

KS2 Maths Activities

Here is a selection of maths activities for you to work through.

Summit

The total at the top (the summit) is found by adding the two numbers below it.

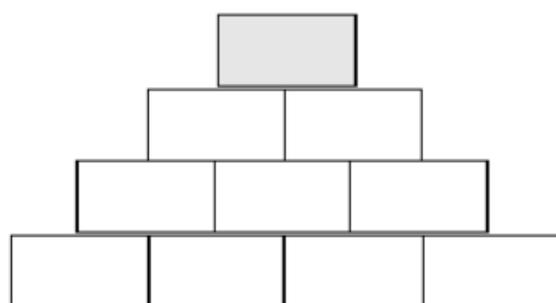
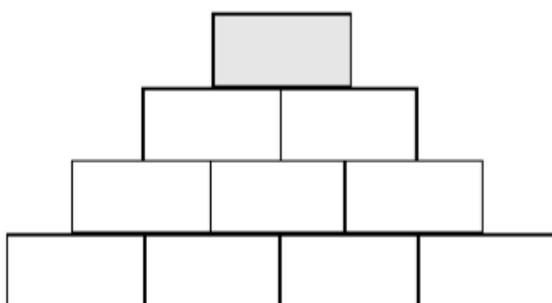
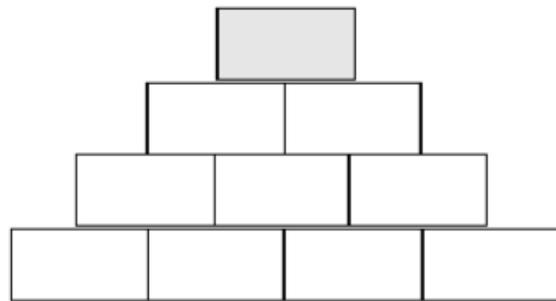
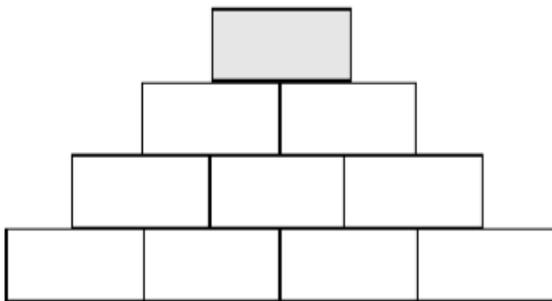
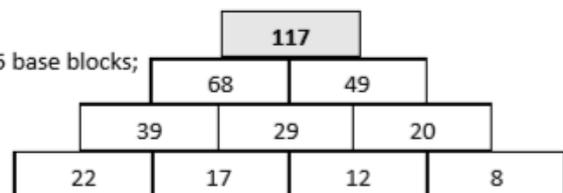
You will need: paper and pencil

Challenge: to investigate how 4 given numbers can be arranged in the bottom row to create:

a) the highest value summit b) the lowest value summit.

Support: remove a block from the bottom so that there are 3 base blocks;
simplify numbers.

Challenge: add a block to the bottom row so that there are 5 base blocks;
larger numbers; try decimals or fractions.



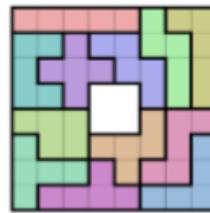
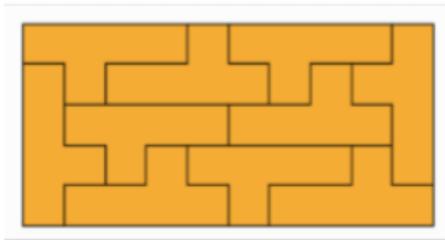
Problem Solving Challenge

Activity: Tessellating patterns

You will need: squared paper, colouring pens/pencils

Pentominoes are made from 5 congruent (the same) squares joined edge to edge. There are 12 different pentominoes.

- Work in pairs to see how many different pentominoes you can find.
- Using one pentomino, create a tessellating pattern (no gaps) and colour it.
- Create a design which uses all 12 pentominoes!



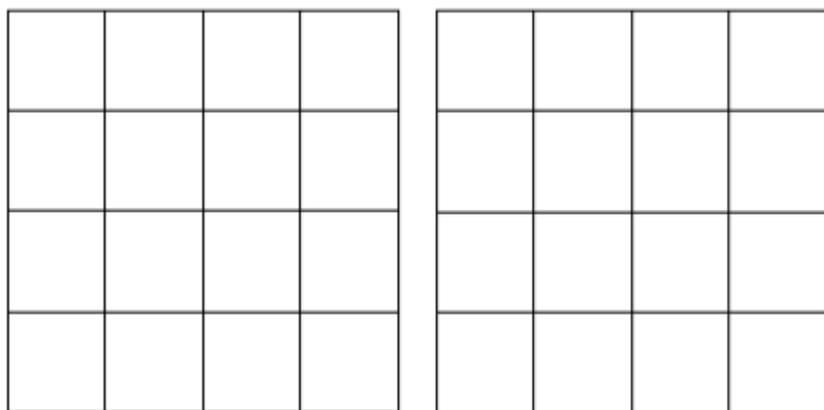
Number Knowledge

Magic squares

Challenger: 2 x 2 grid using the digits 1-4. How many combinations can you find?

Contender: 3 x 3 grid using the numbers 1-9.

Champion: 4 x 4 grid using the numbers 1-16 or try 5 x 5 using the numbers 1 -25.



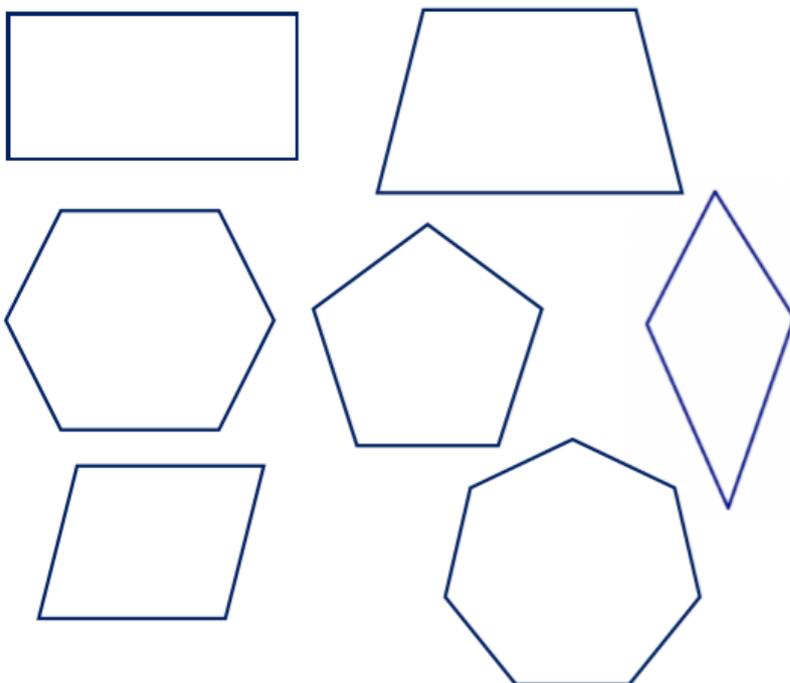
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Problem Solving Challenge



Investigating diagonals

Name of shape	Number of sides	Number of diagonals



28

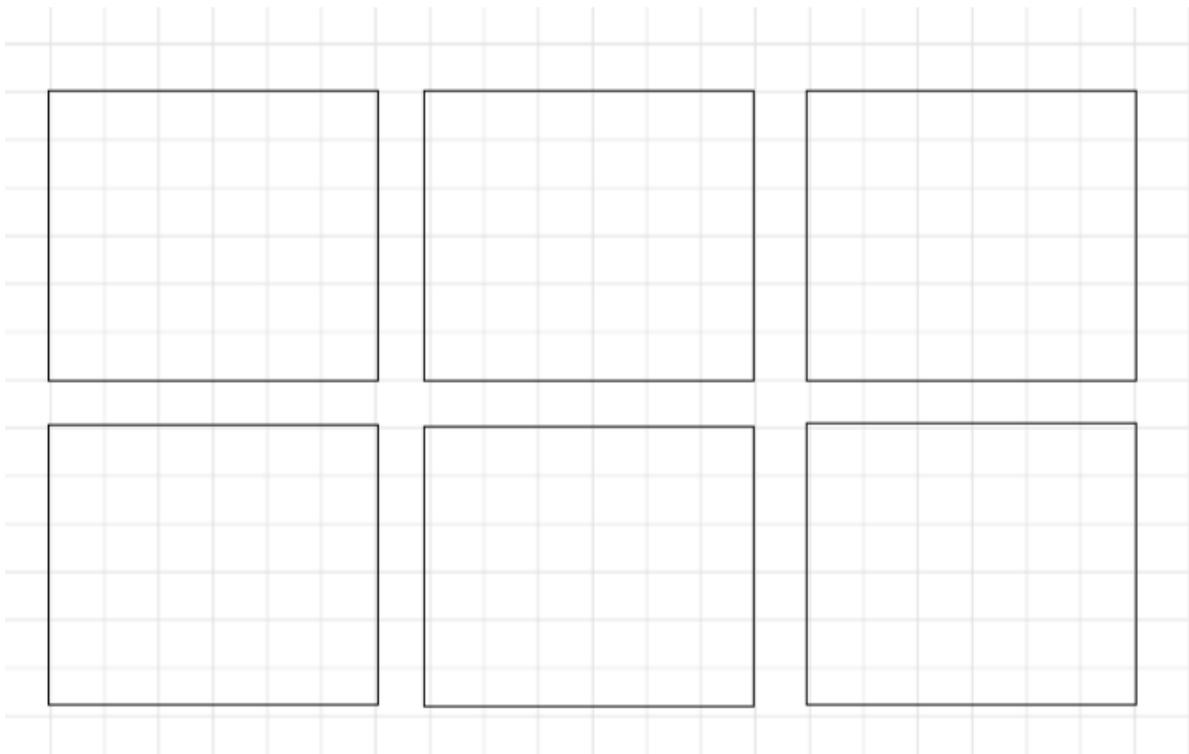
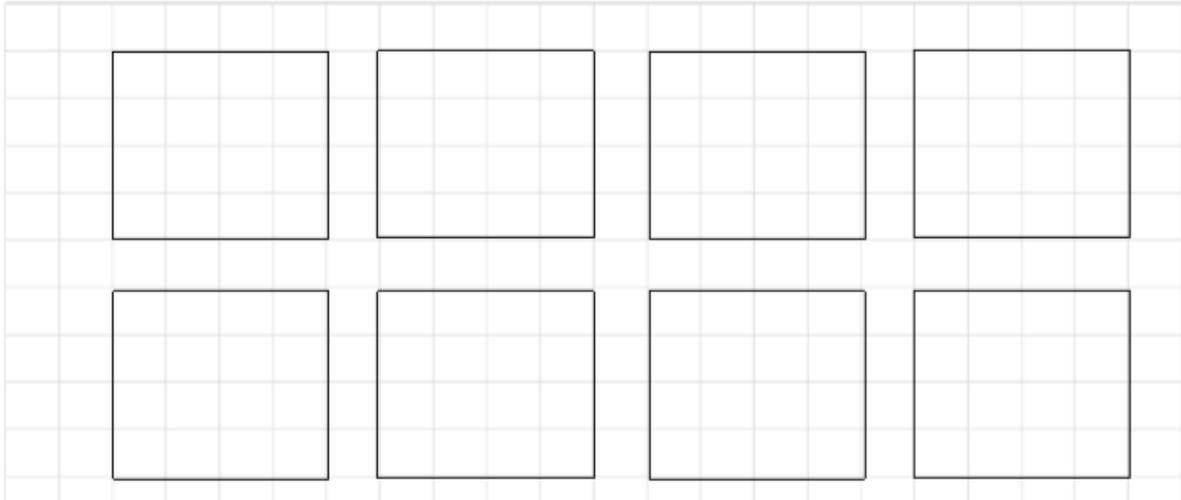
Problem Solving Challenge

Design a symmetrical mosaic pattern. Select from the following:

Challenger: 2 colours, shade half with each (4 x 4 grid);

Contender: 4 colours, shade a quarter with each (4 x 4 or 6 x 6 grid);

Champion: 3 colours, shade one third with each or give pupils the following to challenge further: $\frac{1}{3}$; $\frac{2}{6}$; $\frac{4}{12}$ (6 x 6 grid).



Number Knowledge

Arabic	Attic Greek
0.25	Ϟ
0.5	Ϛ
1	Ι
5	ϚΠ
10	Δ
50	ϚϚ
100	Η
500	ϚϚϚ
1 000	Χ
5 000	ϚϚϚϚ
10 000	Μ
50 000	ϚϚϚϚϚ

These are the Attic symbols used by the Ancient Greeks.

Can you write the following in Attic symbols?

- Your age
- The year you were born
- The number of pupils in your class/school
- Your house number
- The number of legs on a spider

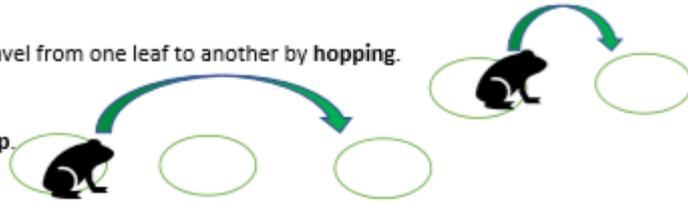
Challenge: Write some True/False questions for your partner.

Frogs and lily pads

You will need: paper and pencils.

A frog can travel from one leaf to another by **hopping**.

Or it can **jump**.



How many ways can a frog travel along:

- a) 4 leaves?
- b) 5 leaves?
- c) 6 leaves?

Complete the table. What do you notice about the numbers?
Can you predict how many ways for 7, 8 or 9 leaves?

Number of leaves	2	3	4	5	6	7	8
Number of ways							

Explain the pattern:

Problem solving challenge

Crossword grid

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

Clues across

- 1.
- 3.
- 6.
- 8.
- 9.
- 12.
- 14.
- 16.
- 18.
- 19.

Clues down

- 1.
- 2.
- 4.
- 5.
- 7.
- 10.
- 11.
- 13.
- 15.
- 17.

Teach a family member a maths skill!

Can you create Easter themed word problems for your family to 'crack'?

Create your own maths game.