

Card Collections

George and Kate collect football cards.
They each have fewer than 60 cards.
They each put their cards in a scrap book.
Fred puts 4 cards on each page, except for one page that he puts 3 cards on.
If Kate had just one more card, she would have exactly 5 cards on every page.

- List all the possibilities for the number of cards that George and Kate have.
- If the children had the same number of cards, how many could they each have?

Learning and Teaching Objectives

- Have a system for finding all possibilities
- Organise the recording of possibilities (ordered list, table)
- Use a method of tracking what has been included and what has not
- Have a way of deciding when all possibilities have been found

Card Collections Solution

1. George -

7,11,15,19,23,27,31,35,39,43,47,51,55,59

Kate –

9,14,19,24,29,34,39,44,49,54,59

2. 19,39,59