

# Pack 221

## 2009 Pinewood Derby

**#1 Rule - have fun , use your imagination, be proud of your derby entry. Do Your Best !**



### \*\* PLAN \*\*

**All cars must be within the following dimensions:**  
 7" Long  
 2 3/4" Wide  
 3" High  
 3/8" Bottom Clearance  
**The total finished weight of the car shall not exceed 142 grams (5 ounces).**  
**The distance between the front and rear wheels or axles cannot be altered. You must use the cutouts provided in the standard kit block**

### convert your plan to cut lines draw them on the wood block

the block size drawing can be used to sketch initial ideas  
 it is double sided for twice the fun!  
 if you need more, feel free to make additional copies or contact Dave Wanner (see rules sheet for contact info)  
 when finished, the shapes can be cut out and traced around to transfer the design to the block for cut lines  
 it may be helpful to draw centerlines & block out wheel areas if you chose to instead draw directly on the block  
 Make sure not to cut off the wheel axles  
 plan & leave spaces to add weights later

Can pick one category to be the best in, any of them can be a winner

### Design



use imagination  
 doesnt have to be a race car  
 old cars, pickup trucks  
 invent a design  
 cartoons, animals  
 military, space, sea, air  
 add trim, fenders, fins  
 driver, pipes, engines, spoilers

### Paint



sand sand sand  
 the finish is only as good as the base  
 watch mixing paint types  
 try color shading,  
 pin stripes  
 decals too  
 paint can be heavy  
 don't glue in weights  
 until paint is done

### Speed



axles straight  
 deburr & polish  
 lube with graphite  
 don't forget the tires

surf the web for speed tips and design ideas

### Tools & safety

Power tools need adult help  
 always use goggles, & caution  
 saw & hammer safety  
 Derby workshop is available for help

### WEIGH IN

leave time for lubing wheels  
 weight adjustment  
**PROTECT YOUR CAR**  
 All registered Cub Scouts can go to District Race

Helpful Hints produced by The Master of Mistakes !

Paint - always in well ventilated area

leave plenty of time to dry

sand, buff, steel wool  
 between coats or primer

mount wheels straight as possible

test roll on a flat floor

preliminary weight check -  
 can use official weights, or washers, pennies, screws, lead substitutes

only restrictions: maximum weight, and has to be solidly mounted