

- Monday 12/18:
- Study guide #2
 - Data analysis for derby racer
- Wednesday 12/20:
- Test (Velocity & Acceleration)
 - Arduino programming activity
- Thursday 12/21:
- Begin wiring Arduino/
breadboard
- After break:
- Finish programming, wiring
 - Test LED/Racer/ramp

Data Analysis for Derby Racer:

- You have displacements (for example 196 cm)
- You have time

• You'll calculate:

1. Displacement in meters ($\text{cm}/100$)

2. Final velocity ($\frac{\text{displacement}}{\text{time}} \times 2$)

3. Acceleration ($\frac{V - V_0}{t}$)

4. Average displacement, time, velocities, and acceleration

5. How long it takes to get to a certain location in cm ...

$$\left(\sqrt{\frac{2 \cdot \text{location}}{\text{acceleration}}} \right)$$