# Year 5 to Year 6 Math's Learning Journey



Year 6



use the properties of rectangles to deduce related facts and find missing lengths and angles

#### **Position & Direction**

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**

complete, read and interpret information in tables, including timetables

solve comparison, sum and difference problems

distinguish between regular and irregular polygons

#### identify:

angles at a point and 1 whole turn (total 360o) angles at a point on a straight line and half a turn (total 180o) other multiples of 90o

draw given angles, and measure them in degrees (o)

### **Properties of Shape**

know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles

identify 3-D shapes, including cubes and other cuboids, from 2-D representations



estimate volume and

recognise the per cent symbol (%) and understand that per cent relates to "number of parts per

100"

#### Measurement

convert between different units of metric measure

measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres

understand and use approximate equivalences between metric units and common imperial units

calculate and compare the area of rectangles (including squares)

Fractions (decimals & percentages)

solve problems involving converting between units of time capacity

round decimals with 2 decimal places to the nearest whole number and to 1 decimal place

multiply proper fractions and mixed numbers by whole numbers

add and subtract fractions with the same denominator

recognise mixed numbers and improper fractions and convert from one form to the other

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

read and write decimal numbers as fractions



recognise and use square numbers and cube numbers solve problems involving multiplication and division

multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000

solve problems involving addition, subtraction, multiplication and division and a combination of these

divide numbers up to 4 digits by a one-digit number using the formal written method of short division

solve problems involving multiplication and division, including scaling by simple fractions

multiply and divide numbers mentally drawing upon known facts

multiply numbers up to 4 digits by a one- or twodigit number using a formal written method

compare and order fractions whose denominators are all multiples of the same number

**Multiplication & Division** 



number up to 100 is prime and recall prime numbers up to 19

establish whether a

#### identify multiples

#### **Addition & Subtraction**

add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)

use rounding to check answers to calculations

solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

know and use the vocabulary of prime numbers

## and factors

add and subtract numbers mentally with increasingly large numbers

round any number up to 1.000.000 to the nearest 10, 100, 1,000, 10,000 and 100,000

#### Number & Place Value

read Roman numerals to 1,000 (M) and recognise years written in Roman numerals



Year 5

interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0

count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

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

