Mathematics Non-Negotiables

Non-negotiables are the minimum expectations that all pupils must attain by the end of year.

These prompt sheets have been designed to assist teachers with planning/assessment and as an ideal support tool for parent's evenings/progress meetings etc.

The content identifies basics to ensure children make rapid progress and access learning in other areas, as well as securing success in terms of preparing children for the next stages in their learning.

Written with age appropriate expectations in mind, they:

- focus on the basics; making a difference to progress for all children
- support teachers in recognising key areas to promote progress
- are based on the average pupil in the cohort, supporting the need for differentiation.

Non-negotiables are in no way intended to cover the entirety of the curriculum – they are an on-going reminder of key objectives for the year group. They are the basics in order to embed and support meaningful learning.

End of Year Expectations for Year 1

- Count to and across 100, forwards & backwards from any number
- Read and write numbers to 20 in numerals & words
- Read and write numbers to 100 in numerals
- Say 1 more/1 less to 100
- Count in multiples of 2, 5 & 10
- Use bonds and subtraction facts to 20
- Add & subtract: 1 digit & 2 digit numbers to 20, including zero
- Solve one-step multiplication and division using objects, pictorial representation and arrays
- Recognise half and quarter of object, shape or quantity
- Sequence events in chronological order
- Use language of day, week, month and year
- Tell time to hour & half past

End of Year Expectations for Year 2

- Compare and order numbers up to 100 and use < > =
- Read and write all numbers to 100 in digits & words
- Say 10 more/less than any number to 100
- Count in steps of 2, 3 & 5 from zero and in 10s from any number (forwards and backwards)
- Recall and use multiplication & division facts for 2, 5 & 10 tables
- Recall and use +/- facts to 20
- Derive and use related facts to 100
- Recognise place value of any 2-digit number
- Add & subtract: 2-digit numbers & ones
  2-digit numbers & tens
  two 2-digit numbers
  three 1-digit numbers
- Recognise and use inverse (+/-)
- Calculate and write multiplication & division calculations using multiplication tables
- Recognise, find, name and write 1/3; 1/4; 2/4; 3/4
- Write and recognise equivalence of simple fractions
- Tell time to five minutes, including quarter past/to

End of Year Expectations for Year 3

- Compare & order numbers up to 1000
- Read & write all numbers to 1000 in digits and words
- Find 10 or 100 more/less than a given number
- Count from 0 in multiples of 4, 8, 50 and 100
- Recall & use multiplication & division facts for 3, 4, 8 tables
- Recognise place value of any 3-digit number
- Add and subtract: 3-digit numbers and ones
  3-digit numbers and tens
  3-digit numbers and hundreds
- Add and subtract: Numbers with up to 3-digits using written columnar method
- Estimate and use inverse to check
- Multiply: 2-digit by 1-digit
- Count up/down in tenths
- Compare and order fractions with same denominator
- Add and subtract fractions with same denominator within one whole
- Tell time using 12 and 24 hour clocks; and using Roman numerals
- Tell time to nearest minute
- Know number of days in each month and number of seconds in a minute

End of Year Expectations for Year 4

- Count backwards through zero to include negative numbers
- Compare and order numbers beyond 1,000
- Compare and order numbers with up to 2 decimal places
- Read Roman numerals to 100
- Find 1,000 more or less than a given number
- Count in multiples of 6, 7, 9, 25 and 1000
- Recall and use multiplication and division facts for all tables to 12x12
- Recognise place value of any 4-digit number
- Round any number to the nearest 10, 100 or 1,000
- Round decimals with 1 decimal-place to nearest whole number
- Add and subtract numbers with up to 4-digits using written columnar method
- Multiply 2-digit and 3-digit numbers by 1-digit numbers
- Count up and down in hundredths
- Recognise and write equivalent fractions
- Add and subtract fractions with same denominator
- Read, write and convert time between analogue and digital 12 and 24 hour clocks

End of Year Expectations for Year 5

- Count forwards and backward with positive and negative numbers through zero
- Count forwards/backwards in steps of powers of 10 for any given number up to 1,000,000
- Compare and order numbers up to 1,000,000
- Compare and order numbers with 3 decimal places
- Read Roman numerals to 1,000
- Identify all multiples and factors, including finding all factor pairs of two numbers
- Use known tables to derive other number facts
- Recall prime numbers up to 19
- Recognise and use square numbers and cube numbers
- Recognise place value of any number up to 1,000,000
- Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000
- Round decimals with 2 decimal places to nearest whole number and 1 decimal place
- Add and subtract: Numbers with more than 4-digits using formal written method
- Use rounding to check answers
- Multiply: 4-digits by 1-digit/ 2-digit
- Divide: Up to 4-digits by 1-digit
- Multiply & divide: Whole numbers & decimals by 10, 100 and 1,000
- Recognise and use thousandths
- Recognise mixed numbers and improper fractions and convert from one to another
- Multiply proper fractions and mixed numbers by whole numbers
- Identify and write equivalent fractions
- Solve time problems using timetables and converting between different units of time

End of Year Expectations for Year 6

- Use negative numbers in context and calculate intervals across zero
- Compare and order numbers up to 10,000,000
- Identify common factors, common multiples and prime numbers
- Round any whole number to a required degree of accuracy
- Identify the value of each digit to 3 decimal places
- Use knowledge of order of operations to carry out calculations involving four operations
- Multiply: 4-digit by 2-digit
- Divide: 4-digit by 2-digit
- Add and subtract fractions with different denominators and mixed numbers
- Multiply simple pairs of proper fractions, writing the answer in the simplest form.
- Divide proper fractions by whole numbers
- Calculate % of whole number