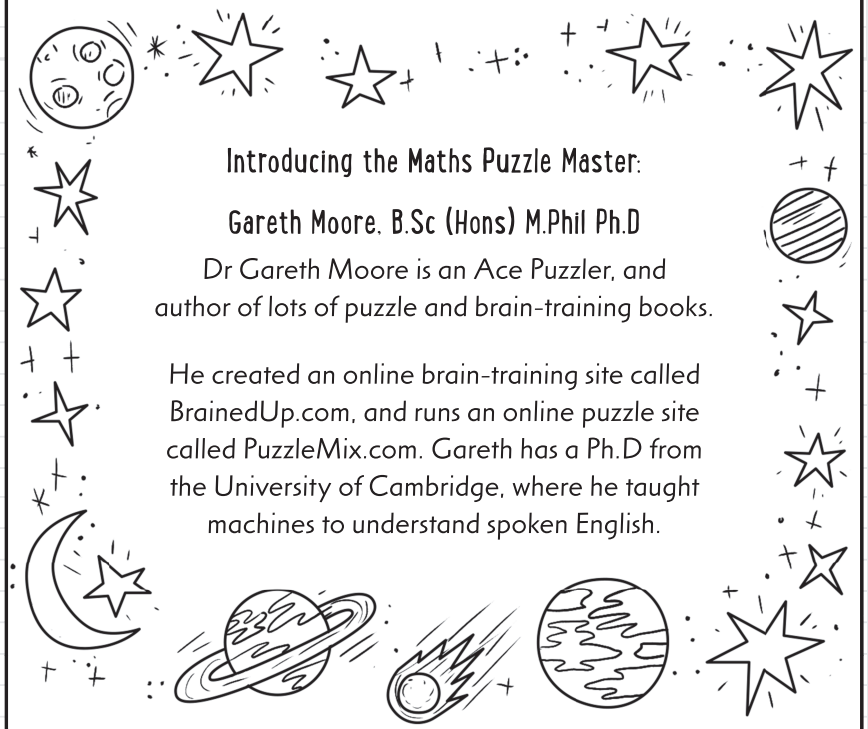
INTRODUCTION

If you're still stuck, you could also try asking an adult, although did you know that your brain is actually much more powerful than a grown-up's? When you get older, your brain will get rid of lots of bits it thinks it doesn't need any more, which means you might be better at solving these games than older people are.

If you're **REALLY** stuck, have a peek at the answers at the back of the book, and then try and work out how you could have got to that solution yourself.

Now, good luck and have fun!

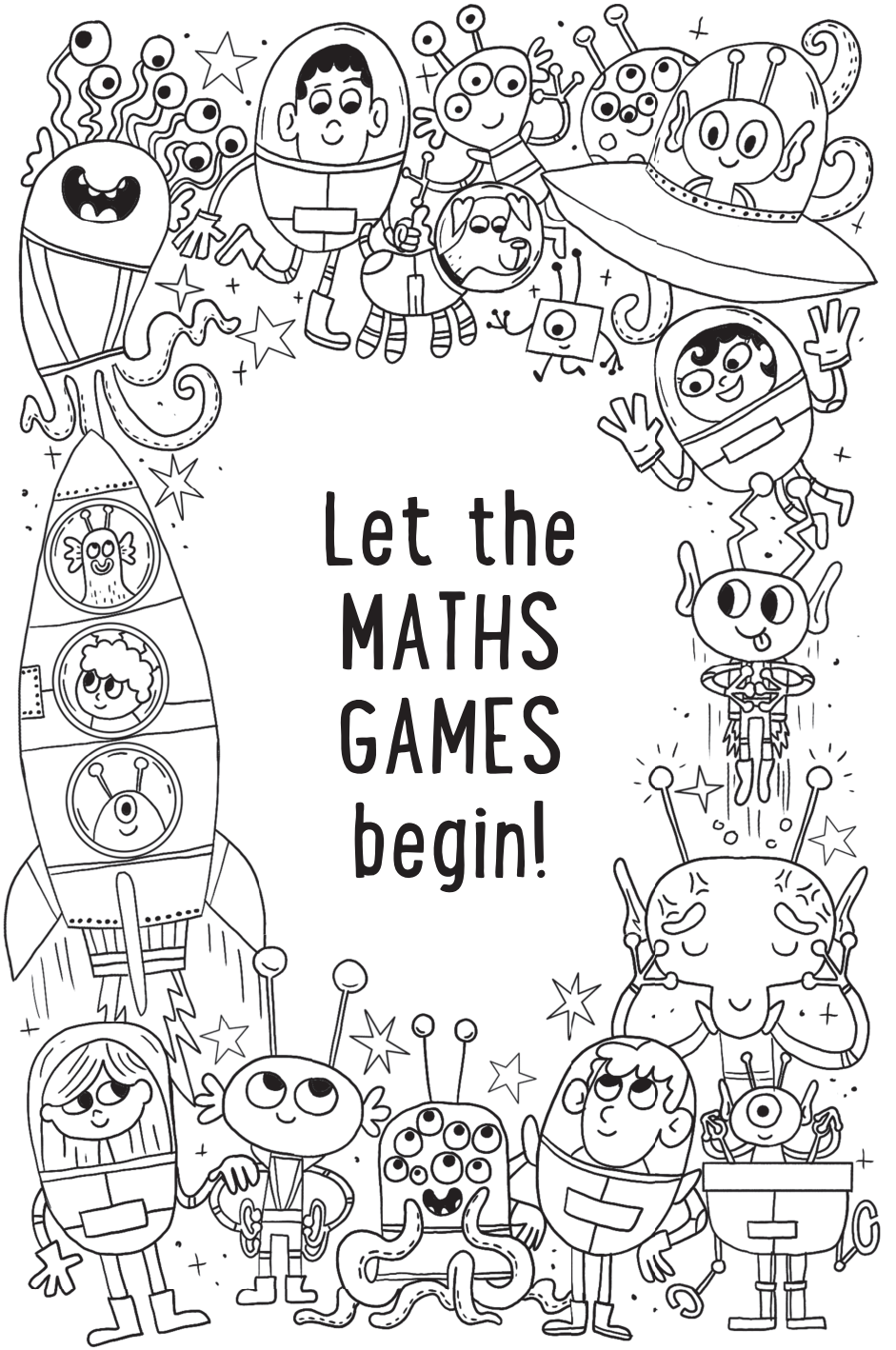


Introducing the Maths Puzzle Master:

Gareth Moore, B.Sc (Hons) M.Phil Ph.D

Dr Gareth Moore is an Ace Puzzler, and author of lots of puzzle and brain-training books.

He created an online brain-training site called BrainedUp.com, and runs an online puzzle site called PuzzleMix.com. Gareth has a Ph.D from the University of Cambridge, where he taught machines to understand spoken English.

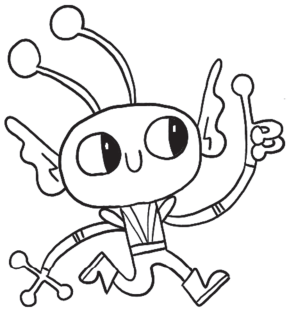


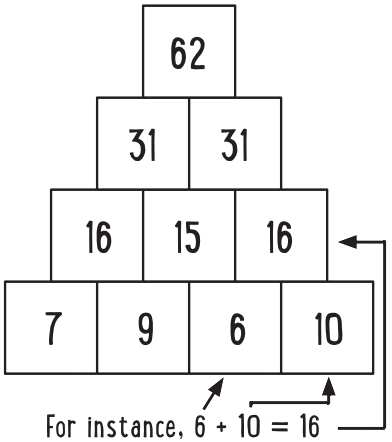
MATHS PUZZLE 1

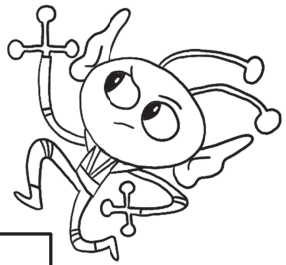
TIME .....

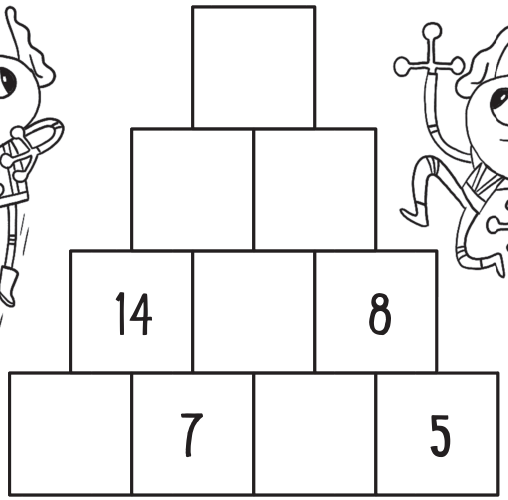
Can you conquer the number pyramid by making sure that every block is equal to the sum of the numbers on the two blocks directly beneath it?

Here's a finished example:





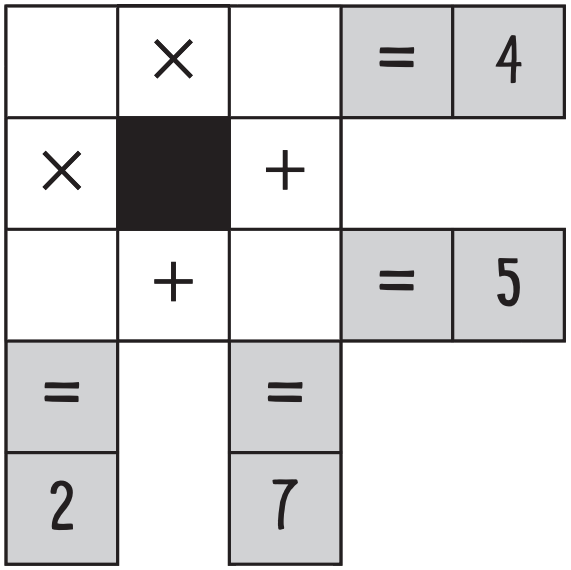


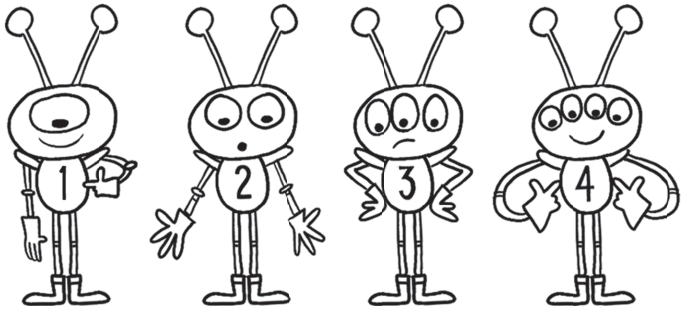


TIME .....

MATHS PUZZLE 2

Can you place the digits 1 to 4 once each into the four empty squares so that each of the mathematical equations is correct? Two equations read left-to-right, and two read top-to-bottom.

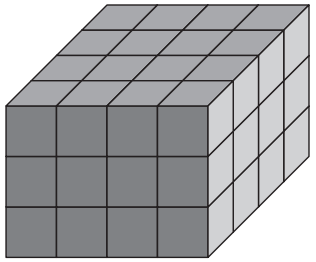




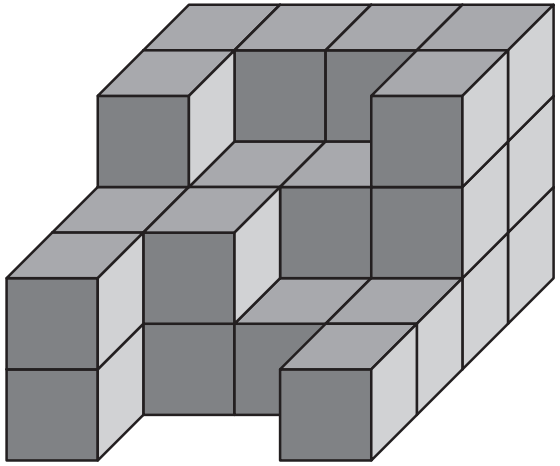
MATHS PUZZLE 3

TIME .....

Original stack



How many cubes can you count in the picture below? It started off as the 4x4x3 arrangement of cubes shown above, but someone has been stealing from the stack. None of the cubes are 'floating' in the air, so if there is a cube on a layer above the bottom one then you can be certain that all of the cubes beneath it are still there too.



Answer: There are ..... cubes

TIME .....

MATHS PUZZLE 4

Can you work out which number should come next in each of these mathematical sequences?

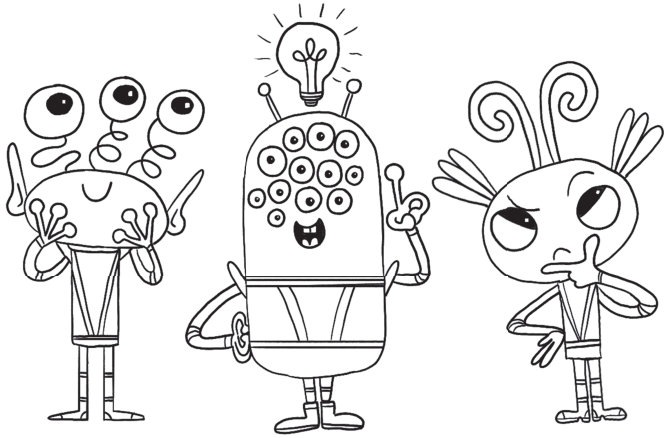
a) 29 27 25 23 21 19 .....

b) 23 26 29 32 35 38 .....

c) 128 64 32 16 8 4 .....

d) 7 13 19 25 31 37 .....

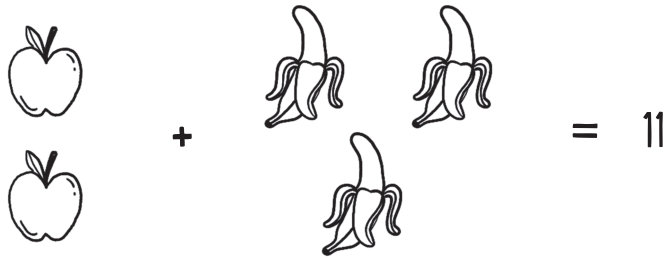
e) 7 8 10 13 17 22 .....



MATHS PUZZLE 5

TIME .....

Looking at these picture equations, can you work out the value of each of the fruits?



 Apple = ...

 Banana = ...

 Cherry = ...

TIME .....

MATHS PUZZLE 6

Can you use each of these mathematical operations to join a pair of numbers?

+9 ×2 ×3 ×5

Pick two of the numbers below that can be joined by one of the mathematical operations above. Each number, and each operation, should be used only once. Note that there are multiple ways of joining some pairs, but only one way of doing it which allows everything to be used just once.

For example, you could use the **×5** operation to join **5** and **25**, since 5 × 5 = 25.

12 9 5

4 13

3 25 6

Write your answers below:

.....

.....

.....

.....

.....

MATHS PUZZLE 7

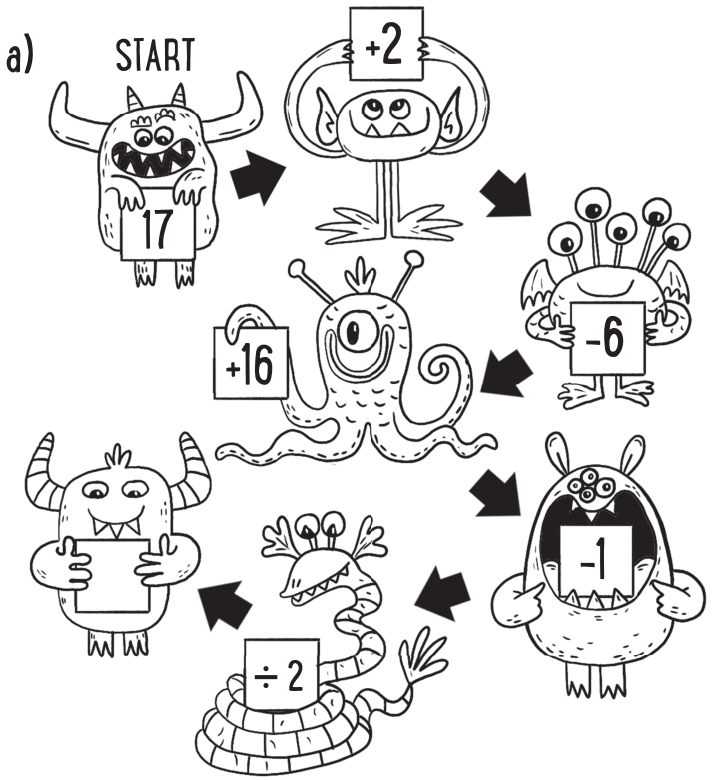
TIME .....

These space monsters are marvellous at maths. They have created some mental-arithmetic puzzles for you to solve.

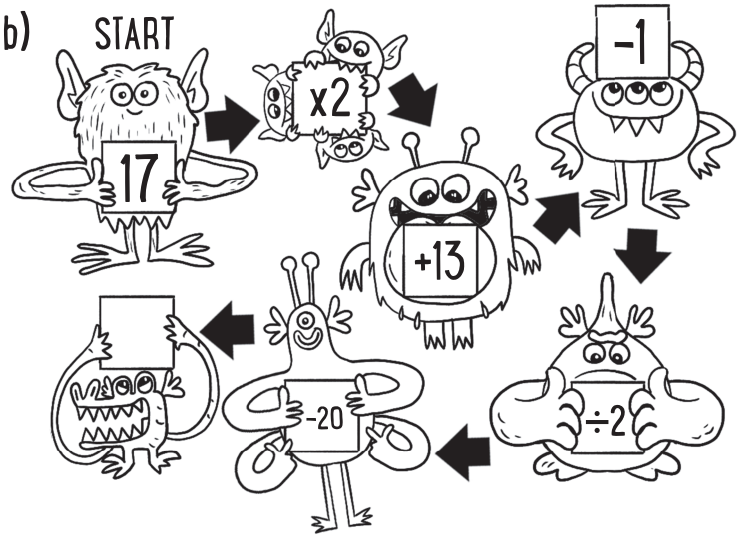
Each of these monster chains is giving you some mathematical instructions. Begin with the number at the START of each sequence, and then apply each mathematical operation in turn until you reach the end of the row. Try to do all of the maths in your head, without making any written notes.

Write your answer in the box at the end of each sequence.

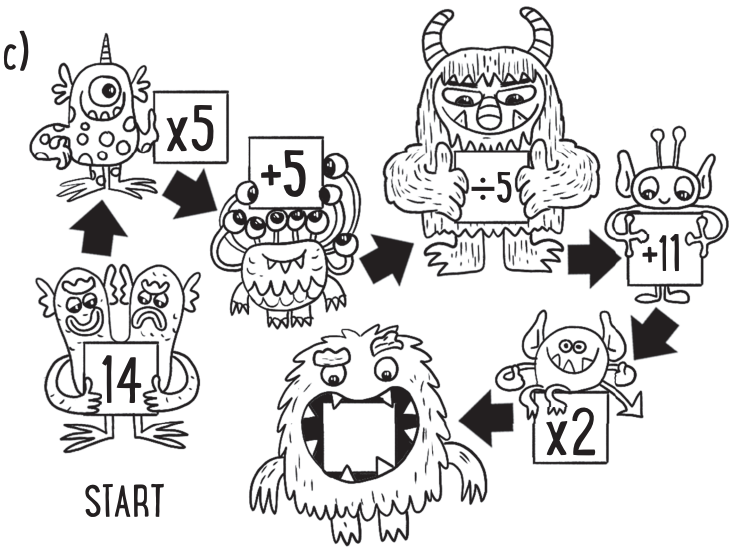
a)



b)



c)

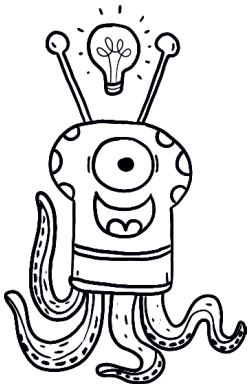


MATHS PUZZLE 8

TIME .....

To solve this frame sudoku puzzle, place the numbers 1 to 4 once each into every row, column and bold-lined 2x2 box, just like in regular sudoku. The numbers outside the grid tell you the sum of the two nearest numbers in the corresponding row or column.

Here's a finished example:



	5	5	5	5	
3	1	2	3	4	7
7	4	3	2	1	3
4	3	1	4	2	6
6	2	4	1	3	4
	5	5	5	5	

For instance, 3 + 2 = 5

	5	5	6	4	
3					7
7				1	3
7	4				3
3					7
	5	5	4	6	

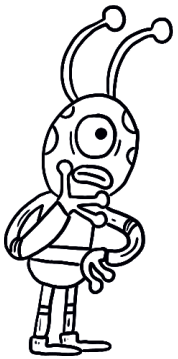
TIME .....

MATHS PUZZLE 9

By adding together some of the numbers below, can you make each of the totals listed in the column?

4 5 7 10 11 12

You can use each number only once per total. You could form 18 by adding 7 + 11, for example, but not by adding 4 + 4 + 10.



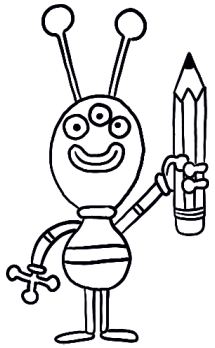
Totals:

18

24

31

35



Write your answers below:

18 = ...

24 = ...

31 = ...

35 = ...