

Year 6 Maths Statements

I can...

Number - Number and Place Value

1. read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.
2. round any whole number to a required degree of accuracy
3. use negative numbers in context and calculate intervals across zero
4. solve number and practical problems that involve all of the above.

Number - Addition and Subtraction & Multiplication and Division

5. solve addition and subtraction multi-step problems in contexts, deciding which methods to use and why.
6. multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of multiplication.
7. divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding.
8. divide numbers up to 4 digits by a two-digit number using the formal written method of short division with remainders, where appropriate.
9. identify common factors, common multiples and prime numbers.
10. perform mental calculations, with mixed operations and large numbers.
11. use my knowledge of the order of operations to carry out calculations involving the four operations.
12. solve problems involving addition, subtraction, multiplication and division.
13. use estimation to check answers to calculations and determine an appropriate degree of accuracy

Number - Fractions (including decimals and percentages)

14. use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
15. compare and order fractions
16. add and subtract fractions with different denominators and mixed numbers
17. multiply simple pairs of proper fractions, writing the answer in its simplest form for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$
18. divide proper fractions by whole numbers for example, $1/3 \div 2 = 1/6$
19. associate a fraction with division and calculate decimal fraction equivalents
20. identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
21. multiply one-digit numbers with up to two decimal places by whole numbers
22. use written division methods in cases where the answer has up to two decimal places.
23. solve problems which require answers to be rounded to specified degrees of accuracy =
24. recall and use equivalences between simple fractions, decimals and percentages.

Ratio and Proportion
25. solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
26. solve problems involving the calculation of percentages, for example 15% of 360, and the use of percentages for comparison
27. solve problems involving similar shapes where the scale factor is known or can be found
28. solve problems involving unequal sharing and grouping using knowledge of fractions and multiples
Algebra
29. use simple formulae
30. generate and describe linear number sequences
31. express missing number problems algebraically
32. find pairs of numbers that satisfy an equation with two unknowns I can enumerate possibilities of combinations of two variables
Measurement
33. solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
34. use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places
35. convert between miles and kilometres
36. recognise that shapes with the same areas can have different perimeters and vice versa
37. recognise when it is possible to use formulae for area and volume of shapes
38. calculate the area of parallelograms and triangles
39. calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres cm^3 and cubic metres m^3 , mm^3 and kilometres km^3
Geometry - Properties of Shape
40. draw 2-D shapes using given dimensions and angles
41. recognise, describe and build simple 3-D shapes, including making nets I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
42. illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
43. recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
Geometry
44. describe positions on the full coordinate grid (all four quadrants)
45. draw and translate simple shapes on the coordinate plane, and reflect them in the axes
Statistics
46. interpret and construct pie charts and line graphs and use these to solve problems.

47. calculate and interpret the mean as an average.