Key Skills Maths Year 5

Position and Direction

47. I can identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language and know that the shape has not changed.

Statistics

48. I can solve comparison, sum and difference problems using information presented in a line graph.

49. I can complete, read and interpret information in tables, including timetables.

Key vocabulary

Multiplication and Division: multiplied by, multiple, factor, groups of, times, product, once, twice, three times … ten times, repeated addition, division, dividing, divide, divided by, divided into, left, left over, remainder, grouping, sharing, share, share equally, one each, two each, three each … ten each, group in pairs, threes … tens, equal groups of, doubling, halving, array, row, column, number patterns, multiplication table, multiplication fact, division fact.

Fractions, Decimals and Percentages

fraction, proper/improper fraction, equivalent fraction, mixed number, numerator, denominator, equivalent, reduced to, cancel, equal part

equal grouping, equal sharing, parts of a whole, half, two halves, one of two equal parts, quarter, two quarters, three quarters, one of four equal parts, one third, two thirds, one of three equal parts, sixths, sevenths, eighths, tenths … hundredths, thousandths, decimal, decimal fraction, decimal point, decimal place, decimal equivalent, proportion, in every, for every, percentage, per cent, %

Geometry: flat, line, curved, straight, round, hollow, solid, sort, make, build, construct, draw, sketch, perimeter, centre, radius, diameter, surface, angle, right-angled, congruent, base, square-based, size, bigger, larger, smaller, symmetry, symmetrical, symmetrical pattern, line symmetry, reflect, reflection, axis of symmetry, reflective symmetry, pattern, repeating pattern, match, regular, irregular, 2-D, two-dimensional, corner, side, point, pointed, rectangle (including square), rectangular, oblong, rectilinear, circle, circular, triangle, triangular, equilateral triangle, isosceles triangle, scalene triangle, pentagon, pentagonal, hexagon, hexagonal, heptagon, octagon, octagonal, quadrilateral, parallelogram, rhombus, trapezium, 3-D, three-dimensional, face, edge, vertex, vertices, cube, cuboid , pyramid, sphere, hemisphere, spherical, cone, cylinder, cylindrical, prism, triangular prism, tetrahedron, polyhedron, octahedron.

Position and Direction: north-east, north-west, south-east, south-west, NE, NW, SE, SW, horizontal, vertical, diagonal, translate, translation, coordinate, movement, slide turn, stretch, bend, whole turn, half turn, quarter turn, three-quarter turn, rotate, rotation, angle, is a greater/smaller angle than, degree, right angle, acute angle, obtuse angle, reflection, straight line, ruler, set square, angle measurer, compass, protractor.

Statistics: tally, sort, vote, survey, questionnaire, data, database, graph, block graph, pictogram, represent, group, set.
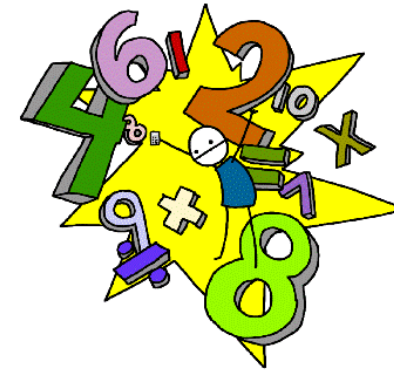
Place Value

1. I can read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.

2. I can count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.

3. I can interpret negative numbers in context, count forwards & backwards with positive & negative whole numbers, including through zero.

4. I can round any number up to 1 000 000 to the nearest 10, 100, 1000,10 000 and 100 000.

Addition and Subtraction

5.I can add and subtract whole numbers with more than 4 digits.

6. I can add and subtract numbers mentally with increasingly large numbers.

7. I can use rounding to check answers to calculations and determine, in the context of the problem, levels of accuracy.

8. I can solve addition and subtraction multistep problems in contexts, deciding which operations to use and why.

Multiplication and Division

9. I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.

10. I can know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.

11. I can find out whether a number up to 100 is prime and recall prime numbers up to 19.

12. I can multiply numbers up to four digits by a one or two-digit number using a formal written method.

13. I can multiply and divide numbers mentally drawing upon known facts.

14. I can divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the content.

15. I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.

16. I can recognise and use square numbers and cube numbers, and the notation for squared and cubed.

17.I can solve problems involving multiplication and division using my knowledge of factors and multiples, squares and cubes.

18. I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Fractions, Decimals and Percentages

19.I can compare and order fractions whose denominators are all multiples of the same number.

20. I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.

21. I can recognise mixed numbers and improper fractions and convert from one form to the other.

Fractions (continued…)

22. I can add and subtract fractions with the same denominator and denominators that are multiples of the same number.

23. I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.

24. I can read and write decimal numbers as fractions.

25. I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.

26. I can round decimals with two decimal places to the nearest whole number and to one decimal place.

27. I can read, write, order and compare numbers with up to three decimal places.

28. I can solve problems involving numbers up to three decimal places.

29. I can recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred'.

30. I can write percentages as a fraction and as a decimal.

31.I can solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.

Measurement

32.I can convert between kilometre and metre, centimetre and metre, centimetre and millimetre.

33. I can convert between gram and kilogram.

34. I can convert between litre and millilitre.

35. I can understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.

36.I can measure and calculate the perimeter of composite rectangular shapes in centimetres and metres.

37. I can calculate and compare the area of rectangles using standard units, square centimetres and square metres and estimate the area of irregular shapes.

38. I can estimate volume and capacity.

39. I can solve problems involving converting between units of time.

40. I can use all four operations to solve problems involving measure using decimal notation, including scaling.

Shape

41. I can identify 3D shapes from 2 D representations.

42. I can estimate and compare acute, obtuse and reflex angles.

43. I can draw given angles and measure them.

44. I can identify angles in multiples of 90 degrees.

45. I can use the properties of rectangles to deduce related facts and find missing lengths and angles.

46. I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.