Section 1: Decimals
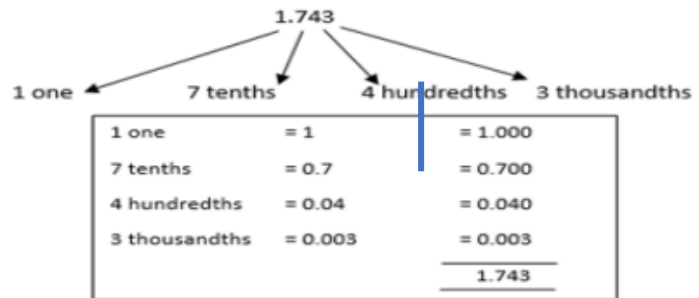### 4 Easy steps to follow to order and compare decimals
Example rule: from smallest to the biggest number
1. Stack up the number being compared and line up the decimal point.
2. Put in zeros so that each number has the same number of decimal digits.
The zero acts as a place holder.
3. Compare each place value one by one, starting with the highest value digit (the one furthest to the left) If the number is the same move to the next highest value.
4. Order the numbers from the least to the greatest

5. Remove the zeros you have added

1.2.3.
```
4.8      4.800   4.800
4.826    4.826   4.826
4.08     4.080   4.080
4.006    4.006   4.006
```

4. 4.006, 4.080, 4.800, 4.826

5. 4.006, 4.08, 4.8, 4.826

The number 1.743 can be broken into four parts:

1.743

1 one   7 tenths   4 hundredths   3 thousandths

1 one	= 1	= 1.000
7 tenths	= 0.7	= 0.700
4 hundredths	= 0.04	= 0.040
3 thousandths	= 0.003	= 0.003
		1.743

Section 2: Rounding decimals

Rounding Decimals

Round **5.1731** to the nearest hundredth.

Step1: Identify given place value...   5.1731

Step2: ...and the one next to it   5.1731 | round!

Step3: Round to nearest ten   5.1701

Step4: Remove all digits after given place value   5.17

Rounding Decimals

Find your **place** and look **next door**.
5 or greater, add one more.

All digits in front, stay the same.
All digits behind, zero's the name.

Round 1.362 to the nearest hundredths.

1.362 ➡ 1.360
6 is at the hundredths place.
We look next door and find the number 2.
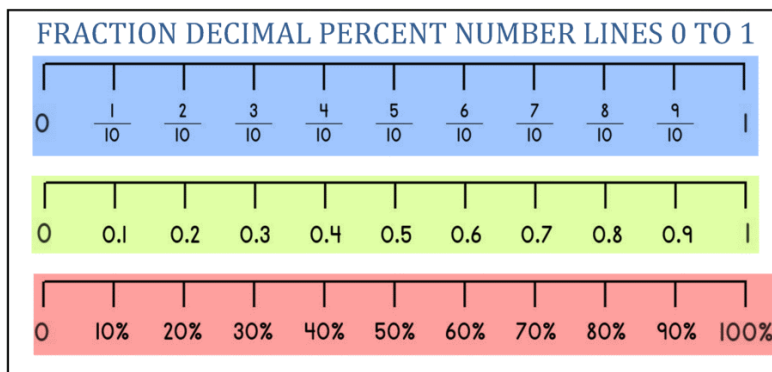2 is less than 5 and so 6 remains the same.

Round 25.378 to the nearest tenths.

25.378 ➡ 25.400
3 is at the tenths place.
We look next door and find the number 7.
7 is more than 5 and so we increase 3 to 4.

Section 3: Percentages and equivalent fractions
Percent relates to the *number of parts per 100.*
The symbol used to show percentage is **%**. You can convert between percentages, fractions and decimals.

FRACTION DECIMAL PERCENT NUMBER LINES 0 TO 1

0   $\frac{1}{10}$ $\frac{2}{10}$ $\frac{3}{10}$ $\frac{4}{10}$ $\frac{5}{10}$ $\frac{6}{10}$ $\frac{7}{10}$ $\frac{8}{10}$ $\frac{9}{10}$ 1

0   0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9   1

0   10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

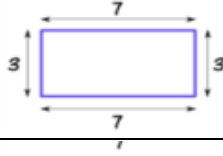| Fraction	Decimal	Percent
$\frac{84}{100}$	0.84	84%

Section 4: Perimeter
Perimeter and Area

Perimeter
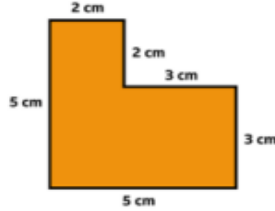Perimeter is the length of the outline of a 2D shape.
Perimeter = length + length + width + width

Example: 7 + 7 + 3 + 3 = 20

A rectilinear shape is a shape that has lots of sides that meet at right angles.
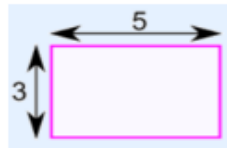
Example: 2 + 2 + 3 + 3 + 5 + 5 = 20

2 cm
2 cm
3 cm
5 cm
3 cm
5 cm

Area
Area is the amount of space taken up by a 2D shape (the inside of the shape).

Area = Length x width

Example: 3 x 5 = 15

5
3

Section 5: Line Graphs

A line graph is **a graphical display of information that changes continuously over time**.
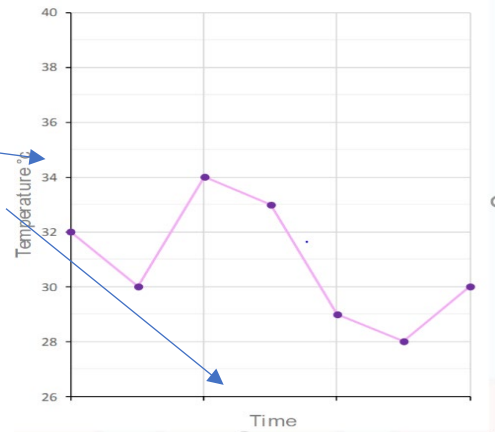Within a line graph, there are various data points connected together by a straight line that reveals a **continuous change** in the values represented by the data points.

The data being measured is shown on the **vertical** axis. The time the data is being measured over is shown on the **horizontal** axis.

Data is plotted on to a line graph in the same way as a coordinate grid. These data plots are then joined with straight lines.

We can use the line of the graph to **describe general trends in the change of the measurement over time,** or to **find precise measurements at a given time.**

A Line Graph to Show the Temperature of the Classroom

Section 6: Reading and interpreting Timetables

Swanage Holiday Camp		
Activity	Red Group	Blue Group
Mini tennis	09:30	09:20
Painting	10:45	10:10
Mountain biking	12:45	10:55
Lunch	13:25	12:55
Football	14:15	13:40
Home Time	15:10	15:00

Timetables can be full of important information and are usually laid out in a table.

24-hour time
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
a.m.   p.m.
12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11
12-hour time

Timetables use a 24-hour clock.

E.g.
1. How many minutes will Blue Group be playing mini tennis?

+ 40 minutes   + 10 minutes

09:20   10:00   10:10   40 + 10 = 50

2. How many minutes longer will Red Group be painting than Blue Group?

Mini tennis   09:30   09:20
Paint   120   10:45   10:10   45
Mountain   minutes   12:45   10:55   minutes
120 - 45 = 75   Lunch   13:25   12:55
Football   14:15   13:40
75 minutes   Home Time   15:10   15:00

Steps to success:
1. Identify the row.
2. Identify the column.
3. Identify the operation to use to answer the question.
4. Solve using time converting skills.
5. Check your answer makes sense.