

## MATHS STAGE E CHILD SPEAK TARGETS

### NUMBER

#### Number, Place Value, Approximation and Estimation/Rounding

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

I can read, write, order and compare numbers to at least 1,000,000.

I know the value of each digit in numbers up to 1,000,000.

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

I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000 and 100000.

I can interpret negative numbers in context.

I can count forwards and backwards with positive and negative whole numbers.

I can solve number problems and practical problems with the above.

#### Calculations

I can add and subtract numbers (with more than 4 digits) mentally and including using written methods.

I can use rounding to check answers to calculations.

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

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

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

I can establish whether a number up to 100 is prime and the prime numbers up to 19.

I can recognise and use square numbers and cube numbers, and use  $\text{cm}^2$  and  $\text{cm}^3$ .

I can multiply and divide numbers mentally drawing on known facts.

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

I can multiply numbers up to 4 digits by a 1 or 2-digit number using a formal written method, including long multiplication for 2-digit numbers.

I can divide numbers up to 4 digits by a 1 or 2-digit number using the formal written method of short division and interpret remainders appropriately for the context.

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

I can solve problems involving  $+$ ,  $-$ ,  $\times$ ,  $\div$  and  $=$ .

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

#### Fractions, Decimals and Percentages

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

I can identify, name and write equivalent fractions of a given fraction.

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

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

I can multiply proper fractions and mixed numbers by whole numbers.

I can read and write decimal numbers as fractions.

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

equivalents.
I can round decimals with 2 decimal places to the nearest whole number and 1 decimal place.
I can read, write, order and compare numbers with up to 3 decimal places and solve problems.
I can recognise the percent symbol (%) and know this is 'parts per hundred'.
I can write percentages as a fraction with denominator hundred, and as a decimal.
I can solve problems which require knowing percentage/decimal equivalents of $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{5}$ , $\frac{2}{5}$ , $\frac{4}{5}$ & those fractions with a denominator or a multiple of 10 or 25.
<b>STAGE E- SHAPE SPACE AND MEASURES</b>
<b>Measurement</b>
I can solve problems involving converting between units of time.
I can convert between different units of metric measure.
I can understand and use approximate equivalences between metric units and common imperial units.
I can measure and calculate the perimeter of composite rectilinear shapes (several straight-lined shapes which make one) in cm and m.
I can calculate and compare the area of rectangles (inc. squares), and including using standard units ( $\text{cm}^2$ and $\text{cm}^3$ ) to estimate the area of irregular shapes.
I can estimate volume and capacity.
I can use all four operations to solve problems.
<b>Geometry - Properties of Shape</b>
I can use the properties of rectangles to deduce related facts and find missing lengths and angles.
I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
I can identify 3D shapes, including cubes and other cuboids, from 2D representations.
I know angles are measured in degrees.
I can estimate and compare acute, obtuse and reflex angles.
I can identify angles at a point and one whole turn.
I can identify angles at a point on a straight line and $\frac{1}{2}$ a turn.
I can identify other multiples of $90^\circ$ .
I can draw given angles and measure them in degrees.
<b>Geometry - Position and Direction</b>
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.
<b>Statistics</b>
I can complete, read and interpret information in tables, including timetables.
I can solve comparison, sum and difference problems using information presented in a line graph.