# Y4 - Place Value

Now that the children are in Year 4, they need to develop a secure understanding of numbers beyond 1000. Through use of Base 10 resources (thousands ▦ , hundreds ▦ , tens ▌ and ones •), children will learn to identify the value of each digit in a 4-digit number (for example, they should know that the **4** in 3**4**22 is **400**). They will also use this knowledge to help them compare and order numbers according to size. In addition to this, children must be able to say what is 1000 more or less than any given number. They will notice that when they add or subtract 1000, the hundreds, tens and ones digits do not change. Children must also be able to round any 4-digit number to the nearest 10, 100 or 1000.

Activities & Games:

☆ **Find a partner and a 1–6 dice,** or even a 0–9 dice if you have one. Each of you draw a set of four boxes like this: ☐☐☐☐ Take turns to roll the dice and decide which of your four boxes to fill. Do this four times each until all your boxes are full. Read the four digits as a whole number. Whoever has the larger four-digit number wins.

There are two possible scoring systems:

1)   A point for a win. The first person to reach 10, wins the game.

2)   Work out the difference between the two 4-digit numbers after each round. The winner keeps this score. First to 10,000 wins.

☆☆ **Roll a dice** (with 6 or 9 numbers on it) four times to get four digits (e.g. 3, 6, 2 and 1). How many different 4-digit numbers can you make with them? Can you make a number that rounds to 3500? Does this change if one of the digits is a zero? Why?

☆ **Guess my numbers** - 'Partner 1' chooses a number between 100 and 1000. 'Partner 2' has to try to work out the number in the least possible number of 'yes/no' questions, e.g. '*Does it have more than 5 tens? Is it an odd number? Is there a number greater than 7 in the thousands column? When you round it to the nearest hundred, does it make _____?*'

☆☆☆ **Four Digit Targets -** Make two sets of the digits from 0 to 9 . Arrange these digits in the five boxes below to make four-digit numbers as close to the target number as possible. You may use each digit once only.

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

☐ largest odd number

☐ largest even number

☐ largest multiple of 3

☐ smallest multiple of 5

☐ number closest to 5000

Going deeper...

MISSING DIGITS!

How many positive integers (whole numbers) less than or equal to 4000 can be written down without using the digits 7,8 or 9?

My Maths

Use our school log in (Username: **coleridge1,** Password: **success74**), and then your own log in details to access activities related to our current topic on the MyMaths website. You can also have a look to see if there are some other fun games you would like to play. If you have misplaced your personal login, please see your class teacher to re-issue you one.

Wonderful websites

Higher or Lower? - Numbers to 10,000

Under the sea

Golden Digits - Select *'Numbers Unit 5-6'*

Whilst it can be very tempting to encourage your child to have a go at the more challenging activities, it is far better to work with them at a level they feel confident with. Significant and regular practise of even the most basic skills outlined in this document will lead to a much deeper understanding and greater proficiency, and ultimately a much more pleasant 'homework' experience for you and your child!