

Maths Challenge Set 1

How to use the challenges

The maths challenge sheets include the main facts that the children need to recall and use by the end of the academic year. These facts are broken down into twelve targets, each given a colour. They are introduced during maths lessons and reinforced regularly but further practise at home is extremely helpful. One target at a time will be stuck in to your child's Home/School book.

- Regular practise is more effective than one longer session a week. The children don't always need to write something down. Practise can be oral.
- There are lots of activities on the School 360 Learning platform that will support these challenges.
- It is important that when children are confident with a set of facts, they continue to practise them and apply them in a practical way. For example, when a child has learned all number pairs to 20; $17 + 3 = 20$, $20 - 17 = 3$, they can use this to solve problems. "I have 20p. I spend 16p, how much do I have left?",
- "I have saved 13p. How much more do I need to have 20p?" etc. The children can discuss these questions and solve them mentally, without always writing something down.
- Regular assessment takes place in school, during maths lessons. When your child is confident with a particular 'colour' on the challenge sheet, their teacher will colour all of the faces on the challenge sheet that is in their Home/ School book.

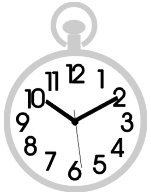
Remember, these challenges alone will not be enough to help your child learn these skills.

Websites to support.

Maths Challenge – Set 1



I can write numbers from 0 – 20 in digits and words.



2 minutes

Say the numbers and ask your child to write them in numerals and words. If incorrect show your child the correct spelling/numerals. Challenge: Cover the numbers/words up and see if they write them.

E.G. Show child 'one' in words and ask them to write numeral...or show them the numeral one as them to write numeral.

Previous score



one 1

three 3

five 5



seven 7

nine 9

ten 10

twelve 12



thirteen 13

eighteen 18

twenty 20

eight 8

fourteen 14

12

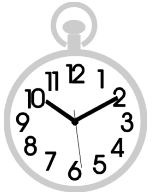
Set 1

1

Maths Challenge Set 1 - White



I can write numbers from 0 – 20 in digits and words.



2 minutes

Previous score

15

★	
6	six
4	four
0	zero
2	two
5	five

★ ★	
9	nine
15	fifteen
19	nineteen
11	eleven
12	twelve

★ ★ ★	
13	thirteen
17	seventeen
16	sixteen
15	fifteen
20	twenty

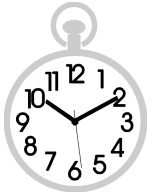
Set 1

2

Maths Challenge Set 1 - Red



I can read and write numbers to 100 in digits and words.



2 minutes

Previous score

15

★
one
eleven
eight
twenty
eighteen

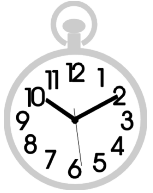
★ ★
twenty two
twenty three
thirty six
thirty eight
twenty seven

★ ★ ★
thirty eight
forty three
forty six
forty five
fifty

Maths Challenge Set 1 - Red

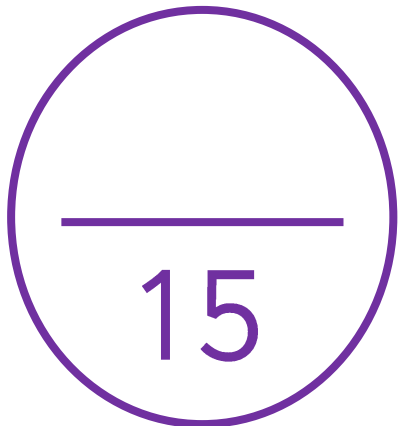


I can read and write numbers to 100 in digits and words.



2 minutes

Previous score



★	★ ★	★ ★ ★
eighteen	forty seven	seventy four
nineteen	sixty three	seventy seven
thirty two	fifty eight	eighty nine
twenty nine	sixty five	ninety six
forty	forty six	one hundred

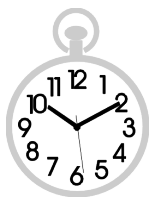
Set 1

4

Maths Challenge Set 1 - Orange



I can count to and across 100, **forwards** from any given number.



2 minutes

Previous score

Ask children to give you the next three numbers in each sequence.



2, 3, 4.....

1, 2, 3.....

8, 9, 10

11, 12, 13.....

15, 16, 17.....



16, 17, 18.....

26, 27, 28.....

36, 37.....

56, 57.....

43, 44



66.....

76.....

81.....

78.....

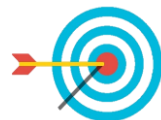
97.....

15

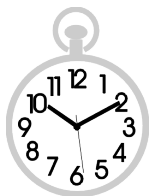
Set 1

5

Maths Challenge Set 1 - Orange



I can count to and across 100, **backwards**
from any given number.



3 minutes

Previous score

13

Ask children to give you the next three numbers in each sequence.



10, 9, 8.....

15, 14, 13.....

21, 20, 19.....

33, 32, 31.....

39, 38, 37.....



45, 44, 43.....

65, 64, 63.....

54, 53, 52.....

66, 65.....

42, 41.....



71.....

80.....

87.....

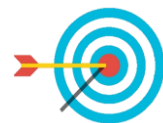
94.....

100.....

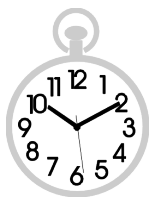
Set 1

6

Maths Challenge Set 1 - Yellow



I can count on in multiples of 2 to 100



3 minutes

Previous score

15

Ask children to give you the next three numbers in each sequence.



0, 2, 4.....

2, 4, 6.....

8, 10.....

12, 14.....

16, 18.....



22, 24, 26.....

32, 34, 36.....

44, 46, 48.....

48, 50

60, 62.....



66, 68.....

78.....

86.....

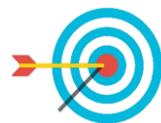
90.....

92.....

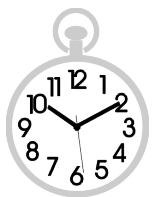
Set 1

7

Maths Challenge Set 1 - Yellow



I can count on in multiples of 2 to 100 from
any given number.



5 minutes

Previous score

15

Ask children to give you the next three numbers in each sequence.



3, 5, 7.....

1, 3, 5.....

7, 9.....

11.....

15, 17.....



21, 23.....

33, 35.....

47, 49...

59.....

61, 63.....



87.....

77.....

81.....

91.....

93.....

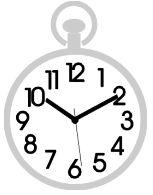
Set 1

8

Maths Challenge Set 1 - Green



I can count on in multiples of 5 to 100



3 minutes

Previous score

15

Ask children to give you the next **three numbers** in each sequence.



0, 5, 10.....

5, 10, 15.....

10, 15.....

25, 30, 35.....

30.....



45, 50.....

65, 70, 75.....

60.....

40, 45.....

35.....



80.....

90.....

75.....

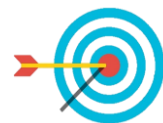
95.....

100.....

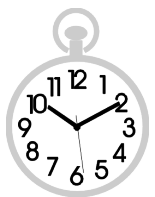
Set 1

9

Maths Challenge Set 1 - Green



I can count **back** in multiples of 5 to 100



4 minutes

Previous score

Ask children to give you the next **three numbers** in each sequence.



25, 20.....

35, 30.....

40, 35.....

45, 40....

30.....



65.....

60.....

70.....

85....

55.....



75.....

80.....

95.....

90....

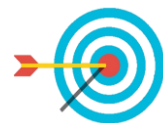
105.....

15

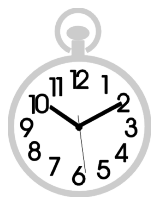
Set 1

10

Maths Challenge Set 1 - Blue



I can count on in multiples of 10 to 100.



3 minutes

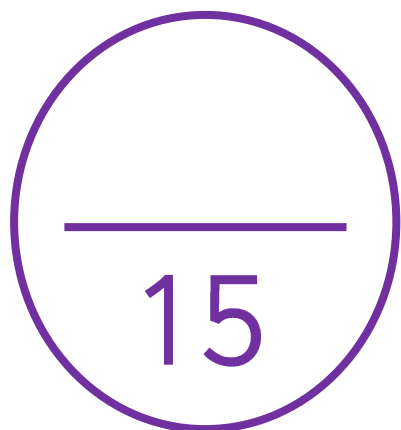
Previous score

Ask children to give you the next 3 **multiples of ten** from the given number.

★
10
0
20
30
50

★ ★
40
60
20
50
70

★ ★ ★
90
80
100
120
150



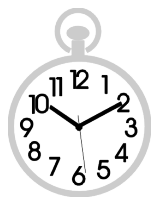
Set 1

11

Maths Challenge Set 1 - Blue



I can count **back** in multiples of 10 to 100.



3 minutes

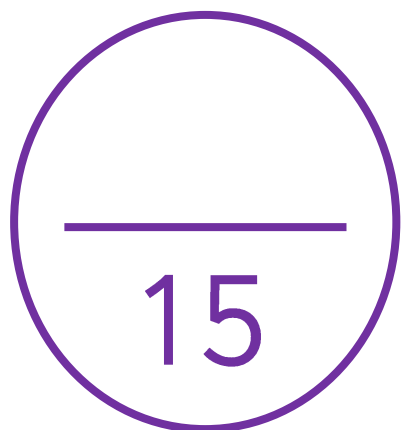
Previous score

Ask children to give you the next 3 **multiples of ten** from the given number.

★
20
30
40
30
50

★ ★
40
60
20
50
70

★ ★ ★
90
80
100
120
150



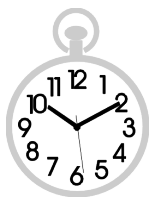
Set 1

12

Maths Challenge Set 1 - Indigo



I can partition all numbers to 10 in several ways.



2 minutes

Previous score

15



$$5 = 4 + ?$$

$$4 = 2 + ?$$

$$3 = 1 + ?$$

$$5 = 3 + ?$$

$$6 = 4 + ?$$



$$8 = 2 + ?$$

$$7 = 7 + ?$$

$$8 = 3 + ?$$

$$6 = 2 + ?$$

$$8 = 1 + ?$$



$$9 = 7 + ?$$

$$8 = 5 + ?$$

$$9 = 9 + 0$$

$$10 = 2 + ?$$

$$10 = 7 + ?$$

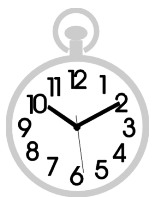
Set 1

13

Maths Challenge Set 1 - Indigo



I can partition all numbers to 10 in several ways.



2 minutes

Previous score

15



$$5 = 2 + 1 + ?$$

$$4 = 1 + 1 + ?$$

$$3 - 2 = ?$$

$$5 - 2 = ?$$

$$6 - 6 = ?$$



$$8 - 2 = ?$$

$$8 = 6 + 1 + ?$$

$$8 - 3 = ?$$

$$7 - 2 = ?$$

$$8 - 1 = ?$$



$$9 - 7 = ?$$

$$8 - 5 - 1 = ?$$

$$9 - 9 = ?$$

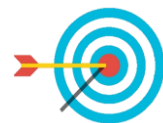
$$10 - 2 = ?$$

$$10 - 7 = ?$$

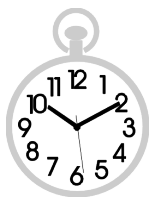
Set 1

14

Maths Challenge Set 1 - Violet

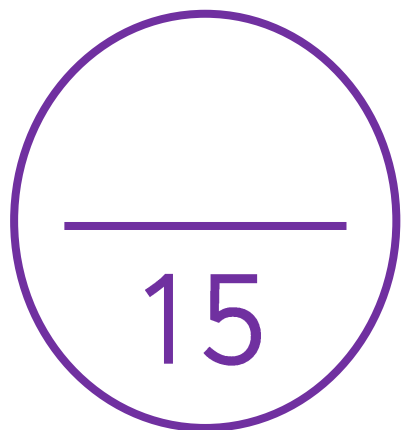


I know and use number bonds to 10.



2 minutes

Previous score



★
$10 = 10 + ?$
$10 = 5 + ?$
$10 = 9 + ?$
$10 = 0 + ?$
$10 = 8 + ?$

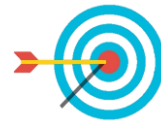
★ ★
$10 = 7 + ?$
$10 = 2 + ?$
$10 = 3 + ?$
$10 = 1 + ?$
$10 = 4 + ?$

★ ★ ★
$10 = 1 + ?$
$10 = 6 + ?$
$10 = 5 + 1 + ?$
$10 = 2 + 2 + ?$
$10 = 3 + 5 + ?$

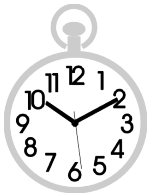
Set 1

15

Maths Challenge Set 1 - Violet

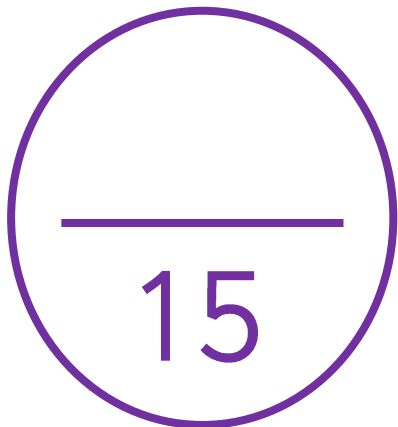


I know and use number bonds to 10



2 minutes

Previous score



$$10 = 2 + 2 + ?$$

$$10 = 5 + 2 + ?$$

$$10 = 0 + 1 + ?$$

$$10 = 7 + 2 = ?$$

$$10 = 5 + 5 + ?$$



$$10 = 2 + 3 + ?$$

$$10 = 9 + 1 + ?$$

$$10 = 7 + 1 = ?$$

$$10 = 6 + 1 + ?$$

$$10 = 3 + 1 + ?$$



$$10 = 2 + 7 = ?$$

$$10 = 0 + 4 + 1 + ?$$

$$10 = 2 + 6 + ?$$

$$10 = 1 + 2 + ?$$

$$10 = 3 + 1 + 1 + ?$$

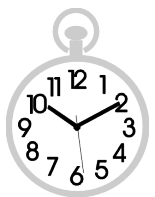
Set 1

16

Maths Challenge Set 1 - Black

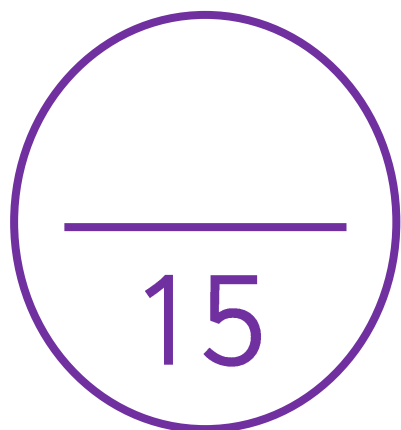


I can partition all numbers to 20 in several ways



2 minutes

Previous score



★
$11 = 10 + ?$
$12 = 1 + ?$
$11 = 11 + ?$
$12 = 10 + ?$
$12 = 9 + ?$

★ ★
$15 = 10 + ?$
$15 = 11 + ?$
$17 = 11 + ?$
$13 = 7 + ?$
$16 = 9 + ?$

★ ★ ★
$20 = 18 + ?$
$20 = 12 + ?$
$20 = 11 + ?$
$20 = 4 + ?$
$20 = 7 + ?$

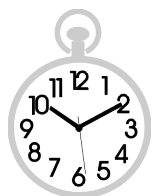
Set 1

17

Maths Challenge Set 1 - Black

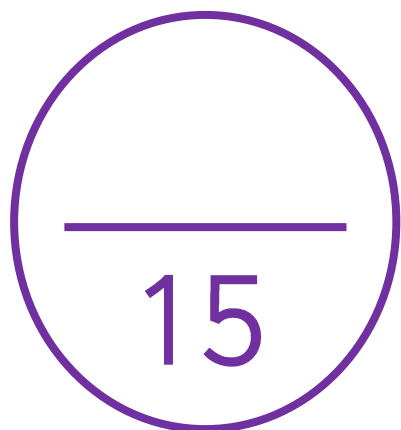


I can partition all numbers to 20 in several ways



2 minutes

Previous score



★
$11 = 2 + ?$
$12 = 2 + ?$
$11 = 1 + ?$
$12 = 11 + ?$
$12 = 8 + ?$

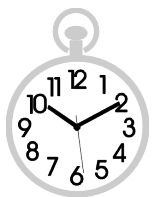
★ ★
$15 = 1 + ?$
$15 = 9 + ?$
$17 = 8 + ?$
$13 = 5 + ?$
$16 = 3 + ?$

★ ★ ★
$20 = 4 + ?$
$20 = 9 + ?$
$20 = 8 + ?$
$20 = 14 + ?$
$20 = 13 + ?$

Maths Challenge Set 1 - Bronze

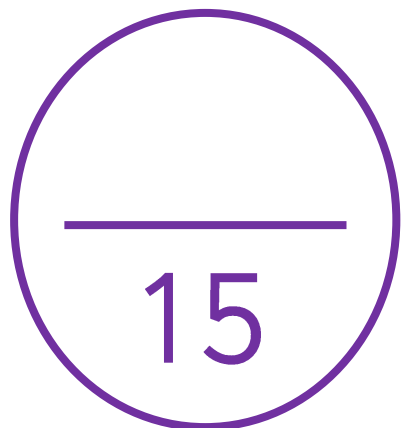


I know and use number bonds to 20.



2 minutes

Previous score



★
$20 = 10 + ?$
$20 = 19 + ?$
$20 = 0 + ?$
$20 = 18 + ?$
$20 = 20 + ?$

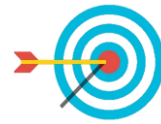
★ ★
$20 = 2 + ?$
$20 = 4 + ?$
$20 = 14 + ?$
$20 = 1 + ?$
$20 = 9 + ?$

★ ★ ★
$20 = 13 + ?$
$20 = 5 + ?$
$20 = 12 + ?$
$20 = 1 + 2 + ?$
$20 = 6 + 2 + ?$

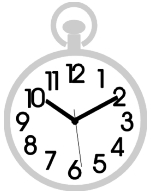
Set 1

19

Maths Challenge Set 1- Bronze

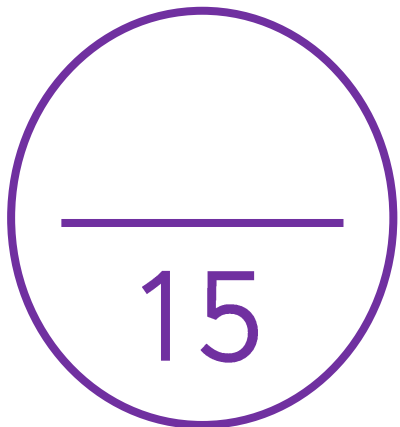


I know and use subtraction number bonds to 20



2 minutes

Previous score



$$20 - 20 = ?$$

$$20 - 10 = ?$$

$$20 - 0 = ?$$

$$20 - 18 = ?$$

$$20 - 1 = ?$$



$$20 - 19 = ?$$

$$20 - 12 = ?$$

$$20 - 15 = ?$$

$$20 - 5 = ?$$

$$20 - 16 = ?$$



$$20 - 3 = ?$$

$$20 - 6 = ?$$

$$20 - 13 = ?$$

$$20 - 7 = ?$$

$$20 - 11 = ?$$

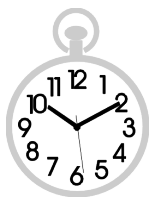
Set 1

20

Maths Challenge Set 1 - Silver



I can find one more or less than a given number to 100



2 minutes

Previous score

15



$23 + 1 =$

$43 + 1 =$

$33 + 1 =$

$32 + 1 =$

$54 + 1 =$



$76 + 1 =$

$53 + 1 =$

$56 + 1 =$

$76 + 1 =$

$66 + 1 =$



$84 \text{ plus } 1$

$89 \text{ plus } 1$

$99 \text{ add } 1$

$1 \text{ more than } 68$

$1 \text{ more than } 95$

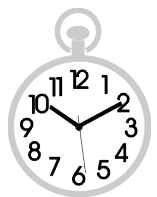
Set 1

21

Maths Challenge Set 1 - Silver



I can find one more or less than a given number to 100



2 minutes

Previous score

15



$19 - 1 =$

$22 - 1 =$

$1 \text{ less than } 45 =$

$47 - 1 =$

$55 - 1 =$



$65 - 1 =$

$36 \text{ minus } 1 =$

$63 - 1 =$

$88 - 1 =$

$89 - 1 =$



$99 - 1 =$

$76 \text{ subtract } 1 =$

$1 \text{ less than } 88 =$

$73 \text{ minus } 1 =$

$90 \text{ minus } 1 =$

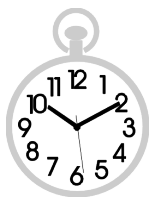
Set 1

22

Maths Challenge Set 1 - Gold



I can solve addition calculations within 20.



60 seconds

Previous score

15



$5 + 1 =$

$8 + 3 =$

$9 + 4 =$

$11 + 3 =$

$12 + 5 =$



$11 + 6 =$

$11 + 2 =$

$13 + 6 =$

$11 + 4 =$

$10 + 8 =$



$10 + 9 =$

$11 + 8 =$

$14 + 2 =$

$16 + 4 =$

$17 + 2 =$

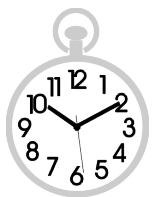
Set 1

23

Maths Challenge Set 1 - Gold

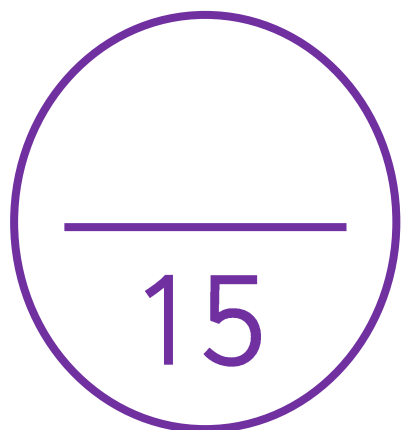


I can solve subtraction calculations within 20.



60 seconds

Previous score



★
$10 - 1 =$
$12 - 2 =$
$13 - 3 =$
$13 - 1 =$
$13 - 4 =$

★ ★
$15 - 5 =$
$15 - 8 =$
$15 - 9 =$
$15 - 10 =$
$16 - 2 =$

★ ★ ★
$20 - 12 =$
$20 - 9 =$
$20 - 1 =$
$17 - 8 =$
$16 - 9 =$

Set 1

24

TOP TIPS

White	Red	Orange	Yellow	Green	Blue
I can write numbers from 0 – 20 in digits and words. 0 zero Teen numbers may need extra attention: 13 thirteen	I can read and write numbers to 100 in digits and words. Spellings should be phonetically plausible	I can count to and across 100, forwards and backwards from any given number. Remember to practise counting backwards	I can count on in multiples of 2 to 100 Children should recognise odd and even numbers. Multiples of 2 are all even numbers. Also practise counting in 2s starting from different numbers; 3, 5, 7, 9, ...	I can count on in multiples of 5 to 100 Starting from 0, children should recognise that multiples of 5 end in 0 and 5. Ask children to look for the patterns.	I can count on in multiples of 10 to 100 Starting from 0, children should recognise that multiples of 10 end in 0. Ask children to count forwards and backwards, what number comes next?
Indigo	Violet	Black	Bronze	Silver	Gold
I can partition all numbers to 10 in several ways. $5 = 4 + 1$, $5 + 0$, $3 + 2$ $7 = 6 + 1$ $5 + 2$ $4 + 3$ $3 + 4$ etc.	I know and use number bonds to 10 $1 + 9 = 10$ $2 + 8 = 10$ etc. $10 - 8 = 2$ $10 - 9 = 1$ $6 + \diamond = 10$ $10 - \diamond = 4$	I can partition all numbers to 20 in several ways $16 = 10 + 6$ $12 + 4$, $15 + 1$	I know and use number bonds to 20 $16 + 4 = 20$ $13 + 7 = 20$ $18 + 2 = 20$ $20 - 18 = 2$ $20 - 16 = 4$ $16 + \diamond = 20$ $20 - \diamond = 15$	I can find one more or less than a given number to 100 $73 + 1 =$ $73 - 1 =$ Remember to also use words such as plus, minus and subtract; 73 minus 1, 65 take away 1, 72 plus 1 12 add 1, 12 plus 1 1 more than 13	I can solve addition and subtraction calculations within 20 $7 + 5 =$ $13 + 4 =$ $17 - 6 =$