

# KS1 Problem

## Butterfly flowers

Possible approaches and solutions: <https://nrich.maths.org/229/solution>

Age 5 to 7 ★

Look at these butterflies and flowers. All of them have a number.



Can you find two butterflies to go on each flower so that the butterfly numbers add to the flower number?

Which pair of butterflies has no flower to go to? Why?

Which flower cannot have a pair of butterflies on it? Why?

# KS2 problem

## Reach 100

Possible approaches and solutions: <https://nrich.maths.org/1130/solution>

Age 7 to 14 ★★

Here is a grid of four "boxes":


You must choose four **different** digits from **1 – 9** and put one in each box. For example:

5	2
1	9

This gives four two-digit numbers:

52 (reading along the 1st row)  
19 (reading along the 2nd row)  
51 (reading down the left hand column)  
29 (reading down the right hand column)

In this case their sum is 151.

Try a few examples of your own.

Is there a quick way to tell if the total is going to be even or odd?

Your challenge is to find four **different** digits that give four two-digit numbers which add to a total of 100.

How many ways can you find of doing it?



