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|  | **Rec** | **Y1** | **Y2** | **Y3** | **Y4** | **Y5** | **Y6** | **Mathematics Non-Negotiables (Minimum end of year expectations)** |
| **Counting & ordering** | Count reliably to 20. | Count to & across 100, forwards & backwards from any number. |  |  | Count backwards through zero to include negative numbers. | Count forwards & backward with positive & negative numbers through zero.Count forwards/backwards in steps of powers of 10 for any given number up to 1000000. |  |
| Order numbers 1 – 20.  |  | Compare & order numbers up to 100. | Compare & order numbers up to 1000. | Compare & order numbers beyond 1000. |  | Compare & order numbers up to 10000000. |
|  |  |  |  | Compare & order numbers with 2 decimal places.  | Compare & order numbers with 3 decimal places.  |  |
|  |  |  |  | Read Roman numerals to 100. | Read Roman numerals to 1000. |  |
| **Numbers &****more/less**  | . | Read & write numbers to 20 in digits & words.Read & write numbers to 100 in digits. | Read & write all numbers to 100 in digits & words. | Read & write all numbers to 1000 in digits & words. |  |  |  |
| Say 1 more/1 less to 20. | Say 1 more/1 less to 100 | Say 10 more/less than any number to 100. | Find 10 or 100 more/less than a given number. | Find 1000 more/less than a given number. |  |  |
| **Tables & multiples** |  | Count in multiples of 1, 2, 5 & 10. | Count in multiples of 2, 3 & 5 & 10 from any number up to 100.Recall & use multiplication & division facts for 2, 5 & 10 tables. | Count from 0 in multiples of 4, 8, 50 & 100.Recall & use multiplication & division facts for 3, 4, 8 tables. | Count in multiples of 6, 7, 9, 25 & 1000.Recall & use multiplication & division facts all tables to 12x12. | Identify all multiples & factors, including finding all factor pairs. Use known tables to derive other number facts. | Identify common factors, common multiples & prime numbers.  |
| **Bonds & Facts** |  | Know bonds to 10 by heart.Use bonds & subtraction facts to 20. | Recall & use +/- facts to 20.Derive & use related facts to 100. |  |  | Recall prime numbers up to 19. |  |
| **Place value & rounding** |  |  | Recognise PV of any 2-digit number. | Recognise PV of any 3-digit number. | Recognise PV of any 4-digit number.Round any number to the nearest 10, 100 or 1000.Round decimals with 1dp to nearest whole number. | Recognise PV of any number up to 1000000. Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 or 100000.Round decimals with 2dp to nearest whole number & 1dp. | Round any whole number to a required degree of accuracy. |
| **Calculations**+/- | Add & subtract two single digit numbers. | Add & subtract:* 1 digit & 2 digit numbers to 20, including zero.

Add any three 1-digit numbers with a total up to 20. | Add & subtract:* 2-digit nos & ones
* 2-digit nos & tens
* Two 2-digit nos
* Three 1-digit nos

Recognise & use inverse. | Add & subtract:* 3-digit nos & ones
* 3-digit nos & tens
* 3-digit nos & hundreds

Add & subtract:* Numbers with up to 3-digits using efficient written method (column).

Use inverse to check. | Add & subtract:* Numbers with up to 4-digits using efficient written method (column).
* Numbers with up to 1dp.
 | Add & subtract:* Numbers with more than 4-digits using efficient written method (column).
* Numbers with up to 2dp.
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| **Calculations**x/÷ |  | Solve simple multiplication & division with apparatus & arrays.  | Calculate & write multiplication & division calculations using multiplication tables.Recognise & use inverse. | Multiply:* 2-digit by 1-digit
 | Multiply:* 2-digit by 1-digit
* 3-digit by 1-digit

Divide:* 3-digit by 1-digit
 | Multiply:* 4-digits by 1-digit/ 2-digit

Divide:* 4-digits by 1-digit

Multiply & divide:* Whole numbers & decimals by 10, 100 & 1000
 | Multiply:* 4-digit by 2-digit

Divide:* 4-digit by 2-digit
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| **Fractions & percentages** |  | Recognise half and quarter of object, shape or quantity.  | Recognise, find, name & write 1/3; 1/4; 2/4; 3/4.Recognise equivalence of simple fractions. | Count up/down in tenths.Compare & order fractions with same denominator.+/- fractions with same denominator with whole. Know pairs of fractions that total 1. | Count up/down in hundredths.Write equivalent fractions+/- fractions with same denominator.  | Count up/down in thousandths.Recognise mixed numbers & fractions & convert from one to another.Multiply proper fractions by whole 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. |
| **Time** |  | Sequence events in order.Use language of day, week, month and year.Tell time to hour & half past. | Tell time to five minutes, including quarter past/to. | Tell time using 12 and 24 hour clocks; and using roman numerals.Tell time to nearest minute.Know number of days in each month. | Read, write & convert time between analogue & digital 12 & 24 hour clocks. | Solve time problems using timetables and converting between different units of time.  |  |