

# Year 3 Number and Place Value

## Counting in multiples of 4

4	8	12	16
20	24	28	32
36	40	44	48

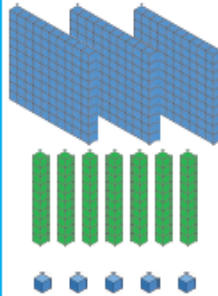
## Counting in multiples of 8

8	16	24	32
40	48	56	64
72	80	88	96

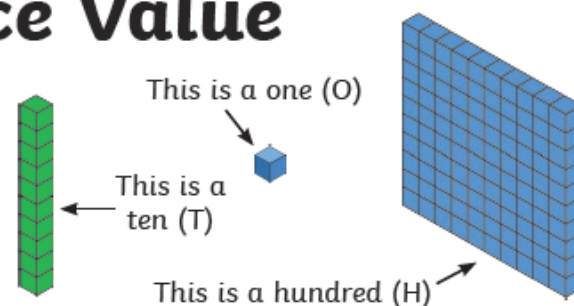
## Counting in multiples of 50

50	100	150	200
250	300	350	400
450	500	550	600

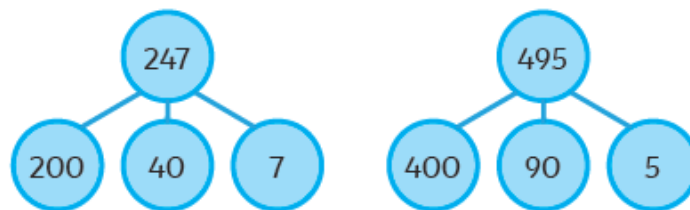
greater than  $>$  less than  $<$  equal to  $=$   
 $345 > 102$   $102 < 345$   $102 = 102$

written form  three hundred and seventy-five	numerical (standard) form  375
expanded form  $300 + 70 + 5$	model form 

375



twenty	20	one hundred	100
thirty	30	two hundred	200
forty	40	three hundred	300
fifty	50	four hundred	400
sixty	60	five hundred	500
seventy	70	six hundred	600
eighty	80	seven hundred	700
ninety	90	eight hundred	800
		nine hundred	900
		one thousand	1000



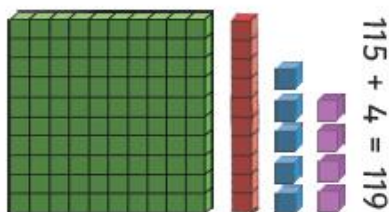
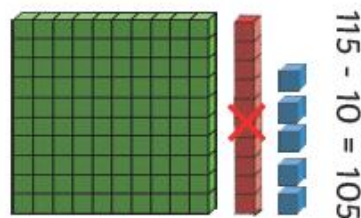
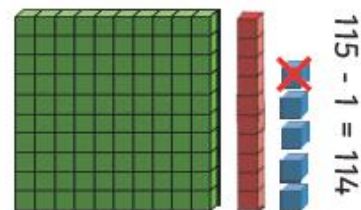
# Year 3 Addition and Subtraction


**Subtraction: Column Method**


1	$\begin{array}{r} 453 \\ -348 \\ \hline \end{array}$	2	$\begin{array}{r} 453 \\ -348 \\ \hline \end{array}$
Place the numbers one on top of the other, lining up the hundreds, tens and ones.		Subtract the ones (note that the answer to $3 - 8$ is negative).	
3	$\begin{array}{r} 453 \\ -348 \\ \hline 5 \\ \hline \end{array}$	4	$\begin{array}{r} 453 \\ -348 \\ \hline 05 \\ \hline \end{array}$
Exchange a 10 from the 50 to give 13 ones. Subtract the ones: $13 - 8 = 5$		Subtract the tens: $40 - 40 = 0$	
5	$\begin{array}{r} 453 \\ -348 \\ \hline 105 \\ \hline \end{array}$	6	$\begin{array}{r} 453 \\ -348 \\ \hline 105 \\ \hline \end{array}$
Subtract the hundreds: $400 - 300 = 100$		Check your answer. ✓	



**Addition: Column Method**

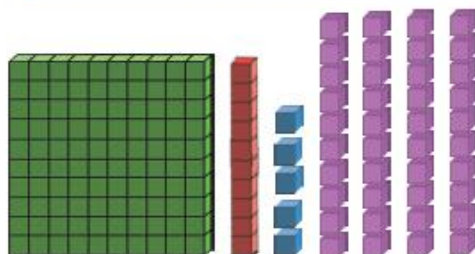
1	$\begin{array}{r} 453 \\ +348 \\ \hline \end{array}$	2	$\begin{array}{r} 453 \\ +348 \\ \hline 1 \\ \hline \end{array}$
Place the numbers one on top of the other, lining up the hundreds, tens and ones.		Add the ones and write the answer.	
3	$\begin{array}{r} 453 \\ +348 \\ \hline 1 \\ \hline \end{array}$	4	$\begin{array}{r} 453 \\ +348 \\ \hline 01 \\ \hline \end{array}$
Regroup any tens under the tens column.		Add the tens including any tens you have regrouped. Regroup any hundreds under the hundreds column.	
5	$\begin{array}{r} 453 \\ +348 \\ \hline 801 \\ \hline \end{array}$	6	$\begin{array}{r} 453 \\ +348 \\ \hline 801 \\ \hline \end{array}$
Add the hundreds including any hundreds you have regrouped.		Check your answer. ✓	



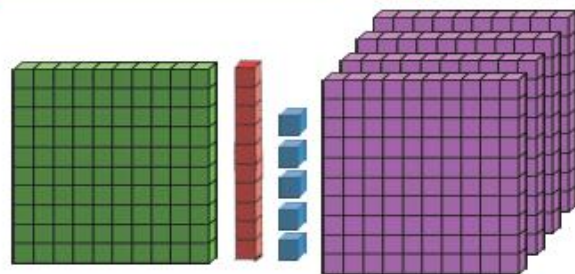
combined  
altogether sum  
more  add  
and plus  
total

take away  
minus reduce  
how many more?  
fewer  less  
How many remain?  
difference subtract

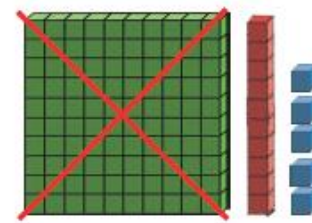
equals  
  
  
makes



$115 + 40 = 155$





$115 + 400 = 515$



$115 - 100 = 15$

# Year 3 Multiplication and Division

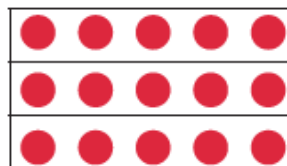
product  
multiply array  
repeated addition  times times by  
groups of sets of lots of

equally grouped  
half halves  divided by  
shared by equally shared

Repeated Addition

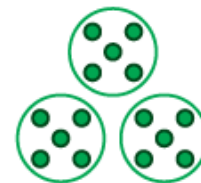
$$5 + 5 + 5 = 15$$

Array



$$5 \times 3 = 15$$

Equal Groups



$$5 \times 3 = 15$$

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

3

$$3 \times 1 = 3$$

$$3 \times 2 = 6$$

$$3 \times 3 = 9$$

$$3 \times 4 = 12$$

$$3 \times 5 = 15$$

$$3 \times 6 = 18$$

$$3 \times 7 = 21$$

$$3 \times 8 = 24$$

$$3 \times 9 = 27$$

$$3 \times 10 = 30$$

$$3 \times 11 = 33$$

$$3 \times 12 = 36$$

$$3 \div 3 = 1$$

$$6 \div 3 = 2$$

$$9 \div 3 = 3$$

$$12 \div 3 = 4$$

$$15 \div 3 = 5$$

$$18 \div 3 = 6$$

$$21 \div 3 = 7$$

$$24 \div 3 = 8$$

$$27 \div 3 = 9$$

$$30 \div 3 = 10$$

$$33 \div 3 = 11$$

$$36 \div 3 = 12$$

4

$$4 \times 1 = 4$$

$$4 \times 2 = 8$$

$$4 \times 3 = 12$$

$$4 \times 4 = 16$$

$$4 \times 5 = 20$$

$$4 \times 6 = 24$$

$$4 \times 7 = 28$$

$$4 \times 8 = 32$$

$$4 \times 9 = 36$$

$$4 \times 10 = 40$$

$$4 \times 11 = 44$$

$$4 \times 12 = 48$$

$$4 \div 4 = 1$$

$$8 \div 4 = 2$$

$$12 \div 4 = 3$$

$$16 \div 4 = 4$$

$$20 \div 4 = 5$$

$$24 \div 4 = 6$$

$$28 \div 4 = 7$$

$$32 \div 4 = 8$$

$$36 \div 4 = 9$$

$$40 \div 4 = 10$$

$$44 \div 4 = 11$$

$$48 \div 4 = 12$$

8

$$8 \times 1 = 8$$

$$8 \times 2 = 16$$

$$8 \times 3 = 24$$

$$8 \times 4 = 32$$

$$8 \times 5 = 40$$

$$8 \times 6 = 48$$

$$8 \times 7 = 56$$

$$8 \times 8 = 64$$

$$8 \times 9 = 72$$

$$8 \times 10 = 80$$

$$8 \times 11 = 88$$

$$8 \times 12 = 96$$

$$8 \div 8 = 1$$

$$16 \div 8 = 2$$

$$24 \div 8 = 3$$

$$32 \div 8 = 4$$

$$40 \div 8 = 5$$

$$48 \div 8 = 6$$

$$56 \div 8 = 7$$

$$64 \div 8 = 8$$

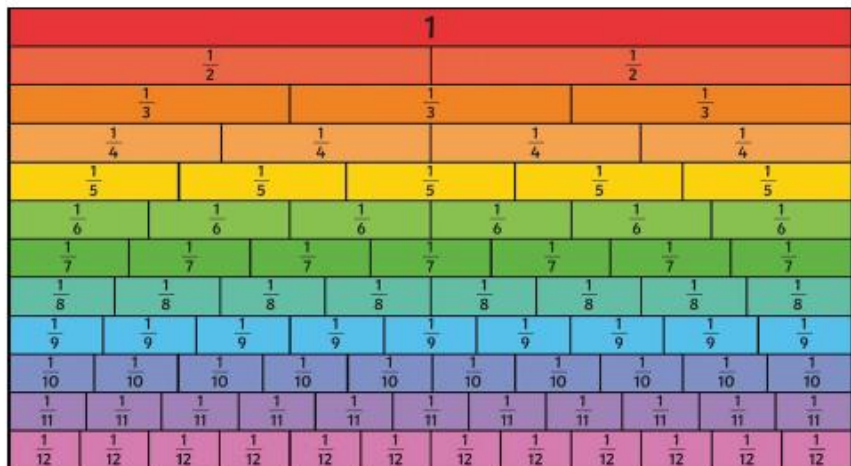
$$72 \div 8 = 9$$

$$80 \div 8 = 10$$

$$88 \div 8 = 11$$

$$96 \div 8 = 12$$

# Year 3 Fractions



## Numerators and Denominators



**Numerator (how many)**  
How many parts are you looking at? →  $\frac{3}{4}$

**Denominator (what kind)**  
How many equal parts is the whole divided into? →  $\frac{3}{4}$



$$= \frac{1}{3}$$



$$= \frac{2}{5}$$

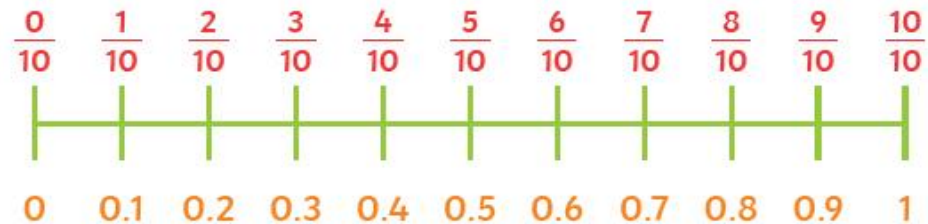
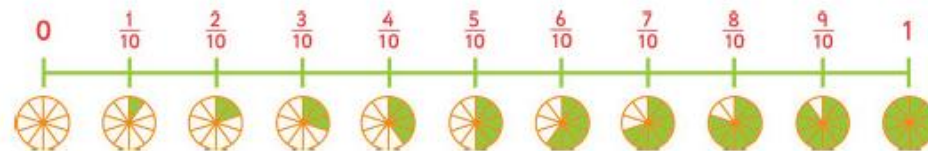


$$= \frac{5}{8}$$

1 whole    2 halves    3 thirds    4 quarters    5 fifths



6 sixths    7 sevenths    8 eighths    9 ninths    10 tenths



60 seconds = 1 minute

# Year 3 Measurement



Roman Numerals



o'clock



quarter past



half past



quarter to

January = 31 days

February = 28 days  
(29 on a leap year)

March = 31 days

April = 30 days

May = 31 days

June = 30 days

July = 31 days

August = 31 days

September = 30 days

October = 31 days

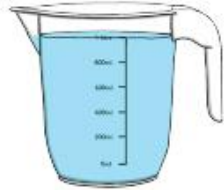
November = 30 days

December = 31 days



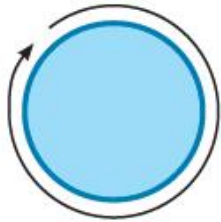
100 ml

100 millilitres

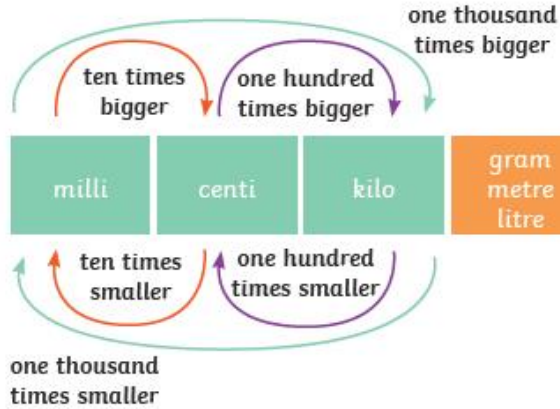


1l

1 litre



Perimeter



1p



2p



5p



10p



20p



50p



£1



£2



£5

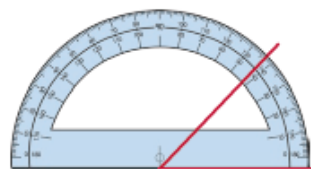
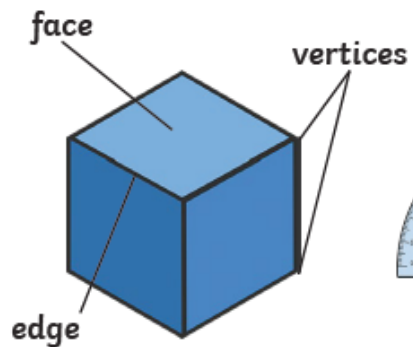
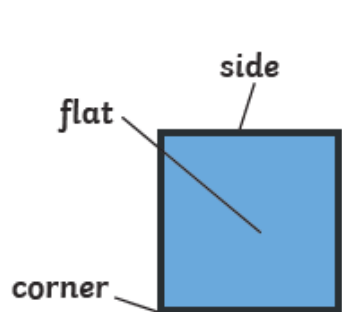


£10

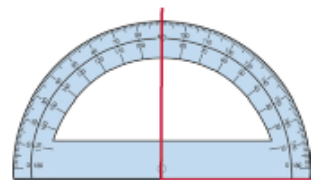


£20

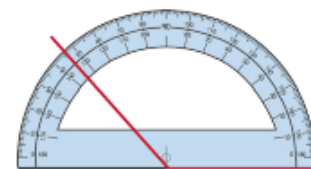
# Year 3 Properties of Shape



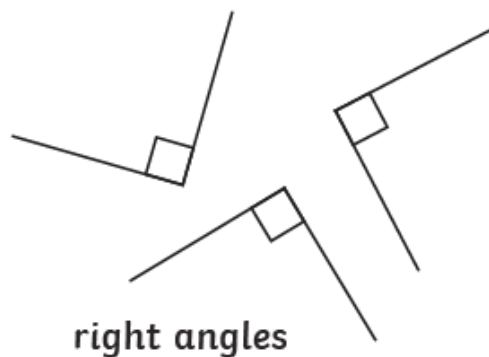
acute angle



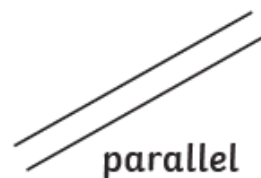
right angle



obtuse angle

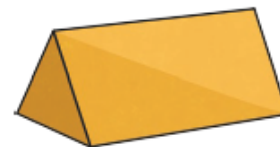
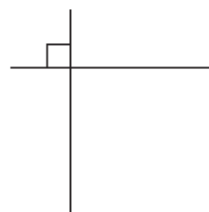


right angles



parallel

perpendicular



triangular prism



triangular-based pyramid



circle



rectangle



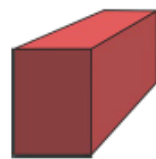
square



triangle



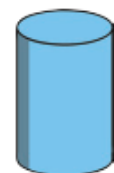
cube



cuboid



cone



cylinder



square-based pyramid



sphere

# Year 3 Statistics Word Mat

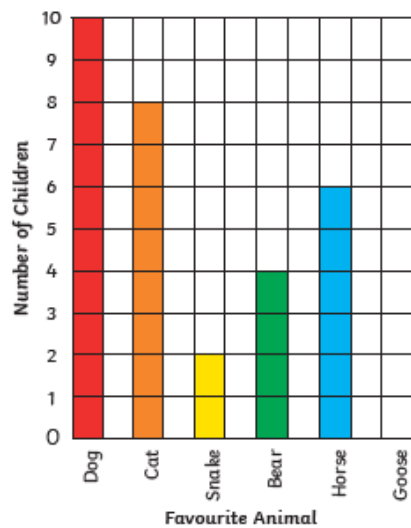
## Bar Chart

A bar chart is used to clearly display results and information.

Types of items are shown on the x-axis, which is horizontal.

The number of items are shown on the y-axis, which is vertical.





One block represents one item. It is quicker to compare results using a block diagram than a table or tally chart.



## Carroll Diagram

A Carroll diagram is a table used for sorting objects based on whether they do or do not meet two given criteria.

Carroll diagrams were invented by Lewis Carroll, the author of 'Alice in Wonderland'.

	Red	Not Red
Quadrilateral		
Not a Quadrilateral		

## Table

A table is used to record information and collect results.

The information can then be used to make pictograms or block diagrams to display results clearly.

A table needs to have headings to show what you are measuring or recording.

Favourite Animal	Number of Children
Dog	10
Cat	8
Snake	2
Bear	4
Horse	6
Goose	0