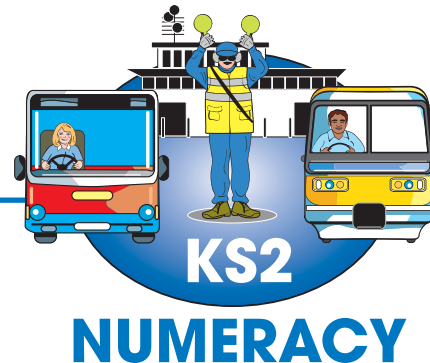


Teachers' Notes



On the train

Numeracy objectives - Strand 1 Use and apply Maths

Year 3

- Solve one and two step problems involving numbers, money, choosing and carrying out appropriate calculations.
- Describe and explain methods, choices and solutions to the problems, orally and in writing, using pictures and diagrams.

Strand 3 Secure knowledge of number facts which can be recalled quickly and used and applied appropriately

- Derive and recall multiplication facts for the 2,3,4,5,6 and 10 times tables and the corresponding division facts
- Use knowledge of number operations and corresponding check calculations

Strand 4 Calculate efficiently and accurately

- Develop and refine written methods to support, record or explain the addition and subtraction of two-digit and three-digit numbers
- Use practical and informal written methods to support multiplication and division of two-digit numbers; round numbers up or down depending on the context.

The children have to complete **Resource Sheets 10.1/2/3**. The sheets offer a range of 'real life' problems for the children to solve. The sheets get progressively more difficult to allow for differentiation. Allow the children to calculate the answers in ways that are appropriate to them. Some may use mental methods, some may use informal written methods. Allow the children to record on ways that are meaningful to them.

A useful curriculum resource for this activity is the ICT program 'Play Train'. This can be downloaded from, http://www.standards.dfes.gov.uk/primary/teachingresources/?subject=S_900361&yeargroup=&term=

Get the bus on time!

Numeracy objectives - Strand 1 Use and apply maths

Year 4

- Suggest a line of enquiry and the strategy needed to pursue it; collect, organise and interpret selected information to find answers

Year 5

- Plan and pursue an enquiry; present evidence by collecting, organising and interpreting information; suggest extensions to the enquiry

Strand 6 - Measure accurately using appropriate units, interpret and compare scales

Year 4

- Read time to the nearest minute, calculate time intervals from timetables

Year 5

- Read timetables and time

This activity involves the children in interpreting timetables and posing questions for each other. Give the children **Resource Sheet 11.1**, ask them to work in pairs to answer the questions. **Resource Sheets 11.2 and 11.3** offer extension activities. Talk with the children about they solved the problems on **Resource Sheet 11.2**

Resource sheet 11.3 involves the children in designing their own timetable.

To give children practise at finding journey times you can download the interactive teaching program, 'Tell the time'; http://www.standards.dfes.gov.uk/primary/teachingresources/mathematics/nns_itps/data_handling/

This can be used with the whole class to set journey start and end times.

Shelters!

Numeracy objectives - Strand 1 Use and apply maths

Year 5

- Plan and pursue an enquiry; present evidence by collecting, organising and interpreting information; suggest extensions to the enquiry

Year 6

- Suggest, plan and develop lines of enquiry; collect, organise and represent information, interpret results and review methods; identify and answer related questions.

Strand 7 Process, present and interpret data to pose and answer questions

Year 5

- Determine the data needed to answer a set of related questions; select and organise relevant data using bar graphs and line graphs that represent the frequencies of events and changes over time; use ICT to present and highlight features that lead to further questions

Year 6

- Solve problems involving selecting, processing, presenting and interpreting data. Using ICT where appropriate; construct bar charts and line graphs, identify further questions to ask.
- Discuss and interpret results and solutions to problems, using the mode, range, median and mean.

This activity is a data handling one and can be completed on paper. However the children can also use the following interactive teaching programs, which can be downloaded. They are also useful to use on an interactive whiteboard, for demonstrating and modelling.

Line graph http://www.standards.dfes.gov.uk/primary/teachingresources/mathematics/nns_itps/line_graph/

Bar graph http://www.standards.dfes.gov.uk/primary/teachingresources/mathematics/nns_itps/data_handling/

Talk to the children about shelters. Ask why they think Go-Ahead provides shelters? Give the children **Resource Sheet 12.1** and then ask them questions about it;

- a) What do you think chart of rainfall and temperature shows?
If there are no correct answers explain that it shows the mean temperature and rainfall.
- b) What has this got to do with shelters?
- c) Ask the children questions about the range of the data.

Give the children calculators and ask them to calculate the mean rainfall and temperature for the year.

Answers • Chapel-in-the-Dale 77.1 • Marystown 63.1 • Leverington 41.2

Resource Sheet 12.2 asks the children to follow a line of enquiry about where to site bus shelters.