# The Value of Each Digit in a Number 

## Digits

A digit is a single numeral
There are 10 digits: $0,1,2,3,4,5,6,7,8$ and 9
Every other number is made from combining these digits
1 digit numbers
0
1
2
3
4
5
6
7
8
9

## Digits

Can you think of some
2 digit numbers?

Can you think of some 3 digit numbers?

Can you think of some 4 digit numbers?

1,256<br>7,893<br>4,674<br>9,032<br>5,810<br>All the numbers from 1,000 to 9,999

## Place Value

## Value means what something is worth

The place of a digit within a number decides its value
The value of the digits in blue in each number below is different because the digit is in a different place
1
4
8
10
46
81
100
439
868
1,000
4,672
8,295

## Base Ten

For each place that a digit moves to the left, it is worth ten times as much

T

0


## Zero As a Place Value Holder

We represent this by using zero as a 'place value holder'
The zero is not worth anything itself, but it changes the value of the other digit


## Place Value

What is the value of the blue digits in each number?

$$
\begin{array}{ccc}
1 & 4 & 8 \\
10 & 46 & 81 \\
100 & 439 & 868 \\
1,000 & 4,672 & 8,295
\end{array}
$$

# M HTh TTh Th <br> T 

Ones
Tens
Hundreds
Thousands
Ten thousands
Hundred thousands
Millions

# M, HTh TTh Th, H T 

0

40
400

## 4,000

## 40,000

## 400,000

## $4,000,000$

