

Lesson: Looking At Travel		
Learning Objectives Interpret tables, graphs and diagrams for both discrete and continuous data, and draw inferences that relate to the problem being discussed; relate summarised data to the questions being explored.		
Starter Put up OHT of graph with labels covered. The aim is for the pupils to deduce what those labels might be. (See DFES training video/resources Interacting with KS3/Y8 Mathematics)	Pupils Discuss ideas with peers and feedback to the class. Give detailed explanation of their answers.	Teacher Use effective questioning in order to get pupils to work out the labels. Reveal labels and write on the guesses for lines.
Main Using the Travel to School worksheet as a stimulus, Read through with the pupils and have a Q&A session about the different data sources.	Pupils Read through worksheet as class. Use the resource sheet to verbally answer the short questions for the individual data sources.	Teacher Help pupils with reading. Facilitate the answering of questions. Explain any misunderstandings in the data.
Plenary Bring ideas together. Pupils can read out their reports. Do others agree/disagree with their conclusions?	Pupils Read/listen to reports. Comment on conclusions and make comparisons with their own work.	Teacher Choose pupils to read reports and encourage pupils in their explanations
Outcomes All pupils will: Read sheets, write a simple report on the data Most pupils will: Give reasons for graph labels and give answers to short questions on data Some pupils will: Give clear reasons for graph labels, produce sound reports based on data, effectively communicate their findings to other pupils.		
Resources: OHT public transport graph, with labels covered, 'Travel to School' worksheet, OTP, method of writing report, access to internet/ www.statistics.gov.uk or www.censusatschool.ntu.ac.uk		
Classroom Management: Pupils will all need to see OHP. Working in groups will enable pupils to discuss and plan their work		
Keywords Data, Information, Decisions, Averages, Tables, Pie Chart, Line Graph, Interpretation, Report	KS3 Strategy Links Pg 268-275 Mathematics Framework	Cross-Curricular Links: ICT: Using the Internet for investigations History: Looking at previous travel methods of the population
Prior Knowledge What is a line graph and how they are labelled. Knowledge of averages and some experience in interpreting graphs and tables.		
Assessment of Learning Class discussion/feedback from short questions/written report/ evaluation of other pupil's ideas		
Extension Activity: Using the Internet, investigate characteristics of other countries etc. Try using the CensusAtSchool project.		
Homework Ideas: From a tally chart of the class, plot an appropriate graph for how your class travels to school.		

Question ideas:

You may want to give a hint that the theme for the lesson is travel.

What is missing from this graph?

Do you have any idea what the axes could be labelled? Why are you saying that? How many points are labelled on the x-axis? Does that give you help in deducing the axis label?

What is the y-axis label? Hint: count the number of lines.

What could the 3 lines represent? Justify. **The red line is for buses/purple line for cars/green line for rail**

Give an overall title for the chart.

Your own notes/questions:

Notes on lesson/evaluation

After a long period of post-war decline, which continued into the early 1990s, local bus use in terms of passenger journeys stabilised towards the end of the decade. In 1999-2001, people in Great Britain used local buses for 61 journey stages a year on average (see Appendix, Part 12: National Travel Survey). The biggest users of buses are those aged 16-24, who used local buses for 126 journey stages each year, and those aged 70 and over, who used them for 76 stages. Education and commuting and business are the main trip purposes for users aged 16-24, while shopping is the main reason for travel among the 70s and over.



This resource was created by the Office for National Statistics at www.statistics.gov.uk