

Derby racer:

- You will design and build a gravity powered vehicle
- 25 cm x 25 cm x 25 cm
- Investigate displacement, velocity, and acceleration



Wed Nov. 17th

- ① Speed problem set
- ② Next project: Derby racer
- ③ Safety contracts & tests
- ④ Safety glasses

Speed problem set:

.. Checkpoint grade -
problem 1

steps 1, 2, 3 of problem 2

$3/3$ {

- + → Nailed it
- √+ → Know what you're doing
- √ → On your way

$2/3$ √- → Try harder

$0/3$ — → ???

Format
for 5 steps:

1a $v = 2.6 \text{ m/s}$ $d = 2 \text{ m}$

1b t

2 $v = \frac{d}{t}$

3 $2.6 = \frac{2}{t}$

4 $(+) \frac{2.6}{2.6} = \frac{2}{t} \frac{(t)}{2.6}$ UNITS!

5 $t = \frac{1}{1.3} \text{ s}$

$v = \frac{d}{t}$

$v = \frac{2}{\frac{1}{1.3}} = \frac{2 \cdot 1.3}{1} = 2.6 \text{ m/s} \checkmark$