

Physics Obstacle Course

Objective: Complete the four “obstacle s” in the shortest time. Time is actual time plus penalty time.

- Obstacles:**
- (1) Laser Pinball Challenge: Set up mirrors to reflect a laser to hit a target.
 - (2) The Tortoise and the Hare: Predict where a fast car will catch up and pass a slow car.
 - (3) Fermi Questions: Calculate (without a calculator) quantities to nearest power of ten.
 - (4) Bowling Ball Impulse: Move a bowling Ball around an obstacle course in the shortest amount of time with the fewest number of hits.

Total Time: Your total time will be calculated adding up your time for each event plus the calculated penalty minutes (or seconds)

Team Number _____ Team Members _____

School _____ Team Members _____

Circle one: (Middle School) (High School)

Laser Pinball: Time elapsed in setting up your mirrors: _____ Minutes _____ Seconds

Accuracy penalty minutes _____

Tortoise and Hare: Time elapsed in setting up your target : _____ Minutes _____ Seconds

Accuracy penalty minutes _____

Fermi Questions: Predicted answers: (1) _____ (2) _____ (3) _____ (4) _____ (5) _____

Accuracy penalty minutes _____

Bowling Ball Obstacle Course:

Trial	Elapsed time (minutes & seconds)	Legal hits	Penalty hits
1			
2			

Scoring: The lowest total time will receive 100 points, and the remaining scores will be proportional.