

Collaborative 3 Act Task

Title: ALL ABOARD

Link: <https://gfletchy.com/all-aboard/>

Big Idea: Elapsed time

Curricular Competencies:

- *estimating reasonably*
- *connect mathematical concepts to each other and to other areas*
- *visualizing to explore mathematical concepts*
- *explain and justify mathematical ideas and decisions*
- *reflect on mathematical thinking*

Core competencies: Social Responsibility and communication



ACT ONE:

Establishing a Need to Know: **view 18 sec. clip**

What did you notice?	What do you wonder?

Driving Question: How long will it take for the train to pass?

Estimating:

A too low estimate:	A too high estimate:

What information would be useful to know for solving this problem?

ACT TWO: types of train cars; time it takes for train cars to pass

Stand up in random groupings with non-permanent surface. One dry-erase marker and eraser per group. Provide information from Act Two.

**There's 70 train cars.
There's 2 locomotives.**

**It takes 10 seconds for
7 train cars to pass**

**It takes 3 seconds for
1 locomotive to pass.**

ACT THREE:

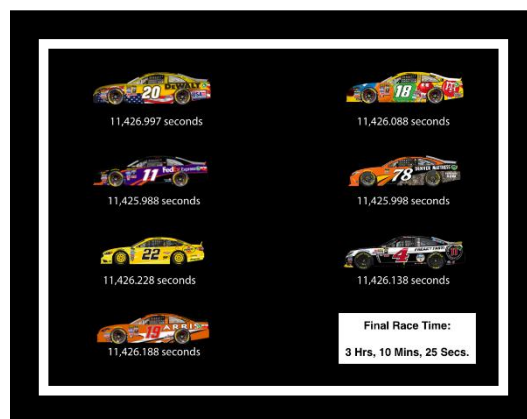
Stand up in random groupings with non-permanent surface. One dry-erase marker and eraser per group.

Strengths: What worked (What strategies did you use to work toward a solution)?

Stretches: What was difficult?

Next steps: What would you do differently next time?

New three act task just posted by GFletchy (2017)
<https://gfletchy.com/final-lap/> also elapsed time



Act Two