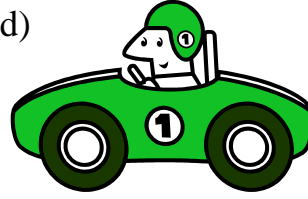


Time Trials (rates of speed)



In this activity, you will compare the rate of speed of two toy vehicles.

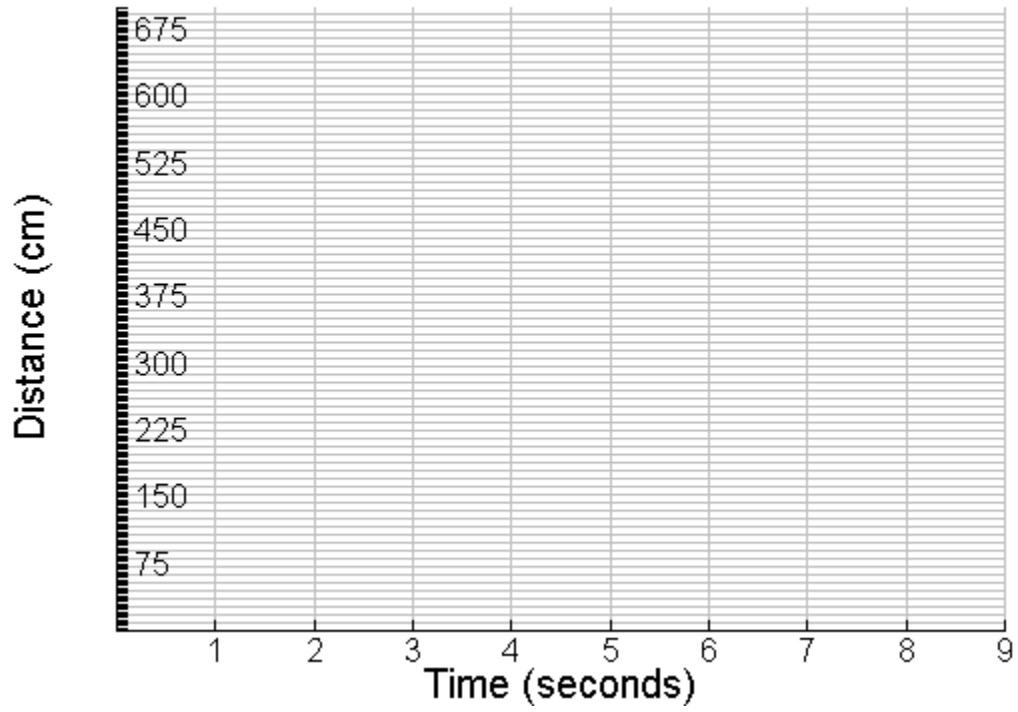
- Test out the cars and the runway. You might use the entire width or length of the room.
- Practice counting by seconds. You will find the speed in centimeters per second.
- Start one car. One person practices dropping a cube or a marker behind the car as the second person counts off each second.
- Measure the distance between markers and record the data below.

1st Vehicle		XXXX	Ratio		2nd Vehicle		X XXX	Ratio	
Time (sec.)	Distance (cm)	Change In Dist.	$\frac{\text{Distance}}{\text{Time}}$	Dec.	Time (sec)	Distance (cm)	Change in Dist.	$\frac{\text{Distance}}{\text{Time}}$	Dec.
0					0				
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
7					7				
Average Change					Average Change				

1) Compare the rate of speed for the two cars.

- What words will you use to explain the differences?
- What mathematics helps you to explain the differences?
- Graph the data for the two cars on the graph which follows. How does the graph help to explain the difference?

Time Trials



- 2) Compare the rates of speed of the two cars. Write your comparison below. Use the words, the math and the graphs to help you.