Maths - ALL, MOST, SOME Statements

Year 4

(Some of the problem solving objectives to be differentiated according to complexity of problem)

Number – number and place value

Count in multiples of 6, 7, 9, 25 and 1000
ALL – I can count in multiples of 6, 7, 9 and 1000
MOST – I can count in multiples of 6, 7, 9, 25 and 1000

Find 1000 more or less than a given number
ALL – I can find 1000 more or less than a given number
MOST – I can explain what happens to place value when 1000 is added or subtracted

Count backwards through zero to include negative numbers
ALL – I know that there are numbers below zero
MOST – I can count backwards through zero to include negative number
SOME – I can apply my understanding of negative numbers to solve simple problems in real-life contexts

Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
ALL – I can recognise the place value of each digit in a four-digit number
MOST – I can explore different ways of partitioning four-digit numbers

Order and compare numbers beyond 1000
ALL – I can compare two 4-digit numbers
MOST – I can compare and order 4-digit numbers in ascending and descending order
SOME – I can use given numbers to make the smallest and largest possible 4-digit numbers

Identify, represent and estimate numbers using different representations
ALL – I can identify, represent and estimate numbers using different representations

Round any number to the nearest 10, 100 or 1000
ALL – I can round any number to the nearest 10 or 100
MOST – I can round any number to the nearest 10, 100 0r 1000
SOME – I can determine the smallest and largest possible values when rounding to the nearest 10, 100 or 1000

(Solve number and practical problems that involve all of the above and with increasingly large positive numbers)

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
ALL – I can read Roman numerals to 12
MOST – I can read Roman numerals to 100
MOST – I know that over time, the numeral system changed to include the concept of zero and place value

Number – addition and subtraction

Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
ALL – I can use the column method to add and subtract (one exchange) numbers with up to 4 digits
MOST – I can use the column method to add and subtract numbers with up to 4 digits
SOME – I can choose, with justification, the most efficient method to add and subtract numbers with up to 4 digits

Estimate and use inverse operations to check answers to a calculation
ALL – I can use near numbers to estimate answers
MOST – I can use rounding to estimate answers with increasing accuracy

SOME – I can begin to choose the most appropriate degree of accuracy when rounding to check answers

ALL – I can use the inverse operation to check answers
MOST – I can use the inverse operation to check answers and derive related facts

(Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why)

Number - multiplication and division

Recall multiplication and division facts for multiplication tables up to 12 × 12
ALL – I can recall multiplication facts for multiplication tables up to 12x12
MOST - I can recall multiplication and division facts for multiplication tables up to 12x12
SOME – I can recall multiplication facts for multiplication tables up to 12x12, and derive related facts

Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
ALL – I can partition a two-digit number into tens and ones to multiply by a one-digit number mentally
MOST – I can partition a two-digit number into factor pairs to multiply one and two-digit numbers mentally
SOME – I can choose, with justification the most efficient method for multiplying mentally

ALL – I understand what happens when we multiply by 0 and 1; and divide by 1

ALL – I can multiply three one-digit numbers
MOST – I understand the associative law and can use this to help me multiply three numbers
SOME – I can choose, with justification and reference to the associative and commutative laws, the most efficient method for multiplying three numbers

Recognise and use factor pairs and commutativity in mental calculations
ALL – I know what a factor is and can give factors of a given number
MOST – I can find factor pairs of given numbers
SOME – I can consistently employ a system to ensure that I have found all possible factor pairs of a given number

Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
ALL – I can use a formal written method to multiply a two-digit number by a one-digit number
MOST – I can use a formal written method to multiply a three-digit number by a one-digit number
SOME – I can recognise, with justification, when it is more efficient to use a mental or written method

(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)

Number – Fractions (including decimals and percentages)

Recognise and show, using diagrams, families of common equivalent fractions
ALL – I can recognise and show, using diagrams, pairs of common equivalent fractions
MOST – I can recognise and show, using diagrams, families of common equivalent fractions
SOME – I can recognise and show, using proportional reasoning, families of equivalent fractions

Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten
ALL – I understand that hundredths arise when dividing an object or quantity by one hundred
MOST – I understand that hundredths arise when dividing an object or quantity by one hundred, and dividing tenths by ten
MOST – I can partition a fraction into tenths and hundredths
MOST – I can count up and down in hundredths

SOME – I can associate an amount of hundredths greater than one hundred with a whole number and a fraction (121/100 is equal to 1 and 21/100)

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
ALL – I can find unit fractions of a quantity
MOST – I can find unit and non-unit fractions of a quantity
SOME – I can find the whole when given the value of a unit fraction of a quantity

Add and subtract fractions with the same denominator
ALL – I can add two fractions with the same denominator
MOST – I can add two or more fractions with the same denominator
SOME – I can use my knowledge of equivalent fractions to recognise when to express answers in a simpler form

ALL – I can subtract two fractions with the same denominator
MOST – I can subtract two fractions with the same denominator, including where the minuend fraction has a value equal to or greater than one (eg 13/9 – 6/9 = 7/9)
SOME – I understand how many equal parts are equivalent to any amount of wholes (eg 9/9 = one whole, 18/9 = 2 wholes, etc.)

Recognise and write decimal equivalents of any number of tenths or hundredths
ALL – I can recognise and write decimal equivalents of any number of tenths
MOST – I can recognise and write decimal equivalents of any number of tenths or hundredths

Recognise and write decimal equivalents to 1/4, 1/2, 3/4
ALL – I can recognise and write decimal equivalents to ¼, ½ and ¾
MOST – I can recognise and write decimal equivalents to ¼, ½ and ¾, including common fractions equivalent to a half
SOME – I can recognise and write decimal equivalents to ¼, ½ and ¾, including fractions equivalent to a half, quarter and three quarters

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
ALL – I can find the effect of dividing a one- or two-digit number by 10, identifying the value of the digits in the answer as ones and tenths
MOST – I can 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

Round decimals with one decimal place to the nearest whole number
ALL – I can round decimals with one decimal place to the nearest whole number, with some support
MOST – I can round decimals with one decimal place to the nearest whole number
SOME – I can find the smallest and largest possible values when rounding to the nearest whole number

Compare numbers with the same number of decimal places up to two decimal places
ALL – I can compare two numbers with the same number of (up to two) decimal places
MOST – I can compare and order numbers with the same number of (up to two) decimal places
SOME – I can compare and order numbers with up to two decimal places
SOME – I can use a set of given digits to make the greatest and smallest possible numbers with up to two decimal places

(Solve simple measure and money problems involving fractions and decimals to two decimal places)

Measurement

Convert between different units of measure [for example, kilometre to metre; hour to minute]
ALL – I can use given equivalences to convert between different units of measure
MOST – I can recall equivalences to convert between different units of measure

Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres

ALL – I can measure the perimeter of a rectilinear shape by counting squares
ALL – I can calculate the perimeter of a rectangle by adding all of the sides
MOST – I can measure and calculate the perimeter of a rectilinear shape in centimetres and metres
MOST – I can use addition and subtraction to calculate missing sides of rectilinear shapes

Find the area of rectilinear shapes by counting squares

ALL – I can find the area of rectilinear shapes by counting squares
MOST – I can compare area of two or more rectilinear shapes by counting squares
MOST – I can make more than one rectilinear shape with the same area using a given amount of squares
SOME – I can find all the possible rectilinear shapes with the same area using a given amount of squares

Estimate, compare and calculate different measures, including money in pounds and pence

ALL – I can estimate, compare and calculate different measures
MOST – I can estimate, compare and calculate different measures, with increasing accuracy using rounding
SOME – I can choose, with justification, the most efficient methods for estimating, comparing and calculating different measures

Read, write and convert time between analogue and digital 12- and 24-hour clocks

ALL – I can read, write and convert time between analogue and digital 12-hour clocks
MOST – I can read, write and convert time between analogue and digital 12- and 24-hour clocks

(Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days)

Geometry – properties of shapes

Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes

ALL – I can identify different types of triangle (isosceles, scalene and equilateral) and quadrilateral (square, rectangle, rhombus, parallelogram and trapezium)
MOST – I can compare and classify geometric shapes, including triangles and quadrilaterals
MOST – I understand that a square is a type of (regular) rectangle
SOME – I can ask and answer questions about properties in order to determine unknown shapes

Identify acute and obtuse angles and compare and order angles up to two right angles by size

ALL – I can determine whether an angles is larger or smaller than a right angle
MOST – I can determine whether a given angle, as an image or numeral, is acute or obtuse
MOST – I can compare and order angles, including in shapes, up to two right angles by size

Identify lines of symmetry in 2-D shapes presented in different orientations

ALL – I can find vertical and horizontal lines of symmetry within 2D shapes
MOST – I can identify lines of symmetry in 2D shapes presented in different orientations

Complete a simple symmetric figure with respect to a specific line of symmetry.

ALL – I can complete a simple symmetric figure with respect to a vertical or horizontal line of symmetry
MOST – I can complete a simple symmetric figure with respect to a specific line of symmetry

Geometry – position and direction

Describe positions on a 2-D grid as coordinates in the first quadrant

ALL – I can describe positions as coordinates in the first quadrant

Describe movements between positions as translations of a given unit to the left/right and up/down

ALL – I can describe movements of points on a coordinate grid
MOST – I can describe movements of simple shapes on a coordinate grid
SOME – I can use my understanding of translation and coordinates to assess the accuracy of my own work

Plot specified points and draw sides to complete a given polygon
ALL – I can plot specified points in the first quadrant
MOST – I can plot specified points to complete a given polygon

Statistics

Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
ALL – I can interpret basic information from bar charts and time graphs
MOST – I can interpret and present data using bar charts and time graphs
SOME – I can choose, with justification, the most appropriate method to present a set of data

Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
ALL – I can solve simple comparison problems using information from bar charts, pictograms, tables and other graphs
MOST – I can solve comparison, sum and difference problems using information from bar charts, pictograms, tables and other graphs
SOME – I can ask and answer increasingly complex and relevant questions about data presented in a range of charts, tables and graphs

NB Differentiation and depth of understanding may also be demonstrated by: the learning stage (concrete, pictorial or abstract), level of support or the pupil's ability to:

- solve problems of greater complexity,
- apply their understanding within a wider range of contexts,
- explain processes and reason mathematically,
- justify their choice of method or approach,
- or work systematically.