



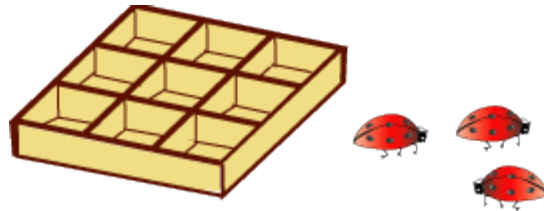
Lesson 1 – 13.07.2020

LO: Problem Solving

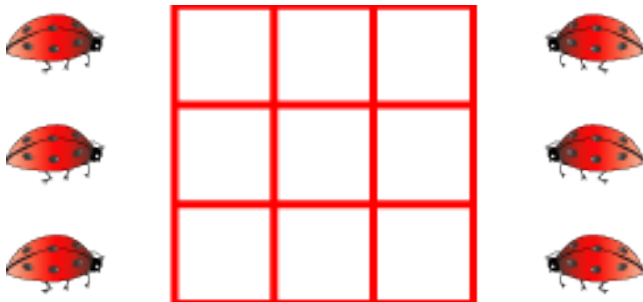
Success Criteria:

1. Draw a grid 3 squares wide and 3 squares high
2. Use counters, pieces of paper or small toys to arrange in the boxes so that there are just two in every column and every row.
3. Then try again and see how many different ways there are to arrange the ladybirds. Have you found all the possibilities?

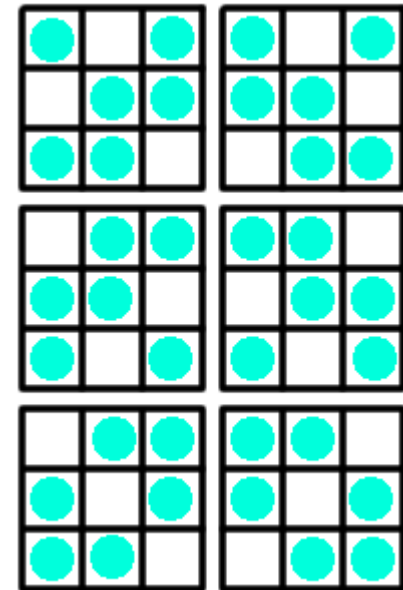
Some toy ladybirds are kept in this box which has 9 little square compartments.



Can you place six ladybirds into the box so that there are just **two ladybirds in every column and every row**?



## POSSIBLE ANSWERS:



1. Begin with Task 1– try to use a **systematic method** (using a pattern to make sure you get all the possible answers) and **write them in order**.
2. Then have a go at Task 2 – **read the clues carefully** to get to the correct solution.

### Task 1

#### Ben's numbers

There are 16 different numbers in Ben's list:

5, 14, 23, 32, 41, 113, 122, 131, 212,  
221, 311, 1112, 1121, 1211, 2111, 11111.

### Task 2

#### Rows of Coins

1. 5p, 2p, 20p, 1p, 10p

2. 2p, 5p, 1p, 2p, 1p, 5p, or its reverse

When two 10p coins are also used:  
2p, 5p, 10p, 2p, 1p, 5p, 1p, 10p, or its  
reverse

