

Wednesday, February 20, 2019

Your Learning Goal: After students experienced speed by running and collecting data, they will calculate the speed of the runners and graph the data with 100% accuracy.

Table of Contents:

Runner's Speed- 34L + R

Catalyst (34L): Write a short description of where your table is located in the classroom. Make sure to use words and not pictures!



Homework:

Study for your quiz
Next Week!



Agenda:

1. Catalyst
2. Lets Run
3. Data Analysis

Table of Contents

<u>Date</u>	<u>Assignment</u>	<u>Pg #</u>
1/22/19	A Planet is Born	27L + R
1/24/19	Scaling the Planets	28L + R
1/29/19	Spatial Attraction	29 L+ R
1/31/19	Electricity and Magnetism	30 L + R
2/6/19	How Fast Is Fast?	31 L + R
2/12/19	Speed Graphs	32L + R
2/14/19	Speed It Up Trackstar	33 L + R
2/20/19	Runner's Speed	34L + R

2/20/19

Catalyst:

Write directions for someone to get to your seat in the classroom.

Runner's Speed

34L

34R

Runner's Name	5 Meters	10 meters	15 meters	20 meters
Trial 1				
Trial 2				
Trial 1				
Trial 2				
Trial 1				
Trial 2				
Trial 1				
Trial 2				

OUR OVERARCHING QUESTION

Why do things
move the way
they do?

How do we describe
the motion of an
object??



Speed of a Runner?

Think – Pair – Share



- What do you need to know to measure the speed of a runner?

Speed of a Runner?

We need **4** volunteers to **run**.



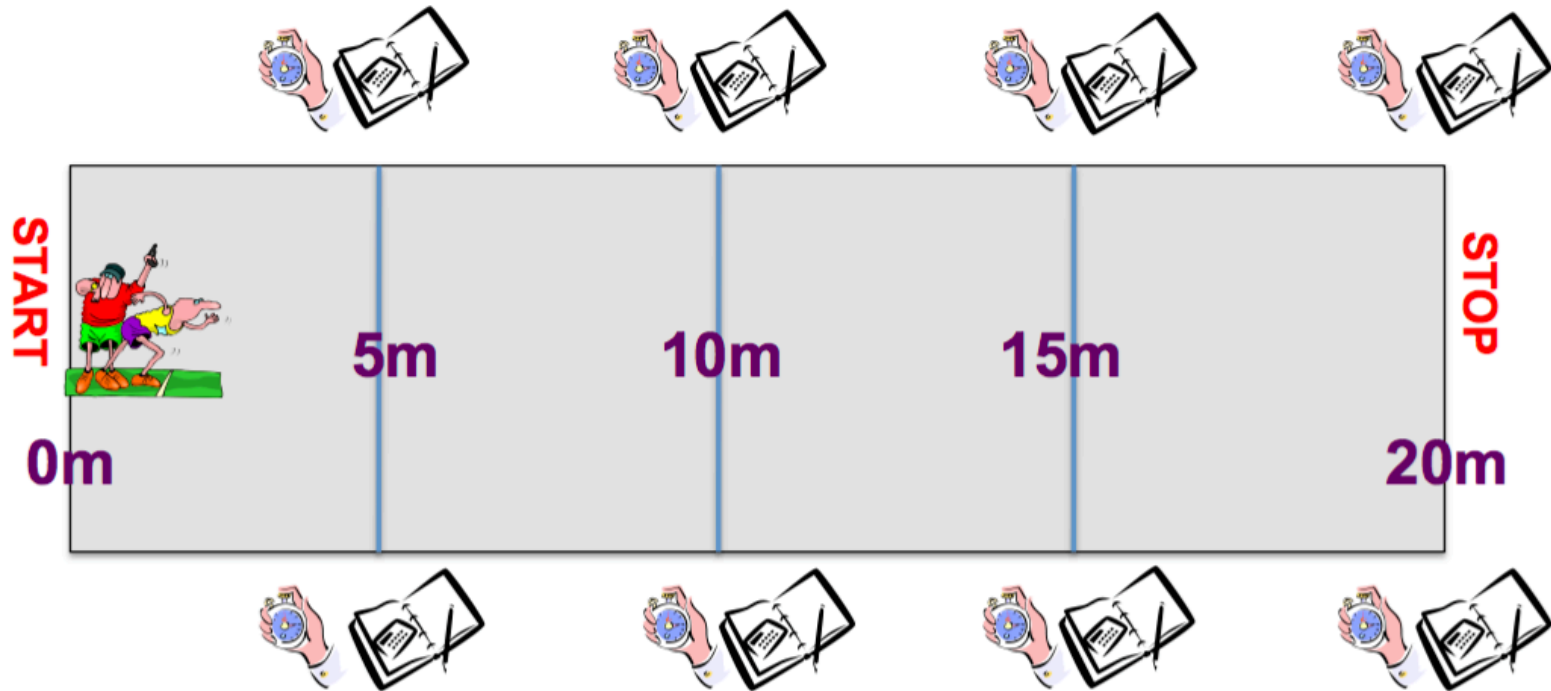
Half the class will be **timers**.

Half the class will be **recorders**.



Ms. Salzburg will **begin** the race.

Running Diagram



Look at this part on the timer. This will tell you the **seconds**.

(We will be using cell phones to supplement)



Activity Expectations

- ✓ Do NOT talk loudly or shout. If I hear you, you're too loud. There are classes in session!
- ✓ Pay attention! I will not start over because you are not ready. You are responsible for your job.
- ✓ I will let you know to get ready by saying "Ready, Set, Go!" Start your timer or run when I say "Go!".
- ✓ When you're done recording your data, look at me and give me a thumbs up. Stay looking at me so we can start again right away.

Data Analysis

Name: _____

Runner's Speed Lab

Period: _____

Data Table 1: Time to Reach Each Interval

Runner	Trial #	Time (sec)			
		Time at 5 meters	Time at 10 meters	Time at 15 meters	Time at 20 meters
	1				
	2				
	Average	$= \frac{\quad + \quad}{2}$ =	$= \frac{\quad + \quad}{2}$ =	$= \frac{\quad + \quad}{2}$ =	$= \frac{\quad + \quad}{2}$ =
	1				
	2				
	Average	$= \frac{\quad + \quad}{2}$ =	$= \frac{\quad + \quad}{2}$ =	$= \frac{\quad + \quad}{2}$ =	$= \frac{\quad + \quad}{2}$ =
	1				
	2				
	Average	$= \frac{\quad + \quad}{2}$ =	$= \frac{\quad + \quad}{2}$ =	$= \frac{\quad + \quad}{2}$ =	$= \frac{\quad + \quad}{2}$ =

Please Take Out This Handout

Data Analysis

1. Each individual at your table will be responsible for ONE runner and their data
2. You will have 3 minutes to calculate your values before we trade papers
3. Once we trade, you will complete the data analysis for your runner AGAIN
4. We will rotate until ALL papers are complete

Data Analysis

1. When we are done with ALL 4 data tables raise your hands
2. You will create a group graph
3. Each person in your group is responsible for your runner's line
4. The graph layout, titles and labels are everyone's responsibility.

2/19/19

Catalyst:

Write a short description of where your table is located in the classroom. Make sure to use words and not pictures!

LEAF:

How did the speed of runners change along the course of the 20m? How might you explain this phenomenon?

34L

Runner's Speed

34R