St. Margaret's C.E. Junior School
Year 3 Maths Curriculum Overview

AUTUMN	SPRING	SUMMER
Number: Place value • Represent numbers to 100 (NPV 2) (R) • Tens & ones using addition (NPV 2) (R) • Number line to 100 (NPV 4) (R) ➢ Represent numbers to 100 ➢ Partition numbers to 100 ➢ Number line to 100- ***(PS) Logical reasoning** ➢ Hundreds ➢ Represent numbers to 1,000- ***(PS) Open-ended/acting out** ➢ Partition numbers to 1,000 ➢ Flexible partitioning of numbers to 1000 ➢ Hundreds, tens and ones • Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) (NPV 2) ***(PS) Build /logical reasoning/drawing a table** • Read and write numbers up to 1,000 in numerals and in words • Find 10 or 100 more or less than a given number (NPV 3) ➢ Find 1, 10 or 100 more or less • Identify, represent and estimate numbers using different representations (NPV 3) (NPV 4) ➢ Number line to 1,000 ➢ Estimating on a number line to 1,000 • Compare and order numbers up to 1,000 (NPV 3) ➢ Compare numbers to 1,000 ➢ Order numbers to 1,000 • Count from 0 in multiples of 4, 8, 50 (NPV 4) and 100; find 10 or 100 more or less than a given number ➢ Count in 50s • **Solve number problems and practical problems**	**Number: multiplication and division B** • Recall and use multiplication facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (Y2) • Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (MD 1) ➢ Multiples of 10 ➢ Related calculations ➢ Reasoning about multiplication ➢ Multiply a 2-digit number by a 1-digit number – no exchange ➢ Multiply a 2-digit number by a 1-digit number – with exchange ➢ Link multiplication and division ➢ Divide a 2-digit number by a 1-digit number – no exchange ➢ Divide a 2-digit number by a 1-digit number – flexible partitioning ➢ Divide a 2-digit number by a 1-digit number – with remainders • **Solve problems**, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects (MD 1) ➢ Scaling Step (NF 3) ➢ How many ways? • **Solve problems** involving addition, subtraction, multiplication and division and a combination of these,	**Number: fractions** • Add and subtract fractions with the same denominator within one whole (for example, 5/7 + 1/7 = 6/7) (F 4) ➢ Add fractions ➢ Subtract fractions ➢ Partition the whole • Compare and order unit fractions, and fractions with the same denominators (F 3) • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators (F 2) ➢ Unit fractions of a set of objects ➢ Non-unit fractions of a set of objects ➢ Reasoning with fractions of an amount • **Solve problems** that involve all of the above

involving these ideas	including understanding the meaning of the equals sign	

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Number: addition and subtraction ➢ Apply number bonds within 10 ➢ Add and subtract 1s ➢ Add and subtract 10s ➢ Add and subtract 100s • Add & subtract 2 digit nos crossing 10 (AS 2) (R) (NF 1) ➢ Spot the pattern ➢ Add 1s across a 10 ➢ Add 10s across a 100 ➢ Subtract 1s across a 10 ➢ Subtract 10s across a 100 ➢ Make connections • Add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds (AS 2) • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction (AS 2) ➢ Add two numbers (no exchange) ➢ Subtract two numbers (no exchange) ➢ Add two numbers (across a 10) ➢ Add two numbers (across a 100) ➢ Subtract two numbers (across a 10) ➢ Subtract two numbers (across a 100) ➢ Add 2-digit and 3-digit numbers ➢ Subtract a 2-digit number from a 3-digit number • Estimate the answer (AS 2) to a calculation and use inverse operations to check answers (AS 3) ➢ Complements to 100 (AS 1) ➢ Estimate answers ➢ Inverse operations ➢ Make decisions • **Solve problems**, including missing number problems, using number facts, place value, and more complex addition and subtraction (AS 2)	**Measurement: Length and Perimeter** • Measure, compare, add and subtract: lengths (m/cm/mm) (NPV 1) (NPV 4) (AS 2) ➢ Measure in metres and centimetres ➢ Measure in millimetres ➢ Measure in centimetres and millimetres ➢ Metres, centimetres and millimetres ➢ Equivalent lengths (metres and centimetres) ➢ Equivalent lengths (centimetres and millimetres) Compare lengths ➢ Add lengths Subtract lengths • Measure the perimeter of simple 2-d shapes (AS 2) ➢ What is perimeter? ➢ Measure perimeter ➢ Calculate perimeter	**Measurement: money** ➢ Pounds and pence ➢ Convert pounds and pence ➢ Add money ➢ Subtract money ➢ Find change • Add and subtract amounts of money to give change, using both £ and p in practical contexts (NPV 2) (AS 2) (AS 3) **Measurement: time** • Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight ***(PS) Logical reasoning/organised list/trial & improvement** ➢ Roman numerals to 12 ➢ Tell the time to 5 minutes ➢ Tell the time to the minute ➢ Read time on a digital clock ➢ Use am and pm • Know the number of seconds in a minute and the number of days in each month, year and leap year • Compare durations of events (for example to calculate the time taken by particular events or tasks) ➢ Years, months and days ➢ Days and hours ➢ Hours and minutes – use start and end times ➢ Hours and minutes - use durations ➢ Minutes and seconds ➢ Units of time ➢ Solve problems with time

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Number: multiplication and division A • Multiplication using arrays (MD 1) (R) • 2x & 5x tables (MD 1) (R) ***(PS) Logical reasoning** • Consolidate 2x, 4x, 8x tables (MD 1) (R) ➢ Multiplication - equal groups ➢ Use arrays ➢ Multiples of 2 ➢ Multiples of 5 and 10 ➢ Sharing and grouping • Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables ➢ Multiply by 3 ➢ Divide by 3 ➢ The 3 times-table ➢ Multiply by 4 ➢ Divide by 4 ➢ The 4 times-table ➢ Multiply by 8 ➢ Divide by 8 ➢ The 8 times-table ➢ The 2, 4 and 8 times-tables • Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (MD 1) • **Solve problems**, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects (MD 1)	**Number: Fractions** • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators (F 1) ➢ Understand the denominators of unit fractions • Compare and order unit fractions, and fractions with the same denominators (F 1) (F 2) (F 3) ➢ Compare and order unit fractions • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators (F 1) (F 2) ➢ Understand the numerators of non-unit fractions ➢ Understand the whole ➢ Compare and order non-unit fractions • Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 (F 2) (F 3) (NF 3) ➢ Fractions and scales ➢ Fractions on a number line- ***(PS) Logical reasoning/drawing a diagram** ➢ Count in fractions on a number line • Recognise and show, using diagrams, equivalent fractions with small denominators (F 1) (NF 3) ➢ Equivalent fractions on a number line ➢ Equivalent fractions as bar models • **Solve problems** that involve all of the above	**Geometry: Properties of Shape** • Recognise angles as a property of shape or a description of a turn • Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; (G 1) • Identify whether angles are greater than or less than a right angle (G 1) ➢ Turns and angles ➢ Right angles ➢ Compare angles • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines (G 2) ➢ Measure and draw accurately ➢ Horizontal and vertical ➢ Parallel and perpendicular • Draw 2D shapes and make 3D shapes using modelling materials (G 2) ➢ Recognise and describe 2-D shapes ➢ Draw polygons • Recognise 3D shapes in different orientations and describe them ➢ Recognise and describe 3-D shapes ➢ Make 3-D shapes
	Measurement: mass and capacity • Measure: mass (kg/g) ➢ Use scales ➢ Measure mass in grams ➢ Measure mass in kilograms and grams ➢ Equivalent masses (kilograms and grams) • Compare: mass (kg/g) (R) • Add and subtract: mass (kg/g) ➢ Compare mass	**Statistics: pictograms and bar charts** • Interpret and present data using bar charts, pictograms and tables ➢ Interpret pictograms ➢ Draw pictograms ➢ Interpret bar charts ➢ Draw bar charts ➢ Collect and represent data ➢ Two-way tables

	➢ Add and subtract mass • Measure: volume/capacity (l/ml) ➢ Measure capacity and volume in millilitres ➢ Measure capacity and volume in litres and millilitres • Compare: volume/capacity (l/ml) (R) ➢ Equivalent capacities and volumes (litres and millilitres) ➢ Compare capacity and volume • Add and subtract: volume/capacity (l/ml) ➢ Add and subtract capacity and volume	• **Solve one-step and two-step questions** [for example, 'how many more?' and 'how many fewer?'] using information presented in scaled bar charts and pictograms and tables (R)

White Rose Maths Hub & **Power Maths** schemes of learning are used to support medium term planning and as exemplification for maths objectives.
R- RECAP of previous objectives
➢ WRH Small Steps
Small steps can be combined into one lesson.

*** (PS) PROBLEM SOLVING opportunities**

DfE- Ready to progress criteria
NF- Number Facts
NPV- Number & Place Value
AS- Addition & Subtraction
MD- Multiplication & Division
F- Fractions
G- Geometry

REMEMBER to complete **pre & post learning assessments.**
Only move on when the majority of pupils are secure in the objective.