

Why might the results in the park be different from my investigation results?

1. Maybe I wasn't careful in my investigation and I need to do it again.
2. Maybe much more massive objects (like Kendra and I) have different results.
3. Maybe there is something different about a ramp that I need to investigate.

I knew that I had investigated very carefully so I ruled out the first idea and the need to repeat my investigation. The second idea did not seem right either because it did not match my previous experience investigating with different amounts of mass. There was a pattern with how motion changed with the amount of mass and it doesn't make sense to me that the pattern would be different just because the mass was a lot greater. So I decided that I needed to investigate how motion on a ramp is different from a flat surface.

I set up the investigation as shown in Figure 3, and I measured the amount of time it took for each cart to get to the bottom of the ramp. My data are shown in Table 3.

Figure 3. Set up for investigating the affect of mass on motion down a ramp.

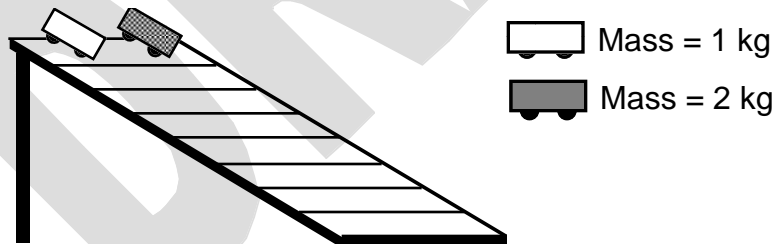


Table 3 Time of Travel Down a Ramp

Cart	Trial	Time (seconds)
1 kg	1	2.34
	2	2.38
	3	2.35
2 kg	1	2.35
	2	2.38
	3	2.36