# Mathematical Super Powers

## Year 2 - Autumn 1



# I can count forwards and backwards to 100 in 1's.

By the end of this half term, children should be able to count forwards and backwards to 100 **confidently, easily and quickly**.

Perhaps start using a 100 square (see below) and as confidence grows, try without any aides. Also try starting at different numbers and asking your child to continue counting on from e.g. 15.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

**Key Vocabulary**

Sort

Count

How many

1-100

Numbers

Forwards

Backwards

Careful counting

## Advice

The secret to success is practising little and often. Can you practise these Super Powers while walking to school or during a car journey? You don't need to practise them all at once.

**Practical Maths**

Use everyday opportunities to count – make it fun! At a park, count steps, jumps or swings. Use nature – count animals or listen for sounds (like birds) and count the sounds they make.

Use interactive resources such as Splat 100 square https://www.primarygames.co.uk/pg2/splat/splatsq100.html

# Mathematical Super Powers

## Year 2 - Autumn 2



## I can count forwards and backwards from different starting points in 1's and 10's.

## I can count in 2's, 5's and 10's.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

For example –

| | | | | |
|---|---|---|---|---|
| **6** | **7** | | | **10** |

What numbers will you say if you **count back** from 58?

| | | | | |
|---|---|---|---|---|
| 58 | | | | 54 |

Can you continue with the number pattern to count in 10's to find the missing numbers?

| | | | | | |
|---|---|---|---|---|---|
| 5 | 15 | 25 | ___ | 45 | ___ |
| 64 | 54 | ___ | 34 | ___ | 14 |
| ___ | 21 | 31 | 41 | ___ | 61 |
| 76 | ___ | ___ | 46 | 36 | 26 |
| 13 | ___ | 33 | 43 | ___ | 63 |




How many turnips will there be in 8 baskets?
There are 5 pineapples in each crate. The shop sells 6 crates. How many pineapples do they sell?
There are 10 potatoes in a sack. Emma wants 90 potatoes. How many bags does she need to buy?

How many shoes are there?



How many fingers and thumbs altogether?



**Advice**

The secret to success is practising little and often. Can you practise these Super Powers while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day.

# Mathematical Super Powers

## Year 2 - Spring 1



# I know doubles and halves of numbers to 20. I know near doubles to 10.

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly.**

| Doubles to 20 | Halves | Near doubles |
|---|---|---|
| 0 + 0 = 0 | half of 20 = 10 | 0 + 1 = 1 |
| 1 + 1 = 2 | half of 18 = 9 | 1 + 2 = 3 |
| 2 + 2 = 4 | half of 16 = 8 | 2 + 3 = 5 |
| 3 + 3 =6 | half of 14 = 7 | 3 + 4 = 7 |
| 4 + 4 = 8 | half of 12 = 6 | 4 + 5 = 9 |
| 5 + 5 = 10 | half of 10 = 5 | 5 + 6 = 11 |
| 6 + 6 = 12 | half of 8 = 4 | 6 + 7 = 13 |
| 7 + 7 = 14 | half of 6 = 3 | 7 + 8 = 15 |
| 8 + 8 = 16 | half of 4 = 2 | 8 + 9 = 17 |
| 9 + 9 = 18 | half of 2 = 1 | 9 + 10 = 19 |
| 10 + 10 = 20 | | 10 + 11 = 21 |

They should be able to answer these questions in any order, including missing number questions, e.g. 4 + ◯ = 8 or ◯ + 10 = 19.

**Advice**

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day.

Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between thirteen and thirty.

Songs and Chants – You can buy CDs or find songs and chants online. If your child creates their own song, this can make the facts even more memorable.

Playing games can make learning facts fun to learn: http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html See how many questions you can answer in 90seconds. https://www.topmarks.co.uk/maths-games/daily10 and https://www.topmarks.co.uk/maths-games/hit-the-button

# Mathematical Super Powers

## Year 2 - Spring 1



## I can use bridging and compensation for addition to 10+10.

| | | | |
|---|---|---|---|
| 7 + 4 = 11<br>7 + 5 = 12<br><br>8 + 3 = 11<br>8 + 4 = 12<br>8 + 5 = 13<br>8 + 6 = 14<br><br>9 + 3 = 12<br>9 + 4 = 13<br>9 + 5 = 14<br>9 + 6 = 15<br>9 + 7 = 16 | **Bridging 10**<br>7 + 4 = ?<br>7 + 3 = 10, then 1 more makes 11<br><br>8 + 5 = ?<br>8 + 2 = 10, then 3 more makes 13<br><br>9 + 6 = ?<br>9 + 1 = 10, then 5 more makes 15 | 4 + 7 = 11<br>5 + 7 = 12<br><br>3 + 8 = 11<br>4 + 8 = 12<br>5 + 8 = 13<br>6 + 8 = 14<br><br>3 + 9 = 12<br>4 + 9 = 13<br>5 + 9 = 14<br>6 + 9 = 15<br>7 + 9 = 16 | **Compensation**<br>6 + 9 = ?<br>6 + 10 = 16, then take away 1 = 15<br><br>8 + 9 = ?<br>8 + 10 = 18, then take away 1 = 17<br><br>7 + 9 = ?<br>7 + 10 = 17, then take away 1 = 16 |

They should be able to answer these questions in any order, using the most efficient strategy.

**Advice**

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day.

Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between thirteen and thirty.

Make the whole fact family – If 9 + 4 = 13, then 4 + 9 = 13 so 13 – 9 = 4 and 13 – 4 = 9.

https://www.topmarks.co.uk/maths-games/daily10 and https://www.topmarks.co.uk/maths-games/hit-the-button

# Mathematical Super Powers

# Year 2 – Spring 2



## I know the multiplication and division facts for the 2 times table.

By the end of this half term, children should know the following facts. The aim is for them to recall these **facts instantly.**

| | | |
|---|---|---|
| 0 x 2 = 0 | 0 ÷ 2 = 0 | **Key vocabulary** |
| 1 x 2 = 2 | 2 ÷ 2 = 1 | What is 3 times 2? |
| 2 x 2 = 4 | 4 ÷ 2 = 2 | |
| 3 x 2 = 6 | 6 ÷ 2 = 3 | What is 2 multiplied by 2? |
| 4 x 2 = 8 | 8 ÷ 2 = 4 | |
| 5 x 2 = 10 | 10 ÷ 2 = 5 | What is 4 groups of 2? |
| 6 x 2 = 12 | 12 ÷ 2 = 6 | |
| 7 x 2 = 14 | 14 ÷ 2 = 7 | What is 18 divided by 2? |
| 8 x 2 = 16 | 16 ÷ 2 = 8 | |
| 9 x 2 = 18 | 18 ÷ 2 = 9 | What is 20 shared between 2? |
| 10 x 2 = 20 | 20 ÷ 2 =10 | |
| 11 x 2 = 22 | 22 ÷ 2 = 11 | What is 12 divided into groups of 2? |
| 12 x 2 = 24 | 24 ÷ 2 = 12 | |

They should be able to answer these questions in any order, including missing number questions, e.g. 2 × ◯ = 14 or ◯ ÷ 2 = 6.

**Advice**

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day.

Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between thirteen and thirty.

Times Table Rockstars – Children all have their username and password to practice in the "Garage" and the "Arena". They could try playing in the "Studio" but remember these will be any questions up to 12x12.

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Test the Parent – Your child can make up their own tricky division questions for you e.g. What is 18 divided by 2? They need to be able to multiply to create these questions.

Apply these facts to real life situations – How many hands are in your house? What other multiplication and division questions can your child make up?

http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html See how many questions you can answer in 90seconds. https://www.topmarks.co.uk/maths-games/daily10 and https://www.topmarks.co.uk/maths-games/hit-the-button

# Mathematical Super Powers

# Year 2 – Summer 1



## I know the multiplication and division facts for the 10 times table.

By the end of this half term, children should know the following facts. The aim is for them to recall these **facts instantly.**

| | | |
|---|---|---|
| 0 x 10 = 0 | 0 ÷ 10 = 0 | Key vocabulary |
| 1 x 10 = 10 | 10 ÷ 10 = 1 | What is 3 **times** 10? |
| 2 x 10 = 20 | 20 ÷ 10 = 2 | What is 2 **multiplied by** 10? |
| 3 x 10 = 30 | 30 ÷ 10 = 3 | |
| 4 x 10 = 40 | 40 ÷ 10 = 4 | What is 4 **groups of** 10? |
| 5 x 10 = 50 | 50 ÷ 10 = 5 | |
| 6 x 10 = 60 | 60 ÷ 10 = 6 | What is 60 **divided by** 10? |
| 7 x 10 = 70 | 70 ÷ 10 = 7 | |
| 8 x 10 = 80 | 80 ÷ 10 = 8 | What is 40 **shared between** 10? |
| 9 x 10 = 90 | 90 ÷ 10 = 9 | |
| 10 x 10 = 100 | 100 ÷ 10 =10 | What is 70 **divided into groups of** 10? |
| 11 x 10 = 110 | 110 ÷ 10 = 11 | |
| 12 x 10 = 120 | 120 ÷ 10 = 12 | |

They should be able to answer these questions in any order, including missing number questions, e.g. 10 × ◯ = 80 or ◯ ÷ 10 = 6.

### Advice

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day.

Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between thirteen and thirty.

Times Table Rockstars – Children all have their username and password to practice in the "Garage" and the "Arena". They could try playing in the "Studio" but remember these will be any questions up to 12x12.

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Test the Parent – Your child can make up their own tricky division questions for you e.g. What is 70 divided by 7? They need to be able to multiply to create these questions.

Apply these facts to real life situations – How many toes are in your house? What other multiplication and division questions can your child make up?

http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html See how many questions you can answer in 90seconds.

https://www.topmarks.co.uk/maths-games/daily10 and https://www.topmarks.co.uk/maths-games/hit-the-button

# Mathematical Super Powers

## Year 2 – Summer 1



# I know the multiplication and division facts for the 5 times table.

By the end of this half term, children should know the following facts. The aim is for them to recall these **facts instantly.**

| | | |
|---|---|---|
| 0 x 5 = 0<br>1 x 5 = 5<br>2 x 5 = 10<br>3 x 5 = 15<br>4 x 5 = 20<br>5 x 5 = 25<br>6 x 5 = 30<br>7 x 5 = 35<br>8 x 5 = 40<br>9 x 5 = 45<br>10 x 5 = 50<br>11 x 5 = 55<br>12 x 5 = 60 | 5 ÷ 5 = 1<br>10 ÷ 5 = 2<br>15 ÷ 5 = 3<br>20 ÷ 5 = 4<br>25 ÷ 5 = 5<br>30 ÷ 5 = 6<br>35 ÷ 5 = 7<br>40 ÷ 5 = 8<br>45 ÷ 5 = 9<br>50 ÷ 5 =10<br>55 ÷ 5 = 11<br>60 ÷ 5 = 12 | Key vocabulary<br>What is 3 **times** 5?<br>What is 2 **multiplied by** 5?<br>What is 4 **groups of** 5?<br>What is 60 **divided by** 5?<br>What is 40 **shared between** 5?<br>What is 70 **divided into groups of** 5? |

They should be able to answer these questions in any order, using the most efficient strategy.

## Advice

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day.

Pronunciation – Make sure that your child is pronouncing the numbers correctly and not getting confused between thirteen and thirty.

Times Table Rockstars – Children all have their username and password to practice in the "Garage" and the "Arena". They could try playing in the "Studio" but remember these will be any questions up to 12x12.

Songs and Chants – You can buy Times Tables CDs or find multiplication songs and chants online. If your child creates their own song, this can make the times tables even more memorable.

Test the Parent – Your child can make up their own tricky division questions for you e.g. What is 70 divided by 7? They need to be able to multiply to create these questions.

Apply these facts to real life situations – How many toes are in your house? What other multiplication and division questions can your child make up?

http://www.conkermaths.org/cmweb.nsf/products/conkerkirfs.html See how many questions you can answer in 90seconds.

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# Mathematical Super Powers

## Year 2 – Summer 2



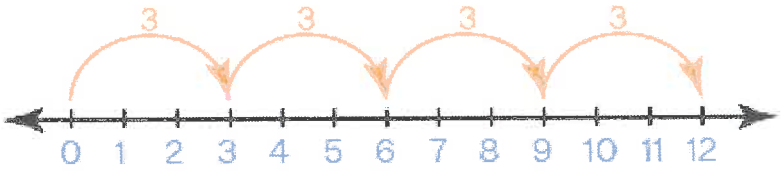
# I can count in 3s to 36.

By the end of this half term, children should know the following facts. The aim is for them to recall these **facts instantly.**

| Count in 3s |
|---|
| 0 |
| 3 |
| 6 |
| 9 |
| 12 |
| 15 |
| 18 |
| 21 |
| 24 |
| 27 |
| 30 |
| 33 |
| 36 |

Skip counting by 3 is a method of counting numbers by skipping two numbers in between and directly jumping on the third number. This method is useful in the process of learning addition. Skip counting by 3 also helps in memorising the multiplication table of 3. Starting from 0, we keep on adding 3 to each previous number to obtain the next number in the list.

**Skip counting by 3 on a number line**




| Skip counting by threes | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |

Fill in the missing numbers

3 12 24 33

**Advice**

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact of the day.