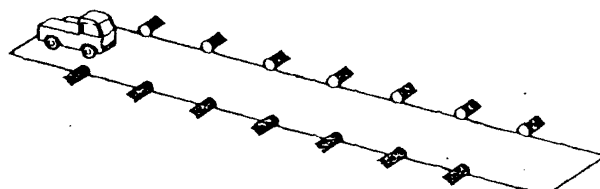


DISTANCE - TIME GRAPHS

A toy truck was released from the top of a sloping track. Electronic timers recorded the time taken for the truck to travel each 0.4 metres down the track.



The readings obtained are shown in the table below.

displacement in m	time in s
0	0
0.4	0.80
0.8	1.12
1.2	1.38
1.6	1.64
2.0	1.78
2.4	1.96

- Plot a displacement - time graph.
- What does the shape of the line tell you about the motion of the truck?
- Calculate the average speed of the truck as it goes down the ramp.

Attach your graph to this sheet to hand in.

	1	2	3	4	5
Effort					
Attainment					
Presentation					

DISTANCE - TIME GRAPHS

A toy truck was released from the top of a sloping track. Electronic timers recorded the time taken for the truck to travel each 0.4 metres down the track.

The readings obtained are shown in the table below.

- a) Plot a displacement - time graph. 5 marks: -1 for each error
- b) What does the shape of the line tell you about the motion of the truck?

Accelerating (1)

- c) Calculate the average speed of the truck as it goes down the ramp.

$$\text{Average speed} = \text{total dist} / \text{total time} \quad (1)$$

$$= 2.4 / 1.96 \quad (1)$$

$$= 1.2 \text{ m/s} \quad \text{answer (1), unit (1)}$$

Attach your graph to this sheet to hand in.

Attainment marking:

90% correct 1, 50% correct 3, 10% correct 5

	1	2	3	4	5
Effort					
Attainment					
Presentation					