

Multiplication strategies and games

By Miss Murray

{4 x table 4 in a row!}

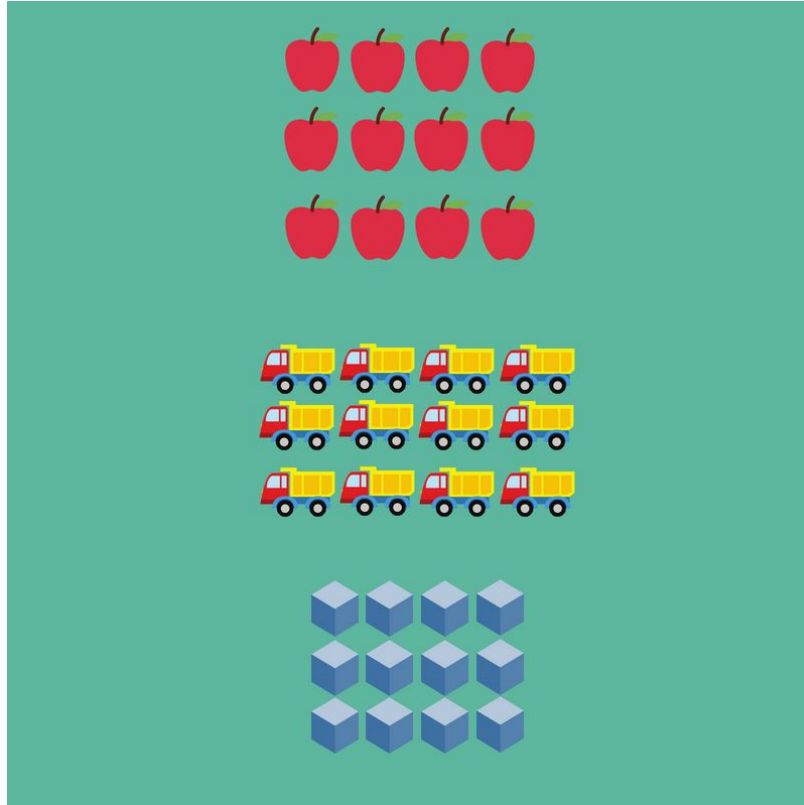
4	12	36	48	28	12	4	40	24
24	40	32	28	8	8	20	24	4
16	16	20	8	36	40	48	4	36
28	16	12	32	16	20	20	24	44
24	32	40	28	20	8	32	28	40
44	48	16	36	4	44	8	32	36

Multiplication is...

...combining equal
groups together to find a
total

Multiplication strategies - ARRAYS

1. Arrays - making equal groups (in rows) and adding together to find the total



Multiplication strategies - ARRAYS

1. Arrays - making equal groups (in rows) and adding together to find the total

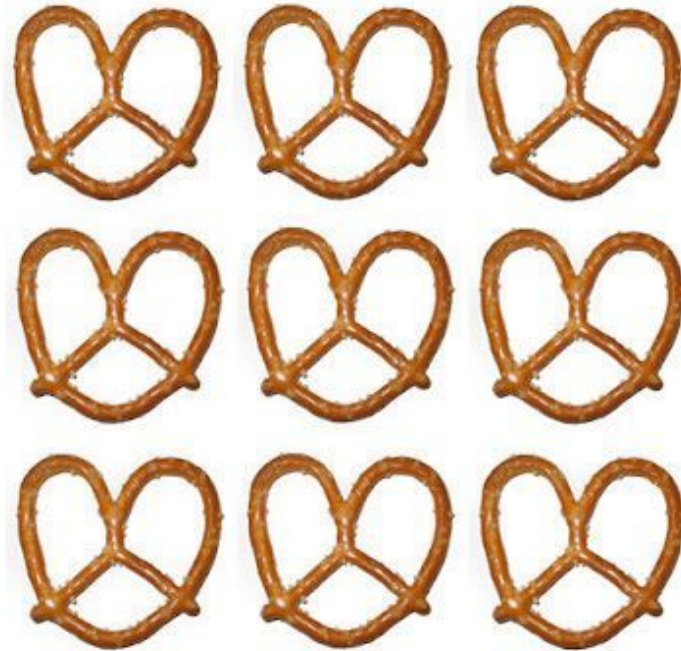
Arrays activity:

- Make some x table cards
- Put in a bowl/box
- Pull out a card
- Make an array by arranging

household objects in rows to

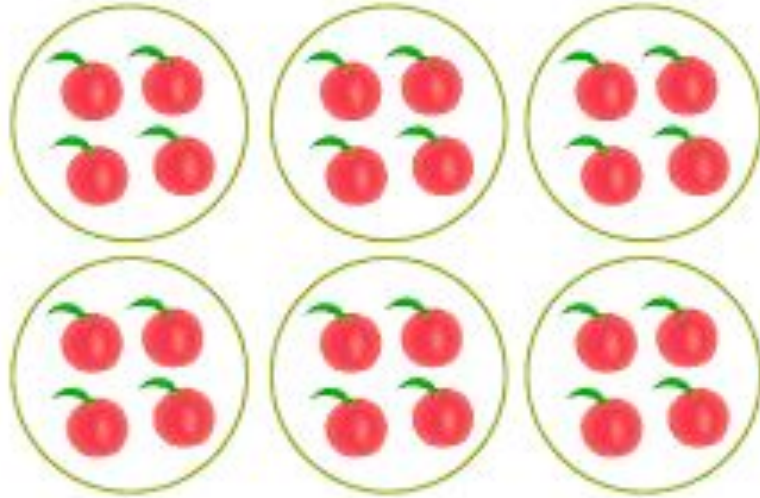
represent the multiplication sentence e.g. $3 \times 3 =$

$0 \times 3 =$	$1 \times 3 =$	$2 \times 3 =$
$3 \times 3 =$	$4 \times 3 =$	$5 \times 3 =$
$6 \times 3 =$	$7 \times 3 =$	$8 \times 3 =$



Multiplication strategies - EQUAL GROUPS

2. Equal groups - making equal groups then adding together to find the total



- There are groups of peaches.
- There are peaches in each group.

Multiplication strategies - EQUAL GROUPS

2. Equal groups - making equal groups then adding together to find the total

Equal groups activity

- Make some x table cards
- Put in a bowl/box
- Pull out a card
- Make an equal group by arranging

$0 \times 3 =$	$1 \times 3 =$	$2 \times 3 =$
$3 \times 3 =$	$4 \times 3 =$	$5 \times 3 =$
$6 \times 3 =$	$7 \times 3 =$	$8 \times 3 =$



household objects in tubs/circles/hoops or

drawing equal groups and objects on a

whiteboard to represent the multiplication sentence e.g. $4 \times 3 =$

Multiplication strategies - REPEATED ADDITION

3. Repeated addition - adding the same number again and again to find the total

Equal groups activity

- Make some x table cards
- Put in a bowl/box
- Pull out a card

$0 \times 3 =$	$1 \times 3 =$	$2 \times 3 =$
$3 \times 3 =$	$4 \times 3 =$	$5 \times 3 =$
$6 \times 3 =$	$7 \times 3 =$	$8 \times 3 =$

Write on paper or a whiteboard a horizontal

or vertical addition sum to represent the

multiplication sentence e.g. $8 \times 4 =$

$$4+4+4+4+4+4+4+4$$

Multiplication strategies - 100 square skip counting

4. 100 square - circle every number on a 100 square to find the total

Equal groups activity

- Make some x table cards
- Put in a bowl/box
- Pull out a card
- For example if working on 3 x table...

circle every 3rd number on a 100 square 8

times to represent the multiplication sentence

e.g. $8 \times 3 =$ find the answer on the 100 square...



NUMBER $8 \times 3 =$ SQUARE

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

Multiplication strategies - skip count on fingers or mentally

5 skip count

Equal groups activity

- Make some x table cards
- Put in a bowl/box
- Pull out a card
- Skip count on your fingers saying the members of that times table until you reach the number of fingers shown on the x table card e.g. $4 \times 6 =$



Multiplication strategies - I just know it!!!



6. You KNOW this multiplication problem - you DON'T need to work it out with any previous strategies because you KNOW the answer with INSTANT RECALL (meaning quickly or 'off by heart')

Which times table sums or multiplication problems do YOU KNOW 'off by heart' with instant recall?? (meaning as quickly as you say can your name)

Since I was young I have *al*ways remembered the doubles! These ones I just **know**!

$(2 \times 2, 3 \times 3, 4 \times 4, 5 \times 5, 6 \times 6, 7 \times 7, 8 \times 8, 9 \times 9, 10 \times 10)$

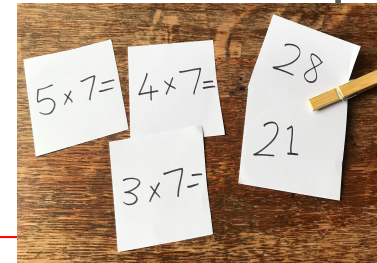
Multiplication games - card games

Here are some more simple games you can play to work on knowing your times table facts with quick or INSTANT recall!

Multiplication card games:

1. Pick a times table to work on
2. Write multiplication sentences starting from 1 up to 12 e.g.
3. 1×12 , 2×12 , etc on card/slips of paper
4. Write the answer to the multiplication sentences on separate
5. cards/slips of paper
6. Mix your sentences and answers up...

7×12	84
8×12	96
9×12	108



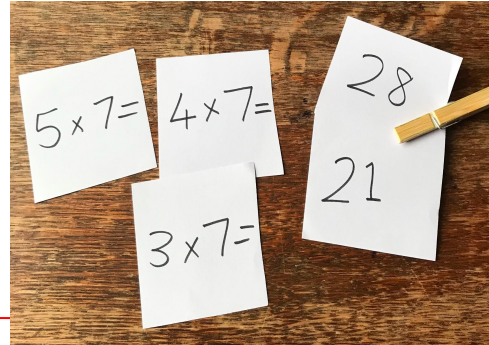
Multiplication games - card games

7. Play snap

8. Play pairs (turn all over and pick 2 cards at a time to find a pair)

9. RACE ! Turn on a stopwatch and time how quickly you can match and order your multiplication sentences & answers from 1 x ... to 12 x)

7×12	84
8×12	96
9×12	108




















Multiplication games - 4 in a row games

1. Pick a times table to work on
2. Create a 4 in a row game board using paper, ruler, coloured pens (fill with members of your chosen times table up to $12 \times \dots$)
3. Create a spinner if you do not have dice up to 12
4. Create coloured counters from small coloured squares of paper (depending on how many players you wish to have!)
5. Store in medicine caps, with clothes pegs or with paper clips
6. See pictures in the next slide:

Multiplication games - 4 in a row games

4 x table 4 in a row!

4	12	36	48	28	12	4	40	24
24	40	32	28	8	8	20	24	4
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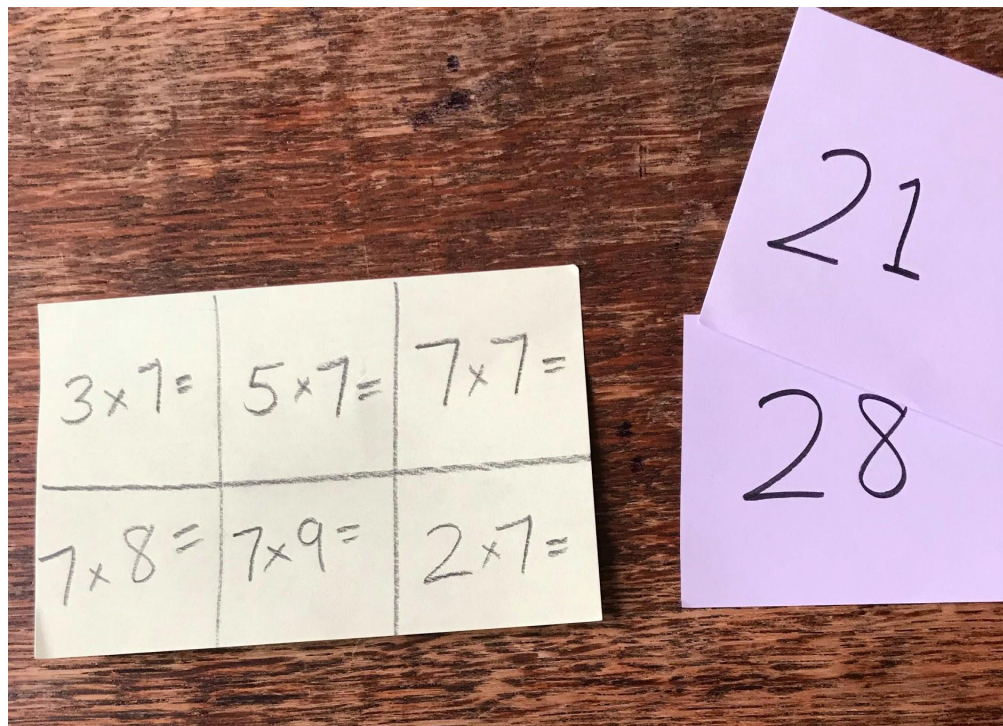
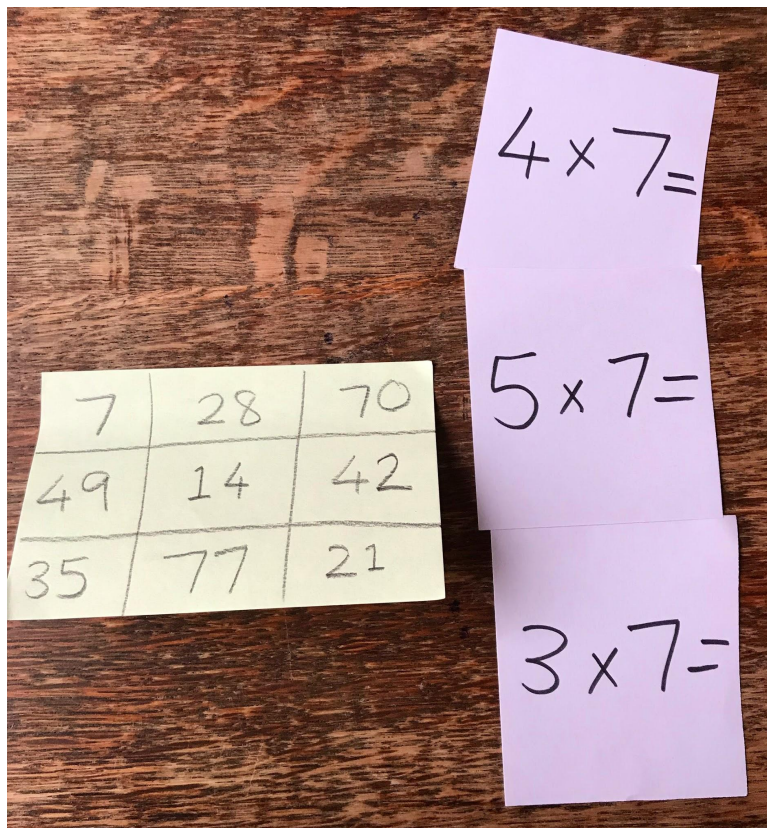
				28	12		40	24
24	40	32	28	8		20	24	4
16			8		40	48		36
28	16	12			20	20		44
24	32	40	28	20	8		28	40
	48	16	36		44	8		36



Multiplication games - Bingo

1. Pick a times table to work on
2. Write multiplication sentences starting from 1 up to 12 e.g.
3. 1×12 , 2×12 , etc on card/slips of paper
4. Create mini bingo boards on post-its, whiteboards or small pieces of paper
5. Nominate a bingo caller to pick the multiplication sentences (problems) from a tub
6. See pictures in the next slide.
7. Have FUN!

Multiplication games - Bingo



Multiplication

Play games regularly to work on your knowledge of times table facts and recall speed!

Can you make up your OWN multiplication game or activity?? Please take a photograph or video of you playing it if you make one!

