Key Skills in Mathematics

From September 2014 we will be following the new National Curriculum; this new curriculum increases the level of challenge for our children and they will be expected to progress through key skills and secure new knowledge at a faster rate than before.

Instead of assessing the children against National Curriculum levels, children will be assessed against the range of skills and knowledge expected for a child of their year group. Some of the key skills for each year group in the new curriculum have been moved from older year groups from the previous national curriculum; **this could significantly increase the difficulty of meeting the end-of-year expectations for some children**.

For the academic year 2014-2015, children in years 2 and 6 will continue to be assessed against the old National Curriculum and we are required to report their attainment as a level. However, from the academic year 2015-2016 the children moving into Year 3 will then be assessed against the new, more challenging curriculum so we will also be preparing our current Year 2 children and making sure that they are ready for this change.

To help our children to move successfully to the new curriculum and its increased challenge we will need your help... We have prepared lists of some of the key skills and knowledge that children must be able to use confidently by the end of each year group. Please practise these key skills with your child as often as possible to help ensure their success.

Key skills highlighted in yellow are those that can be practised at home on a regular basis with ease.

Key skills highlighted in green (times tables and telling the time confidently) are those where the challenge has increased and, from our experience, are also those for which support from home is vital to success.

If your child is finding the key skills for their own year group too tricky, begin by tackling the key skills from younger year groups until their confidence grows. If your child is easily achieving the key skills for their year group, please feel free to encourage them to begin tackling some of those from older year groups.

Maths Key Skills Reception:

- Count reliably to 20.
- Order numbers 1 – 20.
- Say 1 more/1 less to 20 (e.g. 1 more than 16 is 17, 1 less than 13 is 12)
- Add & subtract two single digit numbers (e.g. 7+5=12 or 9-6=3)

Maths Key Skills Year 1:

- Count to & across 100, forwards & backwards from any number.
- Read & write numbers to 20 in digits & words.
- Read & write numbers to 100 in digits.
- Say 1 more/1 less to 100.
- Count in steps of 1, 2, 5 & 10.
- Know bonds to 10 by heart (e.g. 0+10=10, 1+9=10, 2+8=10, 3+7=10.....)
- Add & subtract numbers from 0 to 20.
- Add any three 1-digit numbers with a total up to 20.
- Recognise half and quarter of object, shape or quantity.
- Sequence events in order.
- Use language of day, week, month and year.
- Tell time to hour & half past.

Maths Key Skills Year 2:

- Compare & order numbers up to 100.
- Read & write all numbers to 100 in digits & words.
- Say 10 more/less than any number to 100.
- Count in steps of 2, 3 & 5 & 10 from any number up to 100.
- Recall & use multiplication & division facts for 2, 5 & 10 tables (i.e. children **must** know these times tables **by heart**)
- Recall & use +/- facts to 20.
- Derive & use related facts to 100.
- Add & subtract:
  - 2-digit numbers & ones
  - 2-digit numbers & tens
  - Two 2-digit numbers (e.g. 23+15=38; 28-12=16)
  - Three 1-digit numbers (e.g. 5+3+7=15)
- Recognise & use inverse (+/-); e.g. 17-3=14 so 14+3=17
- Calculate & write multiplication & division calculations using multiplication tables.
- Recognise & use inverse (x/÷); e.g. 3x5=15 so 15÷3=5.
- Recognise, find, name & write 1/3; 1/4; 2/4; 3/4.
- Recognise equivalence of simple fractions (e.g. a half is the same as two quarters)
- Tell time to five minutes, including quarter past/to.

Maths Key Skills Year 3:

- Compare & order numbers up to 1000.
- Read & write all numbers to 1000 in digits & words.
- Find 10 or 100 more/less than a given number.
- Count from 0 in steps of 4, 8, 50 & 100.
- Recall & use multiplication & division facts for 3, 4, 8 tables (i.e. children **must** know these times tables **by heart**)
- Add & subtract:
  - 3-digit numbers & ones
  - 3-digit numbers & tens
  - 3-digit numbers & hundreds
- Add & subtract:
  - Numbers with up to 3-digits using an efficient written method (e.g. putting calculations into the traditional column method).
- Multiply:
  - 2-digit by 1-digit (e.g. 24x6=144)
- Know pairs of fractions that total 1.
- Tell time using 12 and 24 hour clocks; and using Roman numerals.
- Tell time to nearest minute.
- Know number of days in each month.

Maths Key Skills Year 4:

- Count backwards through zero to include negative numbers.
- Compare & order numbers beyond 1000.
- Compare & order numbers with 2 decimal places.
- Read Roman numerals to 100.
- Find 1000 more/less than a given number.
- Count in steps of 6, 7, 9, 25 & 1000.
- Recall & use multiplication & division facts all tables to 12x12 (i.e. children in Year 4 are expected to know **all of their times tables to 12x12 by heart**).
- Round any number to the nearest 10, 100 or 1000.
- Round decimals with 1decimal point to the nearest whole number.
- Add & subtract:
  - Numbers with up to 4-digits using efficient written method (column).
  - Numbers with up to 1decimal place.
- Multiply:
  - 2-digit by 1-digit (e.g. 23x7)
  - 3-digit by 1-digit (e.g. 253x6)
- Divide:
  - 3-digit by 1-digit

- Read, write & convert time between analogue & digital 12 & 24 hour clocks (i.e. children must be very confident and accurate when telling the time).

Maths Key Skills Year 5:

- Count forwards & backward with positive & negative numbers through zero.
- Compare & order numbers with 3 decimal places.
- Read Roman numerals to 1000.
- Use known tables to derive other number facts (e.g. if 3x15=45 then we can also work out that 30x15=450, 6x15=90, 450÷15=30 etc)
- Recall prime numbers up to 19.
- Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 or 100000.
- Round decimals with 2 decimal places to nearest whole number & 1 decimal place.
- Add & subtract:
  - Numbers with more than 4-digits using efficient written method (column).
  - Numbers with up to 2 decimal places.
- Multiply:
  - 4-digit numbers by 1-digit and 2-digit numbers (e.g. 4356x7 or 4356x34).
- Divide:
  - 4-digit numbers by 1-digit numbers.
- Recognise mixed numbers & fractions & convert from one to another.
- Multiply proper fractions by whole numbers.
- Solve time problems using timetables and converting between different units of time (it is expected that children will already be confidently telling the time to the nearest minute by the end of Year 3)

Maths Key Skills Year 6:

- Compare & order numbers up to 10000000.
- Identify common factors, common multiples & prime numbers.
- Round any whole number to a required degree of accuracy.
- Multiply:
  - ➢ 4-digit numbers by 2-digit numbers
- Divide:
  - ➢ 4-digit numbers by 2-digit numbers
- Add & subtract fractions with different denominators & 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.