

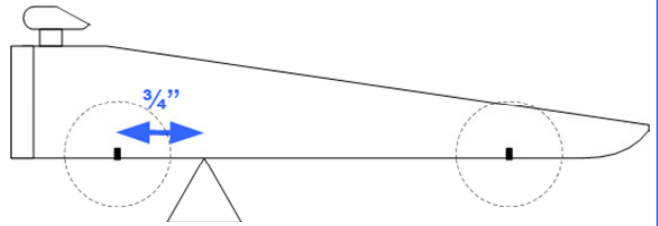


PWD: Adding Weight to your Car (from easiest to hardest)



Where to concentrate the weight?

- Best physics are to have weight concentrated near back of car, with a center of gravity about $\frac{3}{4}$ " in front of rear axle slot



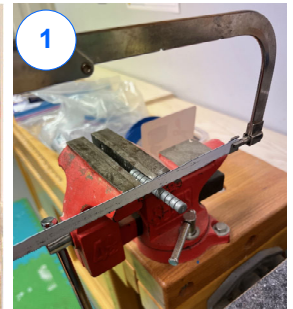
Option 1: Underbody Weights

- Underbody weights screw on underneath or on the sides of the car – available at Michael's or Scout Shop
- On race day, can break off segments (using pliers) to adjust weight



Option 2: Insertable Weights

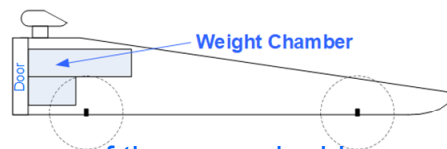
- Figure out how much weight you need to add
- Step 1: Cut tube weights to length with hacksaw
- Step 2: Use drill press to drill $\frac{3}{8}$ " hole into car slightly deeper than weight - set depth stop so you don't drill all the way through, and stay away from axle slots!
- Step 3: Insert weight into hole, cover with wood putty and let dry, then sand flush
- Make sure your car will not be overweight, this is very hard to remove!!
- Can also use a sticker to cover the hole rather than wood putty to make it removable!



Allow room to cover with putty



Option 3: Make a Weight Chamber



- Create a weight chamber in the rear of the car and add a screw-on door for easy adjustments
- Step 1: Use template to mark hole center locations on car rear
- Step 2: Clamp the car for safety
- Step 3: Set drill bit depth stop so hole won't enter axle area or come through top, then drill holes
- Step 4: Use a chisel to remove wood between holes
- Step 5: Pick a pre-made door, tape onto rear of car
- Step 6: Drill matching holes into car with $\frac{5}{64}$ " bit
- Step 7: Fill with lead or alloy weights (purchase at store), adjust car to 5.00 oz, insert screws

