

# 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](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 4 Mathematics Parent Booklet

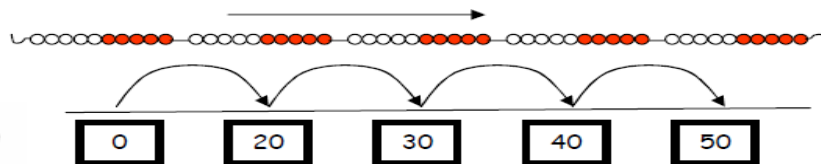


**Supporting your child at  
home.**

# 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 6's, 7's, 8's 9's and 12's. 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 4, most children should be able to recognise 2D and 3D shapes and use mathematical language to describe the properties of these shapes. They will be able to recognise right angles, acute angles and reflex angles. At home, using the correct language when talking about household objects or when going shopping can develop their language and understanding. Also, encouraging your child to practise using a protractor.

By the end of year 4, most children will be able to convert between standard units of measure, including length, mass and capacity. Children will use their knowledge of multiply and divide by 10, 100 and 1000.



# Learning

## Addition and Subtraction

By the end of year 4, most children will be adding and subtracting numbers beyond five digit numbers, including decimals, continuing to use their knowledge and understanding of number bonds and mental addition.

Your child will be using formal methods for addition and subtraction, moving away from the number line to securely using the column method to add and subtract. Regrouping strategy will be reinforced to your child, which is required to subtract using the column method. Adding and subtracting decimals will be introduced within different contexts, including money and measure. At home, practising the number bonds to 100 and 1000 will significantly support your child, reinforcing the learning from school. 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.

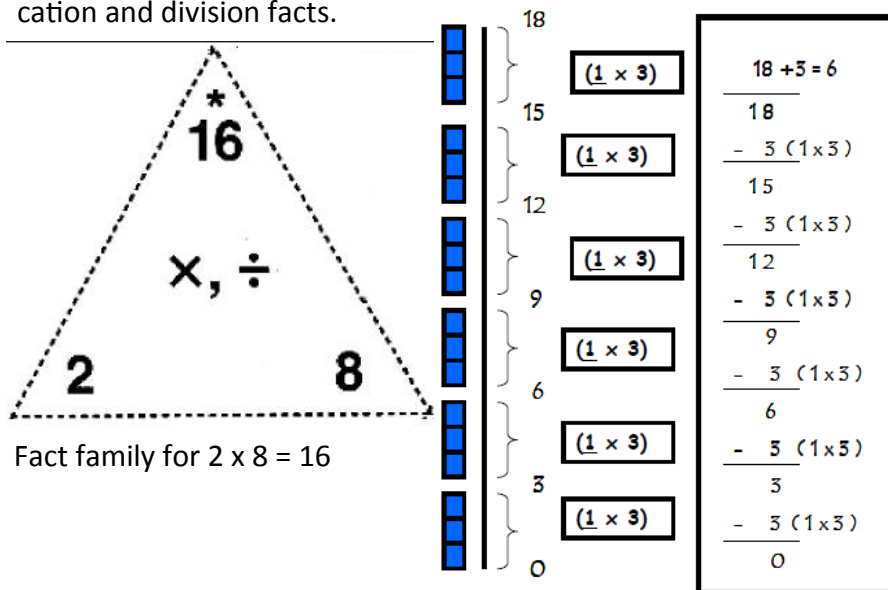
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# Learning

## Multiplication and Division

By the end of year 4, children are expected to know all multiplication tables to 12 x 12 and recall the corresponding division facts. 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, ensuring your child can recall them and the corresponding division facts.

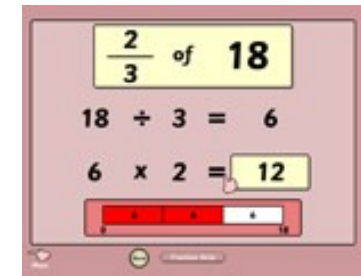
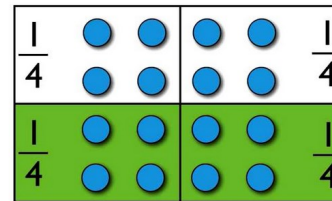
By the end of year 4, most children will be able to divide numbers to 1000, including finding remainders. Children will be expected to multiply and divide whole numbers and decimals by 10, 100 and 1000. They will formally record their work, showing an understanding of multiplication tables to support 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.



# Learning

## Fractions

By the end of year 4, most children will be able to find half, quarter,  $\frac{3}{4}$ ,  $\frac{1}{3}$  and  $\frac{1}{5}$  of objects, amounts and quantities. Children will be linking their knowledge of division to find fractions of amounts and quantities. Children will be able to identify equivalent fractions— to  $\frac{1}{2}$ ,  $\frac{1}{4}$  and  $\frac{1}{3}$  and be introduced to mixed number and improper fractions.



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

## Problem solving

By the end of year 4, most children will be able to solve one and two step problems involving all four operations within the different contexts. 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?'

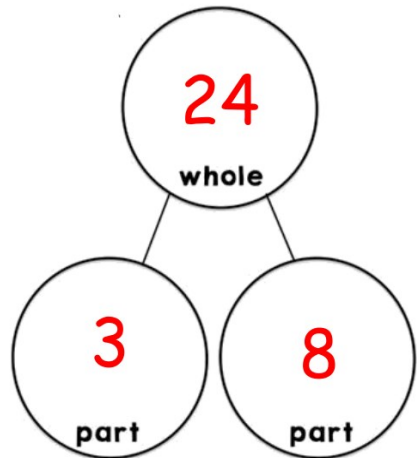
'Double 7 is equal to?'

'How many months are there in one year?'

# Magic Ten

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:**

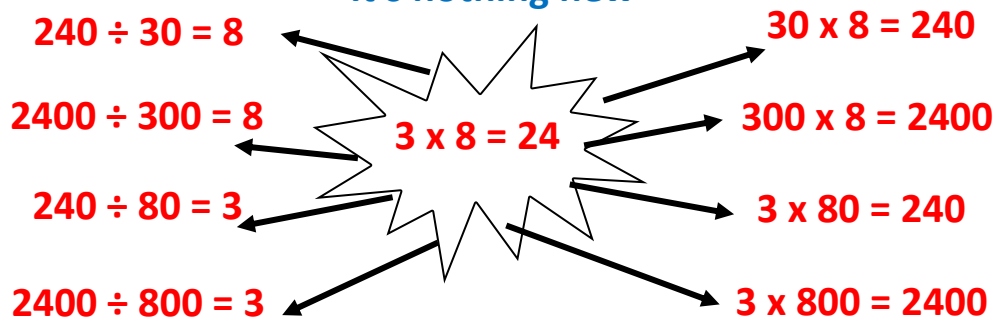
$$3 \times 8 = 24$$

$$8 \times 3 = 24$$

$$24 \div 3 = 8$$

$$24 \div 8 = 3$$

**It's nothing new**

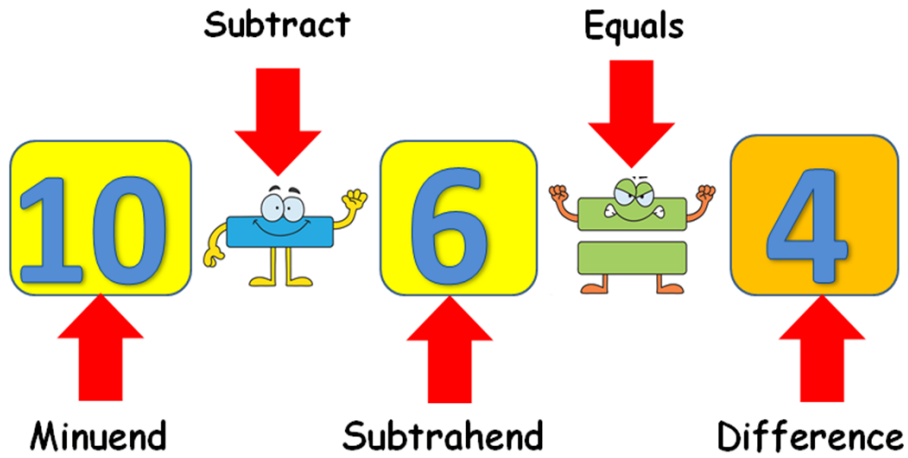


# Termly 'Learn its'

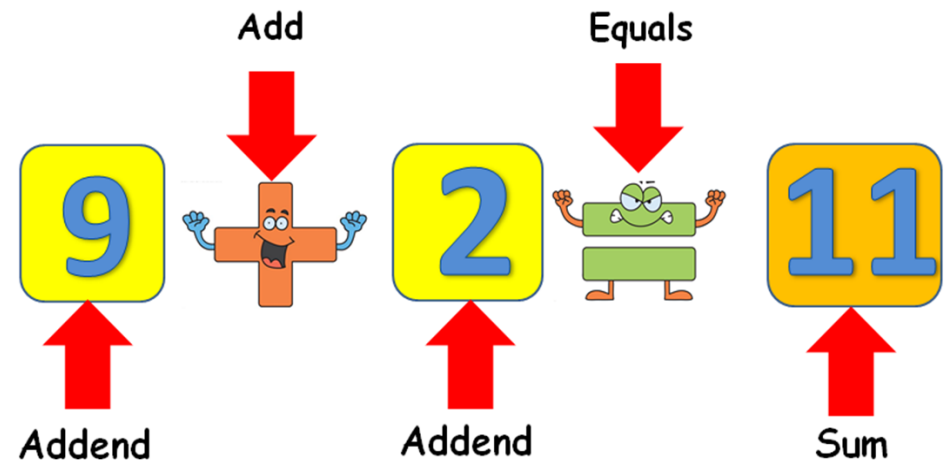
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<p><b>Adding numbers</b></p> <p><b>Revision</b></p> <table border="1"> <tr><td>+</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>2</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td></tr> <tr><td>3</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr> <tr><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td></tr> <tr><td>5</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td></tr> <tr><td>6</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr> <tr><td>7</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr><td>8</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr> <tr><td>9</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td></tr> </table> <p><b>6 times table</b></p> $6 \times 0 = 0$ $6 \times 1 = 6$ $6 \times 2 = 12$ $6 \times 3 = 18$ $6 \times 4 = 24$ $6 \times 5 = 30$ $6 \times 6 = 36$ $6 \times 7 = 42$ $6 \times 8 = 48$ $6 \times 9 = 54$ $6 \times 10 = 60$ $6 \times 11 = 66$ $6 \times 12 = 72$	+	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	<p><b>Adding numbers</b></p> <p><b>Revision</b></p> <table border="1"> <tr><td>+</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>2</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td></tr> <tr><td>3</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr> <tr><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td></tr> <tr><td>5</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td></tr> <tr><td>6</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr> <tr><td>7</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr><td>8</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr> <tr><td>9</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td></tr> </table> <p><b>7 times table</b></p> $7 \times 0 = 0$ $7 \times 1 = 7$ $7 \times 2 = 14$ $7 \times 3 = 21$ $7 \times 4 = 28$ $7 \times 5 = 35$ $7 \times 6 = 42$ $7 \times 7 = 49$ $7 \times 8 = 56$ $7 \times 9 = 63$ $7 \times 10 = 70$ $7 \times 11 = 77$ $7 \times 12 = 84$	+	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	<p><b>Adding numbers</b></p> <p><b>Revision</b></p> <table border="1"> <tr><td>+</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>2</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td></tr> <tr><td>3</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr> <tr><td>4</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td></tr> <tr><td>5</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td></tr> <tr><td>6</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr> <tr><td>7</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr><td>8</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr> <tr><td>9</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td></tr> </table> <p><b>8 times table</b></p> $8 \times 0 = 0$ $8 \times 1 = 8$ $8 \times 2 = 16$ $8 \times 3 = 24$ $8 \times 4 = 32$ $8 \times 5 = 40$ $8 \times 6 = 48$ $8 \times 7 = 56$ $8 \times 8 = 64$ $8 \times 9 = 72$ $8 \times 10 = 80$ $8 \times 11 = 88$ $8 \times 12 = 96$	+	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
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# Key vocabulary

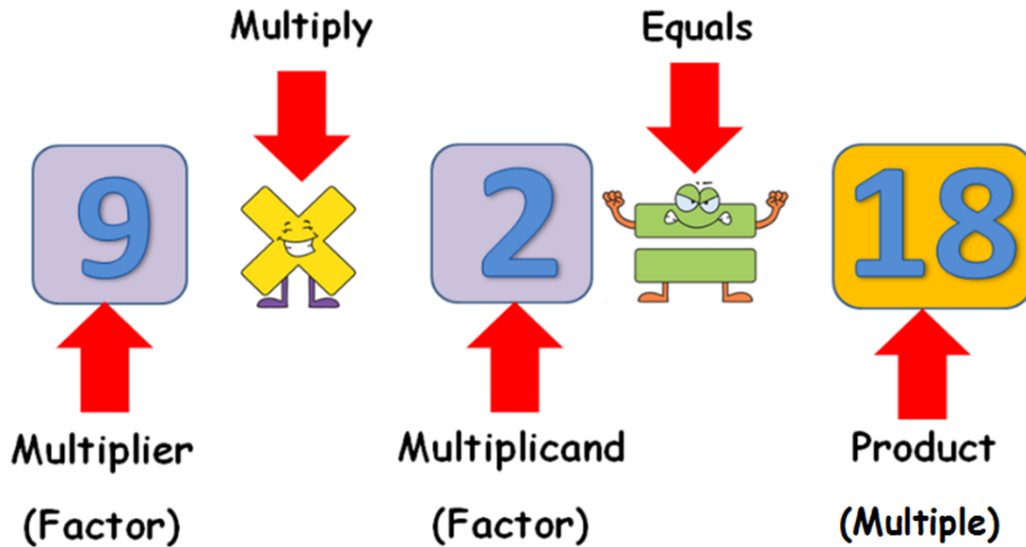
## Parts of a Subtraction Equation



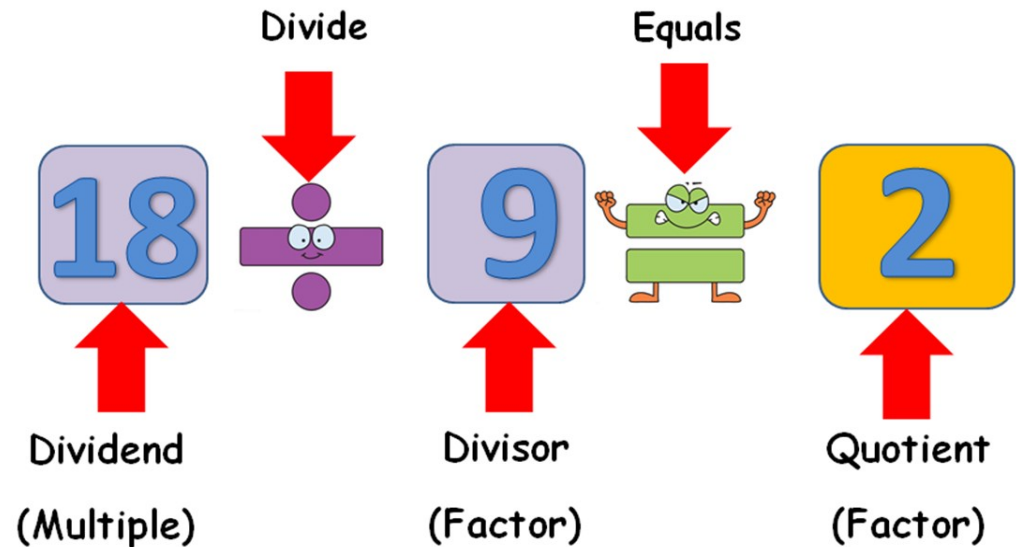
## Parts of an Addition Equation



## Parts of a Multiplication Equation



## Parts of a Division Equation



# Key vocabulary

I name you.....

**Equation!**



**Equation**

## New maths vocabulary for year 4

Number and place value	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions and decimals	Data/statistics
Tenths, hundredths Decimal (places)	Multiplication facts (up to 12x12)	Convert	Coordinates	Quadrilaterals	Equivalent decimals and fractions	Continuous data  Line graph
Round (to nearest)			Translation	Triangles		
Thousand more/less than	Division facts		Quadrant	Right angle, acute and obtuse angles		
Negative integers	Inverse		x-axis, y-axis			
Count through zero	Derive		Perimeter and area			
Roman numerals (I to C)						