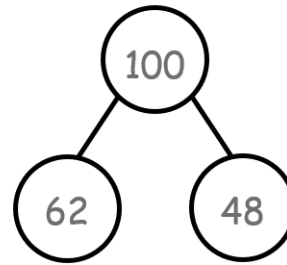


Addition and subtraction facts

+	0	1	2	3	4	5	6	7	8	9	10
0	0+0	0+1	0+2	0+3	0+4	0+5	0+6	0+7	0+8	0+9	0+10
1	1+0	1+1	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10
2	2+0	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8	2+9	2+10
3	3+0	3+1	3+2	3+3	3+4	3+5	3+6	3+7	3+8	3+9	3+10
4	4+0	4+1	4+2	4+3	4+4	4+5	4+6	4+7	4+8	4+9	4+10
5	5+0	5+1	5+2	5+3	5+4	5+5	5+6	5+7	5+8	5+9	5+10
6	6+0	6+1	6+2	6+3	6+4	6+5	6+6	6+7	6+8	6+9	6+10
7	7+0	7+1	7+2	7+3	7+4	7+5	7+6	7+7	7+8	7+9	7+10
8	8+0	8+1	8+2	8+3	8+4	8+5	8+6	8+7	8+8	8+9	8+10
9	9+0	9+1	9+2	9+3	9+4	9+5	9+6	9+7	9+8	9+9	9+10
10	10+0	10+1	10+2	10+3	10+4	10+5	10+6	10+7	10+8	10+9	10+10

Using bonds to 10 and 100



$$62 + 48 = 110$$

Diagram showing 62 broken into 60 and 2, and 48 broken into 40 and 8. A dashed red box encloses the 2 and 8, with a red 10 below it, indicating the exchange of 10 units.

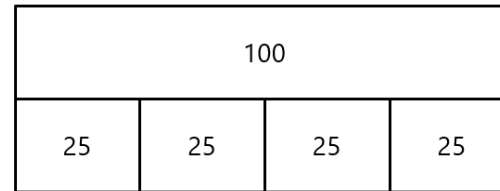
Sometimes, we can see and use number bonds to help us add, rather than the formal method.

I know that 60 + 40 = 100

I know that 2 + 8 = 10

100 + 10 = 110

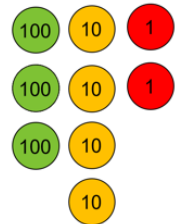
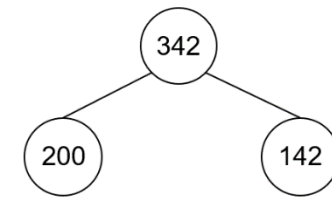
Interpreting bar models



$100 = 25 + 25 + 25 + 25$ $100 = 4 \times 25$

$100 \div 4 = 25$ $100 = 25 \times 4$ $100 \div 25 = 4$

I know the place value in 3-digit numbers



1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

Multiplication tables – the 144 facts I need to know by the end of Y4

1 × 1	1 × 2	1 × 3	1 × 4	1 × 5	1 × 6	1 × 7	1 × 8	1 × 9	1 × 10	1 × 11	1 × 12
2 × 1	2 × 2	2 × 3	2 × 4	2 × 5	2 × 6	2 × 7	2 × 8	2 × 9	2 × 10	2 × 11	2 × 12
3 × 1	3 × 2	3 × 3	3 × 4	3 × 5	3 × 6	3 × 7	3 × 8	3 × 9	3 × 10	3 × 11	3 × 12
4 × 1	4 × 2	4 × 3	4 × 4	4 × 5	4 × 6	4 × 7	4 × 8	4 × 9	4 × 10	4 × 11	4 × 12
5 × 1	5 × 2	5 × 3	5 × 4	5 × 5	5 × 6	5 × 7	5 × 8	5 × 9	5 × 10	5 × 11	5 × 12
6 × 1	6 × 2	6 × 3	6 × 4	6 × 5	6 × 6	6 × 7	6 × 8	6 × 9	6 × 10	6 × 11	6 × 12
7 × 1	7 × 2	7 × 3	7 × 4	7 × 5	7 × 6	7 × 7	7 × 8	7 × 9	7 × 10	7 × 11	7 × 12
8 × 1	8 × 2	8 × 3	8 × 4	8 × 5	8 × 6	8 × 7	8 × 8	8 × 9	8 × 10	8 × 11	8 × 12
9 × 1	9 × 2	9 × 3	9 × 4	9 × 5	9 × 6	9 × 7	9 × 8	9 × 9	9 × 10	9 × 11	9 × 12
10 × 1	10 × 2	10 × 3	10 × 4	10 × 5	10 × 6	10 × 7	10 × 8	10 × 9	10 × 10	10 × 11	10 × 12
11 × 1	11 × 2	11 × 3	11 × 4	11 × 5	11 × 6	11 × 7	11 × 8	11 × 9	11 × 10	11 × 11	11 × 12
12 × 1	12 × 2	12 × 3	12 × 4	12 × 5	12 × 6	12 × 7	12 × 8	12 × 9	12 × 10	12 × 11	12 × 12

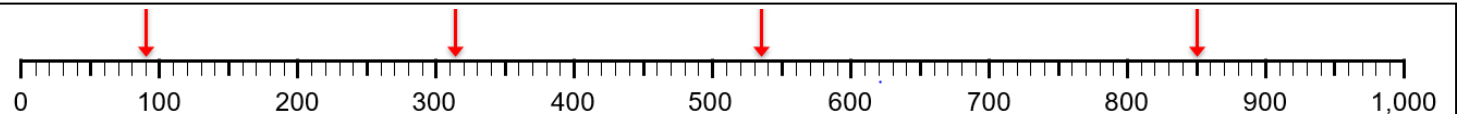
Scaling facts by 10

If I know that 5 + 6 = 11, then I know that 5 tens + 6 tens = 11 tens so 50 + 60 = 110

If I know that 12 – 5 = 7, then I know that 12 tens – 5 tens = 7 tens so 120 – 50 = 70

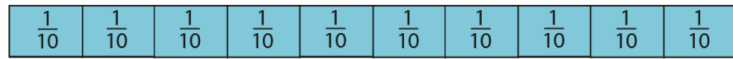
If I know that 5 × 4 = 20, then I know that 5 × 4 tens = 20 tens so 5 × 20 = 200

Counting in 2s, 5s and 10s and applying this to scales and number lines

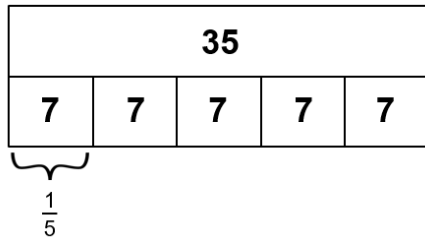


Fractions

I can count in tenths. I know that 10 tenths = 1 whole



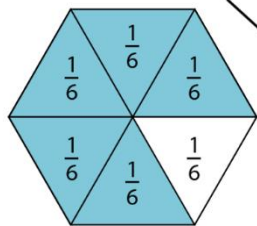
I can find unit fractions of an amount. I know the denominator tells me what to split my whole into.



$\frac{1}{5}$ of 35
 $35 \div 5 = 7$
 So $\frac{1}{5}$ of 35 = 7

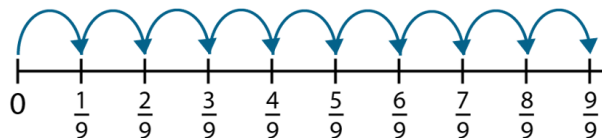
I understand what each part of the fraction notation means.

The whole has been divided into equal parts.

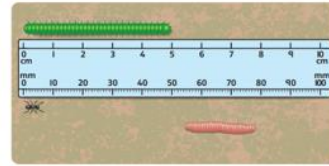


$\frac{5}{6}$
 5 of the parts are shaded.
 There are 6 equal parts.

I know that when the numerator and denominator are the same, the fraction has a value of one.

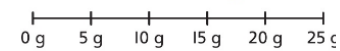


Measure –

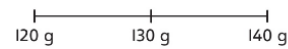


10mm = 1cm so 50mm = 5cm

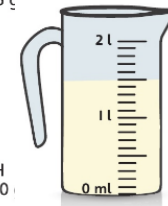
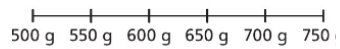
Each interval is 5 g.



Each interval is 10 g.



Each interval is 50 g.



The interval is 10ml.
 Therefore, the **volume** is 1l and 500ml.

The **capacity** of the jug is 2l.

Telling the time

The big hand tells me information about the minutes.



5 minutes past 2



20 minutes past 2



50 minutes past 2

The small hand tells me information about the hour.



6 minutes past 5



27 minutes past 4

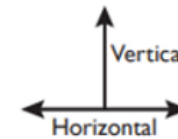
This is the same as 10 minutes to 3.

60 seconds = 1 minute
 60 minutes = 1 hour
 24 hours = 1 day

XI XII I
 X Roman numerals to 12 II
 IX III
 VIII IV
 VII VI V

Geometry

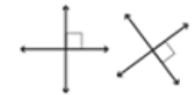
Horizontal and vertical lines



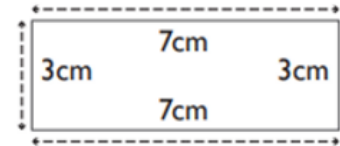
Parallel lines



Perpendicular lines – they make a right angle



Perimeter – the total distance around a shape

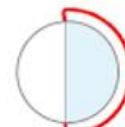


The perimeter for the rectangle is 20cm

Right angles



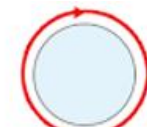
1 right angle
 quarter turn
90°



2 right angles
 2 quarter turns or half turn
180°



3 right angles
 3 quarter turns
270°



4 right angles
 4 quarter turns or full turn
360°