Useful websites and links

http://www.whizz.com/ (Maths Whizz)

http://www.mathszone.co.uk/

http://www.bbc.co.uk/bitesize/ks1/maths/

http://www.bbc.co.uk/schools/websites/4_11/site/numeracy.shtml

https://www.mathsisfun.com/

http://www.topmarks.co.uk/Interactive.aspx?cat=8

http://resources.woodlands-junior.kent.sch.uk/teacher/maths.html

http://www.amblesideprimary.com/ambleweb/maths.htm

http://games.e4education.co.uk/groupone/

Year 3 Mathematics Parent Booklet

**Community School and Children's Centre**

Supporting your child at home.

Learning

Counting

Counting with your child on a daily basis can dramatically support their understanding of the number system and place value. By the end of year 1, most children are expected to count in 3's, 4's, 6's, 8's, 10's and 100's from any given number. E,g. count in 3's starting from 4– 4, 7, 10 ….

Counting everyday whilst undertaking daily activities at home, can help develop your child's fluency of numbers and become familiarised with counting in different steps but not always starting at 0 or 1.
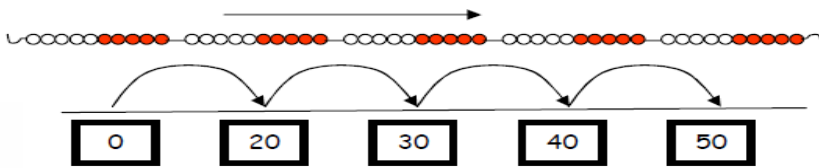
Shapes and measure

By the end of year 3, most children should be able to recognised 2D and 3D shapes and begin to use more mathematical language to describe the properties of these shapes. They will be able to recognise right angles within 2D shapes, beginning to estimate and measure other angles.. At home, using the correct language when talking about household objects or when going shopping can develop their language and understanding.

By the end of year 3, most children will be able to convert between cm and mm, using a ruler to accurately measure length. Children will be exposed to other units of measure for distance, mass and length.
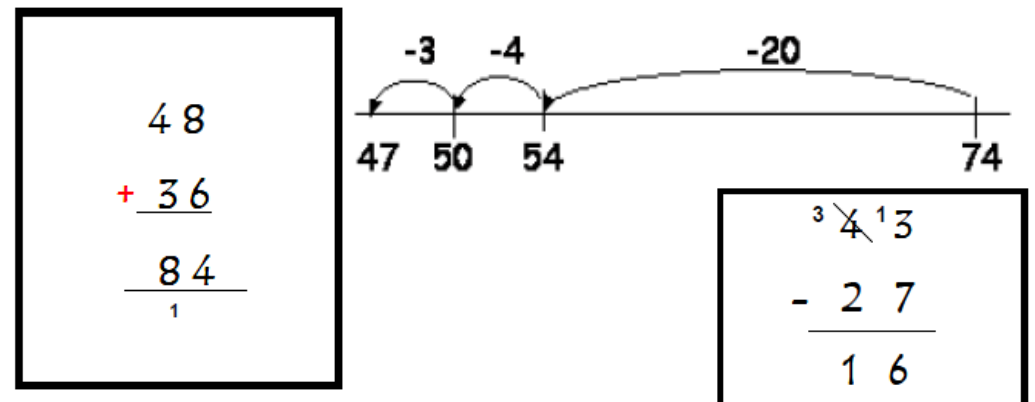
Learning

Addition and Subtraction

By the end of year 3, most children will be adding and subtracting numbers beyond four digit numbers, continuing to use their knowledge and understanding of number bonds.

Your child will be using formal methods for addition and subtraction, using the number line and column method to add and subtract, up to 4 digits. Regrouping strategy will be reinforced to your child, which is required to subtract using the column method. The number line and column methods will be recorded formally within maths books.

At home, practising the number bonds to 100 and 1000 will significantly support your child, reinforcing the learning from school. When your child is ready, practising using the formal column method for addition and subtraction will reinforce learning.

Each week, your child will be given a few 'Learn it' facts to learn and memorise at home. Saying these facts, chanting or even singing will encourage your child to memorise and recall the facts.
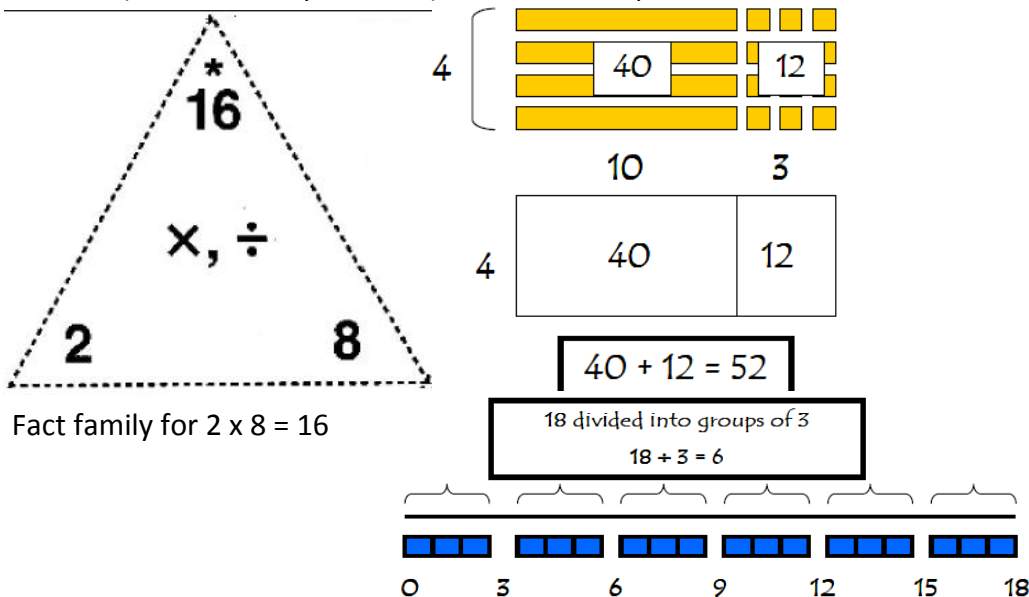
Learning

Multiplication and Division

By the end of year 3, most children will be able to count in multiples of 3, 4, 5, 9 and 10. Using knowledge of multiplication calculations, children will begin to use formal written methods to record their work, including the use of arrays. At home, you can support your child by practising reciting multiplication tables.
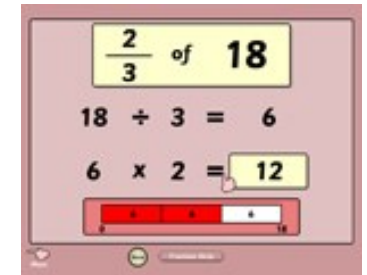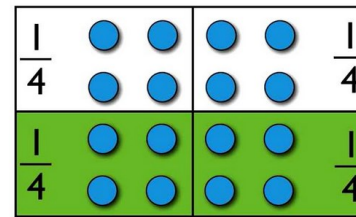
By the end of year 3, most children will be able to divide numbers to 100, the concept of 'remainders' will be consolidated using objects and pictures. Children will be encouraged to begin to formally record their work, showing an understand of multiplication tables to support dividing. They will also use repeated subtraction to divide. At home, encourage your child to use multiplication facts to think about the corresponding division facts. Practising fact families (see the example below), to recall multiplication and division facts.

Fact family for 2 x 8 = 16

Learning

Fractions

By the end of year 3, most children will be able to find half, quarter, 3/4, and 1/3 of objects, amounts and quantities. Children will be linking their knowledge of division to find fractions of amounts and quantities. Children will be identify simple equivalent fractions– to 1/2, 1/4 and 1/3.

$$\frac{2}{4} \text{ of } 16 = 8$$

Problem solving

By the end of year 3, most children will be able to solve one step problems and begin to solve two step problems involving all four operations. These problems will include topics like money, measure, fractions and puzzles. Some problems will require children to use inverse operation to solve the problems, working backwards.

At home, saying problems and encouraging your child to answer them or find a solution will develop their problem solving confidence and independence. Here are some examples of questions that could be posed:

'How many minutes are there in six hours?'

'Double 7 is equal to ?'

'How many months are there in one year?'

Magic Ten

Termly 'Learn its'

We use **'Magic Ten'** every day to develop and secure our number facts and knowledge. We count, chant, sing and play games. We focus on number bonds, multiplication and division facts, using these to solve **'It's nothing new'** questions.

You can help your child by consolidating these number facts; learning and practising them at home using the **'part, part, whole' model.**

Fact family:

3 x 8 = 24
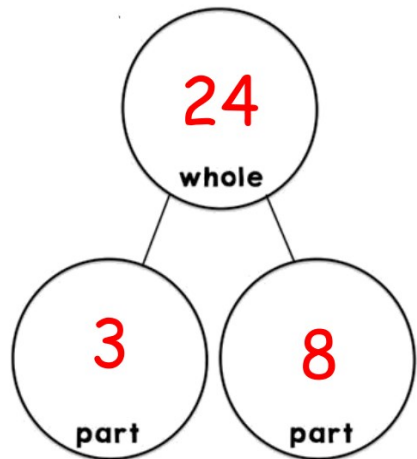
8 x 3 = 24

24 ÷ 3 = 8

24 ÷ 8 = 3

It's nothing new

240 ÷ 30 = 8

2400 ÷ 300 = 8

240 ÷ 80 = 3

2400 ÷ 800 = 3

3 x 8 = 24

30 x 8 = 240

300 x 8 = 2400

3 x 80 = 240

3 x 800 = 2400

Term 1	Term 2	Term 3
Adding numbers	**Adding numbers**	**Adding numbers**
	Revision	**Revision**

+	2	3	4	5	6	7	8	9
2	4	5	6	7	8	9	10	11
3	5	6	7	8	9	10	11	12
4	6	7	8	9	10	11	12	13
5	7	8	9	10	11	12	13	14
6	8	9	10	11	12	13	14	15
7	9	10	11	12	13	14	15	16
8	10	11	12	13	14	15	16	17
9	11	12	13	14	15	16	17	18

3 times table

3 X 0	=	0
3 X 1	=	3
3 X 2	=	6
3 X 3	=	9
3 X 4	=	12
3 X 5	=	15
3 X 6	=	18
3 X 7	=	21
3 X 8	=	24
3 X 9	=	27
3 X 10	=	30
3 X 11	=	33
3 X 12	=	36

4 times table

4 X 0	=	0
4 X 1	=	4
4 X 2	=	8
4 X 3	=	12
4 X 4	=	16
4 X 5	=	20
4 X 6	=	24
4 X 7	=	28
4 X 8	=	32
4 X 9	=	36
4 X 10	=	40
4 X 11	=	44
4 X 12	=	48

9 times table

9 X 0	=	0
9 X 1	=	9
9 X 2	=	18
9 X 3	=	27
9 X 4	=	36
9 X 5	=	45
9 X 6	=	54
9 X 7	=	63
9 X 8	=	72
9 X 9	=	81
9 X 10	=	90
9 X 11	=	99
9 X 12	=	108

Key vocabulary

Parts of a Subtraction Equation

Subtract

Equals

10 6 4

Minuend

Subtrahend

Difference
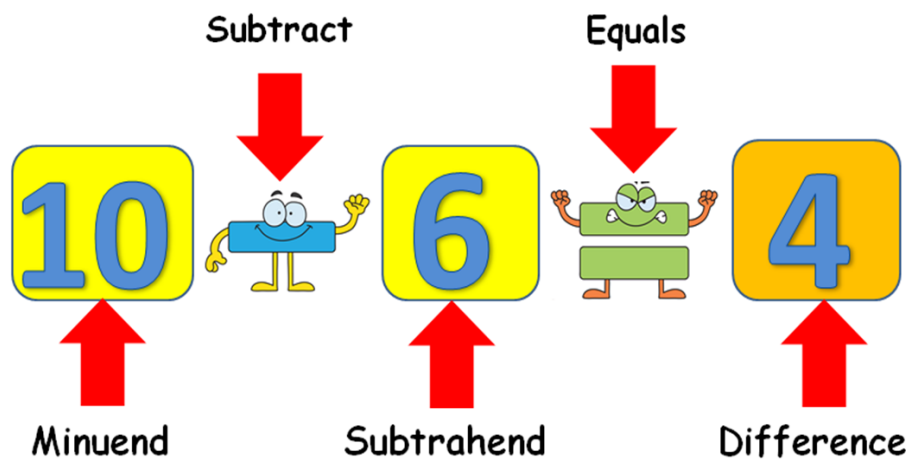
Parts of an Addition Equation

Add

Equals

9 2 11

Addend

Addend

Sum
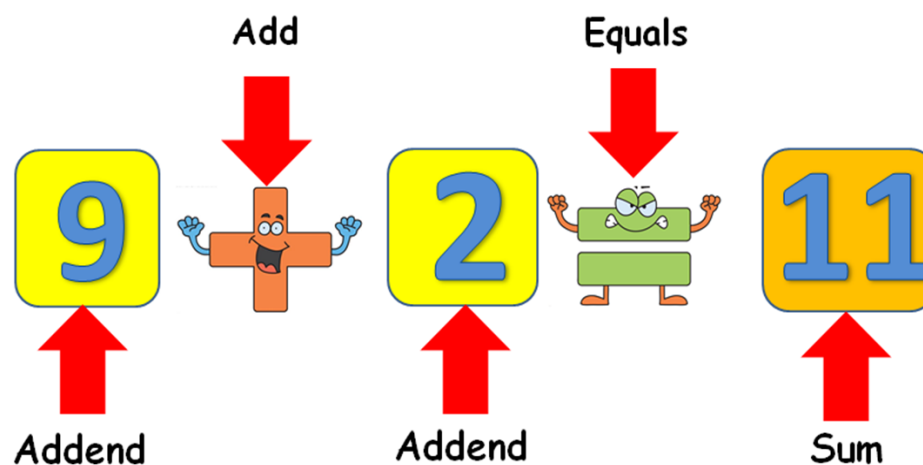
Parts of a Multiplication Equation

Multiply

Equals

9 2 18

Multiplier

(Factor)

Multiplicand

(Factor)

Product
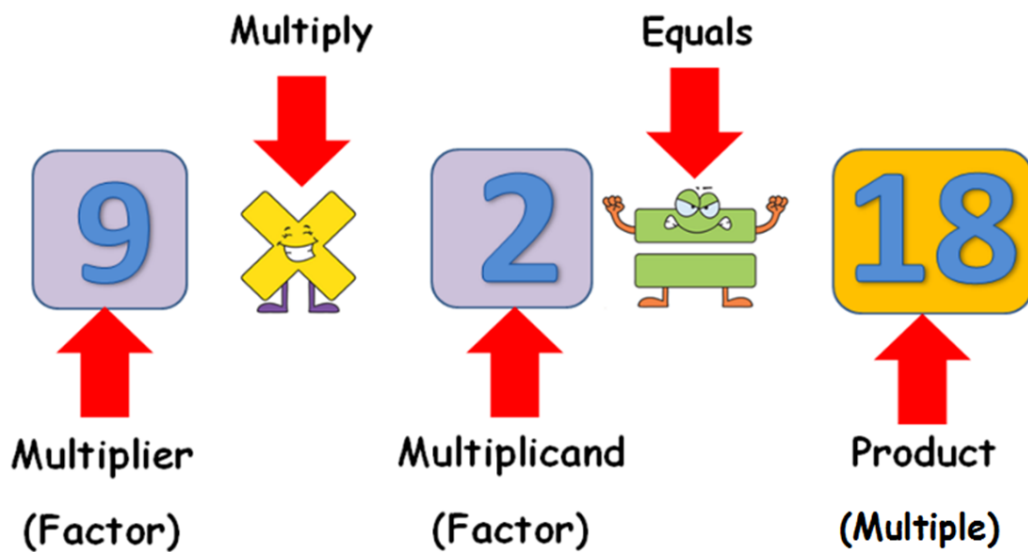
(Multiple)

Parts of a Division Equation

Divide

Equals

18 9 2

Dividend

(Multiple)

Divisor

(Factor)

Quotient

(Factor)
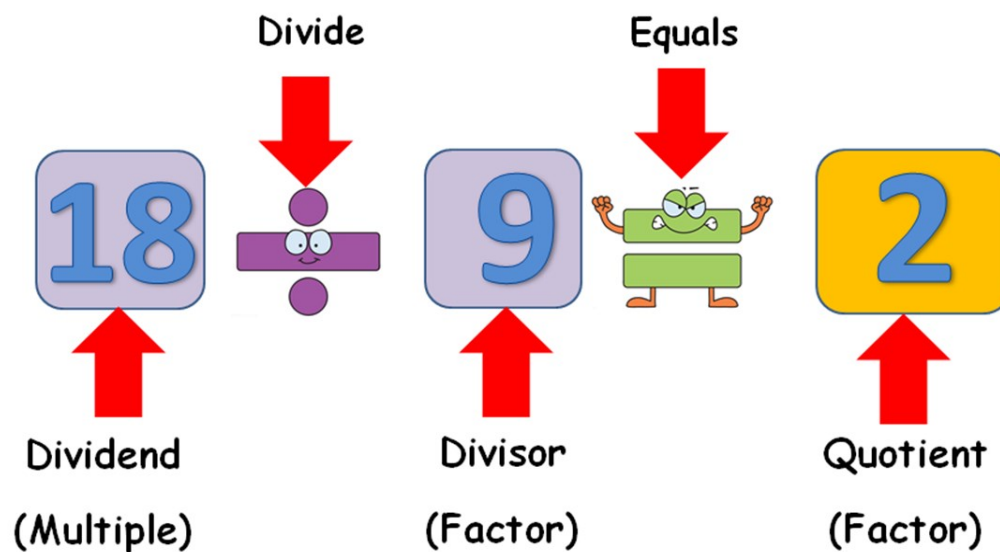
Key vocabulary

I name you.....
Equation!

9 + 2 = 11

Equation

New maths vocabulary for year 3							
Number and place value	Addition and subtraction	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions	Data/statistics
Numbers to one thousand	Column addition and subtraction	Product Multiples of four, eight, fifty and one hundred Scale up	Leap year Twelve-hour/twenty-four-hour clock Roman numerals I to XIII	Greater/less than ninety degrees Orientation (same orientation, different orientation)	Horizontal, vertical, perpendicular and parallel lines	Numerator, denominator Unit fraction, non-unit fraction Compare and order Tenths	Chart, bar chart, frequency table, Carroll diagram, Venn diagram Axis, axes Diagram