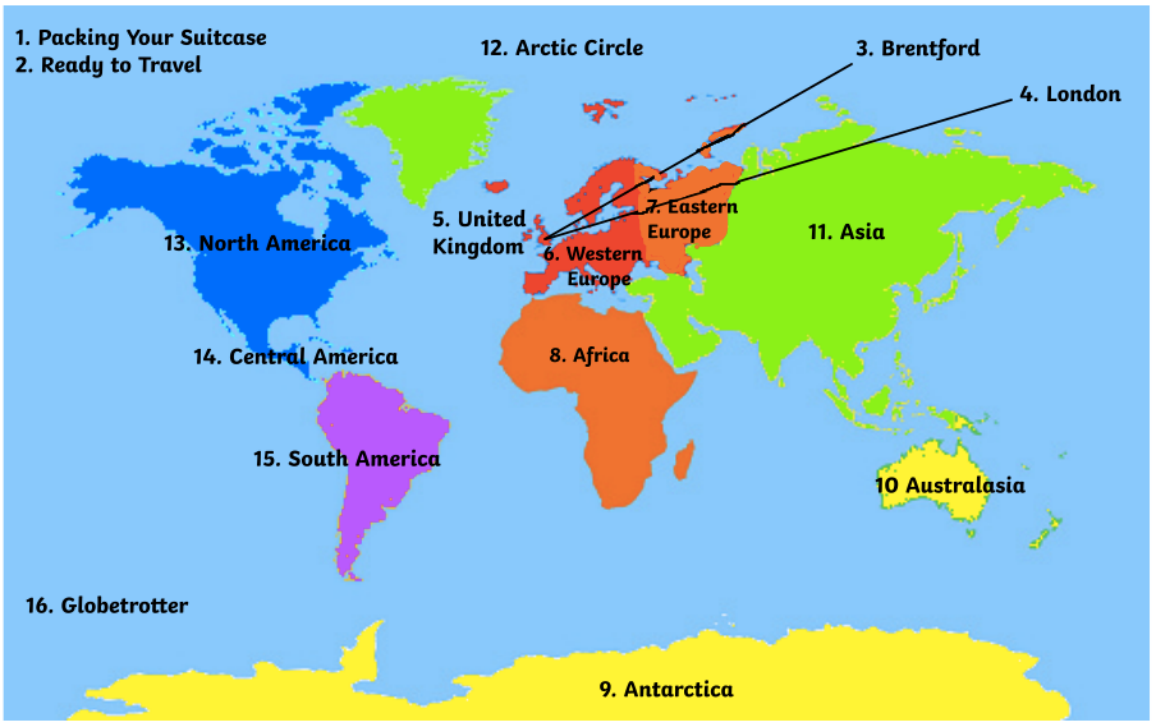
Maths Passport at St Paul's CE Primary School



Since the introduction of the 2014 National Curriculum for Maths there is a very clear emphasis on the importance of children knowing their number facts and times tables thoroughly and having instant recall of this information. The expectation outlined in the National Curriculum is that children will 'recall multiplication and division facts for multiplication tables up 12 x 12' by the end of Year 4, in preparation for the Multiplication Tables Check. Consequently, we have introduced a new mental Maths programme called 'Maths Passports', starting in Nursery and progressing through to Year 6.

Maths Passports are a personalised way of learning as the children are challenged in the passport at a level that is appropriate for the level they are working at. They progress at their own speed onto the next stage. Each child will be given a passport with a series of targets. These targets get progressively more challenging through the school. The children will develop instant recall skills in all the objectives – they should not be taking time to work out the answer to each question.

The aim is for children to complete all the passports by the time they are in Year 6.

1. The passport targets are incorporated into the children's oral and mental starters on a regular basis.
2. Children are assessed at least once a week. This might be in the form of answering questions orally, or by a timed task.
3. When children have met an objective on three separate occasions, the target has been achieved.
4. Children will continue to practice and be assessed on the remaining targets until all of the targets for a passport have been achieved. They will receive a certificate for this achievement during our weekly Celebration Assembly. They can then move on to the next passport and a new set of targets.

How to help at home

We would ask that you spend 10 minutes each day practising your child's passport skills with them. This could be walking to school, in the car, at teatime, before bed – it doesn't need to be a sit down, formal time.

The document below explains what each of the targets mean and how to help your child achieve them. There is also a selection of websites outlined below which can help your child develop their instant recall of key number facts and times tables.

Times Tables

https://ttrockstars.com/

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

Number Bonds

https://www.ictgames.com/mobilePage/numberFacts.html

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

Doubling and Halving

http://www.ictgames.com/robindoubles.html

http://www.topmarks.co.uk/Flash.aspx?f=dartboarddoublesandhalves

http://www.ictgames.com/woodseasy.html

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

Fractions decimals and percentages

http://www.topmarks.co.uk/maths-games/7-11-years/fractions-and-decimals

http://nrich.maths.org/1249

httphttp://www.topmarks.co.uk/interactive.aspx?cat=1://resources.woodlands-junior.kent.sch.uk/maths/fractions/

Counting

http://www.topmarks.co.uk/interactive.aspx?cat=1

Packing your Suitcase	Examples	Can your child answer these questions?
I can say number names in play and song etc.		When playing, can your child talk about how number/ how many of something there is?
I know that a number represents how many of something there is.		Can you show me 3 pencils? Can you show me 6 socks?
I can count up to 3 items accurately.		How many ___ are there here?
I can count up to 5 items accurately.		How many ___ are there here?
I can remove a specified amount of items (up to 5) from a larger group of objects.		Here are 5 chocolates, can you take 3 away?

Ready to Explore	Examples	Can your child answer these questions?
I can recite numbers in order to 10.	1, 2, 3, 4….9, 10	Can you start counting from 1?
I can recognise some familiar numerals.		What number is this?
I can match some numerals to quantities		Show your child some written numbers. Ask child to match card to the correct group of items.
I can identify groups of up to 3 objects without counting		How many___ are here? (child can tell you without counting)
I can begin to make mathematical mark making.		Can you write the number 1? Can you draw 3 fish?

Brentford	Examples	Can your child answer these questions?
I can identify how many are in a group up to 5 without counting		How many___ are here? (child can tell you without counting)
I can count a group of objects beyond 10		How many ___ are here?
I can match numerals to an amount up to 10		Show your child some written numbers. Ask child to match card to the correct group of items.
I can place numbers up to 10 in order		Show your child some written numbers. Ask child to match card to the correct group of items.
I can compare amounts up to 10 saying which has more and less		How many___ are here? Which group has more? How do you know?
I know my number bonds up to 5	0+5=5 1+4=5 2+3=5 3+2=5 4+1=5 5+0=5	What is 2+3? Start with 4 pencils, place one more pencil in the group. How many pencils are there now? (child can tell you without recounting)

London	Examples	Can your child answer these questions?
I can count up from 0 to 20		Start at the number 7, and then count on until you reach 20. How many marbles are in this jar?
I can count back from 20 to 0		Start at the number 18, and then count back until you reach 0.
I can say one more than a number between 0 and 20	One more than 3 is 4. One more than 18 is 19.	What is one more than ___? There are 3 beads in the pot. I am putting one more bead into the pot– how many are there now?
I can say one less than a number between 0 and 20	One less than 7 is 6. One less than 14 is 13.	What is one less than ___? There are seven beads in the pot. I am taking one bead out of the pot now – how many are left?
I know my doubles facts to 10	Double 1 is 2 Double 2 is 4 Double 3 is 6 Double 4 is 8 Double 5 is 10	There are three eggs in this pile, and three eggs in that pile, so how many eggs are there altogether?
I can share groups of objects to 10 equally	10 shared between 2 is 5. 8 shared between to is 4	Here are 6 sweets, can you share them between you and me so that we both get the same?

United Kingdom	Examples	Can your child answer these questions?
I can count on in ones from any number up to 100.		Start at the number 47, and then count on until you reach 100.
I can count back in ones from any number up to 100.		Start at the number 59 and then count back to 0
I can say one more than any number between 1-100	One more than 45 is 46.	What is one more than __? There are seventy beads in this pot. If I put one more in the pot how many would there be?
I can say one less than any number between 1-100	One less than 39 is 38.	What is one less than ___? There are thirty-seven beads in the pot. I am taking one bead out of the pot now – how many are left?
I can count in twos	2, 4, 6, 8, 10…	How far can you count in twos? What number would follow in this sequence: 6,8,10,12….? How far can you continue the sequence? What about this sequence? 18,16,14, … What would come next? Can you get back to 0?
I can count in tens	10, 20, 30, 40…	How far can you count in tens? What number would follow in this sequence: 40,50,60, ….? How far can you continue the sequence? What about this sequence? 90,80,70, … What would come next? Can you get back to 0?

Western Europe	Examples	Can your child answer these questions?
I can count in fives		How far can you count in fives? What number would follow in this sequence: 15, 20, 25, 30…? How far can you continue the sequence? What about this sequence? 35,30, 25, …? What would come next? Can you get back to 0?
I know by heart number facts within 10	Addition with totals within 10. E.g. 1+2 = 3 4+3= 7 6+2= 8 2+7= 9 3+5 = 8	What would you add to 3 to get a total of 7? Use number cards. How many different ways can you make the total 9? How many pairs of numbers can you remember that make the total of 6?
I know by heart number bonds to 10	0+10 = 10 1+9 = 10 2+8 = 10 3+7 = 10 4+6 = 10 5+5 = 10 6+4 = 10 7+3 = 10 8+2 = 10 9+1 = 10 10+0 = 10	What would you add to 7 to get a total of 10? Use number cards from 0 to 10 – can you pair the numbers which make 10? How many pairs of numbers can you remember that make a total of 10?
I know by heart subtraction facts within 10	10-1 = 9 10-2 = 8 10-3 = 7 10-4 = 6 8-5 = 3 4-2= 2 9-3 = 6	What number would you subtract from 7 to get 3? What is 8 take away 5? Pick a number (10 or less) to start with. Roll the dice and subtract that number
I know all doubles of numbers to at least 10	Double 1 is 2 Double 2 is 4 …. Up to Double 10 is 20 And beyond…	I roll double 3 – what is my score? Pick a number, and then double it. What is the largest number you can double? Explain how you know your answer is right… I doubled a number and got 18… which number did I double?
I know all halves of numbers within 10	Half of 10 = 5 Half of 8 = 4 Half of 6 = 3 Half of 4 = 2 Half of 2 = 1	What is half of 8? I halved a number and the answer was 3. What number did I halve?

Eastern Europe	Examples	Can your child answer these questions?
I know by heart all number bonds that total 20	0 + 20 = 20 1 + 19 = 20 2 + 18 = 20 Up to…. 19 + 1 = 20 20 + 0 = 20 20- 19 = 1 20 – 18 = 1	How many pairs of numbers which total 20 can you remember? What would you add to 4 to get a total of 20? Use number cards from 1 to 19 – can you pair the numbers which make 20?
I know by heart all bonds of multiples of 10 up to 100	0+100 = 100 10+90 = 100 20+80 = 100 30+70 = 100 40+60 = 100 50+50 = 100 Up to… 90+10 = 100 100+0= 100 100 – 90 = 10 100 – 80 = 20	Look at these multiples of 10… which pairs give a total of 100? 0 10 20 30 40 50 60 70 80 90 100
I know by heart doubles of all numbers to 20 and significant numbers to 100 (e.g. 25 50 100)	1+1 = 2 (double 1) 2+2 = 4 (double 2) Up to… 19+19 = 38 (double 19) 20+20 = 40 (double20)	I think of a number, then I halve it and get 15, what number was I thinking of? Pick a number, and then double it. What is the largest number you can double? Explain how you know your answer is right… Roll 2 numbers on a die, add them together, and then double it. What must I double to get 16? 22? 36?
I know by heart all multiplication facts for 2 up to 2x12	0 x 2 = 0 1 x 2 = 2… Up to 12 x 2 = 24	Which is the number before 16 in the 2x table? What is the answer to 6x2? 9x2?
I know by heart all multiplication facts for 10 up to 10x12	0 x 10 = 0 1 x 10 = 10… Up to 10 x 12 = 120	Which is the number before 80 in the 10x table? What is the answer to 6x10? 8x10?
I know by heart all multiplication facts for 5 up to 5x12	0 x 5 = 0 1 x 5 = 5… Up to 5 x 12 = 60	Which is the number before 40 in the 5x table? What is the answer to 6x5? 8x5?

Africa	Examples	Can your child answer these questions?
I can recall 10 more and 10 less than a number to 100	86 + 10 = 96 54 – 10= 44 10 more than 33 is 43 10 less than 28 is 18	What is 10 more than 16? What is 10 less than 38?
I know by heart halves of all numbers to twenty and significant numbers to 100 (e.g. 25, 50, 100)	Halves of all the even numbers up to 20 Half 2 is 1 Half 4 is 2 Half 6 is 3 Up to… Half of 18 is 9 Half 20 is 10	I think of a number and double it, the answer is 18, what number did I start with? What number must I halve to get 8? 13? 19? Mina has 22 stickers; she gives half of them to her brother – how many stickers does she give him? What is half of 50?
I know by heart all division facts for 2 up to 24	20 ÷ 2 = 10 18 ÷ 2 = 9… Down to 0 ÷ 2 = 0	What is the answer to 16÷2? 8÷2? Which is the missing number: ? x 2 = 18? How do you know?
I know by heart all division facts for 10 up to 120	100 ÷ 10 = 10 90 ÷ 10 = 9… Down to 0 ÷ 10 = 0	What is the answer to 70÷10? 40÷10? Which is the missing number: ? x 10 = 60? How do you know?
I know by heart all division facts for 5 up to 60	50 ÷ 5 = 10 45 ÷ 5 = 9… Down to 0 ÷ 5 = 0	What is the answer to 35÷5? 40÷5? Which is the missing number: ? x 5 = 25? How do you know?
I can round 2-digit numbers to the nearest 10	26 rounds up to 30 45 rounds up to 50 21 rounds down to 20	What does 16 round to? What does 55 round to? What is the rule for rounding up and down? • if the digit in the ones place value column is between 0 – 4 (if number ends in a number between 0-4) round down • if the digit in the ones place value column is between 5 – 9 (if number ends in a number between 5-9) round up

Antarctica	Examples	Can your child answer these questions?
I know by heart all sums and differences of multiples of 10 to 100 (e.g. 100-40=60)	60 + 30 = 90 70 + 80 = 150 20 + 90 = 110 70 – 20 = 50 90 – 60 = 30 40 – 30 = 10	Add 80 and 30, tell me how you did it. Tell me all the number pairs you know with multiples of 10 which make 90. What is the difference between 20 and 80? Look at these multiples of 10… which pairs give a total of 100? 0 10 20 30 40 50 60 70 80 90 100
I now by heart all number bonds that total 100	63 + 37 = 100 41 + 59 = 100 17 + 83 = 100	What must you add to 62p to make £1? I cut 35 cm off a 1m long piece of string. How much is left?
To know by heart doubles to 50 and multiples of 5 to 100	Double 15 is 30 Double 35 is 70 Double 28 is 56 Double 43 is 86	What is double 60? What is double 85? What is double 19? What is double 54?
I know by heart all multiplication facts for 3 up to 3 x 12	0 x 3 = 0 1 x 3 = 3… Up to 3 x 12 = 36	Which is the number before 30 in the 10x table? What is the answer to 6x3? 8x3?
I know by heart all multiplication facts for 4 up to 4 x 12	0 x 4 = 0 1 x 4 = 4… Up to 4 x 12 = 48	Which is the number before 16 in the 4x table? What is the answer to 6x4? 9x4?
I know by heart all multiplication facts for 8 up to 8 x 12	0 x 8 = 0 1 x 8 = 8… Up to 8 x 12 = 96	Which is the number before 56 in the 8x table? What is the answer to 6x8? 5x8?

Australasia	Examples	Can your child answer these questions?
I know by heart all division facts for 3 up to 36	36 ÷ 3 = 12 33 ÷ 3 = 11 30 ÷ 3 = 10 Down to 3 ÷ 3 = 1	What is the answer to 18÷3? 21÷3? Which is the missing number? x 3 = 15? How do you know?
I know by heart all division facts for 4 up to 48	48 ÷ 4 = 12 44 ÷ 4 = 11 40 ÷ 4 = 10 Down to 4 ÷ 4 = 1	What is the answer to 16÷4? 27÷3? Which is the missing number? x 4 = 24? How do you know?
I know by heart all division facts for 8 up to 96	96 ÷ 8 = 12 88 ÷ 8 = 11 80 ÷ 8 = 10 Down to 8 ÷ 8 = 1	What is the answer to 16÷8? 56÷8? Which is the missing number? x 8 = 64? How do you know?
I know halves of multiples of 10 to 100	Half of 100 = 50 Half of 90 = 45 Half of 80 = 40 Down to Half of 10 = 5	What is half of 70? I share 50 books equally between two classes. How many books does each class get?
I can find 100 more and 100 less than a number up to 1000.	100 more than 324 is 424. 100 less than 867 is 767.	What is 100 more than 443? What is 100 less than 329?
I can round 3-digit numbers to the nearest 100	126 rounds down to 100 456 rounds up to 500 941 rounds down to 900	What does 169 round to? What does 514 round to? What is the rule for rounding up and down? • if the digit in the tens place value column is between 0 – 4 (if number ends in a number between 0-4) round down • if the digit in the tens place value column is between 5 – 9 (if number ends in a number between 5-9) round up

Asia	Examples	Can your child answer these questions?
I know by heart all multiplication facts for 6 up to 6x12	0 x 6 = 0 1 x 6 = 6… Up to 12 x 6 = 72	Which is the number before 36 in the 6x table? What is the answer to 6x6? 8x6?
I know by heart all multiplication facts for 7 up to 7x12	0 x 7 = 0 1 x 7 = 7… Up to 12 x 7 = 84	Which is the number before 35 in the 7x table? What is the answer to 6x7? 8x7?
I know by heart all multiplication facts for 9 up to 9x12	0 x 9 = 0 1 x 9 = 9… Up to 12 x 9 = 108	Which is the number before 54 in the 9x table? What is the answer to 6x9? 9x9?
I know by heart all multiplication facts for 11 up to 11x12	0 x 11 = 0 1 x 11 = 11… Up to 12 x 11 = 132	Which is the number before 55 in the 11x table? What is the answer to 6x11? 5x11?
I know by heart all multiplication facts for 12 up to 12x12	0 x 12 = 0 1 x 12 = 12… Up to 12 x 12 = 144	Which is the number before 60 in the 12x table? What is the answer to 6x12? 5x12?
I can double any 2-digit number	Double 26 = 52 Double 97 = 194	Which numbers are missing in this sequence? 17, 34, __? I think of a number and half it – the answer is 55. Which number was I thinking of? How do you know?

Arctic Circle	Examples	Can your child answer these questions?
I know by heart all division facts for 6 up to 72 ÷ 6	60 ÷ 6 = 10 54 ÷ 6 = 9… Down to 0 ÷ 6 = 0	What is the answer to 36÷6? 48÷6? Which is the missing number: ? x 6 = 24? How do you know?
I know by heart all division facts for 7 up to 84 ÷ 7	70 ÷ 7 = 10 56 ÷ 7 = 8… Down to 0 ÷ 7 = 0	What is the answer to 35÷7? 49÷7? Which is the missing number: ? x 7 = 28? How do you know?
I know by heart all division facts for 9 up to 108 ÷ 9	90 ÷ 9 = 10 81 ÷ 9 = 9… Down to 0 ÷ 9 = 0	What is the answer to 36÷9? 72÷9? Which is the missing number: ? x 9 = 27? How do you know?
I know by heart all division facts for 11 up to 132 ÷ 11	77 ÷ 11 = 7 66 ÷ 11 = 6… Down to 0 ÷ 7 = 0	What is the answer to 11÷11? 66÷11? Which is the missing number: ? x 11 = 88? How do you know?
I know by heart all division facts for 12 up to 144 ÷ 12	72 ÷ 12 = 6 60 ÷ 12 = 5… Down to 0 ÷ 12 = 0	What is the answer to 12÷121? 84÷12? Which is the missing number: ? x 12 = 108? How do you know?
I can round a number up to 1 decimal place to the nearest whole number	256.6 rounds to 257 99.9 rounds to 100	What does 145.3 round to? What does 148.8 round to?

Central America	Examples	Can your child answer these questions?
I can multiply and divide whole numbers and those involving decimals by 10, 100 & 1000	2672.6 x 10 = 26726 2672.6 ÷ 100 = 26.76 2672.6 ÷ 1000 = 2.676	What is 22.345 x 10? 100? 1000? What is 2456.8 ÷ 100? 10? 1000?
I can halve any number with up to one decimal place	Half of 12.4 is 6.2 Half of 54.6 is 27.3	What is half of 24.6? What is half of 67.4?
I can count up and down in tenths	3/10, 4/10, 5/10 .. 0.8, 0.9, 1.0, 1.1 … 9/10, 8/10, 7/10… 1.2, 1.1, 1.0, 0.9…	Continue the sequence… 3/10, 4/10, 5/10 … 0.8, 0.9, 1.0, 1.1 … 9/10, 8/10, 7/10… 1.2, 1.1, 1.0, 0.9…
I can count forwards in steps of powers of 10 for any given number up to 1,000,000		Continue the sequence… 54, 64, 74, 84 ____ ____ 15,500 16,500 17,500 ____ ____ 121,000 131,000 141,000 ____ _____
I can count backwards in steps of powers of 10 for any given number up to 1,000,000		Continue the sequence… 98, 78, 68, 58 ___ ___ 19,100 18,100 17,100 ____ ____ 275,000 265,000 255,000 ____ _____
I can multiply any multiple of 10 by a single digit number	50 x 3 = 150 80 x 4 = 320 90 x 6 = 540	What is 70x5? 80x3?

North America	Examples	Can your child answer these questions?
I can recall all multiplication and division facts for all multiplication tables up to 12x12	1x1 to 12x12 And 144 ÷ 12 to 1 ÷ 1	What is the answer to 63÷7? 48÷8? Which is the missing number: ? x 8 = 24? How do you know? What is the answer to 36÷9? 72÷9? Which is the missing number _ ÷ 9 = 3? How do you know?
I can halve any 2-digit number	Half of 42 is 21 Half of 74 is 37 Up to Half of 98 is 49	What is half of 46? Can you share 62 equally?
I can double any number with up to 1 decimal place	Double 4.2 is 8.4 Double 9.8 is 19.6	What is double 3.5?
I know by heart all the squares of numbers between 1 and 12 and use the notation for squared (^{2})	$1^2 = 1$ $2^2 = 4$ $3^2 = 9$ $4^2 = 16$ $5^2 = 25$ $6^2 = 36$ $7^2 = 49$ $8^2 = 64$ $9^2 = 81$ $10^2 = 100$ $11^2 = 132$ $12^2 = 144$	What is 3 squared? I multiply a number by itself and get 36. What number did I start with?
I can multiply 3 single digit numbers	1 x 2 x 3 = 6 2 x 3 x 4 = 24 8 x 3 x 2 = 48 etc.	
I can count forwards and backwards with positive and negative numbers through 0		Continue counting up from -3 Count back from 8 to -8.

South America	Examples	Can your child answer these questions?
I can identify the highest common factor of two numbers	A **common factor** is a factor that is shared by two or more numbers A common factor of 8 and 10 is 2.	What is the highest common factor of 8 and 12?
I can identify the lowest common multiple of two numbers	A **common multiple** is a number that is a shared multiple of two or more numbers. For example, 24 is a common multiple of 8 and 12, as 24 is in the 8 times tables (8×3=24) and 24 is in the 12 times tables (12×2=24).	What is the lowest common multiple of 6 and 4?
I can identify equivalence between fractions	$\frac{1}{2}$ = 2/4 1/3 = 3/9 $\frac{1}{4}$ = 25/100	Find 3 equivalent fractions for $\frac{1}{4}$
I can find non-unit fractions of a number	2/3 of 6 = 4 $\frac{3}{4}$ of 12 = 8	What is 5/6 of 30? What is 2/3 of 30?
I can find a percentage of a number	25% of 100 = 25 25% of 60 is 15 10% of 80cm is 8cm	What is 50% of …? If I use 20% of my 100cm long piece of string, how much have I used? How much is left?
I can recall roots of all square numbers to 144 and use the notation for square root (√)	√144 = 12 √132 = 11 √100 = 10 √81 = 9 √64 = 8 √49 = 7 √36 = 6 √25 = 5 √16 = 4 √9 = 3 √4 = 2	What is the square root of 132?

Globetrotter	Examples	Can your child answer these questions?
I can convert between decimals and fractions	0.5 = $\frac{1}{2}$ 0.25 = $\frac{1}{4}$ 1/8 = 0.125 1/6 = 1.667	What is 3/5 as decimal? What is 0.4 as a fraction?
I can convert between decimals and percentages	0.25 = 25% 0.5 = 50% 0.79 = 79% 75% = 0.75 33% = 0.33 57% = 0.57	What is 0.2 as a percentage? What is 85% as a decimal?
I can convert between percentages and fractions	$\frac{3}{4}$ = 75% $\frac{1}{2}$ = 50% 80% = 4/5 62.5% = 5/8	What is 1/3 as a percentage? What is 60% as a fraction?
I can convert improper fractions to mixed numbers	$1\frac{1}{2}$ = 3/2 $3\frac{3}{4}$ = 15/4 11/3 = $3\frac{2}{3}$	What is $1\frac{1}{4}$ as a mixed number? What is $\frac{7}{2}$ as a mixed number?
I know by heart all squares of multiples up to 100 squared	30^2 is 900 etc.	What would be the answer to 40 squared? Can you explain how you got your answer?
I can recognise and use cubed numbers and the notation for cubed (^{3})	$1^3 = 1$ $2^3 = 8$ $3^3 = 27$ $4^3 = 64$ $5^3 = 125$ $6^3 = 216$ $7^3 = 343$ $8^3 = 512$ $9^3 = 729$ $10^3 = 1000$ $11^3 = 1331$ $12^3 = 1728$	What is 3 cubed? I cube a number and the answer is 125. What number did I start with?