

Choose a maths problem to do each day and then one or two reasoning problems.

Maths problems				
<u>Hard and Easy</u>	<u>The Same and Different</u>	<u>Odd One Out</u>	<u>Always, Sometimes, Never True</u>	<u>Ordering</u>
Give an example that is really complicated and one that is very easy. Then explain what makes it hard or easy.	What is the same and what is different about these pairs? E.g. they are both odd, they are both less than 10 etc.	Make each of these items in turn the odd one out of the three, giving reasons.	Are the following always, sometimes or never true? Give examples to explain.	Order these items.
A calculation with an answer of 7.	3 and 10	3, 4, 9	Multiplying an odd number by an odd number gives an odd answer?	Order these numbers according to how close to 10 they are: 12, 9, 8, 14, 7
A division question.	$\frac{1}{2}$ and $\frac{1}{4}$	cylinder, sphere, cube	A circle has no straight sides.	Order these shapes according to the number of sides: octagon, quadrilateral, pentagon, triangle, hexagon.
A pair of numbers that multiply to give an answer of 64.	121 and 256	60, 360, 100	You can sort a set of five objects into two sets.	Order these numbers according to how close to 1 they are: $\frac{1}{2}$, $\frac{3}{4}$, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$
Can you make up some of your own problems for each of these and test them out on your family or people in your house?				

Reasoning Problems – you may find the questions on the left easier than the questions on the right.



Mo

I get up at 7 o'clock in the morning and go to bed at 7 o'clock at night. This means I have been awake for a full day.

Do you agree with Mo?

Explain your answer.

Eva starts playing her piano at 11:30

She plays for 45 minutes before having a half an hour break.

She then plays for another 15 minutes.



What time did she finish?

The chocolate bar weighs 100 g.

How much does one muffin weigh?

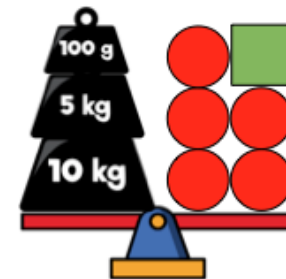


How much does each side weigh?

Here is a balance.



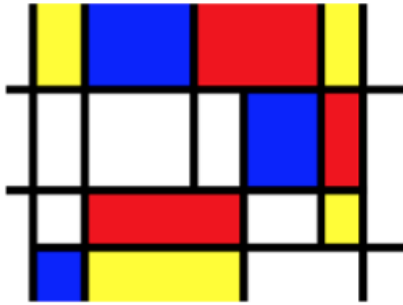
Here is another.



Work out the value of



Can you create your own version for a partner?



How many horizontal and vertical lines can you spot in this image by Mondrian?

Create your own piece of art work using only horizontal and vertical lines.

The letter 'X' has four angles.



Write your name in capital letters.

How many angles can you see in each letter?

How many angles are there in your full name?

How close can you get to 100?

Use each digit card once in the multiplication.

2 3 4

× =

Compare the statements using $<$, $>$ or $=$

$48 \div 4$ $36 \div 3$

$52 \div 4$ $42 \div 3$

$60 \div 3$ $60 \div 4$

Sort the lengths into the table.

Longer than a metre	Shorter than a metre

1 m 65 cm

165 mm

165 m

165 cm

16 cm 5mm

1 cm 65 mm

Are any of the lengths equivalent?

Eva is building a tower using these blocks.



100 mm



80 mm



50 mm

How many different ways can she build a tower measuring 56 cm?

Can you write your calculations in mm and cm?

Dora bought these muffins.



Muffins cost 35 p each.

How much did Dora spend?

Tommy bought three times as many muffins as Dora.

How many muffins did Tommy buy?

How much money did Tommy spend on muffins?

How much more money did Tommy spend than Dora?

Amir has 5 different coins in his wallet.



What is the greatest amount of money he could have in his wallet?

What is the least amount of money?