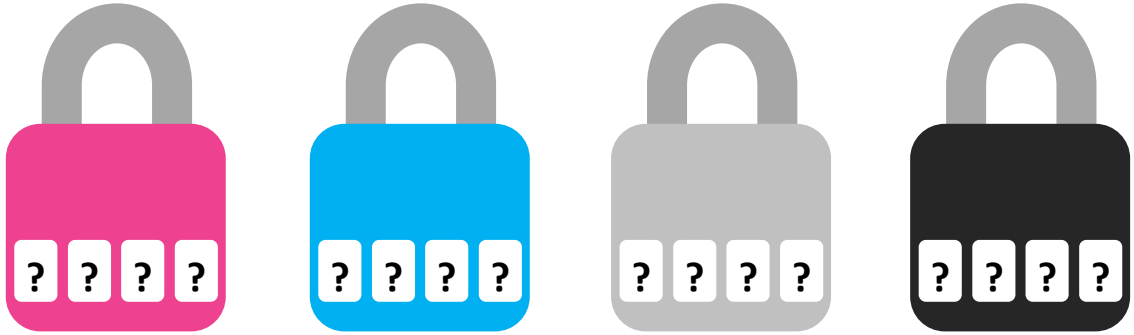
Number Stacks

- Making sense of Numbers -

Puzzle Box Challenges



Year 2

INSTRUCTIONS

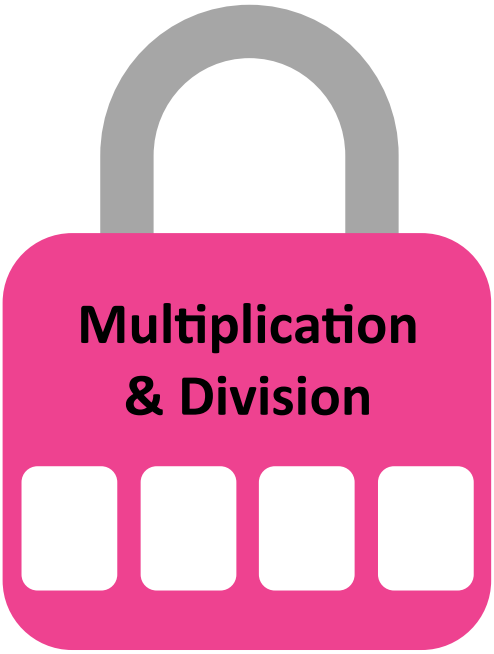
Number Stacks Puzzle Box Challenges are designed to help children practise the fluency skills they have learnt across different areas of maths. Challenges can be completed either with or without using practical resources depending on the children's level of confidence.

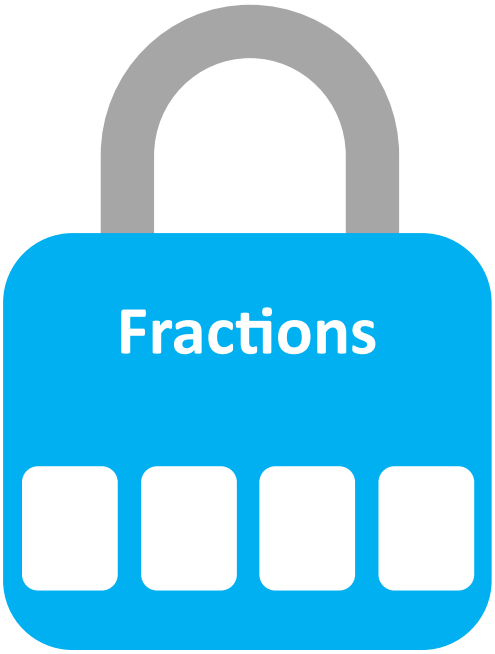
There are 10 sets of challenges (A to J) and all you need to do is choose one set and give them to your children to solve! If you have one of our real-life Puzzle Boxes, set each padlock to the relevant solution before you begin or if not, simply print out our answer sheet for the children to record their codes and let them know when they are correct.

Why not put a mystery reward inside the box for a bit of extra motivation!

Can you solve all the puzzles to open the box?

Puzzle Box Challenge: Answer Sheet





Number Stacks

Y2A

Number & Place Value

Add both digits in each separate answer for your code.

43 + 10 = ?

72 - 10 = ?

? + 10 = 25

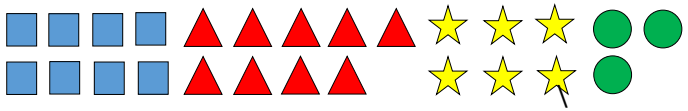
? - 10 = 42

Number Stacks

Y2A

Addition & Subtraction:

The four answers will make your code.



How many squares?

How many more squares than circles?

How many more triangles than stars?

How many stars and circles altogether?

Number Stacks

Y2A

Multiplication & Division:

Add the two digits in each missing number

for your code.

3, 6, 9, 12, ?

6, 8, 10, 12, ?

45, 40, 35, ?

40, 50, 60, ?

Number Stacks

Y2A

Fractions:

The four separate answers will make your code

$\frac{1}{2}$ of 12

$\frac{1}{4}$ of 12

$\frac{1}{3}$ of 15

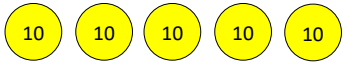
$\frac{3}{4}$ of 12

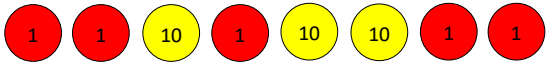
Number Stacks

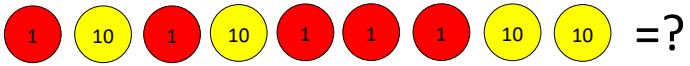
Y2B

Number & Place Value

Add both digits in each separate answer for your code.







Number Stacks

Y2B

Addition & Subtraction:

Add both digits in each separate answer for your code.

? + 13 = 20

23 - ? = 17

? - 5 = 4

11 = 6 + ?

Number Stacks

Y2B

Multiplication & Division:

Add the two digits in each answer for your code.

5 x 5 =

3 x 10 =

9 x 2 =

8 x 5 =

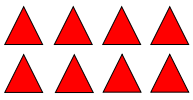
Number Stacks

Y2B

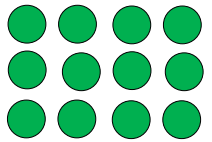
Fractions:

The four separate answers will make your code

1. Circle $\frac{1}{4}$

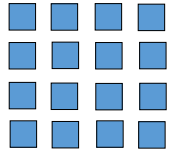


2. Circle $\frac{1}{3}$



3. Circle $\frac{1}{2}$

4. Circle $\frac{2}{4}$



Number Stacks

Y2C

Number & Place Value

Add the digits in each separate answer for your code.

60 + ? = 64

54 = 4 + ?

10 + ? = 19

81 = ? + 80

Y2C

Addition & Subtraction:

Add both digits in each separate answer for your code.

33 + 21 = ?

35 + 27 = ?

33 + 18 = ?

14 + 36 = ?

Y2C

Multiplication & Division:

Add the digits in each separate answer for your code.

Double 6

Half of 14

Double 16

Half of 46

Y2C

Fractions:

Decide if each fact is true or false to get your code

	True	False
$\frac{1}{4}$ of 20 = 10	*2*	*8*
$\frac{1}{3}$ of 15 = 5	*0*	*4*
$\frac{1}{2}$ of 30 = 15	*7*	*6*
$\frac{3}{4}$ of 16 = 4	*5*	*3*

Y2D

Number & Place Value

Add both digits in each separate answer for your code.

Which is bigger: 36 or 63 ?

Which is bigger: 61, 36 or 16 ?

Which is bigger: 78, 18, 28 or 81 ?

Which is bigger: 34, 53, 35 or 45 ?

Number Stacks

Y2D

Addition & Subtraction:

Add both digits in each separate answer for your code.

57 - 35 = ?

42 - 24 = ?

75 - 42 = ?

82 - 58 = ?

Number Stacks

Y2D

Multiplication & Division:

The answers to each question will be your code.

30 ÷ 5 = ?

16 ÷ 2 = ?

40 ÷ 10 = ?

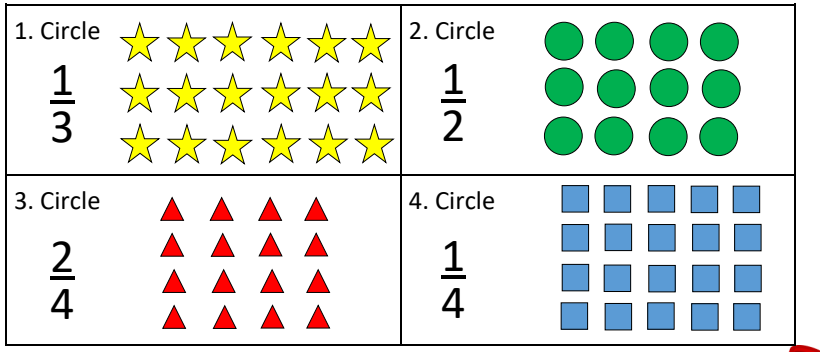
5 ÷ 1 = ?

Number Stacks

Y2D

Fractions:

The four separate answers will make your code



Number Stacks

Y2E

Number & Place Value

Add both digits in each separate answer for your code.

Find one more than 16

Find one fewer than 37

Find one less than 41

Find one greater than 79

Number Stacks

Y2E

Addition & Subtraction:

Add the digits in each separate answers for your code.

Add 38 and 24

Take 19 away from 44

Find 13 more than 39

Find the difference between 65 and 42

Number Stacks

Y2E

Multiplication & Division:

Add the digits in each missing number for your code.

12, 14, 16, ?

65, 70, 75, ?

15, 18, 21, ?

100, 90, 80, ?

Number Stacks

Y2E

Fractions:

Add the digits in each missing number for your code

$\frac{1}{4}$ of ? = 3

$\frac{1}{2}$ of ? = 9

$\frac{3}{4}$ of ? = 9

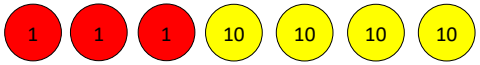
$\frac{1}{3}$ of ? = 5

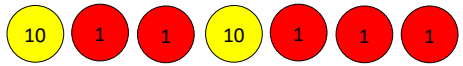
Number Stacks

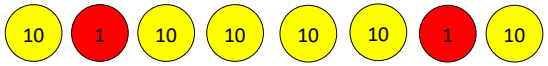
Y2F

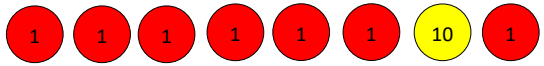
Number & Place Value

Add both digits in each separate answer for your code.









Number Stacks

Y2F

Addition & Subtraction:

Add both digits in each separate answer for your code.

33 + 20 = ?

57 - 30 = ?

12 + 40 = ?

61 - 50 = ?

Number Stacks

Y2F

Multiplication & Division:

The four answers will be your code.

40 ÷ 5 =

18 ÷ 2 =

60 ÷ 10 =

35 ÷ 5 =

Number Stacks

Y2F

Fractions:

Decide if each fact is true or false to get your code

	True	False
$\frac{1}{4}$ of 8 = 6	*7*	*2*
$\frac{1}{3}$ of 12 = 3	*0*	*6*
$\frac{1}{4}$ of 10 = 4	*3*	*0*
$\frac{3}{4}$ of 12 = 9	*4*	*5*

Number Stacks

Y2G

Number & Place Value

Find the smallest number in each line then add both digits in it together for your code.

77	17	71	70
42	24	44	22
19	91	9	99
85	35	53	38

Number Stacks

Y2G

Addition & Subtraction:

Add the digits in each missing number for your code.

$42 - ? = 38$

$36 + ? = 45$

$16 = 23 - ?$

$26 = ? + 18$

Number Stacks

Y2G

Multiplication & Division:

Add the digits in each separate answer for your code.

7×2

9×5

8×10

6×5

Number Stacks

Y2G

Fractions:

Add the digits in each answer for your code

$\frac{1}{4}$ of $24 = ?$

$\frac{1}{2}$ of $18 = ?$

$\frac{1}{3}$ of $9 = ?$

$\frac{3}{4}$ of $8 = ?$

Number Stacks

Y2H

Number & Place Value

Add both digits in each separate answer for your code.

One more than 19

Ten less than 63

Ten greater than 43

One less than 91

Number Stacks

Y2H

Addition & Subtraction:

Add both digits in each separate answer for your code.

26 + 35 =

83 - 58 =

44 + 19 =

60 - 27 =

Number Stacks

Y2H

Multiplication & Division:

Add the digits in each separate answer to get your code.

Double 8

Double 22

Double 27

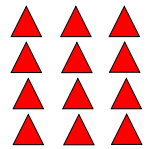
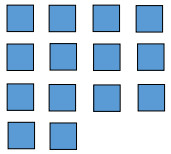
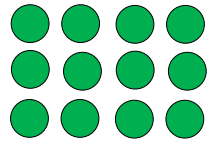
Double 36

Number Stacks

Y2H

Fractions:

The four separate answers will make your code

1. Circle $\frac{2}{4}$ 	2. Circle $\frac{1}{3}$ 
3. Circle $\frac{1}{2}$ 	4. Circle $\frac{1}{4}$ 

Number Stacks

Y2I

Number & Place Value

Add the digits in each missing number for your code.

80 + ? = 87

9 + ? = 19

38 = ? + 8

79 = 9 + ?

Number Stacks

Y2I

Addition & Subtraction:

Add the digits in each missing number for your code.

7 + 6 + 3 =

2 + 8 + 5 =

4 + 7 + 6 =

3 + 1 + 9 =

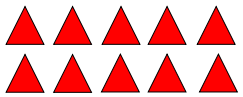
Number Stacks

Y2I

Multiplication & Division:

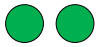
Work out how many of each shape there will be and add the two digits in each answer for your code.

5 sets of stars



7 sets of triangles

8 sets of squares



9 sets of circles

Number Stacks

Y2I

Fractions:

The four separate answers will make your code

	True	False
$\frac{1}{4}$ of 8 = 4	*8*	*3*
$\frac{1}{2}$ of 18 = 9	*2*	*1*
$\frac{3}{4}$ of 40 = 30	*0*	*4*
$\frac{1}{3}$ of 30 = 3	*9*	*6*

Number Stacks

Y2J

Number & Place Value

Find the greatest number in each line then add both digits in it together for your code.

21	19	11	18
18	28	34	14
67	27	72	29
30	19	10	29

Number Stacks

Y2J

Addition & Subtraction:

Add the digits in each missing number for your code.

45 - 23 =

69 - 56 =

52 - 35 =

62 - 35 =

Number Stacks

Y2J

Multiplication & Division:

Divide the top number into equal parts to get your code.

1.

20			
?	?	?	?

2.

12			
?	?	?	?

3.

16	
?	?

4.

30					
?	?	?	?	?	?

Number Stacks

Y2J

Fractions:

Add the digits in each missing number for your code.

$\frac{1}{2}$ of ? = 10

$\frac{3}{4}$ of ? = 6

$\frac{1}{3}$ of ? = 5

$\frac{1}{4}$ of ? = 5

Number Stacks

Puzzle Box Solutions

YEAR 2	Number & Place Value	Addition & Subtraction	Multiplication & Division	Fractions, Decimals & Percentages
Set A	8867	8539	6537	6359
Set B	5589	7695	7394	2478
Set C	4591	9865	3755	8073
Set D	9798	4966	6845	6685
Set E	8948	8775	9867	3936
Set F	7788	8972	8967	2604
Set G	8498	4978	5983	6936
Set H	2889	7796	7899	6373
Set I	7137	7684	1749	3206
Set J	3793	4489	5385	2862

Number Stacks