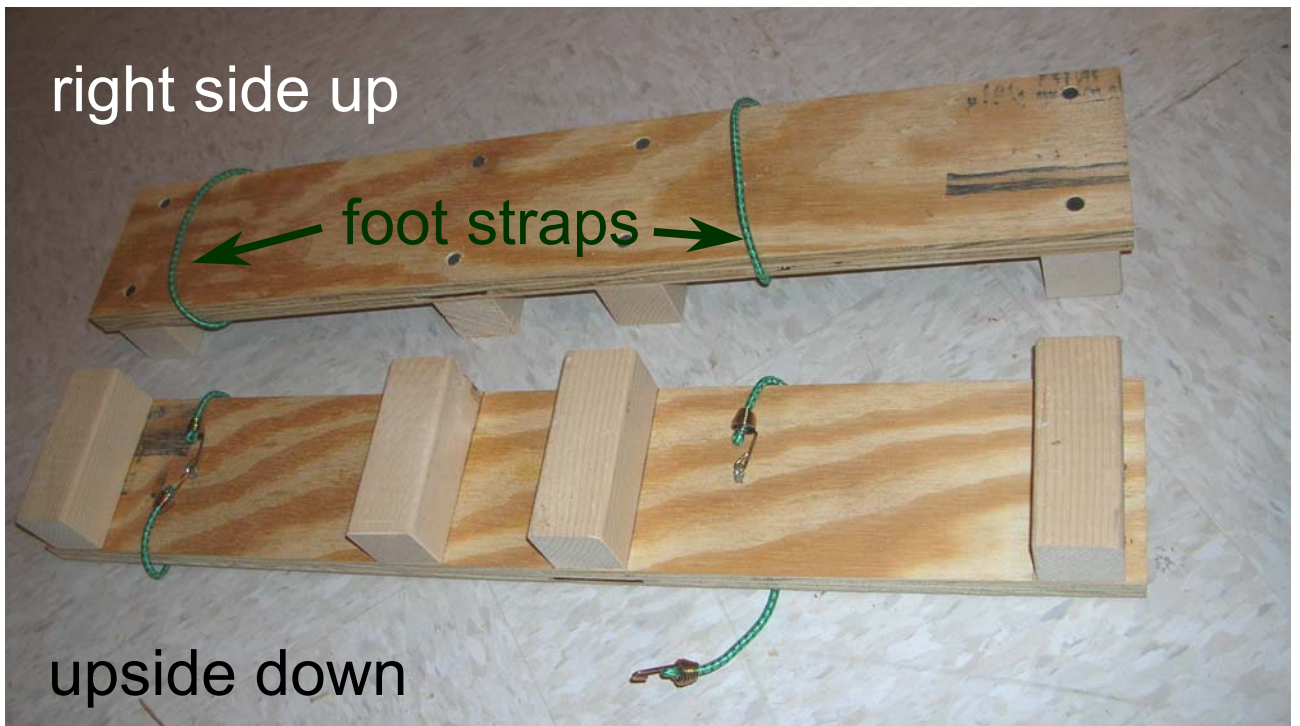


Foot Racers



Foot Racers

Lessons:

- ***Applies to Wolf Elective 7c – Foot Power***
- Practice measuring, sawing, and in assembly
- Leads to physical exercise & teamwork!
- Easy: appropriate for Wolf or Bear

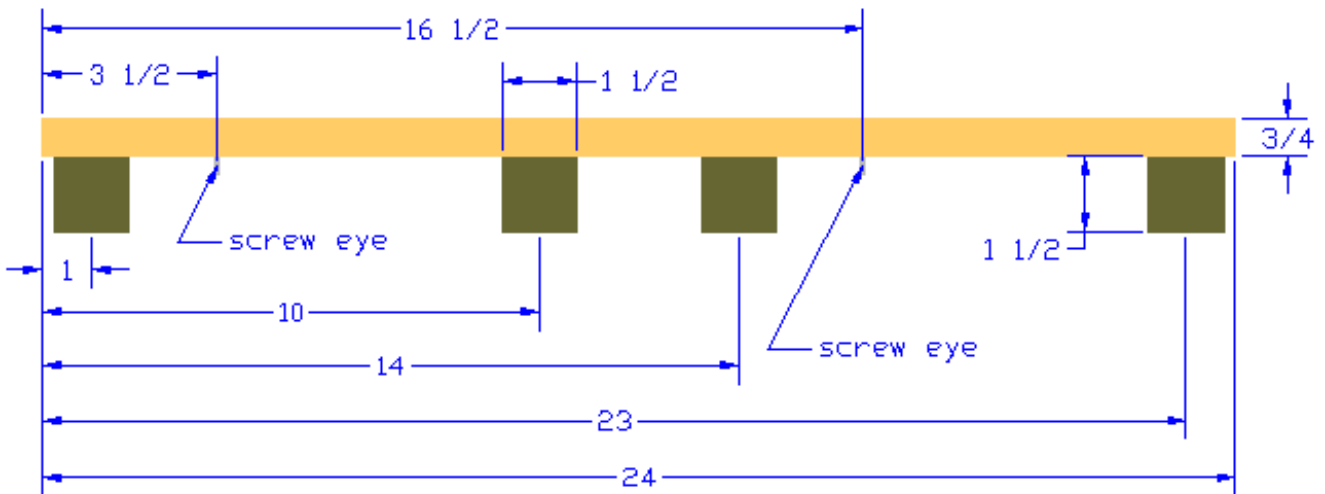
Tools:

- Ruler
- Screwdriver (powered or manual); pliers
- Drill & drill bits (powered or manual); countersinking bit is optional
- Optional (if pieces are not pre-cut by leaders):
 saw (Japanese style pullsaw recommended)

Materials:

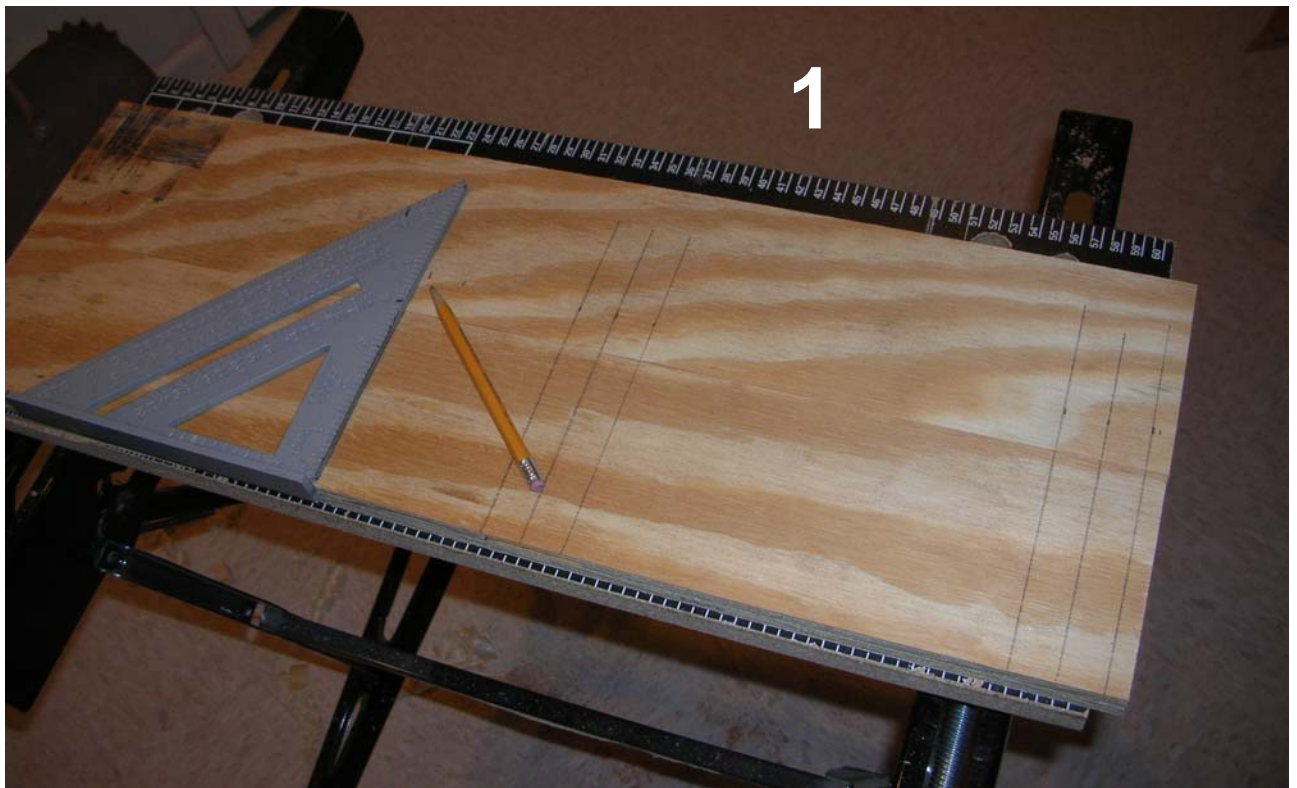
- Two $\frac{3}{4}$ inch thick plywood strips 4 x 24 inches.
- Eight wood blocks, $1\frac{1}{2}$ x $1\frac{1}{2}$ x 4 inches
(or 3 feet of $1\frac{1}{2}$ x $1\frac{1}{2}$ inch board, which the scouts can cut to 4 inch lengths)
- Glue
- Wood or drywall screws
- 4 screw eyes, $\frac{3}{8}$ or $\frac{1}{2}$ inch diameter
- 10 inch bungee cords.

Foot Racers



Procedure:

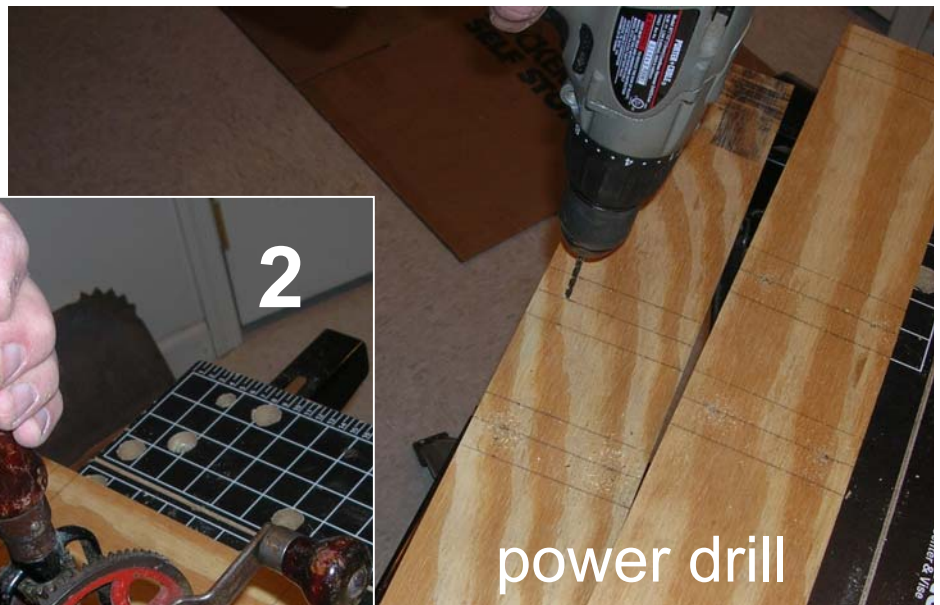
1. Use a ruler to measure the locations of the blocks on the plywood strips. Then use the rafter square to draw the line across both plywood pieces.



Foot Racers

Procedure:

2. At the location of each block, drill 2 holes for the screws. These should be slightly bigger than the screw threads, so that the screws turn freely in the plywood.
 - Optionally, countersink the holes, so that the screws do not protrude above the surface after they're installed.



Foot Racers

Procedure:

4. If the wooden blocks are not pre-cut by leaders, have the boys measure them and saw them.
 - No need to be fussy! For this project, the focus is on using the foot racers, more than on building them!
 - A miter box with a stop set at 4 inches can be used to eliminate the step of measuring before sawing.
5. Apply glue to the blocks, and screw them to the plywood.

Foot Racers

Procedure:

6. Drill a small pilot hole for the screw eyes, and screw them into the bottom of the foot racers.
7. Attach bungee cords. Use pliers to squeeze one hook closed, so that the cords stay attached to the foot racers.
8. Race!

