**NAME OF CHILD:**

**Date/ year group entered school:**

**MATHS**

-Every term assessments will take place and judgements made based on the objectives taught that term.

Autumn term –

Spring term –

Summer term -

**Reception – Early Learning Goals**

Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.

Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Em** | **Dev** | **Sec** | **Master** |
| Can count reliably to 20 |  |  |  |  |
| can work out one more |  |  |  |  |
| Can work out one less |  |  |  |  |
| Count on or back to add using concrete objects 2 one digit numbers. |  |  |  |  |
| count on or back to subtract using concrete objects 2 one digit numbers. |  |  |  |  |
| Can double numbers. |  |  |  |  |
| can being to share numbers. |  |  |  |  |
| Can half numbers. |  |  |  |  |
| Create and describe patterns |  |  |  |  |
| Use mathematical language to describe shapes. |  |  |  |  |
| Use language to describe weight, position, time and money. |  |  |  |  |

**Stage 1 Maths Targets**

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| --- | --- | --- | --- | --- |
|  | **Em** | **Dev** | **Sec** | **Master** |
| Count to and across 100 from any number |  |  |  |  |
| Count, read and write numbers to 100 in numerals |  |  |  |  |
| Read and write mathematical symbols: +, - and = |  |  |  |  |
| Identify "one more" and "one less" |  |  |  |  |
| Use number bonds and subtraction facts within 20 |  |  |  |  |
| Add and subtract 1-digit and 2-digit numbers to 20, including zero |  |  |  |  |
| Recognise, find and name a half |  |  |  |  |
| Recognise, find and name a quarter |  |  |  |  |
| Measure and begin to record length, mass, volume and time |  |  |  |  |
| Use language to sequence events in chronological order |  |  |  |  |
| Recognise and use language relating to dates |  |  |  |  |
| Tell the time to the half-hour, including drawing clocks |  |  |  |  |
| Recognise and name common 2-D shapes |  |  |  |  |
| Recognise and name common 3-D shapes |  |  |  |  |

**Stage 2 Maths Targets**

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|  | **Emerging** | **Dev** | **Secure** | **master** |
| Count in steps of 2s, 3s and 5s, and steps of 10  |  |  |  |  |
| Recognise place value in two-digit numbers  |  |  |  |  |
| Compare and order numbers up to 100 using <, > and =  |  |  |  |  |
| Recall and use number addition/subtraction facts to 20, and derive related facts  |  |  |  |  |
| Add and subtract mentally and with objects one- and two-digit numbers  |  |  |  |  |
| Understand and use the inverse relationship between addition and subtraction  |  |  |  |  |
| Know 2×, 5× and 10× tables, including recognising odd & even numbers  |  |  |  |  |
| Calculate mathematical statements using x and ÷ symbols |  |  |  |  |
| Recognise, find, name and write 1/3, 1/4, 1/2 and 3/4 of size, shape or quantity |  |  |  |  |
| Write simple fraction facts, e.g. 1/2 of 6 = 3 |  |  |  |  |
| Combine amounts of money to make a value, including using £ and p symbols |  |  |  |  |
| Tell the time to the nearest 5 minutes, including drawing clocks |  |  |  |  |
| Describe properties of 2-D shapes, including number of sides and symmetry |  |  |  |  |
| Describe properties of 3-D shapes, including number of edges, vertices and faces |  |  |  |  |
| Interpret and construct simple tables, tally charts and pictograms |  |  |  |  |

**Stage 3**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Count in multiples of 4, 8, 50 and 100 | **Emerging** | **DEV** | **Secure** | **Master** |
| Compare and order numbers up to 1000 |  |  |  |  |
| Add and subtract numbers mentally, including round numbers to HTU |  |  |  |  |
| Add and subtract using standard column method |  |  |  |  |
| Estimate answers to calculations and use the inverse to check answers  |  |  |  |  |
| Know 3×, 4× and 8× tables |  |  |  |  |
| Count up and down in tenths |  |  |  |  |
| Understand that tenths are objectives or quantities divided into ten equal parts  |  |  |  |  |
| Compare and order simple fractions  |  |  |  |  |
| Recognise and show equivalent fractions  |  |  |  |  |
| Find and write fractions of a set of objects  |  |  |  |  |
| Add and subtract fractions with common denominators (less than one)  |  |  |  |  |
| Measure, compare and calculate measures using standard units  |  |  |  |  |
| Measure the perimeter of simple 2-D shapes  |  |  |  |  |
| Add and subtract money, including giving change  |  |  |  |  |
| Tell and write the time from an analogue clock, including using Roman numerals  |  |  |  |  |
| Estimate and read time to the nearest minute  |  |  |  |  |
| Identify horizontal, vertical, parallel and perpendicular lines  |  |  |  |  |
| Identify whether angles are greater or less than a right angle  |  |  |  |  |
| Interpret and present data using bar charts, pictograms and tables  |  |  |  |  |

**Stage 4**

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|  | **Emerging** | **Developing** | **Secure** | **Master** |
| Count backwards through zero, including negative numbers |  |  |  |  |
| Recognise place value in four-digit numbers |  |  |  |  |
| Round any number to the nearest 10, 100 or 1000 |  |  |  |  |
| Know tables up to 12 × 12 |  |  |  |  |
| Use place value and number facts to carry out mental calculations |  |  |  |  |
| Use factor pairs and commutativity in mental calculations |  |  |  |  |
| Use short multiplication method |  |  |  |  |
| Recognise and use hundredths |  |  |  |  |
| Recognise and write decimal equivalents to ¼, ½ and ¾ |  |  |  |  |
| Divide one- or two-digit numbers by 10 and 100, using tenths and hundredths |  |  |  |  |
| Round decimals with one decimal place to the nearest whole number |  |  |  |  |
| Compare numbers up to two decimal places |  |  |  |  |
| Convert between different units of metric measurement, including money |  |  |  |  |
| Find the area of rectilinear shapes by counting squares |  |  |  |  |
| Solve problems converting units of time |  |  |  |  |
| Compare and classify shapes, including quadrilaterals and triangles |  |  |  |  |
| Complete a simple symmetric figure with respect to a specific line of symmetry. |  |  |  |  |
| Describe positions on a 2-D grid using co-ordinates |  |  |  |  |
| Describe translations using a given unit to the left/right and up/down |  |  |  |  |
| Interpret and present discrete and continuous data on appropriate graphs |  |  |  |  |

**Stage 5**

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|  | **Emerging** | **Developing** | **Secure** | **Master** |
| Interpret negative numbers in context |  |  |  |  |
| Read Roman numerals to 1000, including years |  |  |  |  |
| Recognise and use square and cube numbers, and know the notation |  |  |  |  |
| Use rounding to check answers and determine accuracy |  |  |  |  |
| Identify multiples and factors, including finding factor pairs and common factors calculations |  |  |  |  |
| Use vocabulary: prime numbers, prime factors and composite numbers |  |  |  |  |
| Know prime numbers up to 19 |  |  |  |  |
| Multiply and divide numbers by 10, 100 or 1000, including decimals |  |  |  |  |
| Use long multiplication for multiplying numbers of up to 4 digits by one or two digits |  |  |  |  |
| Divide numbers using standard written short division |  |  |  |  |
| Convert between mixed numbers and improper fractions |  |  |  |  |
| Compare and order fractions whose denominators are multiples of the same number |  |  |  |  |
| Identify, name and write equivalent fractions including tenths and hundredths |  |  |  |  |
| Add and subtract fractions with denominators that are multiples of the same number |  |  |  |  |
| Multiply proper fractions and mixed numbers by whole numbers with support |  |  |  |  |
| Read and write decimal numbers as fractions |  |  |  |  |
| Round decimals with 2 decimals places to whole number or to one decimal place |  |  |  |  |
| Read, write, order and compare numbers with up to 3 decimal places |  |  |  |  |
| Recognise % symbol and explain as a fraction with denominator 100 (parts out of 100) |  |  |  |  |
| Understand and use common approximate conversions between metric and imperial |  |  |  |  |
| Measure and calculate the perimeter of composite rectilinear shapes |  |  |  |  |
| Calculate the area of rectangles, and estimate the area of irregular shapes |  |  |  |  |
| Use the properties of rectangles to find missing lengths and angles |  |  |  |  |
| Distinguish between regular and irregular polygons |  |  |  |  |
| Identify 3-d shapes from 2-d representations |  |  |  |  |
| Know angles are measured in degrees and compare acute, obtuse and reflex angles |  |  |  |  |
| Draw and measure angles to the nearest degree |  |  |  |  |
| Identify angles at a point, in a turn and on a straight line |  |  |  |  |
| Describe and represent the result of a reflection or translation |  |  |  |  |
| Complete, read and interpret information in tables, including timetables |  |  |  |  |

**Stage 6**

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|  | **Emerging** | **Developing** | **Secure** | **Master** |
| Use negative numbers to calculate intervals across zero  |  |  |  |  |
| Divide numbers using long division, interpreting the remainders as appropriate |  |  |  |  |
| Use order of operations to carry out calculations |  |  |  |  |
| Use common factors to simplify fractions |  |  |  |  |
| Compare and order fractions of any size |  |  |  |  |
| Add and subtract fractions with different denominators and mixed numbers |  |  |  |  |
| Multiply simple pairs of proper fractions |  |  |  |  |
| Divide proper fractions by whole numbers |  |  |  |  |
| Calculate decimal fraction equivalents for simple fractions |  |  |  |  |
| Multiply a number with up to two decimal places by whole numbers |  |  |  |  |
| Use written division with answers of up to two decimal places |  |  |  |  |
| Solve problems involving the calculation of percentages |  |  |  |  |
| Recall and use equivalences between fractions, decimals and percentages |  |  |  |  |
| Solve problems using ratio using multiplication and division facts |  |  |  |  |
| Solve problems involving similar shapes where the scale factor is known |  |  |  |  |
| Solve problems involving proportion, using knowledge of fractions and multiples |  |  |  |  |
| Use simple formulae |  |  |  |  |
| Generate and describe linear number sequences |  |  |  |  |
| Express missing number problems algebraically |  |  |  |  |
| Convert units of measure between smaller and larger units |  |  |  |  |
| Convert between miles and kilometres |  |  |  |  |
| Calculate the area of parallelograms and triangles |  |  |  |  |
| Calculate and compare volume of cubes and cuboids |  |  |  |  |
| Illustrate and name parts of a circle |  |  |  |  |
| Finding missing angles in triangles, quadrilaterals and regular polygons |  |  |  |  |
| Recognise vertically opposite angles and find missing angles |  |  |  |  |
| Describe positions on the full co-ordinate grid |  |  |  |  |
| Translate shapes on a co-ordinate grid and reflect in the axes |  |  |  |  |
| Construct and interpret pie charts |  |  |  |  |
| Calculate the mean as an average |  |  |  |  |