## Digits

A digit is a single number
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 Can you think of some
2 digit numbers?
13
26
34
57
89

All the numbers from 10 to 100

3 digit numbers?

467
312
897
692
158
All the numbers from 100 to 1,000

Can you think of some
4 digit numbers?

1,256
7,893
4,674
9,032
5,810
All the numbers from 1,000 to 10,000

## Place Value

## Value means what something is worth

The place of a digit decides its value
What is the value of the blue digits in each number?

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

## 2-digit numbers

30


23


75


So when we order 2-digit numbers we need to look at the tens first

## Ordering 2-digit numbers

Order these 2-digit numbers from highest to lowest
Remember, look at the tens first

$$
\begin{array}{llll}
26 & 98 & 31 & 65
\end{array}
$$ $98,65,31,26$

$48 \quad 81 \quad 76 \quad 17$ $81,76,48,17$

## 2-digit numbers

but what about when the tens are the same?


23


If the tens are the same, we then need to look at the units

## Ordering 2-digit numbers

Order these 2-digit numbers from highest to lowest
Remember, look at the tens first and then the units

$$
\begin{array}{cccc}
36 & 32 & 39 & 35 \\
39,36,35,32 & \\
97 & 91 & 95 & 94 \\
97,95,94,91
\end{array}
$$

## 3-digit numbers

156


When we order 3-digit numbers we need to look at the hundreds first

## Ordering 3-digit numbers

Order these 3-digit numbers from highest to lowest
Remember, look at the hundreds first

$$
\begin{array}{cccc}
568 & 911 & 125 & 674 \\
911,674,568,125 & \\
381 & 643 & 897 & 102 \\
897,643,381,102
\end{array}
$$

## 3-digit numbers

but what about when the hundreds are the same?
356




339


If the hundreds are the same, we then need to look at the tens

## Ordering 3-digit numbers

Order these 3-digit numbers from highest to lowest
Remember, look at the hundreds first, then the tens, then the units

$$
\begin{array}{cccc}
267 & 291 & 205 & 300 \\
300,291,267,205 & \\
954 & 966 & 912 & 948 \\
966,954,948,912 &
\end{array}
$$

## Ordering 4-digit numbers

Order these 4-digit numbers from highest to lowest Remember, look at the thousands first, then the hundreds, then the tens, then the units

$$
\begin{gathered}
8,500 \quad 8,263 \quad 3,999 \quad 9,000 \\
9,000,8,500,8,263,3,999 \\
6,765 \quad 6,761 \quad 6,770 \quad 6,712 \\
6,770,6,765,6,761,6,712
\end{gathered}
$$

## Tenths

Units can be split in to tenths
10 tenths make 1 unit

## Units


tenths


## Hundredths

Units can also be split in to hundredths

## 100 hundredths make 1 unit

## Units

hundredths


## Numbers with decimal places

Numbers with decimal follows the same rules
The further to the left a number is, the more it is worth

th

## Place Value

## Value means what something is worth

The place of a digit decides its value
What is the value of the blue digits in each number?
1
4
9
0.1
0.4
0.9
0.01
0.04
0.09
0.001
0.004
0.009

## Zeros after the last digit

In numbers with decimal places, zeros after the las $t$ number do not change the value of the number

The numbers in the same colours below have the same value as each other, despite the extra zeros on the end

| $r$ | 8.0 |
| ---: | :--- |
| 2 | 2.00 |
| 5.1 | 5.10 |
| 7.35 | 7.350000 |

## Ordering numbers with decimal places

## Order these numbers from highest to lowest

Remember, look at the units first, then the tenths, then the hundredths, then the thousandths

$$
\begin{array}{cccc}
6.72 & 6 & 6.9 & 6.311 \\
6.9,6.72,6.311,6
\end{array}
$$

$$
\begin{array}{llll}
2.5 & 2.52 & 2.25 & 2.55
\end{array}
$$

$$
2.55,2.52,2.5,2.25
$$

## Negative numbers

## There are number lower than 0

These numbers are called 'negative numbers'

| -4 | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Ordering negative numbers

## Order these numbers from highest to lowest

$$
\begin{array}{cccc}
-6 & 9 & -1 & 5 \\
& 9,5,-1,-6 &
\end{array}
$$

$$
\begin{array}{cccc}
54 & -45 & -54 & 45 \\
& 54,45,-45,-54 &
\end{array}
$$

