



Mini-Hoop Game

Project Overview:

Work with a partner to design, build and program a Mini-Hoop game that consists of a countdown timer and a score counter. One SEK will be used to control the the countdown timer, the other one will be used to control the score counter. The countdown timer should make a noise as it is running out of time. Keep in mind you are building this for a professional toy company and the product needs to be consumer friendly.

Materials:

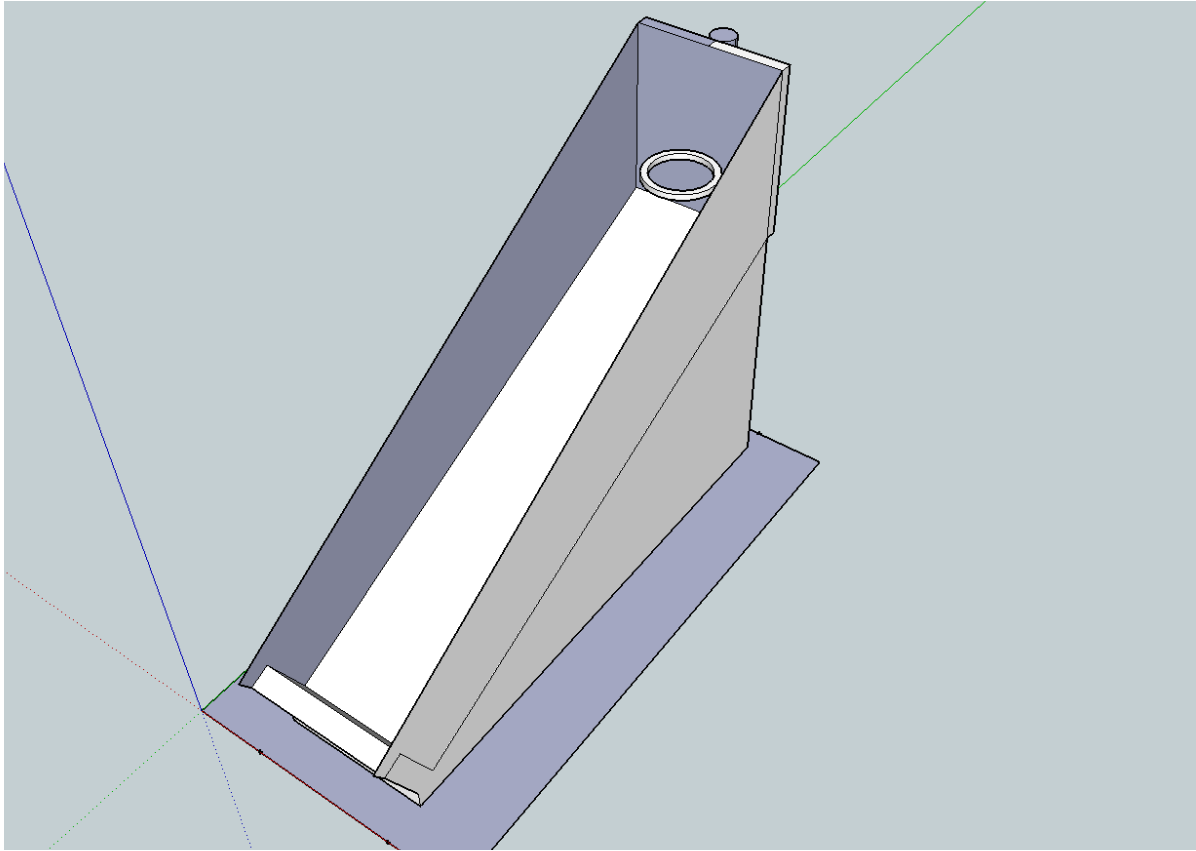
- 1 piece of PVC Pipe
- 1 piece of Filler ROD
- 1 Wood base
- Wire (use reasonable amount)
- 1 Zip Tie
- Limit switch
- 3 Hacky Sacks
- 1 VF Sheet
- 1 Seven Segment Display & Decoder
- Hot Glue gun
- 2 Picaxes
- As much cardboard as you can bring in
- (Any additional materials you bring from home are acceptable to use)

Requirements:

1. Mini-Hoop game must no larger than 2' high, 12" wide, 24" length
2. Limit switch must work with the hoop and the score counter
3. Score counter must reset when you start a new game
4. You must be able to toss the ball and have it returned to you
5. Wiring should be mostly concealed
6. Ball should set score counter off when it passes through the hoop

Grading:

Mini-Hoop fits size requirements	15
Countdown timer makes noise	15
Score counter works properly	20
Countdown timer works	20
Overall Look of Mini-Hoop Game	30
Total	100



Concept Design: **Does not have to be exactly like this, use your imagination!**