

Multiplication

Here are some examples of activities, games or puzzles which can be used to support mathematics learning.

These examples are taken from the multiplication packs. There are three packs in this collection. The mathematical demand increases as you work through the packs. The complete packs can be downloaded at <https://www.stem.org.uk/rxzdw>

Answers to cards can be found at <https://www.stem.org.uk/rxxo5>

Smile Worksheet 2186

Missing Pieces

Fill in the missing numbers.

1	2		4	5	6			9	10
11	12		14	15	16		18	19	20
21	22		24	25			28	29	30
31	32	33	34	35	36			39	40
			43	44	45	46	47	48	49
51			54	55	56	57	58	59	
61			64	65	66				
71	72	73	74	75	76			79	80
	82			85	86		88	89	90
			94	95	96	97	98		100

2	4		8	10
12			18	20
22	24	26	28	30
	34	36		
	44			50

3	6	9		
		24		30
33		39		45
		54	57	60
63	66	69		

9	18	27	
54	63		
	108	117	126 135
	153	162	
		207	

	12	18	24	30
36	42			60
	72		84	90
96	102	108		120
126			144	150

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

Make up another number square with missing numbers for someone else to solve.

Smile 1385

You will need 2 dice, 20 red counters and 20 blue counters

Times Square – a game for 2 players

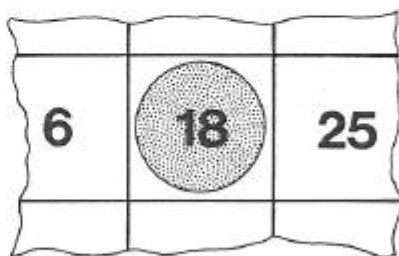
Throw the two dice and multiply their numbers.

$$\begin{array}{|c|} \hline 3 \\ \hline \end{array} \times \begin{array}{|c|} \hline 6 \\ \hline \end{array} = 18$$

Use a counter to cover up your score on the board.

Next player!

The winner is the first player to get 3 counters in a line.



10	2	12	4	18	6
20	6	3	9	2	12
36	10	6	18	25	5
8	5	16	12	4	15
20	3	24	6	1	30
12	30	8	15	24	4

You will need worksheet 1390A

Smile 1390

Table Facts

Most children learn their "tables" by heart.
Investigating number patterns makes that job easier.
You may think there are too many "tables" to remember...
... but some of them are easy... like $10 \times 10 = 100$.

Use this card to find which tables you still need to learn. There are not as many as you think...!

Use worksheet 1390A.

1 Fill in the table facts which you **know by heart**.

... everybody knows
the 1 times table

1x1	1x2	1x3	1x4	1x5	1x6	1x7	1x8	1x9	1x10
2x1	2x2	2x3	2x4	2x5	2x6	2x7	2x8	2x9	2x10
3x1	3x2	3x3	3x4	3x5	3x6	3x7	3x8	3x9	3x10
4x1	4x2	4x3	4x4	4x5	4x6	4x7	4x8	4x9	4x10
5x1	5x2	5x3	5x4	5x5	5x6	5x7	5x8	5x9	5x10
6x1	6x2	6x3	6x4	6x5	6x6	6x7	6x8	6x9	6x10
7x1	7x2	7x3	7x4	7x5	7x6	7x7	7x8	7x9	7x10
8x1	8x2	8x3	8x4	8x5	8x6	8x7	8x8	8x9	8x10
9x1	9x2	9x3	9x4	9x5	9x6	9x7	9x8	9x9	9x10
10x1	10x2	10x3	10x4	10x5	10x6	10x7	10x8	10x9	10x10

... you ought to know
the 2 and 10 times
table

2x1	2x2	2x3	2x4	2x5	2x6	2x7	2x8	2x9	2x10
10x1	10x2	10x3	10x4	10x5	10x6	10x7	10x8	10x9	10x10

... most people know
the 3 and 5 times
tables

3x1	3x2	3x3	3x4	3x5	3x6	3x7	3x8	3x9	3x10
5x1	5x2	5x3	5x4	5x5	5x6	5x7	5x8	5x9	5x10

Can you see why the tables are in rows and columns?

- Fill in the tables which you **work out**.
... if you know $10 \times 4 = 40$ then 9×4 must be 4 less.
... if you know $2 \times 7 = 14$ then 4×7 must be double.
- Check your answers.
Shade the facts which you know by heart or you can easily work out.
- Get a friend to test you on the ones you have shaded.
- Write out all the different table facts which you do not know.
... $8 \times 7 = 56$ is probably one of them and so is $7 \times 8 = 56$, but they are the same.
- Learn the table facts which you don't know.

Table Facts

Smile Worksheet 1390A

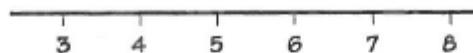
Fill in the table facts which you know (questions 1 and 2)
Shade in the facts which you got right (question 3)

1x1	2x1	3x1	4x1	5x1	6x1	7x1	8x1	9x1	10x1
1x2	2x2	3x2	4x2	5x2	6x2	7x2	8x2	9x2	10x2
1x3	2x3	3x3	4x3	5x3	6x3	7x3	8x3	9x3	10x3
1x4	2x4	3x4	4x4	5x4	6x4	7x4	8x4	9x4	10x4
1x5	2x5	3x5	4x5	5x5	6x5	7x5	8x5	9x5	10x5
1x6	2x6	3x6	4x6	5x6	6x6	7x6	8x6	9x6	10x6
1x7	2x7	3x7	4x7	5x7	6x7	7x7	8x7	9x7	10x7
1x8	2x8	3x8	4x8	5x8	6x8	7x8	8x8	9x8	10x8
1x9	2x9	3x9	4x9	5x9	6x9	7x9	8x9	9x9	10x9
1x10	2x10	3x10	4x10	5x10	6x10	7x10	8x10	9x10	10x10

Smile 2390

Consecutive Products

Consecutive numbers lie next to each other on the number line.



Examples:

6 and 7 are consecutive.

5, 6 and 7 are consecutive.

4 and 6 are **not** consecutive.

The **product** of two numbers is found by multiplying them together.

Example:

The product of 6 and 12 is 72 because $6 \times 12 = 72$

Example:

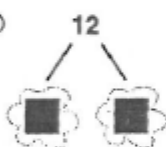
42 is the product of two consecutive numbers.

$$6 \times 7 = 42$$

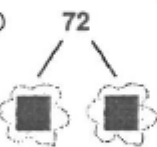


1. Copy the following and find the two missing consecutive numbers.

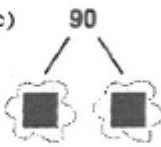
a)



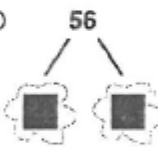
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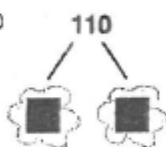
c)



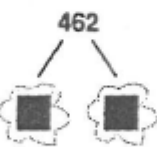
d)



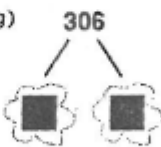
e)



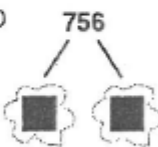
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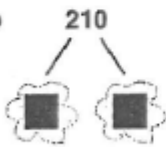
g)



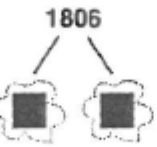
h)



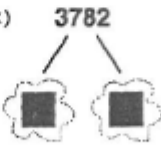
i)



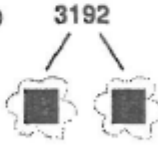
j)



k)

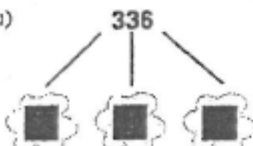


l)

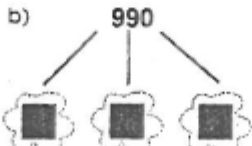


2. Copy the following and find the three missing consecutive numbers.

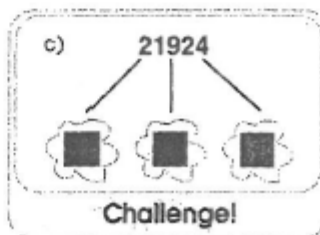
a)



b)



c)



Challenge!