Year 3 Addition Progression Grid

Key vocabulary:

add, addition, more, sum, total, altogether, column, double, near double, count on, thousands, hundreds, tens, ones, column, tens boundary, estimate, plus

Mental Estimate answers to calculations.			
Progressive Key Skills	Method	Manipulatives/ Resources	
Add multiples of 100 (mental)	200+600=800	Base 10 Place value counters.	
Add 3d numbers and 1s- not crossing 10 (mental)	236+3=239	Base 10 Place value counters	
Add 3d numbers and 1s crossing 10 (mental)	236+8=244	Base 10 Place value counters	
Add 3d numbers and tens- not crossing 100 (mental)	332+40=372	Base 10 Number line Place value counters Bead string	
Add 3d numbers and tens- crossing 100 (mental)	332+80=412	Base 10 Place value counters	
Add 100s to any 3d number (mental)	472+300=772	Base 10 Place value counters	

Add 2d + 3d not crossing 10 or 100. (no carrying)	$\begin{array}{cccc} HTO & HTO \\ +452 & 716 \\ +36 & 71 \\ +88 & 787 \end{array}$	
Add 2d + 3d crossing 10 or 100. (carrying)	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	
Add 2 3d numbers not crossing 10 or 100 (no carrying)	HTOHTO + 432 + 432 + 4677	
Add 2 3d numbers crossing 10 or 100 (carrying)	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	
Count forward in tenths.	0 10 20 3 4 5 6 7 8 9 1 W 0 0 10	
Add on tenths to tenths using counting.	Count forward from 6 to 9 10 10 10 10	

Add two or more fractions with the same denominator where the answer is less than 1. 2 + 3 = 510 = 1010102 + 1 + 2 = 56 + 6 + 6 = 6



Year 3 Subtraction Progression Grid

Key vocabulary:

subtract, take away, minus, left, less, difference between, equals, tens boundary, thousands, hundreds, tens, ones, column, tens boundary, borrow, inverse, estimate

Mental

Estimate answers

Progressive Key Skills	Method	Manipulatives/ Resources
Subtract multiples of 100	300-200=100	Base 10 Place value counters Number line
Subtract 3d numbers and ones- not crossing ten	358-7=351	Base 10 Place value counters Number line
Subtract a 1d number from a 3d number – crossing 10	358-9=349	Base 10 Place value counters Number line
Subtract 3d numbers and tens - not crossing 100	234-20=214	Base 10 Place value counters Number line
Subtract tens from a 3d number- crossing 100	234-40=194	Base 10 Place value counters
Subtract 100s	459-300=159	Base 10 Place value counters Number line

Subtract 2d and a 3d number not crossing 10 or 100	H T O 263 - 41 222
Subtract 2d from a 3d number crossing 10 or 100	$\begin{array}{c} H T \\ 2 \\ 7 \\ 2 \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ 6 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ 6 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ 6 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ 6 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ 6 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ 6 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ 6 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ 6 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ 6 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 7 \\ - \\ 7 \\ - \\ 7 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ 7 \\ - \\ 2 \\ 1 \\ 8 \\ - \\ 7 \\ - \\ -$
Subtract 3d from a 3d number- no exchange	н то 367 - 123 - 124 -
Subtract 3d from a 3d number- with exchange	А 0 4 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Count back in tenths.	0 10 20 50 60 70 80 90 1 0 10 20 10
Count back a given amount in tenths.	Count back 3 from 9 10 10 10 10 10 10 10 10 10 10 10



Year 3 Multiplication Progression Grid				
Key vocabulary: Repeated addition, equal, multiple, lots of, groups of, times, multiply, times repeated addition, array, row, column, inverse, estimate				
Progressive Key Skills	Method	Manipulatives/ Resources		
Equal groups		Small maths equipment		
Making arrays	000	Counters.		
Multiplying by 3	6 × 3 = 1 8	Z		
Multiplying by 4	8 × 4 = 3 2	~		
Multiplying by 8	7 × 8 = 56			
Related facts	$2 \times 3 = 6$ $2 \times 3 0 = 60$			

Multiplying 2d x1d- using representations.	Tens Ones 10 10 11 1 10 10 10 1 1 10 10 10 1 1 1	Place value counters
Multiplying 2d x1d- formal written method	13 × 15 65	



