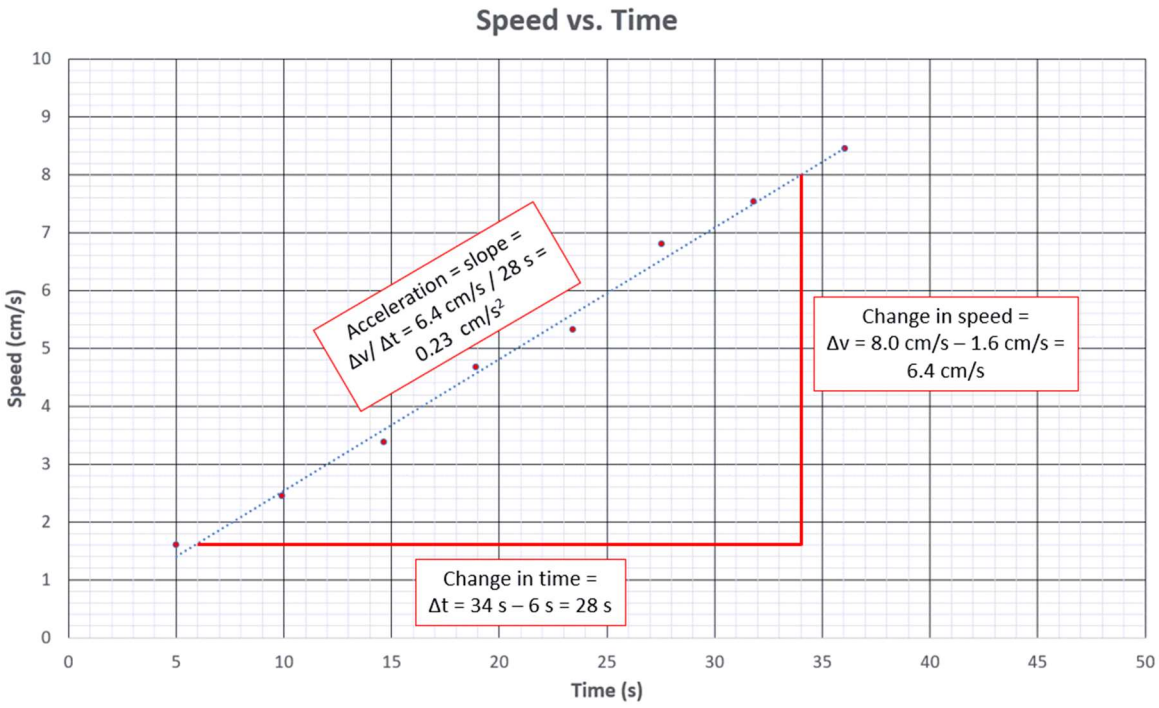
Time, Δt for each segment (s)	*Total time (s)*	*Length, Δd for each segment (cm)*	*Speed, Δd/ Δt (cm/s)*
5	5	8	1.60
4.92	9.92	12	2.44
4.73	14.65	16	3.38
4.28	18.93	20	4.67
4.51	23.44	24	5.32
4.12	27.56	28	6.80
4.25	31.81	32	7.53
4.26	36.07	36	8.45



Teacher Notes:

The acceleration is seen to be 0.23 cm/s^2, or equivalently 2.3 mm/s^2. The speed increases by 2.3 mm/s each second, on average. Note that the way the OzoBlockly program was designed, the speed actually increases by 1 cm/s every time that Ozobot reaches a hash mark. Then the speed stays constant during the interval between hash marks. This lesson calculates the ***average acceleration*** from start to finish.

Note that the times for each interval are quite similar, between 4 and 5 seconds. This was carefully planned by knowing the nominal speeds specified in the OzoBlockly program and setting the distances as indicated in Figure 1 of the student guide.