

Progression with Number Sequencing

Stage 0-1	Stage 2 & 3 **After 1 year at school**	Stage 4 **After 2 years at school**	Stage E5 ** End of Year 3 **	Stage 5 ** End of Year 4 **	Stage E6 ** End of Year 5 **	Stage 6 ** End of Year 6 **	Stage E7 ** End of Year 7 **	Stage 7 ** End of Year 8 **
Numbers from 0 to 10	Numbers from 10 to 20	2 / 3-digit numbers	3 / 4-digit numbers	4 / 5-digit numbers	5, 6 and 7-digit numbers	ALL whole numbers Decimal numbers (1 dp)	Decimal numbers (2 dp)	Decimal numbers (to ANY dp)
<p>I can recognise numbers from 0 to 10. (<i>read / say / write / count it out</i>)</p> <p>I can order numbers from 0 to 10. (<i>count forwards / backwards, ordering e.g. 1, 2, 3 or 10, 9, 8, number before / after, smallest to largest, largest to smallest etc.</i>)</p> <p>I can recognise patterns to 5. (<i>tens frames, fingers, tally, dot patterns</i>)</p>	<p>I can recognise numbers from 10 to 20. (<i>read / say / write / partition / count it out</i>)</p> <p>I can order numbers from 10 to 20. (<i>count forwards / backwards, ordering, before / after, smallest to largest etc.</i>)</p> <p>I can skip count forwards and backwards to and from 20 in different amounts. (<i>multiples of 2 / 5</i>)</p> <p>I can recognise patterns to 10. (<i>tens frames, fingers, tally</i>)</p>	<p>I can recognise 2 / 3-digit numbers. (<i>read / say / write / partition</i>)</p> <p>I can order 2-digit numbers. (<i>count forwards / backwards, ordering, before / after, smallest to largest, more than > / less than < symbols and statements etc.</i>)</p> <p>I can skip count forwards and backwards to and from 100 in different amounts (<i>multiples of 1 / 2 / 5 / 10 starting from any even number, any number ending with 0 or 5 and any number</i>)</p>	<p>I can recognise 3 / 4-digit numbers. (<i>read / say / writ, partition</i>)</p> <p>I can order 3-digit numbers. (<i>count forwards / backwards, ordering, before / after, smallest to largest, more than > / less than < symbols and statements etc.</i>)</p> <p>I can skip count forwards and backwards to and from 1000 in different amounts from any starting number (<i>1 / 10 / 100 and crossing 10s/100s boundaries</i>)</p>	<p>I can recognise 4 / 5-digit numbers. (<i>read / say / write, partition</i>)</p> <p>I can order 4-digit numbers. (<i>count forwards / backwards, ordering, before / after, smallest to largest, more than > / less than < symbols and statements etc.</i>)</p> <p>I can skip count forwards and backwards to and from 10,000 in different amounts from any starting number. (<i>1 / 10 / 100 / 1000</i>)</p>	<p>I can recognise all numbers to 1, 000,000 (<i>read / say / write, partition</i>)</p> <p>I can order all numbers to 1, 000,000 (<i>count forwards / backwards, ordering, before / after, smallest to largest, more than > / less than < symbols and statements etc.</i>)</p> <p>I can skip count forwards and backwards to and from 100,000 in different amounts from any starting number. (<i>1 / 10 / 100 / 1000 / 10,000</i>)</p>	<p>I can recognise ALL whole numbers. (<i>read / say / write, partition</i>)</p> <p>I can recognise numbers to 1 decimal place. (<i>read / say / write</i>)</p> <p>I can order numbers to 1 decimal place. (<i>count forwards / backwards, order, put on a number line</i>)</p> <p>I can skip count forwards and backwards in different amounts from any starting number. (<i>0.1 / 1</i>)</p>	<p>I can recognise numbers to 2 decimal places. (<i>read / say / write / partition</i>)</p> <p>I can order number to 2 decimal places. (<i>count forwards / backwards, order, put on a number line</i>)</p> <p>I can skip count forwards and backwards in different amounts. (<i>0.01 / 0.1 / 1</i>)</p>	<p>I can recognise numbers to 2 or more decimal places. (<i>read / say / write, partition</i>)</p> <p>I can order numbers to 2 or more decimal places. (<i>count forwards / backwards, order, put on a number line</i>)</p> <p>I can skip count forwards and backwards in different amounts. (<i>0.001, 0.01 / 0.1 / 1</i>)</p>

Progression with Place Value

Stage 0-1	Stage 2 & 3 **After 1 year at school**	Stage 4 **After 2 years at school**	Stage E5 ** End of Year 3 **	Stage 5 ** End of Year 4 **	Stage E6 ** End of Year 5 **	Stage 6 ** End of Year 6 **	Stage E7 ** End of Year 7 **	Stage 7 ** End of Year 8 **
Numbers from 0 to 10	Numbers from 10 to 20	2-digit numbers	3-digit numbers	4 / 5-digit numbers	5, 6 and 7-digit numbers	ALL whole numbers Decimal numbers (1/2dp)	Decimal numbers (2 dp)	Decimal numbers (to ANY dp)
		<p>I can recognise tens in a two-digit number. <i>e.g. 76 has 7 tens</i></p>	<p>I can recognise tens or hundreds in a 3-digit number. <i>e.g. 763 has 76 tens</i> <i>e.g. 763 has 7 hundreds</i></p> <p>I can round 2 and 3-digit numbers (to 10 / 100)</p>	<p>I can recognise tens or hundreds in a 4 / 5-digit number. <i>e.g. 4763 has 476 tens</i> <i>e.g. 4763 has 47 hundreds</i> <i>e.g. 4763 has 4 thousands</i></p> <p>I can say that 800 is 8 centuries and that 4000 is 40 centuries or hundreds.</p> <p>I can round 3 and 4-digit numbers (to 10 / 100 / 1000)</p>	<p>I can recognise tens, hundreds and thousands in all numbers to 1,000,000. <i>e.g. 64,341 has 6,434 tens / 643 hundreds / 64 thousands</i></p> <p>I can use my understanding of multiplying and dividing by 10, 100 and 1000 to work out how many 10s, 100s and 1000s are in numbers.</p> <p>I can round all numbers up to 10,000 (to 10 / 100 / 1000 / 10,000)</p>	<p>I can recognise tens, hundreds, thousands etc in ALL whole numbers.</p> <p>I can recognise tenths in numbers to 1 decimal place <i>e.g. 5.1 has 51 tenths</i></p> <p>I am beginning to recognise how many hundredths are in decimal numbers with up to 2 decimal places. <i>e.g. 2.84 is 284 hundredths</i></p> <p>I can round ALL whole numbers up to 1,000,000. (nearest 1,10,100,100)</p> <p>I can round decimals up to 2dp. (nearest whole number)</p>	<p>I can recognise tenths and hundredths in numbers to 2 decimal places. <i>e.g. 5.12 has 51 tenths</i> <i>e.g. 5.12 has 512 hundredths</i></p> <p>I can round decimals. (nearest whole or tenth)</p>	<p>I can recognise tenths and hundredths in whole numbers and ANY decimal places. <i>e.g. 5.12 has 51 tenths</i> <i>e.g. 5.12 has 512 hundredths</i></p> <p>I can round ANY decimals. (nearest whole or tenth or hundredth)</p>

Progression with Basic Facts

Stage 0-1	Stage 2 & 3 **After 1 year at school**	Stage 4 **After 2 years at school**	Stage E5 ** End of Year 3 **	Stage 5 ** End of Year 4 **	Stage E6 ** End of Year 5 **	Stage 6 ** End of Year 6 **	Stage E7 ** End of Year 7 **	Stage 7 ** End of Year 8 **
Numbers from 0 to 10	Numbers to 10	2-digit numbers	2 and 3-digit numbers	2 and 3-digit numbers Multiplication and division facts (2,5,10)	Multiplication and division facts (3,4,6)	Multiplication & division facts up to 10 x 10 (7,8,9)	Multiplication and division facts Fractions / decimals / percentages	Fractions / decimals / percentages
	<p>I can instantly recall addition and subtraction facts to 5. e.g. $3 + 2 = 5$ e.g. $5 - 2 = 3$</p> <p>I can instantly recall number bonds to 10. e.g. $7 + 3$ and $2 + 8$</p> <p>I can instantly recall doubles and halves to 10. e.g. $5 + 5$ e.g. half of 10</p> <p>I can identify teen numbers (read / say / write)</p>	<p>I can identify teen and ty numbers (read / say / write, partition)</p> <p>I can instantly recall addition and subtraction facts to 10. e.g. $6 + 3 = 9$ e.g. $7 - 3 = 4$</p> <p>I can instantly recall number bonds to 100. (with multiples of 10) e.g. $80 + ? = 100$</p> <p>I can instantly recall doubles and halves to 20. e.g. $10 + 10 = 20$ e.g. half of 20</p>	<p>I can instantly recall addition facts to 20. e.g. $16 + 2 = 18$</p> <p>I can instantly recall number bonds of multiples of 10 up to 100 e.g. number bonds to 20, 30 etc $15 + ? = 20$</p> <p>I can instantly recall number bonds to 1000 (with multiples of 100) e.g. $800 + ? = 1000$</p> <p>I can instantly recall doubles and halves to 100. e.g. $30 + 30$ e.g. half of 70 e.g. link to $\times 2$ and $\div 2$</p> <p>I can understand what is meant by the word multiple.</p> <p>I can give multiples of numbers up to 100 (2,5,10) e.g. 42 and 64 are multiples of 2 and 85 and 100 are multiples of 5</p>	<p>I can instantly recall all addition and subtraction facts to 20. e.g. $16 - 5 = 11$</p> <p>I can generate fact families. (e.g. $4 + 5 = 9$ so $5 + 4 = 9$, $9 - 5 = 4$, $9 - 4 = 5$)</p> <p>I can instantly recall number bonds to 100 and 1000 using any number. e.g. $83 + ? = 100$</p> <p>I can instantly recall the multiplication and division facts for 2</p> <p>I can instantly recall the multiplication and division facts for 5</p> <p>I can instantly recall the multiplication and division facts for 10</p>	<p>I can instantly recall the multiplication and division facts for 3</p> <p>I can instantly recall the multiplication and division facts for 4</p> <p>I can instantly recall the multiplication and division facts for 6</p>	<p>I can instantly recall the multiplication and division facts for 8</p> <p>I can instantly recall the multiplication and division facts for 9</p> <p>I can instantly recall the multiplication and division facts for 7</p> <p>I am beginning to understand what is meant by 'factors'.</p>	<p>I can recall fraction to decimal to percentage conversions. e.g. $\frac{1}{2} = 0.5 = 50\%$ e.g. $\frac{1}{4} = 0.25 = 25\%$ e.g. $\frac{1}{10} = 0.1 = 10\%$</p> <p>I can recall divisibility rules e.g. for 2, 5, 10</p> <p>I can identify multiples (of ALL numbers (up to 10 x10) e.g. Multiples of 6 up to 48</p> <p>I can identify factors (to 100)</p>	<p>I can convert fractions to decimals and percentages (and vice versa) (including percentages beyond 1 whole)</p> <p>I can convert improper fractions to decimals and percentages (and vice versa)</p> <p>I can simplify fractions using knowledge of multiplication, factors and multiples. (e.g. $\frac{12}{20} = \frac{3}{5}$)</p> <p>I can recall and apply common divisibility rules (for 3,4,9)</p> <p>I can give the least common multiple (LCM) of numbers (e.g. LCM of 6 and 9 is 18)</p> <p>I can give the highest common factor (HCF) of 2 two-digit numbers (e.g. HCF of 12 and 28 is 4)</p>

Progression with Fractions

Stage 0-1	Stage 2 & 3 **After 1 year at school**	Stage 4 **After 2 years at school**	Stage E5 ** End of Year 3 **	Stage 5 ** End of Year 4 **	Stage E6 ** End of Year 5 **	Stage 6 ** End of Year 6 **	Stage E7 ** End of Year 7 **	Stage 7 ** End of Year 8 **
	Halves and quarters	Halves, thirds, quarters, fifths	tenths	Recognising & ordering proper fractions	Recognising proper / improper ordering fractions	Recognising & ordering ALL fractions ALL Improper fractions.	Equivalent fractions Order ALL fractions	Comparing ALL common fractions
	I can recognise (read, write and represent) halves and quarters to 20 (<i>shapes and sets</i>)	I can recognise (read, write and represent) fractions: halves / quarters / thirds / fifths.	I can recognise (read, write and represent) tenths. I can recognise when shapes are divided into tenths. I can identify the numerator and denominator and explain what they represent. (e.g. $\frac{3}{4}$ means the whole is cut into 4 and 3 are shaded)	I can recognise (read, write and represent) ALL fractions with a numerator of 1. (e.g. $\frac{1}{20}$, $\frac{1}{16}$) I can recognise (read, write and represent) ALL proper fractions with numerators bigger than 1. (e.g. $\frac{3}{2}$) I can put fractions with the same denominator in order from the smallest to the largest or vice versa. I can put fractions with 1 as the numerator in order from the smallest to the largest or vice versa. (e.g. $\frac{1}{2}$, $\frac{1}{4}$) I can recognise simple equivalent fractions. (e.g. $\frac{1}{2} = \frac{2}{4}$ $\frac{2}{4} = \frac{1}{2}$) I can read, write and represent improper fractions. (e.g. $5\frac{4}{7}$ $\frac{7}{5}$)	I can recognise (read, write and represent) ALL proper fractions (e.g. one quarter, $\frac{1}{4}$, six eighths $\frac{6}{8}$) I can recognise (read, write and represent) <u>some simple</u> improper fractions. (e.g. $\frac{3}{2}$, $\frac{4}{3}$, $\frac{5}{4}$, $\frac{6}{5}$) I can turn improper fractions into mixed numbers by using multiplication. (e.g. $\frac{16}{3} = 5\frac{1}{3}$ using $5 \times 3 = 15$) So, 5 whole ones and $\frac{1}{3}$ I can fold shapes to recognise equivalent fractions. (e.g. $\frac{9}{12} = \frac{3}{4}$) I can put fractions with the same numerator in order from the smallest to the largest or vice versa. (e.g. $\frac{1}{2}$, $\frac{1}{5}$, $\frac{1}{7}$)	I can recognise (read, write and represent) ALL proper, improper and mixed fractions. (e.g. $2\frac{2}{6} = 2$ whole pizzas and $2\frac{1}{6}$ of a third pizza.) I can convert improper and mixed fractions. (e.g. $1\frac{1}{4} =$ one whole and one quarter, or five quarters) I can put fractions with the same numerator or same denominator in order from the smallest to the largest or vice versa. (e.g. $\frac{1}{2}$, $\frac{1}{5}$, $\frac{1}{7}$)	I can put proper fractions with the same numerator and different denominator in order, e.g. $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{10}$ from smallest to the largest or vice versa. I can identify the smallest / largest proper fraction in a set when they have different numerators AND denominators e.g. $\frac{1}{3}$, $\frac{3}{8}$, $\frac{4}{10}$, $\frac{1}{3}$ is the smallest) I can order fractions with unlike denominators by comparing fraction sizes on a fraction wall, e.g. $\frac{2}{6} > \frac{1}{4}$ I can put proper fractions with different numerators and denominators in order, e.g. $\frac{1}{2}$, $\frac{4}{5}$, $\frac{2}{3}$, $\frac{3}{8}$ from smallest to largest and vice versa. I can turn improper fractions into mixed numbers by using division, e.g. $\frac{47}{7}$ to $6\frac{5}{7}$ (using $47 \div 7 = 6$ r 5) I can turn more complex mixed numbers into improper fractions by, e.g. $6\frac{5}{6}$ to $\frac{41}{6}$ or 41 sixths I can identify equivalent fractions for halves, quarters and tenths with denominators of 10, 100 and 1000. E.g. $\frac{1}{4} = \frac{25}{100}$,	I can compare any proper fractions (halves / thirds / quarters / fifths / eighths / tenths) and explain which is larger / smaller using number conversions as well as pictures. (e.g. $\frac{2}{5} = \frac{40}{100}$ and $\frac{3}{4} = \frac{75}{100}$ so $\frac{3}{4}$ is bigger) I can compare improper fractions and explain which is larger / smaller using number conversions as well as pictures. I can use my knowledge of common factors and multiples to support this. I can use the greater than and less than symbols to compare both proper and improper fractions. I can put all common proper and improper fractions in order and explain which is larger / smaller using number conversions as well as pictures. (e.g. $\frac{3}{2}$, $\frac{7}{4}$, $\frac{19}{10}$, $\frac{9}{3}$) I can find common denominators and simplify fractions to help support ordering fractions. I can identify equivalent fractions for thirds, fifths, with denominators of 10, 100 and 1000. E.g. $\frac{1}{4} = \frac{25}{100}$, $\frac{2}{3} = \frac{66}{100}$

Progression with ADD / SUB Strategies

Stage 0-1	Stage 2 & 3 **After 1 year at school**	Stage 4 **After 2 years at school**	Stage E5 ** End of Year 3 **	Stage 5 ** End of Year 4 **	Stage E6 ** End of Year 5 **	Stage 6 ** End of Year 6 **	Stage E7 ** End of Year 7 **	Stage 7 ** End of Year 8 **
1 to 1 counting	1 to 1 counting	Count on / back	Basic strategies: doubling & making tens	PVP strategy & making tens	PVP strategy (3-digit numbers) Reverse (3 digit)	PVP strategy / algorithm Round and compensate Reverse	DECIMALS PVP strategy / algorithm Round and compensate Reverse Integers (basic)	DECIMALS (all) PVP strategy / algorithm Round and compensate Reverse Integers (complex)
<p>I can count sets of materials up to 10</p> <p>I can make sets of materials up to 10</p>	<p>I can count all the objects to find the answer.</p> <p>I can count all the objects in <u>my head</u> to find the answer.</p> <p>I can add two groups together by counting all the objects in my head up to 20, e.g. $5 + 4 = 9$ and $12 + 4 = 16$</p> <p>I can take away from a group up to 20 in my head and count what is left, e.g. $9 - 3 = 6$ and $20 - 2 = 18$</p> <p>I can add groups of 10 to find the answer, e.g. $30 + 40 = 70$ because I know $3 + 4 = 7$</p> <p>I can take away groups of 10 in my head to find the answer, e.g. $60 - 40 = 20$ because I know $6 - 4 = 2$</p>	<p>I can count forwards from the largest number in my head to find the answer. e.g. $9 + 4 = 1$ put 9 in my head then count on 4 more...10, 11, 12, 13</p> <p>I can count backwards from the largest number in my head to find the answer. e.g. $12 - 4 = 1$ put 12 in my head then count back 4... 11, 10, 9, 8</p> <p>I can solve addition and subtraction problems with groups of tens and ones, using place value materials e.g. $30 + 20 = 50$, $63 - 30 = 33$, $65 - 32 = 33$</p> <p>I can check my answers.</p>	<p>I can use known basic facts to find the answer. e.g. $8 + 7 = 1$ know $10 + 7 = 17$ so $8 + 7 = 15$</p> <p>I can use doubles to solve addition problems. e.g. $8 + 7 = 1$ know $8 + 8 = 16$ so $8 + 7 = 15$. Using $\times 2$ and $\div 2$ will help support this.</p> <p>I can make tens (tidy numbers) to solve addition problems. e.g. $8 + 7 = 1$ know $8 + 2 = 10$ and $10 + 5 = 15$</p> <p>I can use compatible numbers to solve problems up to 20 (by not counting). (e.g. $8 + 2 + 7 - 9 = 8$ $2 + 7 = 9$ so remove them to leave 8)</p> <p>I can solve problems adding or taking a single digit up to 100 by making connections with how the family of facts (e.g. $45 - 7 = 1$ know $45 - 5 = 40$ and $40 - 2 = 38$)</p> <p>I can check my answers.</p>	<p>I can use place value (partitioning) to:</p> <p>...add 2-digit numbers. e.g. $44 + 25 = 1$ know $40 + 20 = 60$ and $4 + 5 = 9$ so the answer is 69</p> <p>...subtract 2-digit numbers. e.g. $79 - 34 = 1$ know $79 - 30 = 49$ and $49 - 4 = 45$ **Only the second number is partitioned**</p> <p>I can use a near double to solve a problem with numbers which are close to 25, 50 and 100 (e.g. $24 + 26 = 50$ by $25 + 25$ and $52 + 51 = 103$ By $50 + 50 = 100$ and $100 + 3 = 103$</p> <p>I can use compatible numbers to solve problems up to 100.</p> <p>I can work back through ten and use tidy numbers to find the answer. e.g. $45 - 7 = 1$ know $45 - 5 = 40$ and $40 - 2 = 38$</p> <p>I can check my answers.</p>	<p>I can use my knowledge of rounding to estimate answers to addition and subtraction problems involving 3-digit numbers.</p> <p>I can use place value (partitioning) to:</p> <p>... add 3-digit numbers. e.g. $463 + 215 = 1$ know $400 + 200 = 600$ and $60 + 10 = 70$ and $3 + 5 = 8$ so answer is 678 - start with ones or hundreds.</p> <p>...subtract 3-digit numbers. e.g. $463 - 212 = 1$ know $463 - 200 = 263$ and $263 - 10 = 253$ and $253 - 2 = 251$ **only second number is partitioned**</p> <p>I can reverse a subtraction problem and solve it using known strategies. e.g. $137 - 125 = 1$ can change it to $125 + ? = 137$</p> <p>I can use a number line to solve + and - problems with up to 3 digits.</p> <p>I can use an equal addition strategy to make a tidy number to solve subtraction problems over a 100. (e.g. $138 - 18$ as $140 - 20 = 120$)</p> <p>I can use doubles and near doubles of numbers in 100's</p> <p>I can check my answers using inverse operations (e.g. $137 - 125 = 22$ can be checked with $125 + 22 = 137$)</p>	<p>I can use my knowledge of rounding to estimate answers to addition and subtraction problems involving whole numbers.</p> <p>I can use place value partitioning & algorithms to:</p> <p>...add ANY numbers e.g. $7331 + 258 = 1$ know to add the ones, tens, hundreds and thousands. The answer is 7589</p> <p>...subtract ANY numbers. e.g. $8935 - 6123 = 1$ know to subtract the ones, tens, hundreds and thousands. The answer is 2812 **only second number is partitioned**</p> <p>I can use rounding and compensating to:</p> <p>...add numbers. e.g. $135 + 999 \gg 135 + 1000$, then - 1</p> <p>...subtract numbers. e.g. $834 - 398 \gg 834 - 400$, then +2</p> <p>I can use a mixture of strategies to solve + and - problems like reversibility, equal additions, doubles / near doubles, making tens and using a number line. e.g. $2013 - 1985 = 1$ know that $1985 + 15 = 2000$ and $2000 + 13 = 2013$ so the answer is 28</p>	<p>I can use my knowledge of rounding to estimate answers to addition and subtraction problems involving whole numbers and decimals.</p> <p>I can use place value (partitioning) & algorithms to:</p> <p>... add decimals (2dp) ... to subtract decimals (2dp)</p> <p>I can use rounding and compensating to:</p> <p>...add decimals (2dp) ...to subtract decimals (2dp).</p> <p>I can reverse a subtraction problem and solve it using known strategies (2dp). Using a number line may support this. E.g. $6.03 - 5.8$ as $5.8 + \underline{\quad} = 6.03$</p> <p>I can use a mixture of strategies to solve addition and subtraction problems involving decimals to 2dp (see S6).</p> <p>I can use a number line to solve simple integer problems. E.g. $3 - 7 = -4$</p> <p>I can use integers (positive and negative numbers) to solve problems with numbers between +10 and -10 e.g. $-1 + +4 = +3$ OR $+1 + -4 = -3$</p>	<p>I can use my knowledge of rounding to estimate answers to addition and subtraction problems involving whole numbers and numbers with a mixed number of decimal places.</p> <p>I can use place value (partitioning) & algorithms to:</p> <p>... add decimals (mix of 1, 2 and 3dp) ... to subtract decimals (mix of 1, 2 and 3dp)</p> <p>I can use rounding and compensating to:</p> <p>...add decimals (mix of 1, 2 and 3dp) ...to subtract decimals (mix of 1, 2 and 3dp)</p> <p>I can reverse a sub. problem and solve it using known strategies (mix of 1, 2 and 3dp). using a number line may support this. E.g. $1.5 - 0.085 = 0.085 + \underline{\quad} = 1.5$.</p> <p>I can use a mixture of strategies to solve + and - problems involving decimals with up to 3 dp and a mix e.g. place value, reversing, compatible numbers, tidy numbers, equal additions, doubles / near doubles.</p> <p>I can solve complex integer problems. e.g. $-64 + +58 = -6$ OR $+72 - -28 = +100$</p>

Progression with MULT / DIV Strategies

Stage 0-1	Stage 2 & 3 **After 1 year at school**	Stage 4 **After 2 years at school**	Stage E5 ** End of Year 3 **	Stage 5 ** End of Year 4 **	Stage E6 ** End of Year 5 **	Stage 6 ** End of Year 6 **	Stage E7 ** End of Year 7 **	Stage 7 ** End of Year 8 **
		Skip counting (2, 5, 10)	X 2,10 and adding	X 2,5,10 (and adding)	Some 10 x 10 facts (and adding) Reverse PVP (TO x O)	ALL 10 x 10 facts Double & halve PVP (TO x O) Round and compensate	PVP (TO x TO) PVP (HTO x O) Round and compensate Reverse Divide with remainders	ALL strategies (3-digit no's) Decimals
		<p>I can skip count in twos to find the answer to word problems. (e.g. 5 chickens lay 2 eggs each. How many eggs did they lay altogether? 2, 4, 6, 8, 10)</p> <p>I can skip count in TENS to find the answer to word problems. (e.g. 10 chickens lay 6 eggs each. How many eggs did they lay altogether?... 10, 20, 30, 40, 50, 60)</p> <p>I can skip count in fives to find the answer to word problems. (e.g. 5 chickens lay 5 eggs each. How many eggs did they lay altogether? 5, 10, 15, 20, 25)</p> <p>We are learning to solve division problems by using materials to share equally in sets of 1, 2 and 5 (e.g. I can share into sets of 1, I can share into sets of 2, I can share into sets of 5)</p>	<p>I can use a combination of multiplication and repeated addition to find the answer. (e.g. 3 packets of biscuits with 5 in each packet. I know $2 \times 5 = 10$ and $10 + 5 = 15$)</p> <p>I can draw an array to show a multiplication fact, e.g. 4×3 and show how it is different to 3×4 but is the same value</p>	<p>I can use 2, 5 and 10 multiplication facts to find the answer. (e.g. 3 packets of biscuits with 5 in each packet. I know $3 \times 5 = 15$)</p> <p>I can use a combination of multiplication and repeated addition to find the answer. (e.g. $8 \times 12 = 1$ know $8 \times 10 = 80$ and $80 + 8 = 88$ and $88 + 8 = 96$)</p> <p>I can generate division facts from known multiplication facts.</p> <p>I can use doubling and halving. (e.g. I can use my $\times 10$ tables to work out my $\times 5$ tables, like $2 \times 10 = 20$ so $4 \times 5 = 20$)</p>	<p>I can use known multiplication and division facts (up to 10×10) to find the answer. (e.g. $8 \times 6 = 1$ know that $8 \times 5 = 40$ and $40 + 8 = 48$)</p> <p>I can reverse a division problem and solve it using known multiplication facts (up to 10×10). (e.g. $36 \div 6 = 1$ can change it to $6 \times \underline{\quad} = 36$)</p> <p>I can use place value (partitioning) and known multiplication facts (up to 10×10) to solve multiplication problems. (e.g. $14 \times 7 = 1$ know that $10 \times 7 = 70$ and $4 \times 7 = 28$ then I add those together to get 98)</p> <p>I can solve division problems which have remainders. (e.g. $43 \div 5 = 8$ r 3 because $5 \times 8 = 40$ with 3 left over or $39 \div 4 = 9 \frac{3}{4}$ or 9.75)</p>	<p>I can use all multiplication and division facts to 10×10 to find answers. (e.g. $45 \div 9 = 9 \times ? =$)</p> <p>I can use doubling and halving to find the answer to multiplication and division problems. (e.g. $15 \times 6 = 1$ know that $30 \times 3 = 90$)</p> <p>I can use a trebling and thirding strategy to solve multiplication problems. (e.g. $3 \times 18 =$ as $9 \times 6 = 54$)</p> <p>I can use place value (partitioning) to multiply a 2-digit number by a 1-digit number. (e.g. $23 \times 7 = 1$ know that $20 \times 7 = 140$ and $3 \times 7 = 21$ then I add those together to get 161)</p> <p>I can use rounding and compensating to multiply a 2-digit number by a 1-digit number. (e.g. $19 \times 8 = 1$ know that $20 \times 8 = 160$ and $160 - 8 = 152$)</p>	<p>I can use place value (partitioning) to multiply a 2-digit number by a 2-digit number. E.g. 23×11</p> <p>I can use place value (partitioning) to multiply a 3-digit number by a 1-digit number. E.g. 236×7</p> <p>I can use rounding and compensating to multiply a 2-digit number by a 1-digit number. E.g. 29×7</p> <p>I can use rounding and compensating to multiply a 2-digit number by a 2-digit number. E.g. 19×16</p> <p>I can use rounding and compensating to multiply a 3-digit number by a 1-digit number. E.g. 199×6</p> <p>I can use doubling / halving, trebling/thirding and a standard written form to \times and \div</p> <p>I can use a mixture of strategies to solve division problems, including those involving remainders. E.g. $87 \div 5 = 17$ r 2 OR $81 \div 3 = 3 \times \underline{\quad} = 81$, $3 \times 20 = 60$, then $3 \times 7 = 21$.</p>	<p>I can use a mixture of strategies to solve 3-digit number problems; PVP, reverse, round and compensate, double and halve, standard written method</p> <p>e.g. $114 \div 6 = 6 \times 19 = 114$. Because... $6 \times 20 = 120$ then $-(1 \times 6)$</p> <p>I can use a mixture of strategies to solve decimal equations; PVP, reverse, round and compensate, double and halve, standard written method</p> <p>e.g. 1.5×12 (could do... 3×6 OR $1 \times 12 + 0.5 \times 12$...)</p>

Progression with FRACTIONS & PROPORTIONS Strategies

Stage 0-1	Stage 2 & 3 **After 1 year at school**	Stage 4 **After 2 years at school**	Stage E5 ** End of Year 3 **	Stage 5 ** End of Year 4 **	Stage E6 ** End of Year 5 **	Stage 6 ** End of Year 6 **	Stage E7 ** End of Year 7 **	Stage 7 ** End of Year 8 **
		½ or ¼ with materials ½ or ¼ using diagrams / imaging	½ or ¼ using halving or addition facts	½, ¼, 1/5 using addition ½, ¼, 1/5 using mult / div Ratios	Fractions using known mult / div facts Ratios	Fractions using ALL mult / div facts (up to 10 x 10) 2 step fractions equations Ratios (up to 10 x 10)	Add / sub fractions Complex fraction equations Ratios – simple equivalence	Add / sub fractions Improper fractions 2 step ratio Q
		<p>I can find <u>half</u> of sets by sharing materials equally (e.g. ½ of 18)</p> <p>I can find <u>quarter</u> of sets by sharing materials equally (e.g. ¼ of 20)</p> <p>I can find <u>half</u> of sets by sharing equally in my head or drawing a picture. (e.g. ½ of 18)</p> <p>I can find <u>quarter</u> of sets by sharing equally in my head or drawing a picture. (e.g. ¼ of 16)</p> <p>I can find fractions of different shapes by folding into equal parts (e.g. 1/8 - eighth, 1/3 - third, 1/6 - sixth)</p> <p>I can use materials to make a fraction of a set into a whole set. (e.g. 3 is a third of a set so the whole set is 3 + 3 + 3 and there is 9 in the whole set)</p>	<p>I can find quarter of a whole number using halving facts OR simple addition (3 + 3 + 3 + 3) (e.g. ¼ of 12 = I know ½ of 12 is 6 and ½ of 6 is 3)</p> <p>I can find a fraction of a number by halving or by using equal addition. (½ of 10 = 5 because 5 + 5 = 10 and 1/3 of 12 is 4 because 4 + 4 + 4 = 12 also ¼ of 28 = 7 because ½ of 28 is 14 and ½ of 14 is 7)</p>	<p>I can find the fraction of a whole number using repeated addition. (e.g. ¼ of 16 = 4 because I know that 4 + 4 + 4 + 4 = 16)</p> <p>I can find the fraction of a whole number using known multiplication and division facts. (e.g. ⅓ of 15 = 5 because I know that 3 x 5 = 15)</p> <p>I can solve ratio problems using known addition facts. (e.g. A chicken lays 3 eggs every 2 days. How many eggs would it lay in 6 days? I know that 3 + 3 + 3 = 9)</p>	<p>I can use known division facts to find 1 part of a set. (e.g. 1/5 of 40 = 8 because I know that 40 ÷ 5 = 8)</p> <p>I can use known division facts to find fractions of sets when the numerator is more than 1. (e.g. ¾ of 24 = 18 because 24 ÷ 4 = 6 and 6 x 3 = 18)</p> <p>I can solve ratio problems using known multiplication facts. (e.g. 2: 5 = 6: ___ I know 2 x 3 = 6 and 5 x 3 = 15 so the answer is 6:15)</p> <p>I can solve simple 1: 2 ratio problems by repeated copying.</p>	<p>I can find fractions of sets when the numerator is more than 1. (e.g. 5/7 of 56)</p> <p>I can solve 2 step fraction equations. E.g. If I spent \$6 and have 2/3 of my money left, how much did I start with?</p> <p>I can solve ratio problems by using all multiplication and division facts to 10 x 10. (e.g. 32 carrots in 4 bags, so XXX in 12 bags. 4: 32 is equal to 12:96)</p>	<p>I can add fractions with the same / similar denominator. e.g. ¼ + 3/8 = 5/8</p> <p>I can subtract fractions with the same / similar denominator. e.g. 7-8-3-8 = 4/8 or 1/2</p> <p>I can solve fraction equations that have a missing value E.g. ¼ of ___ = 32</p> <p>I can find simple equivalent ratios. E.g. 3:5 as ___:40</p>	<p>I can add fractions with <u>different</u> denominator by simplifying. e.g. 3/8 + 2/6 = 9 / 24 + 8 / 24 = 17/24</p> <p>I can subtract fractions with <u>different</u> denominator by simplifying.</p> <p>I can solve fraction problems involving improper fractions (e.g. 6 cars filled up ¾ of their tank with fuel = how many full tanks is this equivalent to?) 6 x ¾ = 18 / 4 = 4 ½</p> <p>I can use efficient strategies to find complex equivalent ratios. E.g. 6: 14 is equal to ___:21</p>