



# Mousetrap Cars

Term 1 Physics Project

# The Rules

Must be powered by a single Victor brand mouse trap (or other brand that is similar to the Victor brand.)





# The Rules

- No energy storage or input other than the spring
  - No rubber bands, batteries, etc.
  - No adjustment of the spring
- No pre-fabricated kits!
- Vehicle must be self-starting
  - No pushing or running starts
- Vehicle must be self-steering
  - No "pushing" back onto a straight path
- All parts must stay on the vehicle throughout the race
- I have final say about the appropriateness of design and/or materials!



# Registrations

- Due Friday 25 August
- Must travel a minimum of 5 m to receive a parking space.

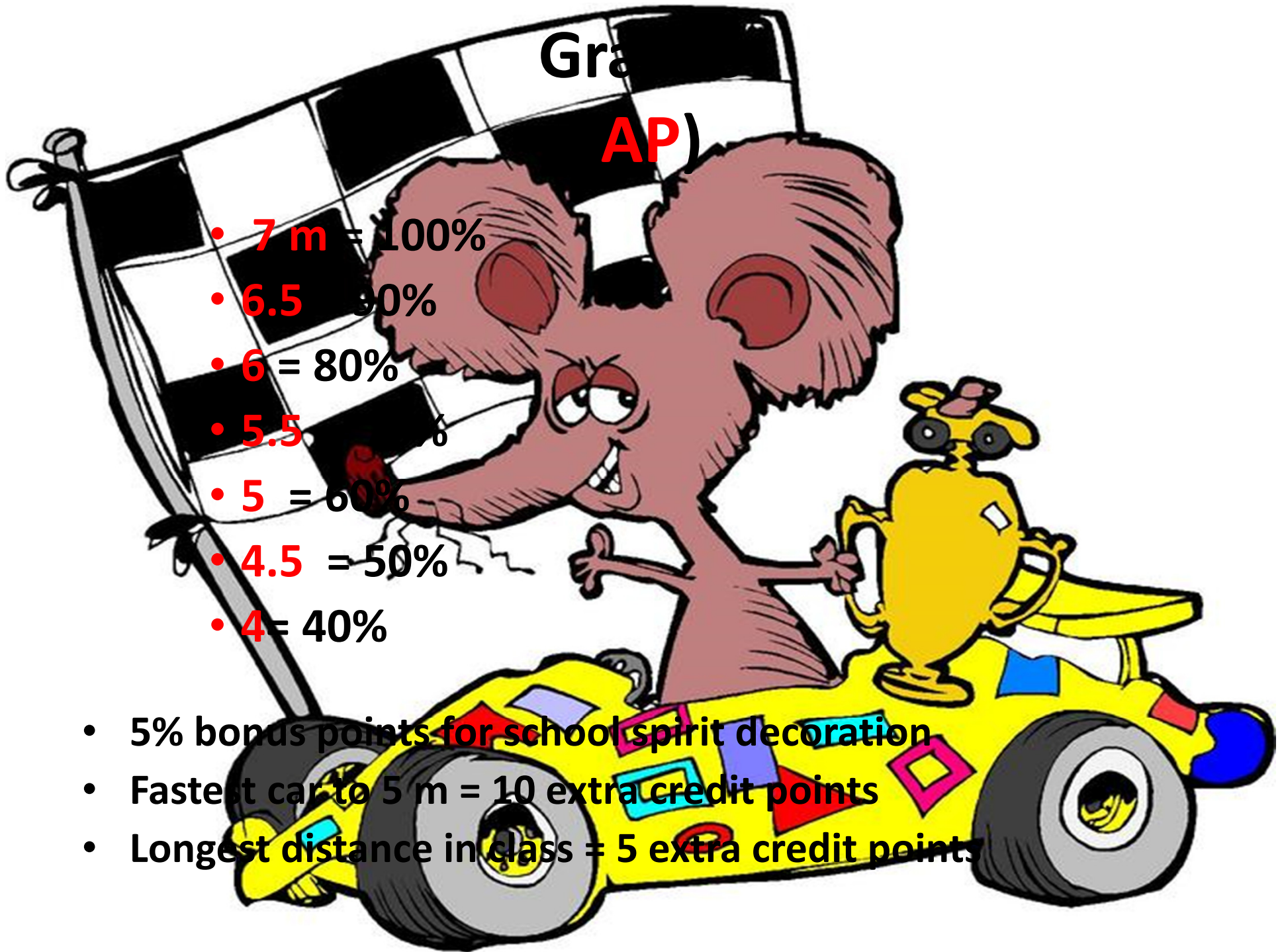




# Grade (AP)

- 7 m = 100%
- 6.5 = 90%
- 6 = 80%
- 5.5 = 70%
- 5 = 60%
- 4.5 = 50%
- 4 = 40%

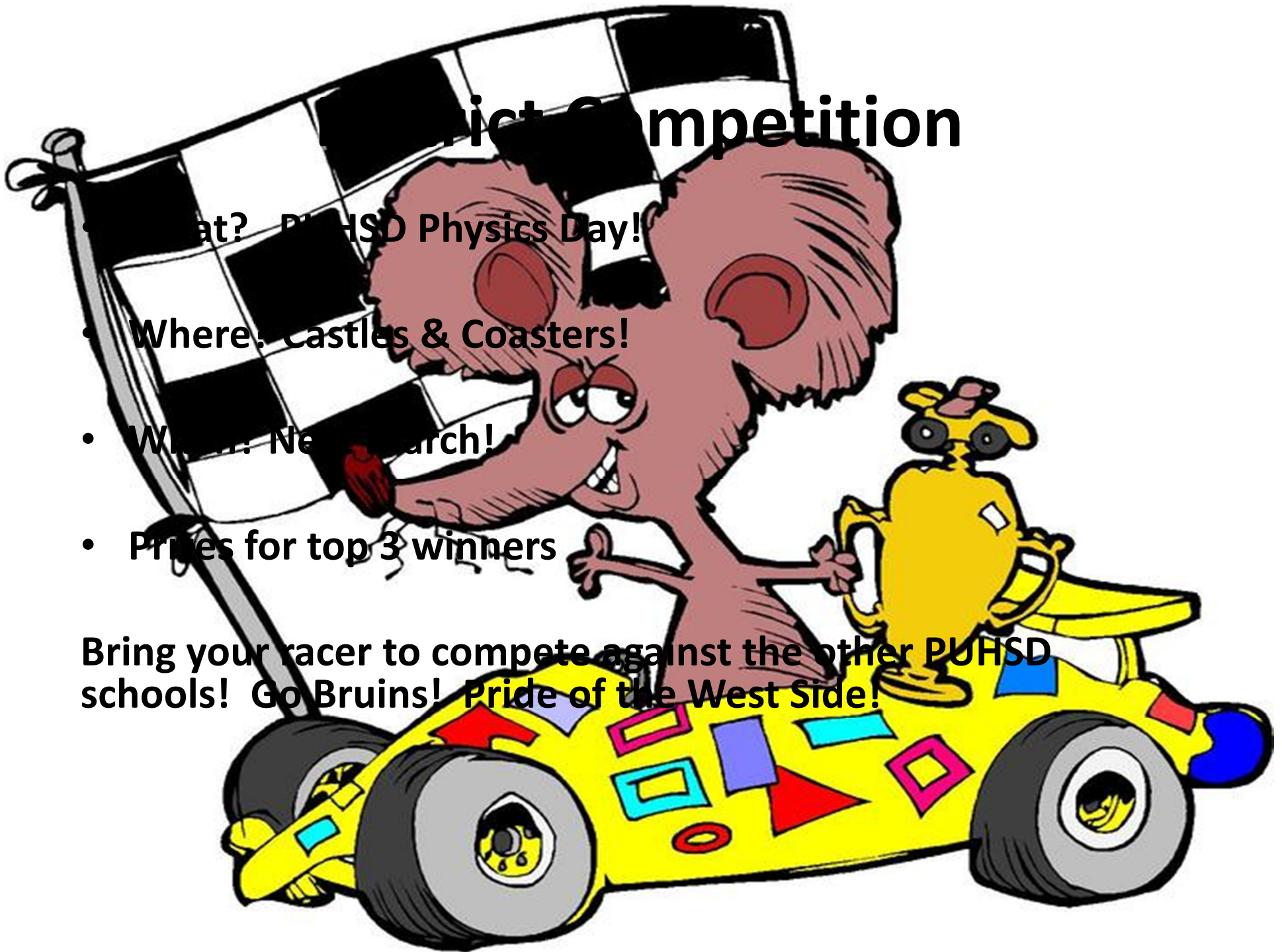
- 5% bonus points for school spirit decoration
- Fastest car to 5 m = 10 extra credit points
- Longest distance in class = 5 extra credit points



# Triumph Competition

- What? PUHSD Physics Day!
- Where: Castles & Coasters!
- When: Next March!
- Prizes for top 3 winners

Bring your racer to compete against the other PUHSD schools! Go Bruins! Pride of the West Side!





# Requirements

- Things to include in log:

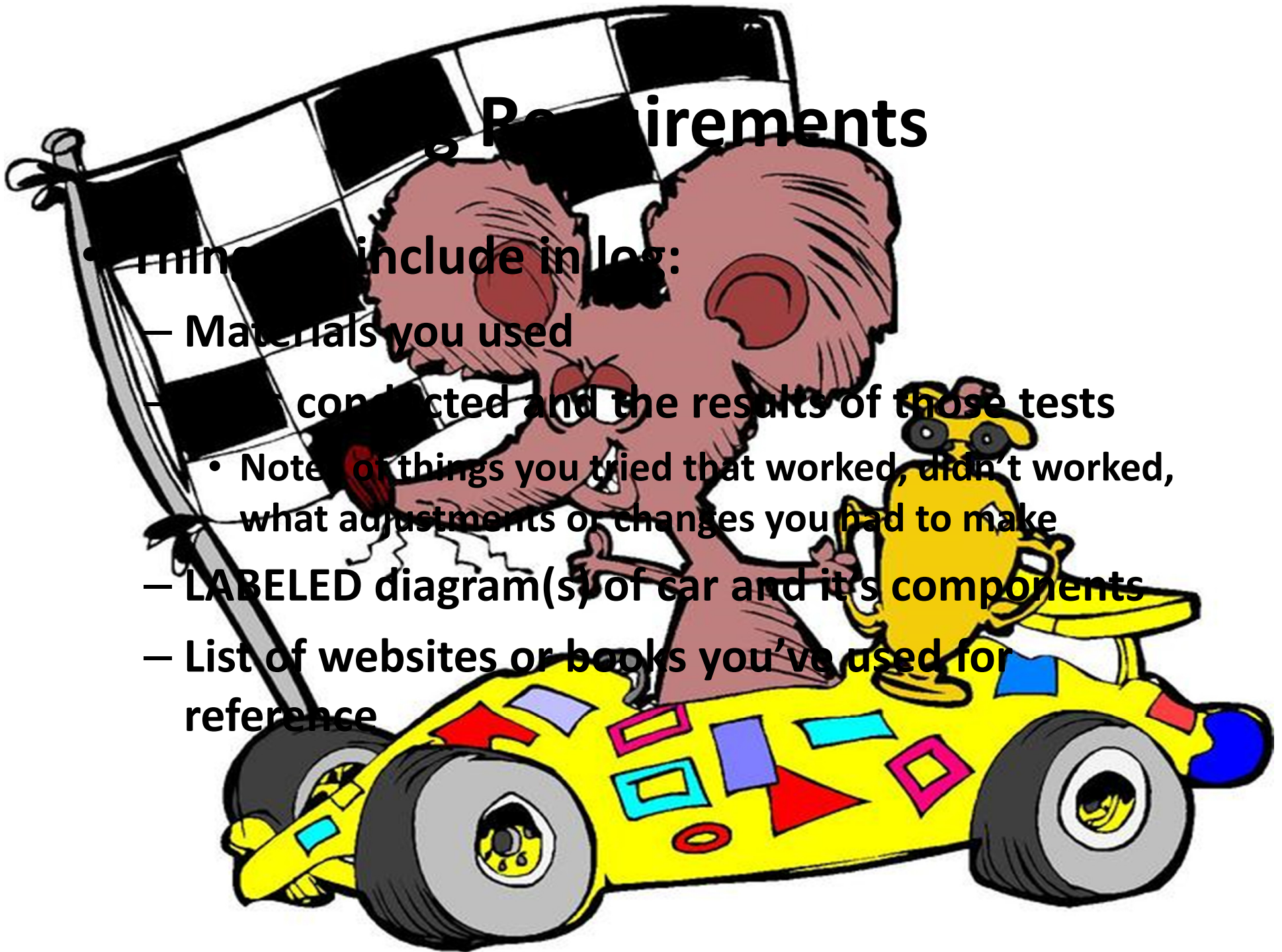
- Materials you used

- Tests conducted and the results of those tests

- Notes on things you tried that worked, didn't work, what adjustments or changes you had to make

- LABELED diagram(s) of car and its components

- List of websites or books you've used for reference



# Me and My Mousetrap Car

- A standard mousetrap
- No rat traps, beaver traps, bear traps, etc
- No other aid to propulsion (batteries, rockets, rubber bands, etc.)
- Graduated on 8.0m to 5.0m
- More than 5.0m? Now you can get extra credit
- Extra credit for fastest to 5.0m
- Enter the lunchtime drag racing competition
- Set aside pages \_\_\_\_\_ in your notebook to keep the daily log of your design/thinking journey up to the end of race day :-)

