Interpreting graphs

Description:
Interpreting graphs to find answers to questions and creating new charts with collected data.

Numeracy Strategy reference:	Task analysis:
Year 4 Handling data Organising and using data pg114	Pupils are required to: • Interpret existing graphs • Answer questions using graphs • Create their own graphs

Learning Objectives:

Solve a problem by collecting, organising, representing, extracting and interpreting data in tables, graphs and charts.

Suggested activities:
Oral work and mental calculation:
Counting forward and backwards in different multiples starting from different numbers. Link to reading scales.

Teaching activity:
Demonstrate and talk the children through the river traffic bar graphs in which the scale is in tens. Discuss the axes and what the columns represent. As a class discuss the first question. In their groups, pupils should go on to complete the graphs and answer the remaining questions.

Using the Flash graph-drawing program, demonstrate how to create individual bar charts. In groups, pupils children should create their own shop sales charts and set questions for their partner/group/other groups. Graphs and questions are then exchanged to be completed.

Plenary:
Children report answers to the class and check with the pupils who set the questions. Pupils could discuss why the results are as they are. Are there any patterns. For example, Why is there less traffic at certain times? What are the differences between recreational and cargo ships?

Resources:
River traffic printable activity sheets. Flash graph drawing program.

Learning outcomes:
Pupils should be able to:
• Create simple bar charts with the vertical axis marked in multiples of 2, 5, 10 or 20.
• Analyse and interpret bar charts to solve problems.

Extension activities:
Pupils could design and carry out a data collection activity, e.g. a traffic survey outside school. The information would be used to produce a bar chart from which questions are generated and data interpreted to report back to the class.