

Year 6 Maths Target Map

I can read, write, order and compare numbers to at least 10000000 and know the value of each digit.

I can round a whole number to different degrees of accuracy - for example to the nearest 10 or 1000 or 100000.

I understand and use negative numbers in my work and can calculate intervals across zero (e.g. how much is between -7 and +8.)

Number & Place Value

I can solve number and practical problems that involve large numbers, rounding and negative numbers.

I can use common factors to simplify fractions and use common multiples to express fractions in the same denominator.

I can compare and order fractions, including fractions greater than 1.

I can add and subtract fractions with different denominators and mixed numbers.

I can multiply simple pair of fractions and then give the answer in its simplest form.

I can divide proper fractions by whole numbers (e.g. $\frac{1}{4} \div 2 = \frac{1}{8}$)

I can change a fraction into a decimal - (e.g. $\frac{5}{8}$ changes to 0.625 by dividing 1 by 8 and multiplying by 5).

I can multiply and divide numbers by 10, 100 and 1000 and know the value of each digit up to three decimal places.

I can multiply numbers such as 1.82 by a one-digit number (e.g. 1.82×6).

I use written division methods in cases where the answer has up to two decimal places.

I can solve problems about relative sizes of two quantities (ratio).

I can find the percentage of an amount - (e.g. finding 15 percent of 420).

I can solve similar shape problems using scale factor.

I can solve problems about unequal sharing (e.g. 'I need 6 bananas and for every banana I need 25ml of milk. How much milk do I need?').

I can multiply four-digit numbers by a two-digit number (e.g. 6083×62) using the written method of long multiplication.

I can divide 4-digit numbers by a two-digit number using long division - and tell you the remainder as appropriate for the context.

I can choose to divide 4-digit numbers by a two-digit number using the written method of short division if this is possible.

I can calculate mentally with all four operations with large numbers.

I identify common factors, common multiples and prime numbers.

I know that there is a specific order to use the four operations, and use it when solving problems.

I can solve problems involving addition, subtraction, multiplication and division.

I can solve addition and subtraction multi-step problems, deciding where to add or subtract.

I can estimate my answer before I begin calculating and use an appropriate degree of accuracy.

Geometry

I can accurately draw 2-D shapes using given dimensions and angles.

I can recognise, describe and build 3-D shapes, including making nets.

I can classify shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.

I know the parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.

I can work with angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

I can describe positions on the full coordinate grid (all four quadrants).

I can draw and translate shapes using coordinates or reflect a shape on the grid.

Fractions

I can solve problems which include rounding to a required accuracy (e.g. the nearest 10, 100 or 10000).

I know the decimal value, percentage and fraction of a range of values - such as 0.75, 75% and $\frac{3}{4}$

I solve problems involving different units of measures with three decimal places.

I can convert measurements of length, weight, volume and time up to three decimal places in length (e.g. $0.44\text{kg} = 440\text{g}$).

I can convert between miles and kilometres.

I know that shapes with the same areas can have different perimeters and vice versa.

I can use formulae for area and volume of shapes.

I can calculate the area of parallelograms and triangles.

Measure

I can calculate the volume of cubes and cuboids using cm^3 and m^3 , and extending to other units (e.g. mm^3 and km^3).

Operations



Algebra

I know how to use simple formulae (e.g. $n - 10 = 2$).

I can create a sequence of numbers that follow a rule.

I can use a letter (e.g. n or x) to show a missing number (e.g. $12 - x = 4$).

I can find pairs of numbers that satisfy an equation with two missing numbers.

I can find possible answers to missing numbers (e.g. listing the possible answers of a and b in $a + 5 = b - 10$).



Statistics

I can use and construct pie charts and line graphs and use these to solve problems.

I can calculate the mean as an average.

