## 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 Can you think of some 2 digit numbers? 3 digit numbers? 4 digit numbers?

13
26
34
57
89
All the numbers from 10 to 100

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

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?
1
4
8
10
46
81
100
439
868 1,000
4,672
8,295

## 2-digit numbers



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 lowest to highest
Remember, look at the tens first

$$
\begin{array}{cccc}
75 & 32 & 61 & 93 \\
32,61,75,93 & \\
56 & 12 & 84 & 29 \\
12,29,56,84
\end{array}
$$

## 2-digit numbers

but what about when the tens are the same?


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

## Ordering 2-digit numbers

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

$$
\begin{gathered}
75 \quad 72 \quad 71 \quad 79 \\
71,72,75,79
\end{gathered}
$$

$56 \quad 52 \quad 54 \quad 58$

$52,54,56,58$

## 3-digit numbers <br> 256



324



When we order 3-digit numbers we need to look at the hundreds firs $\dagger$

## Ordering 3-digit numbers

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

$$
\begin{array}{cccc}
650 & 910 & 126 & 341 \\
& 126,341,650,910 & \\
783 & 812 & 243 & 587 \\
243,587,783,812 &
\end{array}
$$

## 3-digit numbers

but what about when the hundreds are the same?
256


239




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

## Ordering 3-digit numbers

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

\[

\]

## Ordering 4-digit numbers

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

$$
\begin{gathered}
4,652 \quad 6,210 \\
4,299
\end{gathered} 4,658
$$

## Tenths

Units can be split in to tenths

## 10 tenths make 1 unit

## Units



## Hundredths

Units can also be split in to hundredths
100 hundredths make 1 unit


## Numbers with decimal places

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

h 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
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 last 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 lowest to highest
Remember, look at the units first, then the tenths, then the hundredths, then the thousandths

$$
\begin{array}{cccc}
5.4 & 7 & 5.8 & 5.43 \\
& 5.4,5.43,5.8,7 & \\
& & & \\
6.45 & 6.4 & 6.423 & 6.5 \\
6.4,6.423,6.45,6.5 &
\end{array}
$$

## 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 lowest to highest

$$
\begin{array}{cccc}
-2 & 6 & -8 & 4 \\
& -8,-2,4,6 & \\
50 & -20 & -46 & 32 \\
& -46,-20,32,50 &
\end{array}
$$

