

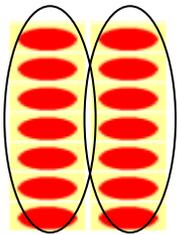
## Activities for parents to support the learning of multiplication tables

There are many times table games available on line which will help children to recall times tables and division facts. You can also buy times tables CDs for children to sing along to from a number of shops and supermarkets.

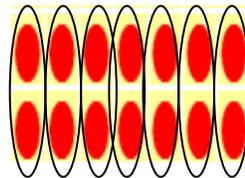
Other words for multiplication are "lots of", "groups of", "product" so you are asking.... How many have you got if you've got 3 bowls of 5 sweets? 3 lots of 5 /  $3 \times 5$ .

### Learn 1 get 1 free!

Multiplication is perfect for switchers! For example  $7 \times 2$  gives the same result as  $2 \times 7$ . Knowing this means children reduce the number of times table facts they need to learn, by half!



2 lots of 7

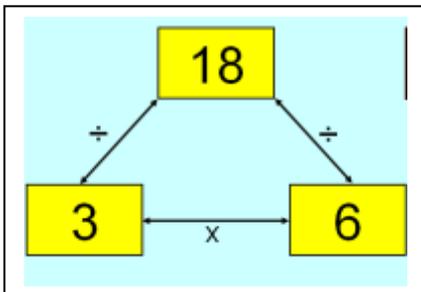


7 lots of 2

### Four facts

Children learn the relationship between multiplication and division.

They should learn that  $6 \times 3 = 18$ ,  $3 \times 6 = 18$ ,  $18 \div 3 = 6$  and  $18 \div 6 = 3$ .



Children can make a set of 3 cards e.g. 18, 6 and 3. Cover one card and ask the children to explain the relationship.

What is 3 multiplied by to give 18?

How many 6s in 18?

What is 18 divided by 3?

*Children then begin to use this to look at related facts.*

*How many 30s in 180? How many 0.6s in 1.8? (As they get older – not in yr 3 don't panic! 😊)*

### Doubles!

It helps to learn the doubles. If children are able to double they don't just learn the two times tables. They can quickly remind themselves of other facts.

For  $8 \times 6$  - double six ( $2 \times 6 = 12$ ), double again ( $4 \times 6 = 24$ ), double again ( $8 \times 6 = 48$ )

## 10x

Children need to be confident when multiplying by 10 and later 100. The short cut of adding 0 does not work for multiplying decimal numbers so it is best not to teach this. Multiplying by 10 makes the number ten times bigger. Learn the rule that to multiply by 10 we move the digits one place to the left and to divide by 10 we move the digits one place to the right.

## Singing, chanting:

These "old-fashioned" strategies still help. Say the multiples as you go up the stairs - eg: 3, 6, 9, 12.... Time how quickly they can do it. Can they run up the stairs? Can they do it backwards when they come back down? (Please walk forwards though we don't want to be responsible for any A&E trips! ☺)

Writing them: For the arty children make a tables poster for their bedroom wall.

Speed writing: How quickly can you write all the facts in the xtable of choice? Can you beat your time? Race your parents / older siblings!

## Rhymes and patterns:

Create rhymes to help children remember facts.

$8 \times 8 = 64$  (I ate and I ate and was sick on the floor,  $8 \times 8$  is 64)



$8 \times 7 = 56$  ( $56 = 7 \times 8$ ) (the numbers in this times table fact are in order 5, 6, 7, 8!)

Fizz Buzz: (if you've got older siblings to join in - this works well)

Count around in a group with each person taking it in turns to say the next number. Count again, but instead of saying the number the child has to say fizz instead of the multiples of 5. For example 1, 2, 3, 4 fizz, 6, 7, 8, 9 fizz. Repeat this time saying buzz for multiples of 3. A challenge is to say fizz for the multiples of 3 and buzz for the multiples of 5. This game can be adapted for other multiples. This game helps children rehearse the pattern of multiples. What do you say instead of 15?

## Bingo:

Version 1 Children write down 6 to 8 numbers from 1 to 36. Roll a dice twice to make a multiplication calculation. Players cross out the answer if it is one of their numbers. This game can be played with dice, playing cards, digit cards or another person saying the

multiplication calculation. Which numbers are good to choose? Which numbers rarely come up?

Version 2 Choose answers from times tables and write them down. Roll two dice and multiply the two numbers. Cross off the answer if you have it. The winner is the first to cross off all their numbers.

### Dominoes

Place dominoes face down on the table. Player one takes a domino. Multiply the two numbers together and say the answer. If they are correct they can keep the domino. Continue the game with each player doing the same. The winner is whoever has the most dominoes at the end. This game can be played with a set of dominoes, two playing cards or you could make your own set focusing on a specific times table.

### Table Square

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

Help children to see the patterns and so cut down on the number of facts to memorise. Highlight the facts you already know on the square and then start work on selected table facts. Children can be given times table squares like this one to complete with the missing table facts they are working on.

Children can be given a blank square with the numbers arranged in a random order and complete a speed test!

30
42
?
63
70

X	5	6	9	2	8	11	4	3	7
7									
3									
4									
11									
8									
2									
9									
6									
5									

X	5	6	4	2
2				
3				
4				
9				

We are happy to give you photocopies of these multiplication grids to practise at home - please just ask!

**Pairs:**

Make a sets of 0-12 number cards. Turn them all face down - take it in turns to randomly turn one over and multiply by your chosen table ( eg x3) if its right you keep it - if not it goes back face down. Play on their own - how quickly can they work them all out?

[www.mathszone.co.uk](http://www.mathszone.co.uk) - is a site that is promoted within Surrey Heath schools. Have a go!

There are numerous other websites that have fun games on that are great for learning and practising tables, just do a search! Also many different apps you can download onto iPhones and iPads too!

The school calculations progression document is currently being updated to support the new curriculum which will compulsory from September 2014. You will be sent a copy of this as soon as it is complete.

Any other questions - please ask. If your child creates any new games then please let us know! We'd love to learn new strategies and ideas ourselves! ☺

**Happy tables learning!**

From the Year 3 team

