More superheroes (double and multi-stage problems)

Starter
Display page 7 of the flipchart. Establish that 0 is in the middle of the number line. Ask the children to draw the same line on their whiteboards. Then ask them for three positive and three negative numbers between –20 and +20. Write these numbers randomly on the board.

Ask the children to order the six numbers on their number lines. Collect answers and ask for a volunteer to move the numbers into order on the board. Extend the activity by telling the children that you have reversed the signs, so negative numbers are now positive and vice versa. Ask a child to reorder the numbers on the board.

Whole-class shared work
● Review the five stages to solving a problem from the previous lesson (on page 3).
● Display page 8 and read out the problem.
● Discuss what information the class needs and invite volunteers to highlight the parts of the problem that supply the information.
● Ask the class to break the problem into two parts and invite children to explain each part.
● Identify that the first part is 14×8, and that the second part is $(14 \times 8) \times 7$. Demonstrate the solution.
● Look at the problem on page 9.
● This problem involves different maths. Invite the children to highlight the key maths parts and ask the class to discuss what different types of maths are being used with this problem (addition and division), and how they could be used together to solve the question.
● If the children need more practice, work through the third example on page 10.

Independent work
● Give out copies of the photocopiable sheet for the children to complete using the five-stage method. All the problems are multi-stage. The children can choose which problems they want to do, and in which order they do them.
● Less able learners could highlight what information is needed to solve each problem, and what mathematics is needed to solve it.
● Encourage more able learners to work through all the problems.

Plenary
● Review the solutions from a number of children. Ask them what maths they used and note this down on page 11. Discuss how, with multi-stage problems, a wider range of maths is needed in order to work out the answer.
● Explain that in the next lesson the class will be writing their own problems and presenting them to their friends to solve.