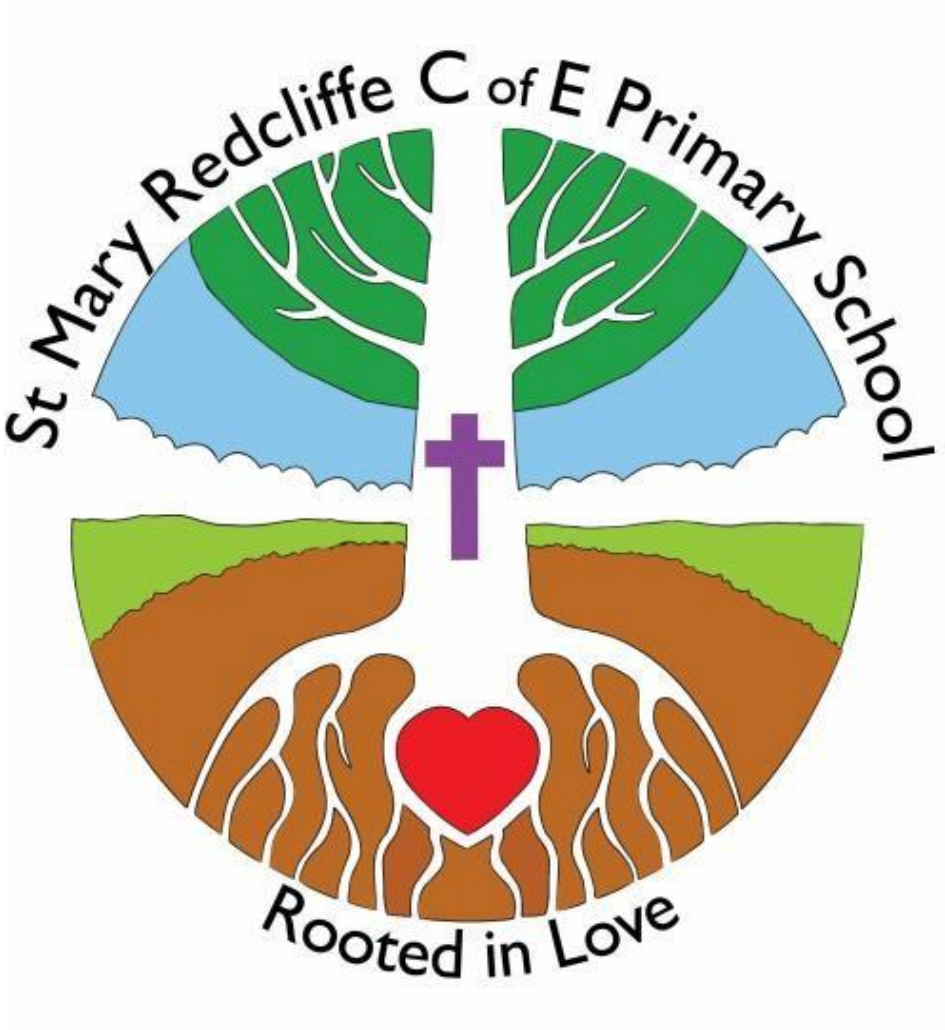
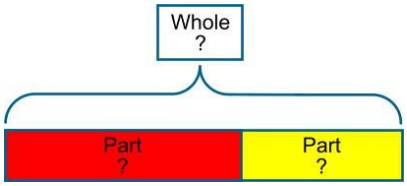
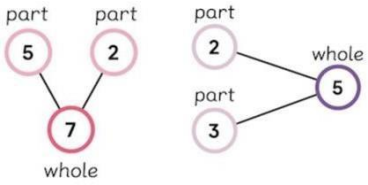
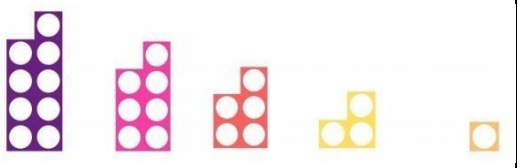
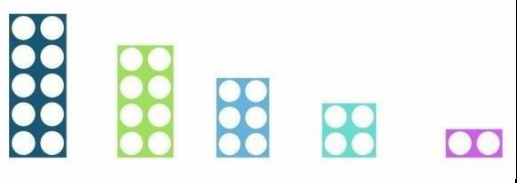
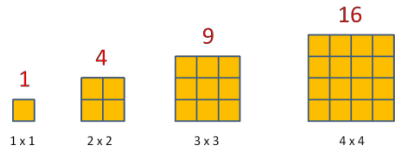
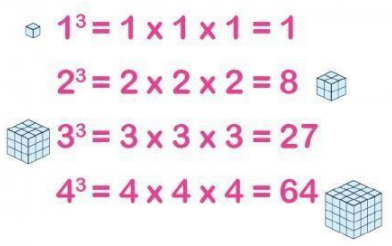


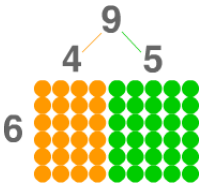
Vocabulary and Sentence Stems

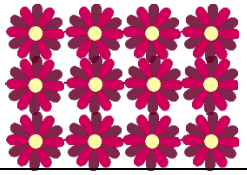
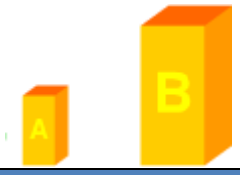
Vocabulary and Sentence Stem Bank

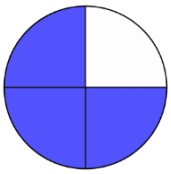
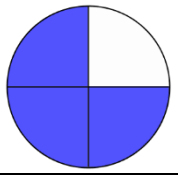
These words have been organised underneath headings linked to the different strands of the maths curriculum and written in order so common associations are grouped together.

Term	Definition	Stem Sentences
Number and Place Value		
Digit	A single numeral e.g 4 or 7	The value of the ___ digit in _____ is _____ 'The value of the 6 digit in 173,463 is 60.'
Integer	A whole number e.g 56, 107, 5000	
Negative number	A number less than 0.	
Ones	Digits representing 0-9	The ____ in _____ represents the ones. 'The 5 in 475 represents the ones.'
Whole	The total amount. 	____ is the whole, _____ and _____ are the parts. '20 is the whole, 16 and 4 are the parts.'
Part	An portion of a number that makes part of the whole. 	A part of _____ is _____ 'A part of 10 is 6.' _____ can be split into the parts _____ and _____ '10 can be split into the parts 6 and 4'
Partitioning	Splitting a number into parts.	____ can be partitioned into _____ and _____ '35 can be partitioned into 30 and 5'
Equal	When two numbers and/or calculations have the same value or worth.	_____ is the same as _____ '20 + 20 is the same as 10 x 4' _____ is equal to _____ '56 is equal to 7 x8'
Less than	When the value or worth of a number/calculation is smaller than another. < is the symbol used to represent less than.	_____ is less than _____ '4 is less than 5' _____ < _____ '10 < 5 x 3'
Greater than	When the value or worth of a number/calculation is larger than another. > Is the symbol used to represent greater than.	_____ is greater than _____ '3/5 is greater than 1/5' ____ is more than _____ '17 + 33 is more than 15 + 34' ____ > _____ '40 ÷5 > 5 + 2'

Odd	*Numbers that can't be made of groups of two.* *Odd numbers can be partitioned into one odd part and one even part.* 	*___is not made of pairs; it is an odd number.* *'37 is not made of pairs; it is an odd number. '*
Even	*Numbers that can be made out of groups of two.* *Even numbers can be partitioned into two odd parts or two even*  *parts.*	*___is made of pairs of___; it is an even number.* *'12 is made of pairs of 6; it is an even number.'*
Ordinal number	*A number that gives a position eg. 1st.*	
Cardinal number	*A number that represents a quantity.*	
Prime number	*A number that can only be divided by itself and 1.*	*I know that____is a prime number because its only factors are____and 1.* *'I know that 19 is a prime number because its only factors are 19 and 1.'*
Square number	*A number created from multiplying an integer by itself.*  	*I know_____is a square number because you multiple____by itself.* *'I know 64 is a square number because you multiple 8 by itself.'*
Cube number	*A number created by multiplying an integer by itself three times.*  	*If I multiple____by itself three times, I get the cube number____.* *'If I multiple 10 by itself three times, I get the cube number 1000.'*

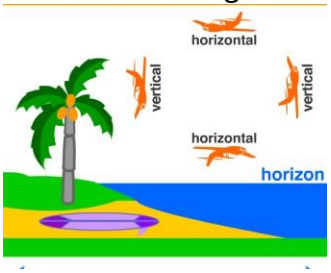
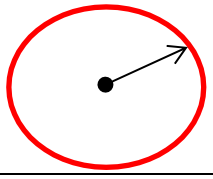
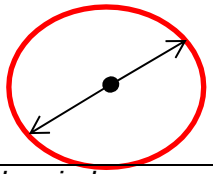
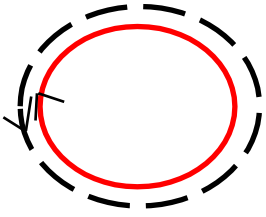
Calculations		
Number sentence	Representing the maths of a context with numbers and symbols. E.g 50 + 20 = 70	The number sentence that represents the word problem is _____ **Jake has 10 stickers, he gives 4 to his sister. How many does he have left?** 'The number sentence that represents the word problem is 10 - 4 = 6'
Operation	Four actions to solve problems; addition, subtraction, multiplication and division.	
Calculation	Using any of the four operations between numbers. E.g 10 + 5, 10 x 5, 10 - 5, 10 ÷5	
Estimate	Finding an approximate answer by rounding the numbers to the nearest one, tens, hundreds etc.	I estimate_____is_____ because I can do _____ 'I estimate 19 x 8 is 160 because I can do 20 x 8.'
Rounding	Changing the number up or down to the nearest one, ten, hundred etc depending how close it is.	I know to round___ to____ because it is between____ and_____ and the is above/below 5. 'I know to round 67 to 70 because it is between 60 and 70 and the ones is above 5.'
Commutative	Adding or multiplying numbers together in any order because you still get the same total.	If I know_____then I also know _____ "If I know 12 + 3 = 15 then I also know 3 + 12 = 15'
Distributive	Splitting a multiplication up into two different calculations that still represent the same amount. 9 x 6 is the same as 4x6 and 5x6 added together. 	I know that____groups of____is the same as____groups of_____and_____ groups of _____ 'I know that 3 groups of 15 is the same as 3 groups of 10 and 3 groups of 5.'
Addition		
Adding	Combining 2(or more) parts to make a whole.	
Sum	The calculation that represents an addition operation.	The sum of____and_____is _____ 'The sum of 24 and 30 is 54'
Total	The amount you get from adding 2 or more numbers together.	The total of the parts____and_____is _____. 'The total of the parts 30 and 70 is 100.'
Subtraction		
Take away	Removing a part from the whole.	

Difference	*The amount of the missing part between part and whole.*	*The difference between___and____is ____* *'The difference between 35 and 50 is 15'*
Multiplication		
Times	*An amount that is added to itself multiple times.*	*___times_____equals_____* *'three times ten equals thirty'*
Groups	*The amount of the same number in a multiplication.*	*There are___groups of_____in_____* *'There are 4 groups of 5 in 20'*
Multiples	*The result of multiplying one whole number with another.* *E.G 3,6,9,12 are multiples of 3.*	*I know that___is a multiple of ____ because it is in the___times table.* *'I know that 20 is a multiple of 5 because it is in the 5 times table.'* *I know that_____is a multiple of ____ because it is made of___equal groups of___.* *'I know that 42 is a multiple of 6 because it is made of 7 equal groups of 6.*
Array	*Arranging symbols/objects into columns and rows to represent multiplication.* 	*There are_____lots of_____.* *'There are 3 lots of 4.'*
Scaling	*The ratio between two amounts.* *B is twice the size of A.* 	*____is a_____of the size of _____* *'15cm is a third of the size of 45cm'*
Division		
Divide	*Sharing out an amount into equal groups.*	
Factors	*A factor of a number is a whole number that divides exactly into it.*	*___is a factor of____because I can share it into____equal groups of _____* *'3 is a factor of 12 because I can share it into 3 equal groups of 4.*
Remainders	*When you divide one number by another and the answer does not divide exactly and you have an amount left over.*	

Fractions, Percentages, Decimals		
Fraction	A part of something. The whole can be one object or a group of objects.	
Numerator	The top part of the fraction that shows how many parts you are looking at. $\frac{3}{4}$ ← 	
Denominator	The bottom part of the fraction that shows how many equal parts are in the whole. $\frac{3}{4}$ ← 	
Unit fractions	A fraction that has a numerator of 1. E.g ¼	___is a unit fraction. "1/5 is a unit fraction." A unit fraction always has a numerator of ____ "A unit fraction always has a numerator of 1"
Non- unit fractions	A fraction that has a numerator larger than 1. E.g ¾	___is a non-unit fraction. "3/5 is a non-unit fraction." A non-unit fraction always has a numerator _____ "A non-unit fraction always has a numerator bigger than 1"
Mixed number	A whole number and a fraction. E.g 2 ¾	The____represents _____ "The 2 represents 8 quarters" A mixed number is made up of a ____ and a _____ "A mixed number is made up of a whole number and a fraction."
Improper fraction	A fraction that has a numerator larger than the denominator. E.g 8/4	____is an improper fraction. "7/5 is an improper fraction."
Equivalent fractions	Fractions worth the same amount.	___is equivalent to _____ "1/2 is equivalent to 3/6" I know_____and_____are thesame because... "I know ¼ and 4/16 are the same because both the numerator and the denominator have been multiplied by 4."

Decimal equivalents	*Decimals that have the same worth as a fraction.*	*____is the same as _____* *'0.1 is the same as one tenth.'*
Tenths	*When the whole has been split into 10 equal parts.*	*1/10 of_____is_____* *"1/10 of 50 is 5"* *To find a 1/10 of____, I must....* *"To find a 1/10 of 30, I must divide 30 by 10 so 1/10 of 30 is 3.* *If I have____, I have_____left over* *"If I have 2/10, I have 8/10 left over."*
Percentage	*An amount out of 100.*	*I know___% is____out of 100.* *"I know 15% is 15 out of 100."*
Ratio		
Relative size	*Changing the amount of an item to be in proportion to another amount.*	
Proportion	*Having two ratios that are equal in size.* *E.g 1:5 is the same as 2:10*	*If the ratio is____, then if I had____, I would also have_____.* *"If the ratio is 2:5, then if I have 40 boys, I would also have 100 girls."*
Ratio	*Comparing one part of a whole to another part of a whole.* *Eg. The ratio in cooking is 1(egg):100(grams offlour)*	*For every____, I have _____* *"For every 5 blue pegs, I have 10 red pegs."*
Algebra		
Formulae	*A rule that uses symbols or letters to represent any number you place in there.* *E.G a x b = c*	
Linear number sequence	*A sequence that goes up in the same amount each time or follows a rule.*	
Measurement		
Length	*The measurement for how long something is.*	
Mass	*Amount of matter in an object.*	

Weight	*How heavy an item is.*	
Volume	*The space taken up by an object or the amount of liquid*	
Capacity	*How much liquid a container could hold.*	
Metric	*A modern unit of measurement including centimetre, litre, grams*	*10mm = _____* *"10mm = 1cm"* *I know that there are____cm in___m so I know there are____cm in___m.* *"I know that are 100cm in 1m so I know there are 500cm in 5m"*
Imperial	*An old unit of measurement including mile, inch, foot, pint*	*1lb is the same as____oz* *"1lb is the same as 16 oz"*
Analogue clock	*A clock where the time if represented on a face with hands.*	*The_____hand represents _____* *"The long hand represent the minutes"* *The___represents___minutes* *"The 4 represents 20 minutes."*
Digital clock	*The time represented as digits.*	*The___in_____represents_____* *"The 3 in 03:15 represents the hour."*
Perimeter	*The length around a 2D shape.*	*To find the perimeter of____, I must…* *"To find the perimeter of a pentagon, I must multiply the length of one side by 5"* *A square will always have…"* *"A square will always have a perimeter with a multiple of 4."*
Area	*The amount of space a shape covers.*	*If I know the length and width of is____then I know the area is* *"If I know the length and width of the rectangle is 6cm and 4cm then I know the area is 24cm."* *To find the area of a_____, I must…* *"To find the area of a triangle, I must multiply the base by the height and then half it."*
Geometry		
2D shape	*An outline with length and width.*	
3D shape	*An object with length, width and depth.*	

Net	*A flat shape which can be folded into a 3D shape.*	
Polygon	*A 2d shape with more than 2 sides.*	
Angle	*A turn formed between two straight lines meeting.*	*A_____angle is (between)_____(and _____) degrees.* *'A right angle is 90 degrees.'* *'An acute angle is between 0 and 90 degrees.'*
Horizontal/vertical lines	*A straight line that runs from top to bottom/left to right.* 	
Co ordinates	*A pair of letters or numbers that show a position on a grid.*	*When finding a co-ordinate I must read the____axis then the____axis.* *'When finding a co-ordinate I must read the X axis then the Y axis.'* *When writing a co-ordinate, I must write_____then _____* *When writing a co-ordinate, I must write x axis then the y axis.'*
Translation	*Moving a point or object in any direction without rotating it.*	
Reflection	*A mirror view across a line of reflection.*	
Radius	*The distance from the centre of a circle to the circumference.* 	
Diameter	*A straight line that passes through the centre of the circle from one side to the other.* 	
Circumference	*The distance around a circle.* 	

Statistics		
Bar charts	*A chart which shows the relation between a set of data.*	*The_____bar represents _____* *'The yellow bar represent 6 children'*
Pictograms	*A diagram where a picture represents a quantity.'*	*The____represents_____so_____ represents_____.* *'The flower represent 5 flowers sold so 2 flowers represents 10 flowers sold.'*
Tables	*A way of recording or displaying basic data.*	
Pie chart	*A circle graph where each section represent part of the total.*	
Line charts	*A graph depicting continuous data.*	*A_____linerepresents _____* *'A steep line represents the plant grew quickly.'*
Discrete data	*Data that is not related to each other. E.G Favourite colours*	
Continuous data	*Data that is on the same scale and dependent on the previous piece of data. E.G tracking temperature over multiple days.*	
Mean	*The average amount of a group of different amounts.*	*To find the mean, I need to _____* *'To find the mean, I need to add up the amounts and divide by how many amounts there are'*