

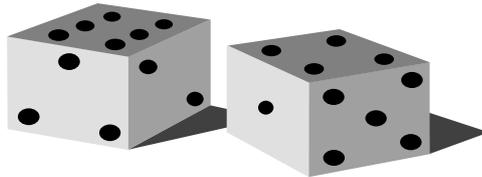
Some quick games to help with learning facts....

Make 20

For this game you need to write out numbers 0 to 20 on a piece of paper.

Make them big enough to put counters or coins on.

- ◆ Take turns. Roll a dice. Put a coin on the number that goes with the dice number to make 20, e.g. throw a '4' and put a coin on 16.
- ◆ If someone else's counter is there already, replace it with yours!
- ◆ The first person to have counters on 6 different numbers wins.
- ◆ Now roll two dice, add the numbers together and look for a number to make 20.
- ◆ The first with coins on 10 different numbers wins.



How many more to make?

- Roll two dice.
 - Make a two-digit number, e.g. if you roll a 6 and 4, you could choose to make 64 or 46.
 - Ask your child what you need to add on to make the next multiple of 10.
- Eg (1) if 64 is chosen the next multiple of 10 is 70 so you need to add 6 on. $64+6=70$*
Eg (2) if 46 is chosen the next multiple of 10 is 50 so you need to add 4 on. $46+4=50$

Mind your language!

Some times your child may know all the maths facts when you work with them at home but still seem to struggle in the classroom or when the teacher tests them. This may be because they are not familiar with the range of language that can be used. Try to use a range of language when asking your child questions.

THE NUMBER SENTENCE $3+17$ MAY BE ASKED AS	THE NUMBER SENTENCE $15-4$ MAY BE ASKED AS
<i>What is the sum of 3 and 17?</i>	<i>What is the difference between 4 and 15?</i>
<i>3 add, 17</i>	<i>Starting at 4, how many more to make 15?</i>
<i>3 more than 17</i>	<i>How much more is 15 than 4?</i>
<i>3 plus 17</i>	<i>15 subtract 4</i>
<i>What is the total of 3 and 17?</i>	<i>How many are left over when you take 4 from 15?</i>
<i>How many do 3 and 17 make altogether?</i>	<i>15 minus 4</i>
	<i>4 less than 15</i>
THE NUMBER SENTENCE 4×6 MAY BE ASKED AS	THE NUMBER SENTENCE $27 \div 3$ MAY BE ASKED AS
<i>6 lots of four</i>	<i>How many equal groups of 3 in 27?</i>
<i>4 times 6 or 6 times 4</i>	<i>27 divided by 3</i>
<i>Multiply 4 by 6</i>	<i>Share 27 between 3</i>
<i>What is the 6th multiple of 4?</i>	<i>If you have 27 sweets, give 3 each until you run out. How many children will get sweets?</i>
<i>What is the product of 4 multiplied by 6?</i>	<i>How many lots of 3 in 27</i>
<i>Draw an array to show 6×4</i>	<i>27 divided into 3</i>
<i>6 groups of 4</i>	

Name :



Helping your child with maths

Date started:-



GREEN
WALL

Date completed:-

The maths work your child is doing at school may look very different to the kind of 'sums' you remember. This is because children are encouraged to work mentally, where possible, using personal jottings to help support their thinking. **One thing hasn't changed; children still need to have a secure understanding of essential facts such as times tables.**

You can help your child do well and enjoy maths by helping them learn these facts.

You can see which facts your child needs to learn by looking at page 2 of this booklet. This shows two walls. The first is made up of statements about the facts your child needs to learn. On the second wall each corresponding brick contains examples to help you understand what we expect children to be able to do.

When you or your child's teachers think they have secure understanding of the facts needed for one brick that brick should then be shaded in using the wall colour. This will show your children how well they are doing; it is always a great feeling to know you have learnt something!

GREEN WALL

Know all the addition and subtraction facts for the totals to 15	Know all the addition and subtraction facts for the totals to 20	Know or work out all sums and differences of multiples of 10
Know the multiplication facts for the three times table	Know the multiplication facts for the four times table	Know the multiplication facts for the six times table
Know division facts for the three times table	Know division facts for the four times table	Know division facts for the six times table
Know or work out the number pairs that total 100	Recognise multiples of two up to 1000	Recognise multiples of five and ten up to 1000

GREEN WALL EXAMPLES

<p>Children will find it easier to learn these facts if they can see the links between them</p> <p>e.g $2+16=18$ $16+2=18$ $18-2=16$ $18-16=2$</p>	<p>For example, rapidly:</p> <ul style="list-style-type: none"> • find pairs of cards with a total of 20; • say how many more counters or cubes are needed to make 20 altogether; • say how many steps must be taken to get from 13 to 20 on a number line, or from 20 back to 13 	<p>Using their knowledge of the pairs of numbers that make tens children can identify totals such as $15+5=20$ $38+2=40$</p>										
<p>Make pictures or patterns with triangles. Your child can count the points on the triangles if they get stuck</p> <p style="text-align: center;">$4 \text{ lots of } 3 = 12$</p> <div style="text-align: center;">  </div>	<p>Use pictures of cars or horses to help. If one horse has 4 legs, how many legs on three horses. $3 \times 4 = 12$</p>	<p>Chant as whole number sentences: One six is six, two sixes are twelve . . . Chant as lists of multiples: Six, twelve, eighteen, twenty-four . . . Chant them forwards and backwards</p>										
<table style="width: 100%; border: none;"> <tr> <td style="padding: 0 10px;">$3 \div 3 = 1$</td> <td>$18 \div 3 = 6$</td> </tr> <tr> <td style="padding: 0 10px;">$6 \div 3 = 2$</td> <td>$21 \div 3 = 7$</td> </tr> <tr> <td style="padding: 0 10px;">$9 \div 3 = 3$</td> <td>$24 \div 3 = 8$</td> </tr> <tr> <td style="padding: 0 10px;">$12 \div 3 = 4$</td> <td>$27 \div 3 = 9$</td> </tr> <tr> <td style="padding: 0 10px;">$15 \div 3 = 5$</td> <td>$30 \div 3 = 10$</td> </tr> </table>	$3 \div 3 = 1$	$18 \div 3 = 6$	$6 \div 3 = 2$	$21 \div 3 = 7$	$9 \div 3 = 3$	$24 \div 3 = 8$	$12 \div 3 = 4$	$27 \div 3 = 9$	$15 \div 3 = 5$	$30 \div 3 = 10$	<p>How many dogs if there are 20 legs all together? (How many groups of 4 in 20?)</p>	<p>How many bags of six apples can I make if I have 18 apples in a box? (How many groups of 3 in 18?)</p>
$3 \div 3 = 1$	$18 \div 3 = 6$											
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<p>Play 'ping pong' to practise with your child. You say a number. They reply with how much more is needed to make 100.</p>	<p>List the numbers from 1-20 number grid. Ask your child to count on in twos from 1 and colour in the numbers as they say them . What does your child notice about the numbers they have landed on? (that the numbers end in 0, 2, 4, 6 or 8)</p>	<p>Know that multiples of 5 end in a 5 or a zero. Know that multiples of 10 end in a zero</p>										

How long should I spend on each brick?

We expect most children to work on each wall for about one year as the emphasis is on the facts being very secure in your child's mind so they can recall them rapidly.

Frequently Asked Questions

Which brick should I start with?

Your child's teacher will let you know the bricks that will be particularly helpful to start with. However you know your child and may choose to start with an area of maths they enjoy. A positive attitude to maths is essential

What is? There seem to be so many new words in maths now!

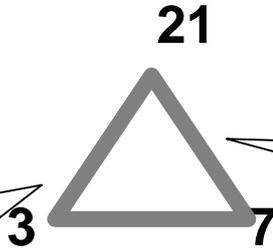
You are not alone in not knowing what some of the technical language means. So we have included a glossary. If you are still not sure ask your child's teacher

Tables Trios

These can help children learn their division tables at the same time as their multiplication tables

What are the four facts associated with this trio of numbers?
(sometimes the four related facts that use the same 3 numbers are called fact families)

$3 \times 7 = 21$
 $7 \times 3 = 21$
 $21 \div 3 = 7$
 $21 \div 7 = 3$



I am thinking of a tables trio. Two of the numbers are 21 and 7. What is the third number?

Glossary



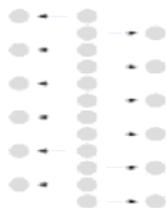
Array : A way of drawing multiplication and division as rows and columns

Even Numbers: The numbers that can be divided equally into groups of 2 and give a whole number answer. *The first 5 even numbers are 2, 4, 6, 8, and 10*

Difference: The difference between two numbers is the distance between them.
e.g. $2007 - 1999 = 8$, *The difference between 1999 and 2007 equals 8.*

Division - Division questions can be solved in two ways.

SHARING



$$12 \div 2 = 6$$

"One for you, one for you"

GROUPING



$$12 \div 2 = 6$$

"How many groups of 2 can I make?" "from 12 counters?"

Multiples- 10, 20, 30, 40, 50, 60, and 70 are multiples of ten as they can be divided exactly by ten.