**Learning Objective**

We are learning how to solve a natural world problem by using and applying our skills and knowledge of number **(including addition, multiplication and estimation)**.

**The Problem:**

Dr Greenfingers carefully placed a mixture of red 7-spot ladybirds and black 4-spot ladybirds on his parsley plant so that he could get rid of the aphids that were destroying it.

**One morning, he decided to count the total number of spots that were on the ladybirds. If the number that he counted was an odd number, how many ladybirds of each type were there?**

**Recording:**

|  |  |  |
| --- | --- | --- |
|  | Total Number of Spots (must be an odd number) | Number of Ladybirds |
| Answer 1  (example) | 7 spots + 4 spots = 11 spots | 7-spot ladybirds = 1  4-spot ladybirds = 1 |
| Answer 2 |  | 7-spot ladybirds = \_\_\_  4-spot ladybirds = \_\_\_ |
| Answer 3 |  | 7-spot ladybirds = \_\_\_  4-spot ladybirds = \_\_\_ |
| Answer 4 |  | 7-spot ladybirds = \_\_\_  4-spot ladybirds = \_\_\_ |
| Answer 5 |  | 7-spot ladybirds = \_\_\_  4-spot ladybirds = \_\_\_ |
| Answer 6 |  | 7-spot ladybirds = \_\_\_  4-spot ladybirds = \_\_\_ |

You can use the table below to record the number of ladybirds of each type. You might want to record their spots as numbers and/or draw the ladybirds (as shown in the example).

**How many different answers to the problem did you find?**

**Look closely at your table of answers. Do you notice anything interesting about the numbers of 7-spot and 4-spot ladybirds?**