Primary Problem

Multiple facts

The children play a game in class where they pick a number card up to 100, and write down all the numbers of which it is a multiple (not including 1 and the number itself)

- 1. Sam chooses a number card and writes down 2, 3, 4, 6. What number has Sam chosen?
- 2. Which numbers up to 50 are multiples of 2, 3, 4 and 6?
- 3. Sam says there are no numbers less than 100 that are multiples of 2, 3, 4, 5 and 6. Is Sam correct?
- 4. Sam's friend Andy has a number. He starts writing down numbers which have his number as a multiple. So far he has written 2, 4, 5. Which numbers up to 100 could it be?
- 5. Andy then writes 8, 10, 20. Now which numbers could it be?
- 6. Andy says all the numbers which are multiples of 8 and also multiples of 4. Is Andy correct? Explain your answer?

Problem taken from Problem-solving Toolkit Years 5 and 6 (Maths plus from Heinemann)