

### Notes: Ladybirds

7 to 9

#### Solution and notes

The total of each ladybird's spots must be even.  
The problem is to find three even numbers with a total of 30, or three numbers with a total of 15.

The 12 possibilities for the number of spots on each ladybird are:

2, 4, 24	4, 6, 20	6, 8, 16
2, 6, 22	4, 8, 18	6, 10, 14
2, 8, 20	4, 10, 16	8, 10, 12
2, 10, 18	4, 12, 14	
2, 12, 16		

Working systematically will help to make sure that all possibilities are included.

#### Extension

What if there were 4 ladybirds on the leaf?

What if the ladybirds had 24 spots between them?

Find three even numbers to total 30  
Record systematically