

HOUR OF CODE

&amp;

eTwinning project

FUN and MATH GAMES

# CODE + MATHS = FUN

Dear Friends,

We have created a few activities for you concerning coding. You may practise Maths skills while doing them. Choose one or more tasks to be done. Present the solutions in TwinSpace, Facebook or our blog. In the last activity you can create a task for us, we will do it with pleasure.

Have fun!

SPMako Team

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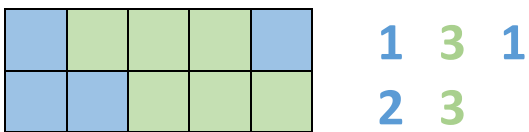
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CODE + MATHS = FUN

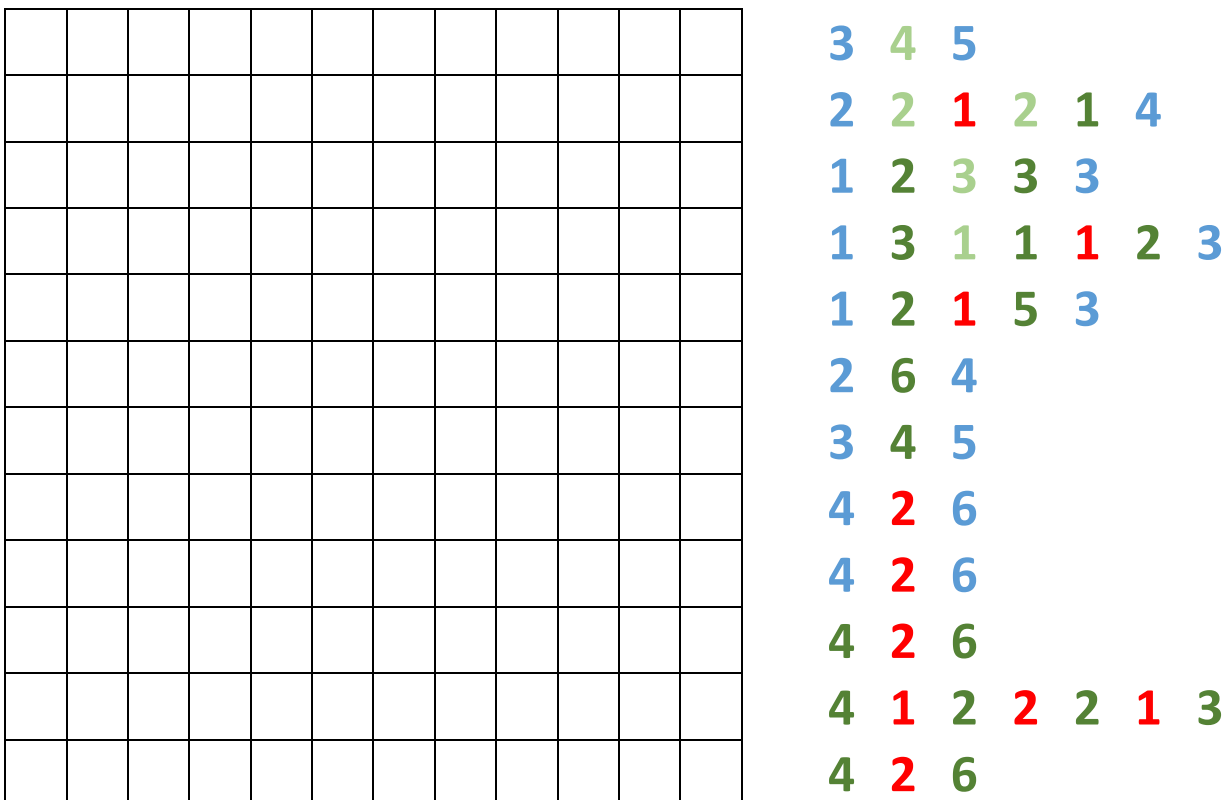
**ACTIVITY 1**

Decode the picture. Numbers of colours show you how many grids you need to paint with this colour.

EXAMPLE



PRACTICE





## ACTIVITY 2

Decode the picture. The numbers show rows and columns. Colour the grids, which they intersect.

### EXAMPLE

	1	2	3	4	5				
I						I 2	I 3	I 4	
II						II 1	II 3	II 5	

### PRACTICE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
I																		
II																		
III																		
IV																		
V																		
VI																		
VII																		
VIII																		
IX																		

I 4	I 10	IV 1	V 18	VII 18	VIII 9	VIII 18
I 5	I 11	IV 14	VI 1	VIII 1	VIII 10	IX 4
I 6	II 3	V 1	VI 18	VIII 3	VIII 11	IX 14
I 7	II 12	V 15	VII 1	VIII 5	VIII 13	
I 8	III 2	V 16	VII 4	VIII 7	VIII 15	
I 9	III 13	V 17	VII 14	VIII 8	VIII 17	

**WORKSHEETS**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
I																			
II																			
III																			
IV																			
V																			
VI																			
VII																			
VIII																			
IX																			
I	4		I	10		IV	1		V	18		VII	18		VIII	9		VIII	18
I	5		I	11		IV	14		VI	1		VIII	1		VIII	10		IX	4
I	6		II	3		V	1		VI	18		VIII	3		VIII	11		IX	14
I	7		II	12		V	15		VII	1		VIII	5		VIII	13			
I	8		III	2		V	16		VII	4		VIII	7		VIII	15			
I	9		III	13		V	17		VII	14		VIII	8		VIII	17			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
I																			
II																			
III																			
IV																			
V																			
VI																			
VII																			
VIII																			
IX																			
I	4		I	10		IV	1		V	18		VII	18		VIII	9		VIII	18
I	5		I	11		IV	14		VI	1		VIII	1		VIII	10		IX	4
I	6		II	3		V	1		VI	18		VIII	3		VIII	11		IX	14
I	7		II	12		V	15		VII	1		VIII	5		VIII	13			
I	8		III	2		V	16		VII	4		VIII	7		VIII	15			
I	9		III	13		V	17		VII	14		VIII	8		VIII	17			

# CODE + MATHS = FUN

## ACTIVITY 3

Decode the picture. Calculate and colour the grid with the result.  
(Version 1 - addition and subtraction. Version 2 - multiplication and division.)

### EXAMPLE

20	13	18	14	7	$9-2=7$	$12+4=16$
16	7	12	5	8	$5+3=8$	$15-3=12$

### PRACTICE

20	13	18	14	7	0	8	17	6	14	16	8	0	7	16	11	8
16	7	12	5	8	12	13	2	1	19	13	17	18	12	8	13	18
17	3	8	13	17	18	7	4	20	9	14	12	8	0	18	12	3
12	8	14	18	7	12	6	5	10	11	2	7	16	13	17	7	8
7	13	3	16	13	9	20	1	3	19	0	6	8	12	8	5	7
18	12	18	12	2	0	4	11	4	0	9	5	4	14	13	12	17
0	16	17	10	5	1	3	19	20	15	20	10	11	15	7	8	3
7	13	9	11	15	0	10	5	6	5	1	3	2	5	10	14	7
8	6	0	4	3	9	20	1	0	19	11	4	0	6	3	9	12
1	2	10	6	4	1	6	15	4	9	6	2	10	4	1	19	2
3	0	3	11	0	5	20	9	2	1	11	20	0	5	0	3	5
0	5	20	0	3	11	0	1	10	6	0	5	3	11	5	20	0

6-5	12-4	13+7	8:8	32:4	4x5
7+3	15-3	11-6	5x2	4x3	45:5
13+6	17-4	9-6	19x1	1x13	24:8
6-2	19-5	7+4	24:6	2x7	1x11
7+8	11+5	7-7	3x5	4x4	7x0
15-9	14+3		30:5	1x17	
5+4	9+9		27:3	6x3	
7-5	4+3		18:2	28:4	

**WORKSHEETS**

20	13	18	14	7	0	8	17	6	14	16	8	0	7	16	11	8
16	7	12	5	8	12	13	2	1	19	13	17	18	12	8	13	18
17	3	8	13	17	18	7	4	20	9	14	12	8	0	18	12	3
12	8	14	18	7	12	6	5	10	11	2	7	16	13	17	7	8
7	13	3	16	13	9	20	1	3	19	0	6	8	12	8	5	7
18	12	18	12	2	0	4	11	4	0	9	5	4	14	13	12	17
0	16	17	10	5	1	3	19	20	15	20	10	11	15	7	8	3
7	13	9	11	15	0	10	5	6	5	1	3	2	5	10	14	7
8	6	0	4	3	9	20	1	0	19	11	4	0	6	3	9	12
1	2	10	6	4	1	6	15	4	9	6	2	10	4	1	19	2
3	0	3	11	0	5	20	9	2	1	11	20	0	5	0	3	5
0	5	20	0	3	11	0	1	10	6	0	5	3	11	5	20	0

- 6-5      12-4      13+7
- 7+3      15-3      11-6
- 13+6      17-4      9-6
- 6-2      19-5      7+4
- 7+8      11+5      7-7
- 15-9      14+3
- 5+4      9+9
- 7-5      4+3

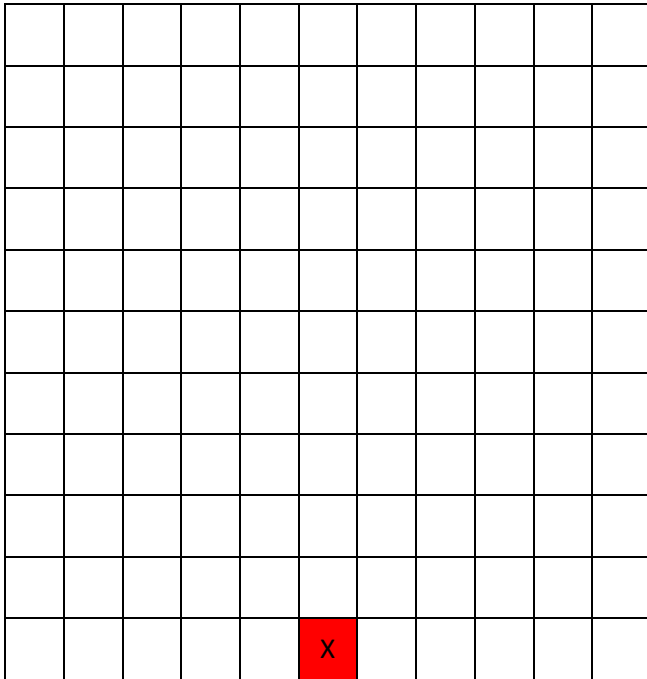
20	13	18	14	7	0	8	17	6	14	16	8	0	7	16	11	8
16	7	12	5	8	12	13	2	1	19	13	17	18	12	8	13	18
17	3	8	13	17	18	7	4	20	9	14	12	8	0	18	12	3
12	8	14	18	7	12	6	5	10	11	2	7	16	13	17	7	8
7	13	3	16	13	9	20	1	3	19	0	6	8	12	8	5	7
18	12	18	12	2	0	4	11	4	0	9	5	4	14	13	12	17
0	16	17	10	5	1	3	19	20	15	20	10	11	15	7	8	3
7	13	9	11	15	0	10	5	6	5	1	3	2	5	10	14	7
8	6	0	4	3	9	20	1	0	19	11	4	0	6	3	9	12
1	2	10	6	4	1	6	15	4	9	6	2	10	4	1	19	2
3	0	3	11	0	5	20	9	2	1	11	20	0	5	0	3	5
0	5	20	0	3	11	0	1	10	6	0	5	3	11	5	20	0

- 8:8      32:4      4x5
- 5x2      4x3      45:5
- 19x1      1x13      24:8
- 24:6      2x7      1x11
- 3x5      4x4      7x0
- 30:5      1x17
- 27:3      6x3
- 18:2      28:4



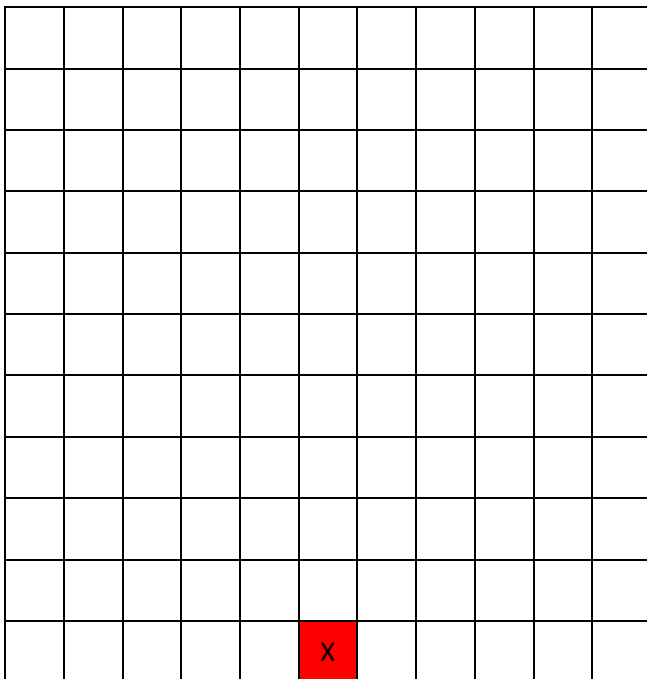


WORKSHEETS



>>

1 ↑	1 ←	1 ↑	1 ←	1 ↑
1 ←	1 ↑	1 ←	1 ↑	1 ←
2 ↑	1 →	1 ↑	1 →	1 ↑
1 →	1 ↓	1 →	1 ↓	2 →
1 ↑	1 →	1 ↑	1 →	1 ↓
1 →	1 ↓	1 →	2 ↓	1 ←
1 ↓	1 ←	1 ↓	1 ←	1 ↓
1 ←	1 ↓			



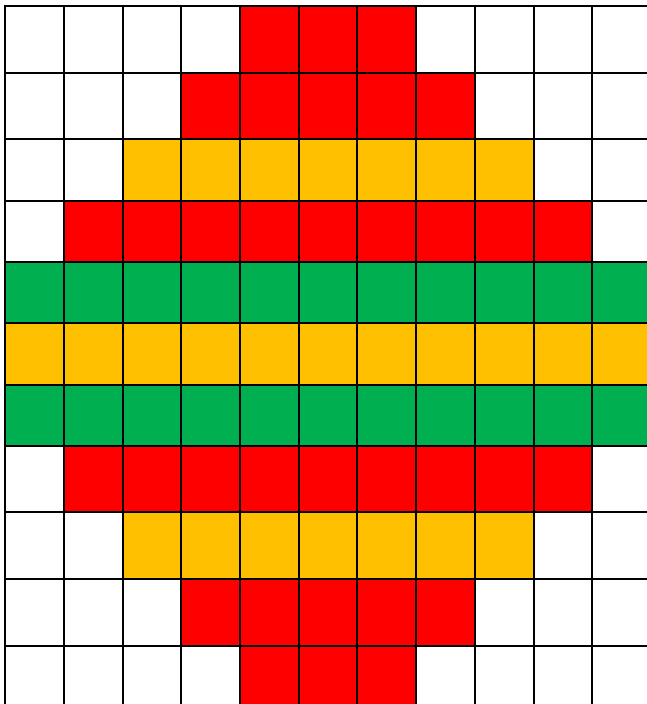
>>

1 ↑	1 ←	1 ↑	1 ←	1 ↑
1 ←	1 ↑	1 ←	1 ↑	1 ←
2 ↑	1 →	1 ↑	1 →	1 ↑
1 →	1 ↓	1 →	1 ↓	2 →
1 ↑	1 →	1 ↑	1 →	1 ↓
1 →	1 ↓	1 →	2 ↓	1 ←
1 ↓	1 ←	1 ↓	1 ←	1 ↓
1 ←	1 ↓			

## ACTIVITY 5

Christmas is coming. Create a Christmas ball picture and encode it. Below there are a few examples of coding, but you don't have to use them.

EXAMPLE



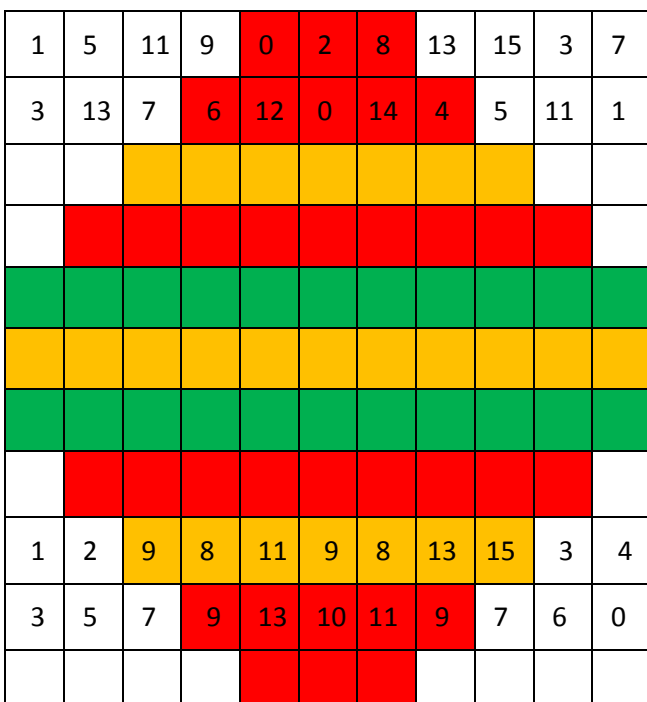
4 3 4

3 5 3

or

1+1 3+4 3-1

1+2 8-3 7-4



odd numbers even numbers

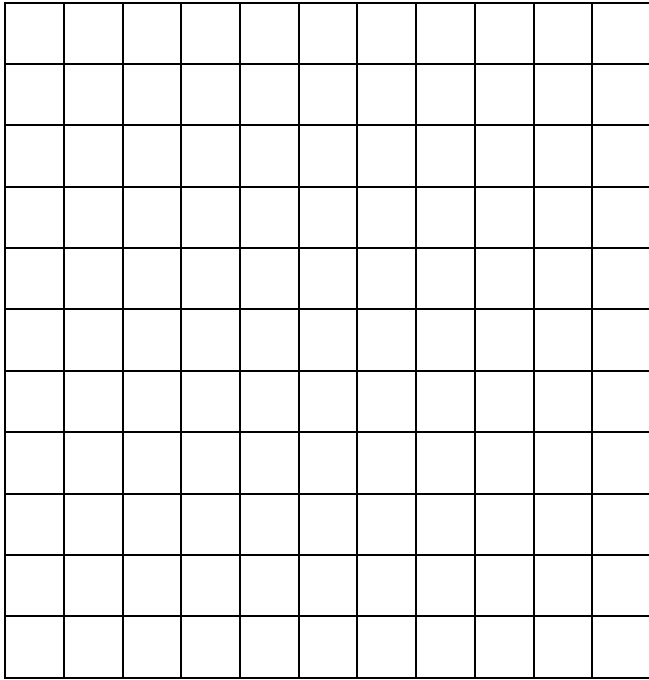
odd numbers even numbers

or

numbers<5 numbers>7

numbers<8 numbers>8

WORKSHEETS



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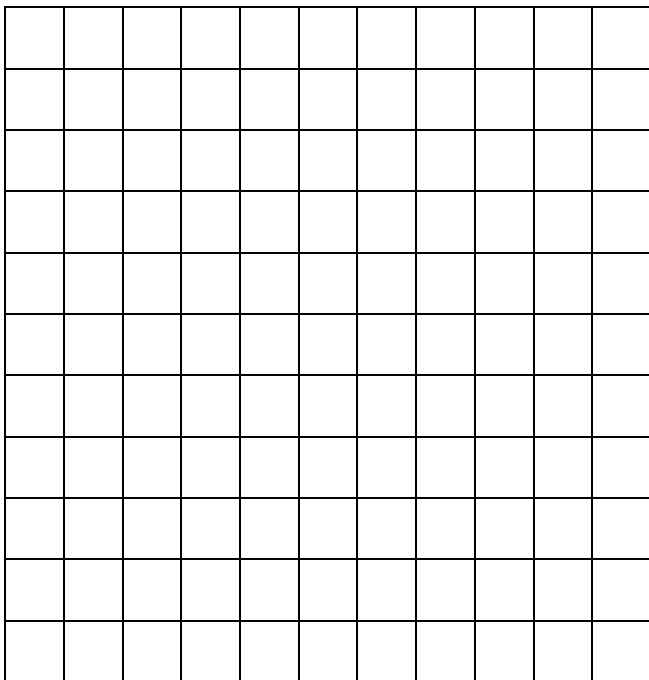
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