

Maths Progress Checker Year 6: Meeting

Name: _____

Number: Key Assessment Criteria	OCT	DEC	FEB	APR	MAY	JUL
<u>Number and Place Value</u>						
• I can read, write, order and compare numbers up to 10,000,000 and know the value of each digit.						
• I can round any number to the required degree of accuracy (e.g. 1,000, 100,000 or 1/100) and solve problems which require answers to be rounded to a specific degree of accuracy.						
• I can use negative numbers in context, and calculate intervals across zero.						
<u>Number: Addition, Subtraction, Multiplication and Division</u>						
• I know all \times and \div facts to 12×12 and can recall them <u>quickly</u> and accurately when solving problems.						
• I can multiply numbers up to 4-digits by a 2-digit whole number using formal written methods of long multiplication						
• I can divide numbers up to 4-digits by a 2-digit whole number using formal written methods of long division and interpret the remainder as a whole number remainder, fraction, decimal or rounding.						
• I can divide numbers up to 4-digits by a 2-digit whole number using formal written methods of short division and interpret the remainder as a whole number remainder, fraction, decimal or rounding.						
• I can solve problems involving the relative sizes of two quantities where the missing values can be found by using integer multiplication and division facts.						
• I can perform mental calculations with mixed operations (+, -, \times and \div) and large numbers.						
• I can identify common factors, common multiples and prime numbers.						
• I can use knowledge of order of operations to carry out calculations involving all four operations.						
• I can solve multi-step addition and subtraction problems deciding which calculations and methods to use.						
• I can solve problems with mixed operations (+, -, \times and \div).						
• I can use estimation to check answers to calculations and decide what is an appropriate degree of accuracy						
TOTAL						
NUMBER of targets achieved at 2 or 3						

Number: Key Assessment Criteria	OCT	DEC	FEB	APR	MAY	JUL
Number: Fractions, Decimals and Percentages.						
• I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination.						
• I can compare and order fractions, including fractions > 1 .						
• I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.						
• I can multiply simple pairs of proper fractions, writing the answer in its simplest form. ($\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$)						
• I can divide proper fractions by whole numbers ($\frac{1}{8} \div 2 = \frac{1}{16}$).						
• I associate a fraction with division and calculate decimal fraction equivalents (for example, 0.375 for $\frac{3}{8}$).						
• I know the value of each number in numbers up to 3 decimal places and \times / \div numbers by 10, 100, 1000 giving answers up to 3 decimal places.						
• I can multiply 1-digit numbers with up to two decimal places by whole numbers.						
• I can use written division to divide decimals by a single digit whole number with answers up to 2 decimal places.						
• I can remember and use equivalence between simple decimals, fractions and percentages (e.g. $\frac{3}{4} = 0.75 = 75\%$)						
Ratio and Proportion:						
• I can solve problems with the relative sizes of 2 quantities by multiplying or dividing by whole numbers (e.g. in each box of apples, $\frac{1}{4}$ are red the rest are green, how many green apples are there in 5 boxes?)						
• I can solve problems involving the calculation of percentages, (for example, of measures) such as 20% of 360 and the use of percentages for comparison.						
• I can solve problems involving scale in factors in shapes.						
• Solve problems involving unequal quantities (e.g. For every egg you need 3 spoonfuls of flour, how much flour would you need if you used 4 eggs?)						
TOTAL						
NUMBER of targets achieved at 2 or 3						

Algebra: Key Assessment Criteria	OCT	DEC	FEB	APR	MAY	JUL
• I can use simple formulae.						
• I can generate and describe linear number sequences.						
• I can express missing number problems algebraically.						
• I can find pairs of numbers that satisfy number sentences involving two unknowns.						
• I can find all possibilities of combinations with 2 variables (e.g. find all pairs of numbers that add up to 25).						
Measurement: Key Assessment Criteria						
• I can solve problems which involve calculating with and conversion of measures, using numbers with up to 3 decimal places.						
• I can use read, write and convert between standard units, converting measurements of length, mass, volume and time using decimals with up to 3 decimal places.						
• I can convert between miles and kilometres.						
• I can recognise that shapes with the same area can have different perimeters and shapes with the same perimeter can have different areas						
• I can use formulae to calculate area and volume of shapes (e.g. Area of a triangle = $\frac{1}{2}$ base x height)						
• I can calculate the area of parallelograms and triangles.						
• I can calculate, estimate and compare the volume of cubes and cuboids in cm^3 , m^3 , km^3 and mm^3						
TOTAL						
NUMBER of targets achieved at 2 or 3						

Geometry: Key Assessment Criteria	OCT	DEC	FEB	APR	MAY	JUL
Properties of Shapes:						
• I can draw 2D shapes using given dimensions and angles						
• I can recognise, describe and build simple 3D 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.						
• I can illustrate and name parts of circles, including radius, diameter and circumference and know that the radius is half the diameter.						
• I can recognise angles where they meet at a point, are on a straight line or are vertically opposite and find missing angles.						
Position and Direction:						
• I can describe positions on all 4 quadrants of the co-ordinate grid.						
• I can draw and translate simple shapes on a co-ordinate grid and reflect them in the axes.						
Statistics: Key Assessment Criteria						
• I can interpret and construct pie charts and line graphs and use these to solve problems.						
• I can calculate and interpret the mean as an average						
TOTAL						
NUMBER of targets achieved at 2 or 3						
PERCENTAGE of targets achieved at 2 or 3						

Maths Progress Checker Year 6 : Exceeding**Name:** _____

Number, Measurement, Geometry and Statistics: Key Assessment Criteria	OCT	DEC	FEB	APR	MAY	JUL
• I can compare, order and convert between fractions, decimals and percentages in contexts related to science, history or geography learning.						
• I can move beyond squared and cubed numbers to calculate problems such as $X \times 10^n$ where n is positive.						
• I can use =, \neq , <, >, \leq , \geq correctly.						
• I can multiply all integers, (using efficient written methods) including mixed numbers and negative numbers.						
• I can recognise an arithmetic progression, and find the nth term.						
• I use formula for measuring area of shape, such as rectangle and triangle to work out area of irregular shape in the school environment.						
• I can use four operations with mass, length, time, money and other measures, including with decimal quantities.						
• I can create a scaled model of a historical or geographical structure showing an acceptable degree of accuracy using known measurements.						
• I can calculate costs and time involved to visit a destination in another part of the world relating to on-going learning in history or geography.						
• I can collect own data on personal project and present information in formats of their choosing, charts, graphs and tables and answer specific questions related to my research.						
TOTAL						
NUMBER of targets achieved at 2 or 3						
PERCENTAGE of targets achieved at 2 or 3						

Maths Progress Checker Year 6: Developing**Name:** _____

Number: Key Assessment Criteria	OCT	DEC	FEB	APR	MAY	JUL
<u>Number and Place Value</u>						
• I can read, write, order and compare numbers up to 1,000,000 and know the value of each digit.						
• I can count forwards and backwards in steps of power 10 (10, 100, 1000 etc) for any given number up to 1,000,000.						
• I can use negative numbers in context, count forwards and backwards with positive and negative numbers including through zero.						
• I can round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.						
• I can solve number problems and practical problems with all of the above.						
• I can read Roman numerals to 1000 (M) and recognise years written in Roman Numerals.						
<u>Number: Addition and Subtraction</u>						
• I can add whole numbers with more than 4-digits using formal written methods.						
• I can subtract whole numbers with more than 4-digits using formal written methods.						
• I can add and subtract mentally with increasingly large numbers.						
• I can use rounding to check answers to calculations.						
• I can solve multi-step addition and subtraction problems deciding which calculations and methods to use.						
TOTAL						
NUMBER of targets achieved at 2 or 3						

Number: Key Assessment Criteria	OCT	DEC	FEB	APR	MAY	JUL
Number: Multiplication and Division						
• I know all \times and \div facts to 12×12 and can recall them <u>quickly</u> and accurately when solving problems.						
• I can identify multiples and factors, including finding all factor pairs of an number and common factors of 2 numbers.						
• I know and can use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.						
• I can work out whether a number up to 100 is prime and remember prime numbers up to 19.						
• I can multiply numbers up to 4-digits by a 1 or 2-digit whole number using formal written method (including long multiplication for 2 digit numbers).						
• I can \times and \div numbers mentally using times table facts.						
• I can divide numbers up to 4-digits by a 1-digit whole number using formal written methods of short division and interpret the remainder appropriately for the context.						
• I can \times and \div whole numbers and decimals by 10, 100 and 1,000.						
• I can recognise and use square numbers and cube numbers and the notation for squared (2) and cubed (3).						
• I can solve problems involving \times and \div including knowledge of factors and multiples, squares and cubes.						
• I can solve problems with multiplication and division, addition and subtraction.						
• I can solve problems with multiplication and division including scaling by simple fractions and problems involving simple rates.						
TOTAL						
NUMBER of targets achieved at 2 or 3						

Number: Key Assessment Criteria	OCT	DEC	FEB	APR	MAY	JUL
Number: Fractions, Decimals and Percentages.						
• I can compare and order fractions whose denominators are all multiples of the same number.						
• I can identify, name and write equivalent fractions of a given fraction represented visually, including tenths and hundredths.						
• I can recognise mixed numbers and improper fractions and convert from one to the other (e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$)						
• I can add and subtract fractions with the same denominators and denominators that are multiples of the same number.						
• I can multiply proper fractions and mixed numbers, writing by whole numbers supported by materials and diagrams.						
• I can read and write decimal numbers as fractions, for example, $0.47 = \frac{47}{100}$.						
• I can recognise and use thousandths and relate them to tenths, hundreds and decimal equivalents						
• I can round decimals with 2 decimal places to the nearest whole number and to 1 decimal place.						
• I can read, write, order and compare numbers with up to 3 decimal places.						
• I can solve problems with numbers with up to 3 decimal places.						
• I recognise the per cent symbol (%) and understand per cent relates to 'number of parts per hundred' and can write percentages as a fraction out of 100 and a decimal (e.g. $56\% = \frac{56}{100} = 0.56$).						
• I can solve problems that involve knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and fractions with a denominator of a multiple of 10 or 25.						
TOTAL						
NUMBER of targets achieved at 2 or 3						

Measurement: Key Assessment Criteria	OCT	DEC	FEB	APR	MAY	JUL
• I can convert between different units of metric measures (e.g. km and m, cm and m, cm and mm, g and kg, l and ml).						
• I understand and can use equivalences between metric units and common imperial units such as inches, pounds and pints.						
• I can calculate perimeters of composite rectilinear shapes in cm and m.						
• I can calculate the area of rectangles (including squares) using standard units cm^2 and m^2 and estimate the area of irregular shapes.						
• I can estimate volume (using cm^3 cubes to build cuboids) and capacity (using water).						
• I can solve problems involving converting between units of time.						
• I can use all 4 operations (+, -, x, \div) to solve problems involving measures (length, mass, volume and money) using decimal notation.						
Geometry: Key Assessment Criteria						
Properties of Shapes:						
• I can identify 3D shapes, including cubes and cuboids from 2D representations.						
• I know that angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.						
• I can draw given angles and measure them in degrees ($^\circ$).						
• I can identify: angles at a point and 1 whole turn (total 360°), ▪ angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°), ▪ other multiples of 90°						
• I can use the properties of rectangles (e.g. parallel and equal opposite sides, diagonals bisect each other etc.) to find missing lengths and angles.						
• I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.						
Position and Direction:						
• I can reflect and translate a shape and know that its size and shape have not changed.						
TOTAL						
NUMBER of targets achieved at 2 or 3						

Statistics: Key Assessment Criteria						
• I can solve comparison, sum and difference problems using information presented in line graphs.						
• I can complete, read and interpret information in tables including timetables.						
TOTAL						
NUMBER of targets achieved at 2 or 3						
PERCENTAGE of targets achieved at 2 or 3						