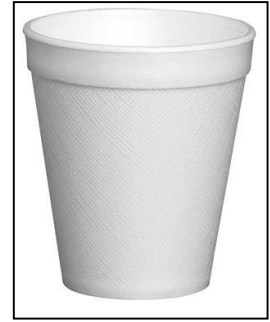


Welcome!!



While you are waiting.....

Collect 52 lolly sticks (and a cup) to use to make a game with your child during the session.

Find the Times-tables 'top tips' booklet in your pack, and have a read through it.

Top Tips to help your child learn their times tables

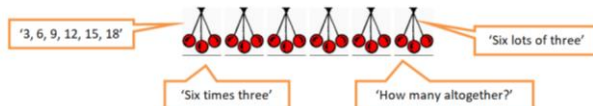
Start with their existing ADDITION skills

1. **Instant recall of doubles.** Make sure they know their doubles for numbers 1-12 [i.e. $1+1=$, $2+2=$, etc.] before you take the next step. Ask them for the answer to each doubling sum - first in order, then randomly. Use sets of objects [e.g. 6 Lego bricks + 6 Lego bricks] to practice and perfect instant recall of doubles, should your child need this.

2. **Understand the concept of multiplication.** Multiplication is repeated addition, two lots of six make twelve, three lots of six make 18. Use sets of objects to prove it!! Start with doubles,

- say and write: ' $2+2=4$ '
- can also be said/written as ' 2 lots of 2 makes 4 '
- can also be said/written as ' $2 \times 2 = 4$ '

Progress to three lots of..... four lots of..... using sets of objects that are the same - pennies, counters, Lego bricks, mini marshmallows - you get the idea!!! Get your child to count in 2 s/ 3 s/ 4 s etc. using the sets they have made.



Bracknell Forest Community Learning Team



Bringing learning to life

Heather Williams

Heather-L.Williams@bracknell-forest.gov.uk

Bracknell Forest Council

Bracknell Forest Family Learning Team

Working with families in the
community in partnership with
schools and children's centres


Bracknell Forest Community Learning

Our Commitment

We are committed to promoting learning for all and we welcome adult learners regardless of age, gender, race, disability, belief, sexual orientation, background or learning difficulty.

You have the right to feel safe where you learn, and your safety is extremely important to us. This leaflet gives you key information and various contact numbers to use if you, or someone you know, are at risk.

1. Fire Regulations

 Please familiarise yourself with the health and safety procedures and fire exits for the venue before your session begins.

On hearing the fire alarm:

- Leave the building by the nearest fire exit
- Do not stop to collect personal belongings
- Assemble at the appointed place where your tutor will take the register
- Remain at the assembly point until advised otherwise

2. Accident

If you have an accident, injury or 'near miss' while on the premises, please notify a member of staff. We will arrange any necessary assistance and ask you to complete an incident report form.

3. 'Safeguarding'

Our staff undertake Safeguarding training and understand the importance of safeguarding children and adults at risk from abuse.

Abuse is when someone does something to another person that damages their quality of life or puts them at risk of harm. Abuse may be physical, emotional, sexual, neglect, financial or discriminatory.

If you suspect that a **child or adult** is at risk of being abused or neglected, you should either:

- 1) Inform your tutor or another available member of staff
- 2) Telephone the **Bracknell Forest Safeguarding Children Team** on 01344 354014/**Bracknell Forest Safeguarding Adults Team** on 01344 351500
- 3) The council Out of Hours Team are available on 01344 786543 or Thames Valley Police on 101 (or 999 in an emergency)

You can also call these numbers if you are the person being abused.

Calculation in Year 4

The Plan:

1. PARENT PREP:

- knowing 'times tables' (and division) facts is a key skill
- activities and ideas to help the children get there
- written methods - practical experience is the key to success
- what is the 'Grid method'

2. CHILDREN ARRIVE: work with your child to make and play a fun game that builds recall, speed and fluency.

3. Opportunity to try out other activities with your child.

.....**and**.....

to build lots of other skills as we work together
(following school values)

"You didn't give up, even though it was hard for you....."

"That's brilliant! - thank-you for listening so well"

"I liked the way you waited until it was your turn....."



The purpose of this session is to provide information and experiences that will help you to support your child's learning. However.....
One size **doesn't** fit all!!



Each parent has different knowledge, skills & experiences - if any of the topics covered are familiar to you, please feel free to chip in and share - we can learn a lot from each other!

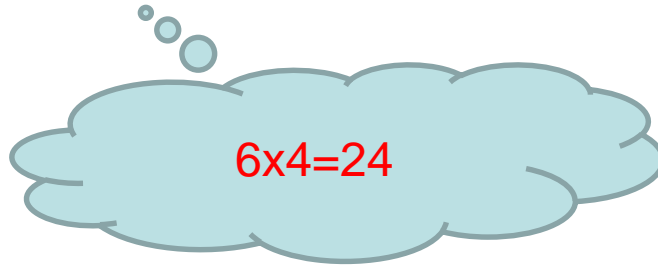
Questions & Suggestions? - please use the 'post-its' provided to jot down:

- questions/things you want to know more about
- notes on things you would like to try out with your child
- any ideas or 'top tips' you can think of

Multiplication and division

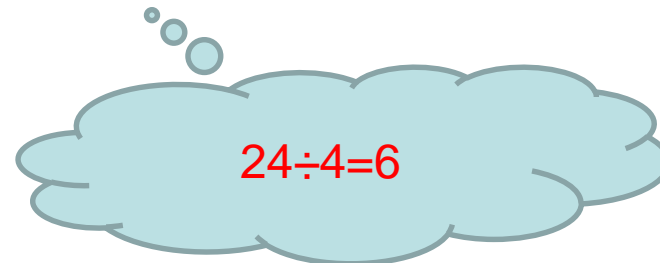
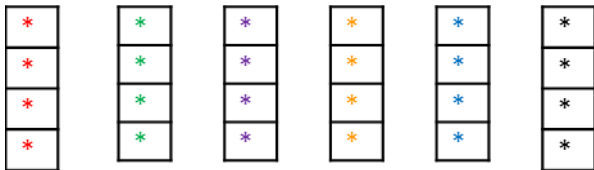
Multiplication is the opposite (inverse) of division

Six groups of four make twenty-four



*	*	*	*	*	*
*	*	*	*	*	*
*	*	*	*	*	*
*	*	*	*	*	*

There are six groups of four in twenty-four



- If I know that six lots of four makes 24 (multiplication fact) I can use this knowledge to work out that 24 can be divided into six groups of four (or indeed four groups of six!)
- You can see that these two concepts in maths are very closely linked - and it is vital to see and have practical experience of this relationship
- Give your child opportunities to practise multiplying (and dividing) using real objects

**Refer to 'Top Tips' hand-out for more detail.....*

Top Tips to help your child learn their times tables

Start with their existing ADDITION skills

1. Instant recall of doubles. Make sure they know their doubles for numbers 1-12 [i.e. 1+1=2, 2+2=4, etc] before you take the next step. Ask them for the answer to each doubling sum... first in order, then randomly. Use sets of objects [e.g. 6 [lego bricks + 6 [lego bricks] to practice and perfect instant recall of doubles, should your child need this.






2. Understand the concept of multiplication. Multiplication is repeated addition, two lots of six make twelve, three lots of six make 18. **Use sets of objects to prove it!** Start with doubles,

- say and write: '2+2=4'
- can also be said/written as '2 lots of 2 makes 4'
- can also be said/written as '2x2=4'

Progress to three lots of..... four lots of..... using sets of objects that are the same - pennies, counters, [lego bricks, mini marshmallows - you get the idea!!! Get your child to count in 2s/ 3s/ 4s etc. using the sets they have made.

<http://www.youtube.com/watch?v=PIWmOvT9vew&list=PLQpF8n28L5y34NpXK7Yfne72oXTiix&index=2>

3. Build Number Facts. Using rows and columns [Arrays] will help your child to count in threes/fives/tens etc. and build multiplication facts in a meaningful way. **Before drilling and memorising tables, children must understand and experience how multiplication facts are derived.** For example, by progressively adding another column of three objects, children can build the three [multiplication] facts for themselves. This representation not only assists in understanding the process, but provides a visual image for children to draw upon as they begin to use and memorise the basic number facts.

				
1 x 3	2 x 3	3 x 3	4 x 3	5 x 3
or	or	or	or	or
3 x 1	3 x 2	3 x 3	3 x 4	3 x 5
		3 x 3		

There are many online resources to help practice this, although using real objects is the best way to do it. Google 'counting in 3s' [or whatever number you need] e.g.

<http://www.bbc.co.uk/bitesize/ks1/maths/multiplication/play/popup.shtml>

<http://www.wmnet.org.uk/resources/gordon/links%20-%20counting%20v4.swf>

<https://www.superstarsworksheets.com/counting/count-by-3-objects.pdf>

Once they are confident with the concept, you can practice counting in 2s 3s 4s etc. [known as 'skip counting'] using hundred squares and other resources that don't actually have pictures of objects e.g.

<http://www.printactivities.com/Mazes/Math-Mazes/Allen-CountingBy4s.shtml>

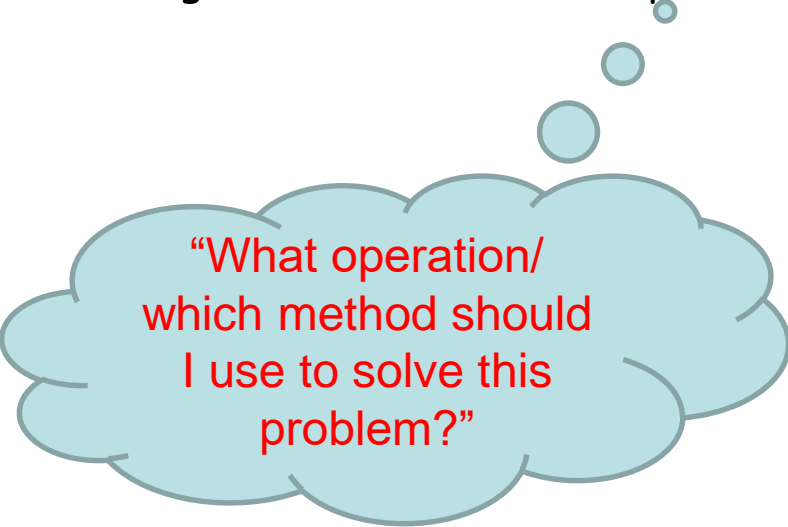
<http://www.sheppardsoftware.com/mathgames/earlymath/BalloonPopSkip.htm>

Curriculum overview:

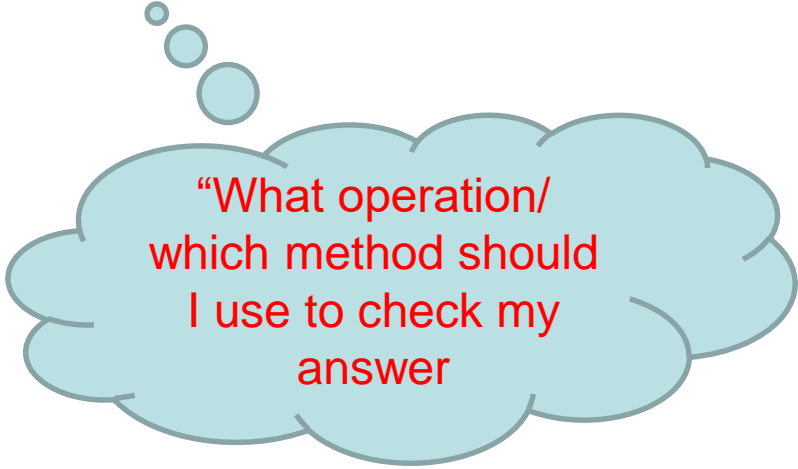
The 4 calculation skills (addition, subtraction, multiplication and division) need to be taught, constantly practised and most importantly understood, if the more formal written methods of calculation are to be used successfully by children.

Practical Experience: Strategies for calculation need to be supported by familiar models and images to ensure understanding.

Purpose: Children need to *understand why* they are doing what they are doing and *know when it is appropriate* to use different methods. If children memorise and practise procedures without understanding, they have nothing to build on when tackling new and harder concepts.

A light blue thought bubble with a grey outline and three smaller circles leading to it from the top. Inside, the text reads: "What operation/ which method should I use to solve this problem?"

“What operation/
which method should
I use to solve this
problem?”

A light blue thought bubble with a grey outline and three smaller circles leading to it from the top. Inside, the text reads: "What operation/ which method should I use to check my answer?"

“What operation/
which method should
I use to check my
answer”

Curriculum aims - what and by when?

Number – multiplication and division

Statutory requirements

Pupils should be taught to:

- recall multiplication and division facts for multiplication tables up to 12×12
- use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- recognise and use factor pairs and commutativity in mental calculations
- multiply two-digit and three-digit numbers by a one-digit number using formal written layout

Year 4

Number – multiplication and division

Statutory requirements

Pupils should be taught to:

- identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
- establish whether a number up to 100 is prime and recall prime numbers up to 19
- multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
- multiply and divide numbers mentally drawing upon known facts
- divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
- multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

Year 5

1. Recall of multiplication and division facts (up to 12×12 by the end of Year 4)

Making a
Kaboom!
game
with your child

Playing games :

Helps to develop a range of skills:

- Memory skills
- Spatial skills eg: directions
- Planning and anticipation
- Fine motor skills
- Listening skills
- Higher level thinking skills

Your children will also learn:

- To be patient
- To lose
- To share
- To take turns
- To concentrate

Things to remember when you are playing games:

- Make sure you understand the rules before you start
- Ideally, only play when you know you can have a quiet undisturbed time together
- Play the game more than once
- Don't always let your child win. It is an important social skill to learn to lose!
[wear your body armour ;-)]
- Talk as you play. A great deal will be learnt from talking things through together.
- ENJOY!!!!

Instructions for making Kaboom!

1. Decide which times tables you want to practice when you play **Kaboom!** - you will need to choose 4

e.g. **3x, 4x, 5x & 6x**

Or

6x, 7x, 8x & 9x

2. **CHILD:** Colour in 3cm at the end of a lolly stick, and then write the word "Kaboom!" with a ballpoint pen. Make 4 of these.



3. **ADULT:**

Get 48 lolly sticks



Write multiplication sentences for each times-table at the end of your lolly sticks using a ballpoint pen. (you should have 12 sticks for each times-table)

4. **CHILD:**

Use felt pens to decorate your "Kaboom cup"



5. Put all the lolly sticks (including the Kaboom sticks) into the cup, face down so you can't see what's written on them



6. Decide how long you want the game to last and set a timer.



Now you are ready to play (P.T.O. for more game instructions)

Instructions for making Kaboom!

HOW TO PLAY: 2-6 players

Players take it in turns to pull out a lolly stick - if a multiplication sentence is written on it the player reads it out and provides the answer. If correct (you can use a multiplication square to double check) they get to keep the lolly stick. If they answer it incorrectly, the stick must go back in the cup.

Anyone who pulls out a KABOOM! stick has to place all the lolly sticks they have collected back into the cup, leaving them with zero. (It may sound harsh, but it happens OFTEN, so everyone will at some point get 'Kaboomed!')

The player with the most lolly sticks when the timer finishes is the winner.

Extra support?

Your child is likely to still need help when recalling multiplication facts, especially under time pressure. Change the rules of the game to suit their needs, it's important to build confidence and have fun! You can make it tougher as their confidence and fluency develops :-)

Tip Tip:

Include times-tables facts that your child knows quite well, along with some new ones.

Use the 'T' (Time out) cards to allow them extra time to work out the answer if they don't already know it. Time out gives them space to think. You can limit the number of T cards a player has, so they need to use them wisely!

e.g. The player pulls out the multiplication sentence 7×6 and asks for 'Time out'

- Use groups of objects to work out the answer - Encourage your child to make six groups of 7 and count up how many altogether (this can be by counting in sevens, so 7, 14, 21, 28, 35, 42 - or even counting in ones to arrive at 42)



- Count up in multiples of 7 six times - so 7, 14, 21, 28, 35, 42. Putting up a finger for each multiple counted helps them keep track.
- Allow them to find the answer on their multiplication square.
- Allow them to use a calculator.
- Get them to use mental strategies based on what they DO know to get to the right answer - e.g. they know $7 \times 5 = 35$, so add on one more seven to arrive at the answer. (see your times-tables 'Tip Tip' booklet for more ideas)



First you need to work with your child to put together the 'Kaboom! Cup' that you will use to practise recall, speed and fluency with multiplication facts.

Follow the instructions on the laminated sheet provided

Yours to take away.....

Multiplication Square

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Useful tips.....

• Using a piece of L-shaped card can help children to find the correct answer.

• Encourage children to colour in the facts they already know on a blank multiplication square. It makes the task of learning the others seem less daunting.

• For some children the number of facts the multiplication square contains can be a bit daunting - encourage children to concentrate on a few facts at a time.

Division Facts Table

1 Division Facts	2 Division Facts	3 Division Facts	4 Division Facts
$1 \div 1 = 1$	$2 \div 2 = 1$	$3 \div 3 = 1$	$4 \div 4 = 1$
$2 \div 1 = 2$	$4 \div 2 = 2$	$6 \div 3 = 2$	$8 \div 4 = 2$
$3 \div 1 = 3$	$6 \div 2 = 3$	$9 \div 3 = 3$	$12 \div 4 = 3$
$4 \div 1 = 4$	$8 \div 2 = 4$	$12 \div 3 = 4$	$16 \div 4 = 4$
$5 \div 1 = 5$	$10 \div 2 = 5$	$15 \div 3 = 5$	$20 \div 4 = 5$
$6 \div 1 = 6$	$12 \div 2 = 6$	$18 \div 3 = 6$	$24 \div 4 = 6$
$7 \div 1 = 7$	$14 \div 2 = 7$	$21 \div 3 = 7$	$28 \div 4 = 7$
$8 \div 1 = 8$	$16 \div 2 = 8$	$24 \div 3 = 8$	$32 \div 4 = 8$
$9 \div 1 = 9$	$18 \div 2 = 9$	$27 \div 3 = 9$	$36 \div 4 = 9$
$10 \div 1 = 10$	$20 \div 2 = 10$	$30 \div 3 = 10$	$40 \div 4 = 10$
$11 \div 1 = 11$	$22 \div 2 = 11$	$33 \div 3 = 11$	$44 \div 4 = 11$
$12 \div 1 = 12$	$24 \div 2 = 12$	$36 \div 3 = 12$	$48 \div 4 = 12$
5 Division Facts	6 Division Facts	7 Division Facts	8 Division Facts
$5 \div 5 = 1$	$6 \div 6 = 1$	$7 \div 7 = 1$	$8 \div 8 = 1$
$10 \div 5 = 2$	$12 \div 6 = 2$	$14 \div 7 = 2$	$16 \div 8 = 2$
$15 \div 5 = 3$	$18 \div 6 = 3$	$21 \div 7 = 3$	$24 \div 8 = 3$
$20 \div 5 = 4$	$24 \div 6 = 4$	$28 \div 7 = 4$	$32 \div 8 = 4$
$25 \div 5 = 5$	$30 \div 6 = 5$	$35 \div 7 = 5$	$40 \div 8 = 5$
$30 \div 5 = 6$	$36 \div 6 = 6$	$42 \div 7 = 6$	$48 \div 8 = 6$
$35 \div 5 = 7$	$42 \div 6 = 7$	$49 \div 7 = 7$	$56 \div 8 = 7$
$40 \div 5 = 8$	$48 \div 6 = 8$	$56 \div 7 = 8$	$64 \div 8 = 8$
$45 \div 5 = 9$	$54 \div 6 = 9$	$63 \div 7 = 9$	$72 \div 8 = 9$
$50 \div 5 = 10$	$60 \div 6 = 10$	$70 \div 7 = 10$	$80 \div 8 = 10$
$55 \div 5 = 11$	$66 \div 6 = 11$	$77 \div 7 = 11$	$88 \div 8 = 11$
$60 \div 5 = 12$	$72 \div 6 = 12$	$84 \div 7 = 12$	$96 \div 8 = 12$
9 Division Facts	10 Division Facts	11 Division Facts	12 Division Facts
$9 \div 9 = 1$	$10 \div 10 = 1$	$11 \div 11 = 1$	$12 \div 12 = 1$
$18 \div 9 = 2$	$20 \div 10 = 2$	$22 \div 11 = 2$	$24 \div 12 = 2$
$27 \div 9 = 3$	$30 \div 10 = 3$	$33 \div 11 = 3$	$36 \div 12 = 3$
$36 \div 9 = 4$	$40 \div 10 = 4$	$44 \div 11 = 4$	$48 \div 12 = 4$
$45 \div 9 = 5$	$50 \div 10 = 5$	$55 \div 11 = 5$	$60 \div 12 = 5$
$54 \div 9 = 6$	$60 \div 10 = 6$	$66 \div 11 = 6$	$72 \div 12 = 6$
$63 \div 9 = 7$	$70 \div 10 = 7$	$77 \div 11 = 7$	$84 \div 12 = 7$
$72 \div 9 = 8$	$80 \div 10 = 8$	$88 \div 11 = 8$	$96 \div 12 = 8$
$81 \div 9 = 9$	$90 \div 10 = 9$	$99 \div 11 = 9$	$108 \div 12 = 9$
$90 \div 9 = 10$	$100 \div 10 = 10$	$110 \div 11 = 10$	$120 \div 12 = 10$
$99 \div 9 = 11$	$110 \div 10 = 11$	$121 \div 11 = 11$	$132 \div 12 = 11$
$108 \div 9 = 12$	$120 \div 10 = 12$	$132 \div 11 = 12$	$144 \div 12 = 12$

2. Formal written methods

("multiply 2 & 3 digit numbers by a single digit number using formal written layouts")

$$\begin{array}{r} 237 \\ \times 4 \\ \hline 948 \\ \small{1 \ 2} \end{array}$$

		1	8
	x	1	3
		5	4
	1	8	0
2	3	4	

$$\begin{array}{r} 0.3 \\ \times 7 \\ \hline 2.1 \end{array}$$

$$\begin{array}{r} 0.64 \\ \times 9 \\ \hline 5.76 \end{array}$$

Standard written methods such as these are actually the last piece of the jigsaw and best introduced when children *securely understand* the concept of multiplication, and have had lots of practical experience using different tools, different models, and a variety of their own recordings.

Want to know more? – please ask

Grid Multiplication

94 x 56

x	50	6	Final Check
90	4500	540	5040
4	200	24	224
			5264

What is the grid method?

Numbers to be multiplied are split up (partitioned) into component parts, using an understanding of place value. Two digit numbers are split into 'tens' & 'ones', three digit numbers into 'hundreds', 'tens' & 'ones', and so on.

For example, when calculating $23 \times 8 =$ 23 is partitioned into tens and ones (20 & 3) and each part is multiplied separately by 8. A grid helps us to organise this process:

Eg. $23 \times 8 = 184$

X	20	3
8	160	24

→ $160 + 24 = 184$

The 'part products' made from multiplying 20×8 and 3×8 are added together to arrive at the final answer.

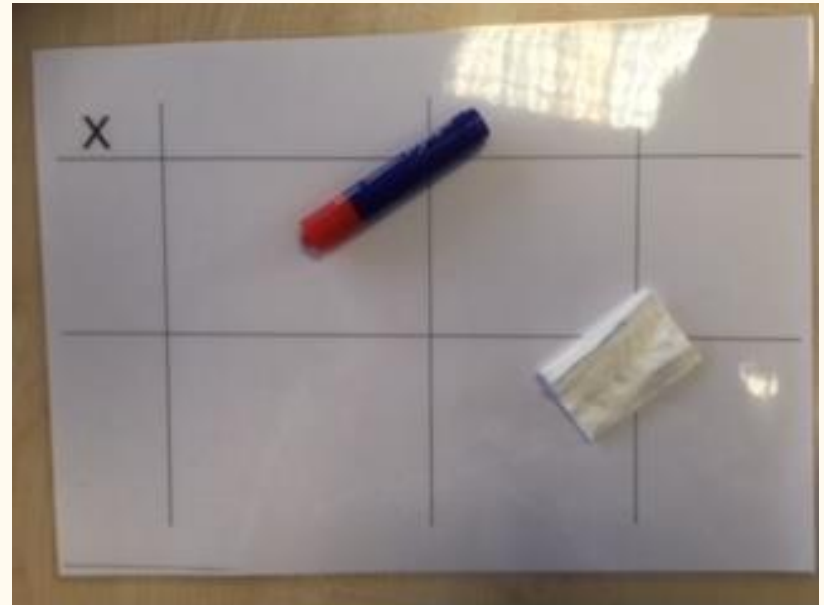
Place Value arrow cards are a great way to help with the partitioning process:



Grid method in year 4

This year, the children are working on multiplying 2 and 3 digit numbers by a single digit number - and the grid method is one of the ways they do this.

Use a set of arrow cards and one of the white grid boards to have a go at doing the grid method with your child.



Put your arrow cards face down on the table and pick different cards to put together to make numbers

- for double digit numbers you need a 'ten' card plus a 'one' card
- for triple digit numbers you need a 'hundred' card, a 'ten' card plus a 'one' card



Now you are ready to multiply!.....

1. Put the double or (triple) digit number you have made along the top of the grid board, splitting it up into 'tens' & 'ones' ('hundreds', 'tens' & 'ones')
2. Choose another 'ones' card and put that down the side of the grid:

X	80	6	
4	320	24	

X	900	80	6
5	4500	400	30

3. Multiply each part and write the answers into each box on the grid.
4. Finally, ADD UP the boxes - column addition might help with this if there are lots of numbers to add.

63000	
5600	
4500	+
420	
400	
30	
<hr/>	

Video links with further information - take a look at home

- Place value explained

<https://www.theschoolrun.com/what-place-value>

- Times tables in ten minutes

<https://www.youtube.com/watch?v=yXdHGBfoqfw>

- Grid multiplication as an interim step

<https://www.youtube.com/watch?v=qyTRtoqYi7Q&list=PLQqF8sn28L9yj34NpXK7Yffze7ZoXTiix&index=3>

- Moving from grid to a column method

https://www.youtube.com/watch?v=5ppOF53x_q0&list=PLQqF8sn28L9yj34NpXK7Yffze7ZoXTiix

- Rapid recall of multiplication facts

<https://www.youtube.com/watch?v=BcljRLZzMaw>

- Demonstration of long multiplication

https://www.youtube.com/watch?v=t_bnIB2KRL4

3

Other activities and
games to try
with your child

Factors & multiples game

Factors and multiples game

This is a game for two players.

You will need a 100 square

The first player chooses a positive even number that is less than 50, and crosses it out on the grid.

The second player chooses a number to cross out. The number must be a factor or multiple of the first number.

Players continue to take it in turns to cross out numbers, at each stage choosing a number that is a factor or multiple of the number just crossed out by the other player.

The first person who is unable to cross out a number loses.

Key questions

Do you have any winning strategies?

Are there any numbers you shouldn't go to?

Change the game

Instead of crossing the numbers out, cover them with something [e.g. mini marshmallows!!] - what's the LONGEST sequence of numbers you can cover?

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Stars and moons multiples game

Stars and Moons Multiples

a game for 2-4 players Need - a marker for each player and a dice

Players start on 1 and throw the dice. A player then moves forward to the next multiple of the number on the dice, e.g. if 4 is thrown a player moves to 4. If a player is on 7 and throws a 3 she moves to 9.

When players land on the bottom of a star, they move up the star to the number above.

When players land on the top of a moon, they move down the moon to the number below.

The first player to reach or pass 100 is the winner. Two players can be on the same number at the same time.

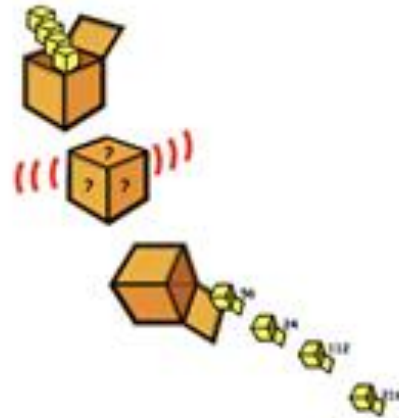
REMEMBER - MOVE UP THE STARS AND DOWN THE MOONS.

100	99	98	97	96	95	94	93	92	91
81	82	83	84	85	86	87	88	89	90
80	79	78	77	76	75	74	73	72	71
61	62	63	64	65	66	67	68	69	70
60	59	58	57	56	55	54	53	52	51
41	42	43	44	45	46	47	48	49	50
40	39	38	37	36	35	34	33	32	31
21	22	23	24	25	26	27	28	29	30
20	19	18	17	16	15	14	13	12	11
1	2	3	4	5	6	7	8	9	10

What's in the box? investigation

What's in the Box?

Four numbers in little boxes are put into a special big box that does a multiplication, then four new numbers come out at the end.



We only used whole numbers to go in, so, what multiplication might have gone on in the big box to get the answers in the picture above?

What was the largest number that could have been used to multiply by, in that big box?

Imagine four new boxes now (with new numbers in) and the large box multiplying by a different number this time. The numbers that come out are these,



What would be the number that the big box is multiplying by?
How are you working these out?

HINT: Remember, each of the four numbers that goes in is multiplied by the **SAME** number in the big box. So, what is special about the four numbers that come out at the end? Why don't you try out some ideas to see whether they work?






































Shape times shape investigation



Shape Times Shape

The coloured shapes stand for eleven of the numbers from 0 to 12. Each shape is a different number.

Can you work out what they are from the multiplications below?

 x  x  = 	 x  = 
 x  = 	 x  = 
 x  = 	 x  = 
 x  = 	 x  = 
 x  = 	 x  = 
 x  = 	 x  = 

“Rollin’ with the facts” game

Rollin’ with the Facts Multiplication

Skill: Multiplication facts up to 12 x 12

4	6	8	9	10
12	14	15	16	18
18	20	21	22	24
24	25	27	28	30
32	33	35	36	36
40	40	42	44	45

Number of players: 2-4

Object of the game: To be the first player to flip over all of their answer cards

Supplies:

- Number cards
- 2 dice, one red & one blue

To Play:

1. Shuffle all the game cards and pass them out so that each player has the same number of cards. Players place the cards face up in front of them.
2. Players take it in turns to roll the 2 dice and add them together make a total. The player with the lowest total starts.
3. The first player rolls the red dice two times and adds together the scores. S/he then repeats using the blue dice. These scores are then used as **factors** and multiplied together to make a **product**



Example:

$$6 + 3 = 9$$



Example:

$$5 + 2 = 7$$

$$9 \times 7 = 63$$

4. The player then writes the sum down and reads it out to the other player(s). If they agree with his answer, the player looks at the cards in front of them. If they have the 63, they can flip it over. Then s/he rolls again. **All players get two rolls on each turn, whether or not they flip a card.**
5. If at any time someone disagrees with the player's answer, s/he may challenge the answer and check it with a calculator. If the challenger is right, the player's turn is over and the challenger wins an extra turn.
6. Players continue to take turns rolling the dice, adding the dice scores to make factors, and multiplying those factors to find the product, and then writing the sum.
7. If a player has 3 turns in a row without a flip, s/he has the option of a "free flip." They choose any unturned card and write a multiplication sentence on their paper that uses the number as a product. For example, if they want to "flip" the number 132, they write on their paper $11 \times 12 = 132$ and read this to the other players.
8. Play continues until one player has flipped over all of their cards. S/he is the winner of the game.

Use any of the activities below to help your child to practise multiplying

- <http://www.bbc.co.uk/bitesize/ks1/maths/multiplication/play/popup.shtml>
- <http://www.wmnet.org.uk/resources/gordon/Bingo%20-%20counting%20v4.swf>
- <https://www.superteacherworksheets.com/counting/count-by-4s-objects.pdf>
- <http://www.printactivities.com/Mazes/Math-Mazes/Alien-CountingBy4s.shtml>
- <http://www.sheppardsoftware.com/mathgames/earlymath/BalloonPopSkip.htm>
- <http://www.oswego.org/ocsd-web/games/Mathmagician/mathsmulti.html>
- http://www.transum.org/Tables/Times_Tables.asp
- www.tablestest.com
- www.mathletics.co.uk
- <http://www.coolmath4kids.com/times-tables/math-lines-xfactor-40.html>
- <http://primarygamesarena.com/Multiplication-Grand-Prix386>
- <http://primarygamesarena.com/tabletrees2837>
- <http://www.topmarks.co.uk/Flash.aspx?f=HitTheButtonv11>
- <http://www.topmarks.co.uk/Flash.aspx?a=activity02>
- http://www.mad4maths.com/8_x_multiplication_table_math_game/
- <http://www.amblesideprimary.com/ambleweb/mentalmaths/testtest.html>
- <http://www.sumdog.com/en/parents/>
- <http://www.coolmath-games.com/0-crazy-taxi-m12/index.html>

Also look out for 'Percy Parker', 'Steve Storm and the tables of doom' & 'Squeebles'



Family Learning Evaluation



Session Attended: Year 4 Calculation Skills - Multiplication

Tutor: Heather Williams

We hope you have enjoyed today's session - In order for us to monitor the quality of our courses, we would be grateful if you could spend a couple of minutes completing the sections below:

Your name: **Date:**

1. Glad you came?

Did you enjoy your time in school today?

Yes/No

Did you learn something new? Please rate increase in knowledge/skills:

+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10
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Two things I have found useful today:

.....
.....

We want our sessions to be as helpful as possible - what could we do better?

.....

2. Want to do more/something else? We run a variety of short courses - please circle any of interest (many are FREE)

Family Learning sessions: Maths / Literacy / anxiety / transition & change / other.....

Parenting courses: Challenging behaviour/ self esteem/ sleep/ anxious thoughts & worries

Back to work courses: working with children / be your own boss / retail / hospitality / customer service / food safety / health & safety / first aid

Soft Skills: Managing change / confidence building/ team building/ effective communication

English/maths for adults - informal 'café style' sessions (brush up skills / gain a qualification)

IT skills: Word / Excel / Outlook / Power Point / IT for jobseekers

Something else?

Phone number/email address.....

Please take a minute to think about what you and your child gained from today's session and consider whether you would like to know more about our other courses 😊

Time for the tiddly peeps.....

- Resources to share are on each table
- Get your Kaboom! instruction sheet
- Read the instructions with your child and then work together to create the "Kaboom! Cup" game
- Agree how long you want to play for, and set a timer
- You're ready to play!! (don't get too competitive.....)

When you're all "Kaboomed" out, have a go at something different:

- Grab a set of arrow cards and try out the grid method
- Try one of the additional game/activity ideas I mentioned earlier

ENJOY!!!