



## Park Grove Mental Maths Skills

### Reception

- Count on from and back to zero in ones to /from 20
- Count in 10s
- Count in 2s
- Say what is one more and one less using numbers from 0 to 10
- Add and subtract two single-digit numbers
- Count on and back to add and subtract two single digit numbers
- Know doubles for all numbers to 5
- Know halves for all even numbers to 20
  
- Recite the days of the week in order

### Year 1

- Count forwards and backwards to and across 100, from 0 or any given number
- Count in 2s
- Count in 5s
- Count in 10s, from different multiples
- Know and count in odd/even number
- Number bonds to 10
- Know all bonds to 20
- Know all bonds and related subtraction facts to 10 and 20 in different forms e.g.  $9+7=16$ ,  $16-7=9$ ,  $7=16-9$
- Given a number identify one more/one less using numbers to 100
- Add and subtract 1 and 2 digit numbers to 20
- Double numbers to at least 10 e.g.  $8+8$
- Half even numbers to 20. Half 50 and 100
- Name half or quarter of a quantity
  
- Recite days of the week
- Recite months of the year in order

### Year 2

- Count in steps of 2, 3 and 5 from 0 and in 10s from any number, forward and backward.
- Use counting in 5s in relation to the clock face.
- Find multiples of 10 more /less than a given number
- Link counting in 2s, 3s, 4s, 5s and 10s to times tables.
- Count in fractions up to 1
- Recall addition and subtraction facts fluently. Derive and use related facts to 100. E.g.  $30+70$ , or  $60+?=100$
- Add and subtract mentally: 2-digit number and ones, 2-digit number and 10s, two two-digit numbers, three one-digit numbers.
- Double all numbers to at least 20 e.g. double 13, and doubles of multiples of 10 to 50, e.g.  $40+40$ , and their corresponding halves
- Name  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$  of a set of objects.
  
- 2,5 and 10 times tables



## Park Grove Mental Maths Skills

### Year 3

- 3,4,8 times tables (plus consolidate 2,5 and 10)
- Through doubling connect 2,4 and 8 times tables
- Count from 0 in multiples of 4,8,50 and 100.
- Find multiples of 10 or 100 more or less than a given number
- Count up and down in tenths
- Use numbers to 1000 to derive and recall facts  
e.g.  $146 = 130 + 16$ .  $900 + 100 = 1000$
- Add and subtract fractions with the same denominator
- Add and subtract mentally: a 3-digit number and ones, a 3-digit number and tens, a 3-digit number and 100s

### Year 4

- Tables up to  $12 \times 12$
- Division facts for up to  $12 \times 12$
- Count in multiples of 6,7,9,25 and 1000
- Count backwards through 0 to include negative numbers.
- Counting in hundredths and using simple decimals and fractions
- Find 1000 more/less than a given number
- Practise mental methods for addition and subtraction with increasingly large numbers
- Use mental methods and extend to 3 digit numbers to derive facts e.g.  $600 \div 3 = 200$  can be derived from  $2 \times 3 = 6$
- Add and subtract fractions with the same denominator
- Use factor pairs in mental calculations
- Round any number to the nearest 10, 100 or 1000
- Round decimals with 1 decimal place to the nearest whole number

### Year 5

- Know square and cube numbers
- Know prime numbers to 19 and derive if a number to 100 is prime
- Count forwards and backwards in steps of powers of ten for any given number up to 1 000 000
- Count forwards and backwards with positive and negative whole numbers
- Add and subtract whole numbers with increasingly large numbers.
- Find compliments of 1 e.g.  $0.83 + 0.17$
- Add and subtract fractions with the same denominator and denominators which are multiples of each other.
- Practise mental methods with all four operations with increasingly large numbers
- Round any number to 1,000,000 to the nearest 10, 100, 1000, 10,000, 100,000
- Recognise and describe linear sequences, including those with fractions.
- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
- Know percentage and decimal equivalents of  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{100}$



## Park Grove Mental Maths Skills

Year 6

- Count forwards and backwards in steps of powers of ten for any given number up to 1 000 000
- Add and subtract fractions with different denominators and mixed numbers
- Round any number to 1,000,000 to the nearest 10, 100, 1000, 10,000, 100,000
- Identify common factors, common multiples and prime numbers
- Know equivalent fractions, decimals and percentages for hundredths, e.g. 35% is equivalent to 0.35 or 35/100