

Q1. Laura and Jaz were worried about the amount of traffic in their town.

The town council aims to reduce the percentage of lorries to 25% of the total number of vehicles.

Laura and Jaz carried out a survey of the types of vehicles passing Laura's house during 10 minutes one Saturday morning.

Here is a list of the vehicles they saw.

Car	Van	Lorry	Motorbike	Bus	Car
Van	Car	Car	Van	Lorry	Motorbike
Motorbike	Motorbike	Van	Lorry	Motorbike	Car
Car	Bus	Lorry	Car	Lorry	Motorbike

Laura and Jaz were going to give a talk about the results of their survey.

- (a) Design a suitable chart or table Laura could use and a different chart or table that Jaz could use to make a summary of the list of vehicles they saw.

Use the space below or the grid provided.

(6)

The council's aim was to reduce the percentage of lorries in the town to be less than 25%.

(b) Did the council succeed? You must explain your answer.

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(2)

Laura and Jaz's survey was not a good one.

(c) Explain how Laura and Jaz could design a better survey to investigate the council's plan.

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(2)

(Total 10 marks)

M1.

		Working	Answer	Mark	Additional Guidance
FE	(a)		Correct table WITH EITHER Bar chart OR Pictogram OR Pie Chart	6	B1 Table with at least 2 columns with car, lorry, van, motorbike and bus rows M1 tally column completed or headed frequency column with at least two entries correct A1 correct frequencies (7, 4, 5, 6, 2) WITH EITHER B1 labelled axes with a uniform scale M1 bars labelled all the same width A1 bars all correct (ft from a) OR B1 labelled pictogram M1 5 classes + key A1 all correct (ft from a) OR B1 circle with 5 sectors labelled M1 correct calculation of at least one angle A1 all sectors correct (ft from a)
	(b)	25% of 24 = 6	Yes as $5 < 6$	2	M1 finding 25% of 24 A1 Yes as $5 < 6$, (ft from a)
	(c)		Survey at different places Survey at different times Do a bigger survey	2	B2 2 or more reasons (B1 1 reason) Ignore irrelevant reasons
					Total for Question: 10 marks

Resource currently unavailable.