The Eliot Bank and Gordonbrock Schools Federation

Mathematics Assessment Guidelines: Standard 4

Number, Ratio And Proportion, And Algebra

AF1 Number, Place Value, Approximation And Estimation/Rounding

- Count from 0 in multiples of 6, 7, 9, 25 and 1000 **4N1**
- Order and compare numbers beyond 1000 **4N2a**
- Find 1000 more or less than a given number **4N2a**
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones) 4N3a
- 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 **4N3b**
- Identify, represent and estimate numbers using different representations **4N4a**
- Round any number to the nearest 10, 100 or 1000 **4N4b**
- Count backwards through zero to include negative numbers **4N5**
- Solve number and practical problems that involve **4N1-4N5**

AF2 Addition, Subtraction, Multiplication And Division (Calculations)

- Add and subtract numbers with up to four digits using the formal written method of columnar addition and subtraction where appropriate **4C2**
- Estimate and use inverse operations to check answers to a calculation **4C3**
- Solve addition and subtraction two-step problems in contexts, deciding which operation and methods to use and why **4C4**
- Recall multiplication and division facts for multiplication tables up to 12 x 12 **4C6a**
- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying three numbers **4C6b**
- Recognise and use factor pairs and commutativity in mental calculations **4C6c**
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout **4C7**
- 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 n objects are connected to m objects **4C8**

AF3 Fractions, Decimals And Percentages

- Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten **4F1**
- Recognise and show, using diagrams, families of common equivalent fractions **4F2**
- Add and subtract fractions with the same denominator **AF4**
- Recognise and write decimal equivalents to 1/4,1/2, 3/4 **4F6a**
- Recognise and write decimal equivalents of any number of tenths or hundredths **4F6b**
- Round decimals with one decimal place to the nearest whole number **4F7**
- Compare numbers with the same number of decimal places up to two decimal places **4F8**
- 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 **4F9**
- 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 **4F10a**
- Solve simple measure and money problems involving fractions and decimals to two decimal places **4F10b**

Measurement, Geometry And Statistics

AF6 Measurement

- Compare different measures, including money in pounds and pence **4M1**
- Estimate different measures, including money in pounds and pence **4M2**
- Read and convert time between analogue and digital 12-hour and 24- hour clocks **4M4a-b**
- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days **4M4c**
- Convert between different units of measurement (e.g. km to m; hour to minute) **4M5**
- Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m **4M7a**
- Find the areas of rectilinear shapes by counting squares **4M7b**
- Calculate different measures, including money in pounds and pence **4M9**

AF7 Geometry – Properties Of Shape

- Compare and classify geometric shapes, including quadrilaterals and triangles based on their properties and sizes **4G2a**
- Identify lines of symmetry in 2-D shapes presented in different orientations **4G2b**
- Complete a simple symmetric figure with respect to a specific line of symmetry **4G2c**
- Identify acute and obtuse angles and compare and order angles up to two right angles by size **4G4**
- Describe movements between positions as translations of a given unit to the left/right and up/down **4P2**
- Describe positions on a 2- D grid as co-ordinates in the first quadrant **4P3a**
- Plot specified points and draw sides to complete given polygon **4P3b**

AF8 Statistics

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs **4S1**
- Solve comparison, sum and difference problems using information presenting in bar charts, pictograms, tables and other graphs **4S3**