

# Mathematics assessment guidelines

Name of child:

Class:

| Number, ratio and proportion, and algebra                        |   |   | Measurement, geometry and statistics  |  |   |   |
|--|---|---|---|--|---|---|
| AF1 - Number, place value, approximation and estimation/rounding | AF2 - Addition, subtraction, multiplication and division (calculations)   | AF3 - Fractions, decimals and percentages   | AF6 - Measurement   | AF7 - Geometry – properties of shape   | AF8 - Statistics  |   |
| <b>Standard 4</b>  | <ul style="list-style-type: none"> <li>Count from 0 in multiples of 6, 7, 9, 25 and 1000 <b>4N1</b></li> <li>Order and compare numbers beyond 1000 <b>4N2a</b></li> <li>Find 1000 more or less than a given number <b>4N2a</b></li> <li>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones) <b>4N3a</b></li> <li>Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value <b>4N3b</b></li> <li>Identify, represent and estimate numbers using different representations <b>4N4a</b></li> <li>Round any number to the nearest 10, 100 or 1000 <b>4N4b</b></li> <li>Count backwards through zero to include negative numbers <b>4N5</b></li> <li>Solve number and practical problems that involve <b>4N1-4N5</b></li> </ul> | <ul style="list-style-type: none"> <li>Add and subtract numbers with up to four digits using the formal written method of columnar addition and subtraction where appropriate <b>4C2</b></li> <li>Estimate and use inverse operations to check answers to a calculation <b>4C3</b></li> <li>Solve addition and subtraction two-step problems in contexts, deciding which operation and methods to use and why <b>4C4</b></li> <li>Recall multiplication and division facts for multiplication tables up to 12 x 12 <b>4C6a</b></li> <li>Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying three numbers <b>4C6b</b></li> <li>Recognise and use factor pairs and commutativity in mental calculations <b>4C6c</b></li> <li>Multiply two-digit and three-digit numbers by a one-digit number using formal written layout <b>4C7</b></li> <li>Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as <math>n</math> objects are connected to <math>m</math> objects <b>4C8</b></li> </ul> | <ul style="list-style-type: none"> <li>Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten <b>4F1</b></li> <li>Recognise and show, using diagrams, families of common equivalent fractions <b>4F2</b></li> <li>Add and subtract fractions with the same denominator <b>AF4</b></li> <li>Recognise and write decimal equivalents to <math>1/4, 1/2, 3/4</math> <b>4F6a</b></li> <li>Recognise and write decimal equivalents of any number of tenths or hundredths <b>4F6b</b></li> <li>Round decimals with one decimal place to the nearest whole number <b>4F7</b></li> <li>Compare numbers with the same number of decimal places up to two decimal places <b>4F8</b></li> <li>Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths <b>4F9</b></li> <li>Solve problems involving increasingly harder fractions to calculate quantities and fractions to divide quantities, including non-unit fractions where the answer is a whole number <b>4F10a</b></li> <li>Solve simple measure and money problems involving fractions and decimals to two decimal places <b>4F10b</b></li> </ul> | <ul style="list-style-type: none"> <li>Compare different measures, including money in pounds and pence <b>4M1</b></li> <li>Estimate different measures, including money in pounds and pence <b>4M2</b></li> <li>Read and convert time between analogue and digital 12-hour and 24-hour clocks <b>4M4a-b</b></li> <li>Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days <b>4M4c</b></li> <li>Convert between different units of measurement (e.g. km to m; hour to minute) <b>4M5</b></li> <li>Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m <b>4M7a</b></li> <li>Find the areas of rectilinear shapes by counting squares <b>4M7b</b></li> <li>Calculate different measures, including money in pounds and pence <b>4M9</b></li> </ul> | <ul style="list-style-type: none"> <li>Compare and classify geometric shapes, including quadrilaterals and triangles based on their properties and sizes <b>4G2a</b></li> <li>Identify lines of symmetry in 2-D shapes presented in different orientations <b>4G2b</b></li> <li>Complete a simple symmetric figure with respect to a specific line of symmetry <b>4G2c</b></li> <li>Identify acute and obtuse angles and compare and order angles up to two right angles by size <b>4G4</b></li> <li>Describe movements between positions as translations of a given unit to the left/right and up/down <b>4P2</b></li> <li>Describe positions on a 2-D grid as co-ordinates in the first quadrant <b>4P3a</b></li> <li>Plot specified points and draw sides to complete given polygon <b>4P3b</b></li> </ul> | <ul style="list-style-type: none"> <li>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs <b>4S1</b></li> <li>Solve comparison, sum and difference problems using information presenting in bar charts, pictograms, tables and other graphs <b>4S3</b></li> </ul> |