

## PAL Challenge overlearn – age related skill development



Year 1 autumn	Year 1 spring	Year 1 summer
Count how many between 10 and 20	How much is there? Numicon 10s image  How much is there? Numicon image	
Sequence forwards and backwards in ones within 20	Identify and circle the number - number recognition  Count in 2s - identify missing numbers in se	
Order three numbers within 20	Order three numbers within 50	Count back in 1s - identify missing numbers in sequence
1 more than within 20	1 more than a two-digit number within 50	Missing box addition + first
2 more than within 20	1 less than a two-digit number within 50	Missing box addition = first
1 less within 20	10 more than multiples of 10	Doubles within 10
2 less within 20	10 less than multiples of 10	Corresponding half to doubles
Circle the smallest number within 20	Write a number between two given numbers - teens	1d – 1d
Circle the largest number within 20	1d – 1d	Spell the number within 10
Make 10 - bonds	Subtraction from 10 — related facts	Write the number

Year 2 autumn	Year 2 spring	Year 2 summer
Partition 2 digit numbers	Place number on a number line - 1s within a decade	Count in steps of 2, 5 or 10 – complete sequence
Identify missing numbers on hundred square - PV	Draw the number using 10s and 1s — dienes image	2d + 2d not crossing a boundary
Recognise dienes – write how much	Add 10 to a multiple of 10	2d + 2d crossing a boundary
Count back in 1s - identify missing numbers in sequence	Add 10 to a two-digit number	2d – 2d numbers not crossing a boundary
Count on or back in steps of 10 from any 2d number	Takeaway 10 from a multiple of ten	Identify if number is odd or even?
Empty box partition	Takeaway 10 from a two digit number	Division facts related to 2 times table
2d + 1d not crossing boundary	Write the fact family - addition and subtraction (3 marks)	Half of a multiple of ten to 120
2d + 1d cross boundary	Two-digit add 'empty box' to make a multiple of 10 - bonds	Write the fact family — multiplication and division 2s, 5s,10s
Multiple of 10 subtract single digit	Double two-digit numbers	Vertical scale in 2s and 10s
2d –1d	Division facts related to 5 times table	Order two-digit numbers
Double multiples of ten		Inequality signs < > =
Missing box addition — single digit answer		Fraction shaded



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Year 3 autumn	Year 3 spring	Year 3 summer
Partition three-digit numbers	Combine expanded number (PV)	Identify number on a number line - 2s, 5s or 10s
Add or subtract 1, 10 or 100 to/from a three-digit number	Add or subtract 1s, 10s or 100s to/from a 3d number	Order two and three-digit numbers
Identify a number on a number line - scale 2s, 5s or 10s	Missing numbers - counting in steps of 3, 4, or 5	Round a three-digit number to the nearest ten
Double a two-digit number crossing boundary	Missing numbers - counting in multiples of 25, 50, 100	Fractions of amounts linked to tables
Missing box multiplication x3 table	How many to the next ten — three-digit numbers	Multiple of 10 multiplied by 3, 4 or 5
Division facts related to x2, x5 x10 tables	Division facts related to x2, x3, x5 x10 tables	Division facts related to x8 table
Division facts related to x3 table	Multiplication and division facts x4 table	Missing box multiplication x8 facts
Missing box bonds to 100	Add or subtract a single digit from / to a 2/3 digit number	Two-digit number multiplied by 3, 4 or 5
Subtract 3d - 2d multiples of 10 crossing boundary	3d + 2d not crossing a boundary	Add a 3d multiple of ten to a 3d number mentally
2d + 2d not crossing a boundary	2d – 2d crossing a boundary	Subtract a 3d multiple of ten from a 3d number mentally
2d + 2d crossing a boundary	Written method 3d + 3d one exchange	Written method 3d + 3d two exchanges
2d – 2d not crossing a boundary	Written method 3d — 3d one exchange	Written method 3d - 3d two exchanges

Year 4 autumn	Year 4 spring	Year 4 summer	
Partition four digit number	Place number on negative number line	Place number on number line	
Partitioning in different ways (PV)	Round 2d, 3d, and 4d numbers to the nearest 100 or 1000	Round decimals to the nearest whole	
Add or subtract 1,10,100 or 1000 to/from a 4d number	Add or subtract 1s 10s,100s or 1000s to/from 4d number	Order decimals to one decimal place	
Order three and four-digit numbers	Fractions of amounts linked to tables	Fraction of an amount - money	
Missing numbers: counting in multiples of 20s, 30s, 40s, 50s	Link multiplication facts to multiples of a hundred	Combine expanded number to two decimal places (PV)	
Missing box bonds to 1000	Link multiplication facts to multiples of ten hundred	Add or subtract two amounts of money	
Doubles of two two-digit numbers	Halving two or three-digit numbers	Double a three-digit number	
Multiplication and division facts x6 table	Multiplication and division facts x7 and x9 tables	Multiplication and division facts x11 and x12 tables	
Times two and three-digit numbers by 10 and 100	Times and divide one or two-digit numbers by 10 and 100	Times and divide two or three-digit numbers by 10 or 100	
Written method 4d + 4d one exchange	Written method 4d – 4d multiple exchanges including zeros	Divide two-digit numbers by 10 or 100 decimal answer	
Written method 4d – 4d one exchange	Written method 4d — 4d multiple exchanges (horizontal)	Multiply three single digits	
Two-digit number multiplied by 3,4,5,or 8 (horizontal)	Written method 2d x 1d	Written method 3d x 1d	



Written method multi-digit subtraction

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Year 5 autumn	Year 5 spring	Year 5 summer
What's the value of the digit to two or three decimal places	Represent partitioned mixed numbers as a decimal (PV)	Difference between positive and negative numbers
Place decimals in order with varying decimal places	Power of ten more or less than a large number	Write in figures — six or seven digit numbers
Decimal bonds to 10	Decimal equivalent to a simple fraction	Round to the nearest tenth
Times and divide numbers to 2dp by 10 or 100	Identify a multiple between two given numbers	Three-digit number divided by 1000
Identify square numbers	Calculate square and cube numbers	Simple calculations involving square and cube numbers
Identify factors of a given number	Identify prime numbers	Balance equations involving tables facts
Fraction of an amount - money	Balance equation involving addition and subtraction	Fraction of an amount - money
Addition of tenths (decimal)	Convert improper fractions to a mixed number	Complete equivalent fraction
Multiple of ten times multiple of ten	Calculate change	Convert fractions to a percentage
Written method add or subtract multi-digit whole numbers	Written method multi-digit addition	Written method addition or subtraction with decimals
Three or four-digit numbers divided by a single digit	Written method 4d ÷ 1d	Written method 4d ÷ 1d
Written method 4d x 1d	Written method 4d x 1d (horizontal)	Written method 3d to1dp x 1d (horizontal)

Year 6 autumn	Year 6 spring
Round to the nearest thousand	Ordering
Place decimals in order with varying decimal places	Rounding
Mental addition with decimals	Convert metric measures
Empty box x ÷ 10,100,1000	Long multiplication
Difference between – positive and negative numbers	Long division
Number sentence with whole, square and cube numbers	Calculate mean value
Identify prime numbers	Perimeter, area and volume
Balance equations involving tables facts	Calculate missing angles
Convert mixed number to an improper fraction	Read scales
Addition of fractions	Algebra - substitution
Written method multi-digit addition	