**St. Mary’s Catholic Primary School MATHS MEDIUM TERM PLAN**

Year 6 St Christopher/ St Catherine Mrs Brennan Mrs Martin

| **Week** | **Main focus of teaching and activities each day** | **Starter** | **Outcomes of each day** |
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| 1  2  Weeks of spring term to be covered | ***REVISION WEEK: Number, place value, Addition and subtraction***  **Monday :** Place value up to 10,000,000 and rounding  **Tuesday:** Place value in numbers with 3 decimal places, ×/÷ 10, 100, 1000, including conversion between measures  **Wednesday:** Negative numbers, find intervals across 0  **Thursday:** Column addition and subtraction, estimate answers  **Friday:** Multi-step problems in context | **Monday :** Add and subtract pairs of 2-digit numbers  **Tuesday:** Counting back  **Wednesday:** Convert 24-hr clock to 12-hr clock times  **Thursday:** Order of operations  **Friday:** 12 times table and division facts | ***REVISION WEEK: Number, place value, Addition and subtraction***  **Monday :** 1. Know what each digit represents in whole numbers up to 10,000,000.  2. Round numbers to the nearest 10, 100, 1000, 10,000, 100,000 or 1,000,000.  2. Compare and order numbers up to 10,000,000.  **Tuesday:** 1. Know what each digit represents in numbers with up to three decimal places.  2. Multiply and divide by 10, 100 and 1000 to give answers with up to three decimal places.  3. Convert measurements from one unit to another, mm to cm, cm to m, m to km, g to kg, l to ml and vice versa.  **Wednesday:** 1. Find intervals across zero.  2. Answer questions about temperature including temperatures below zero.  **Thursday:** 1. Use column addition and subtraction to add and subtract numbers with up to 5 digits.  2. Estimate answers.  3. Use their knowledge of written addition and subtraction to identify missing digits in the numbers being added/subtracted.  **Friday:** 1. Solve multi-step word problem involving at least two different operations.  ASSERTIVE MENTORING TARGETS: 1,2,4,5,6,11, |
| 2 | ***REVISION WEEK: Multiplication and division***  **Monday :** Mental multiplication and division  **Tuesday:** Long and short multiplication  **Wednesday:** Short division, including by 11 and 12  **Thursday:** Use long division to divide 3-digit and 4-digit numbers by 2-digit numbers  **Friday:** Use four operations to reason and solve puzzles | **Monday :** Lowest common multiples and common factors  **Tuesday:** 8, 80, 800 and 8000 × and ÷ facts  **Wednesday:** Recognise prime nos to at least 19  **Thursday:** Square nos to 144  **Friday:** Find a mean | ***REVISION WEEK: Multiplication and division***  **Monday :** 1. Use place value and number facts to multiply and divide mentally.  **Tuesday:** 1. Use short and long multiplication to multiply 3-digt and 4-digit numbers by 1-digit and 2-digit numbers.  **Wednesday**: 1. Use short division to divide 3-digit and 4-digit numbers by single-digit numbers and 11 and 12.  **Thursday:** 1. Use long division 3-digit and 4-digit numbers by 2-digit numbers.  **Friday:**  1. Use knowledge of operations and reasoning to solve number puzzles.  ASSERTIVE MENTORING TARGETS: 3, 11, |
| 3 | ***REVISION WEEK: Fractions, decimals, percentages, ratios and scaling***  **Monday :** Multiply and divide decimals by whole numbers  **Tuesday:** Solve ratio problems; Solve problems involving similar shapes where the scale factor is known  **Wednesday:** Find fractions and percentages of numbers and measures including money  **Thursday:** Add and subtract fractions  **Friday:** Multiply and divide fractions | **Monday :** Simplify fractions  **Tuesday:** Adapting recipes  **Wednesday:** Find non-unit fractions of amounts  **Thursday:** Compare fractions  **Friday:** Equivalents fractions and decimals | ***REVISION WEEK: Fractions, decimals, percentages, ratios and scaling***  **Monday :** 1. Use number facts and place value to multiply decimals by whole numbers mentally.  **Tuesday:** 1. Draw rectangles with sides in the same ratio.  2. Understand that scaling up or down leaves the ratio of sides unchanged.  **Wednesday:** 1. Find fractions and percentages of numbers and measures including money.  **Thursday:** 1. Use equivalence to add and subtract fractions, including mixed numbers.  **Friday:** 1. Multiply pairs of fractions.  2. Divide fractions by whole numbers.  ASSERTIVE MENTORING TARGETS: 7, 8, 9 , 10, 11, 12, 13,14, |
| 4 | ***REVISION WEEK: Shape, measures, statistics and algebra***  **Monday :** Find areas and perimeters  **Tuesday:** Find missing angles round a point, line, vertically opposite and in triangles  **Wednesday:** Reflections and translations  **Thursday:** Bar charts, pie charts and line graphs  **Friday:** Extend and describe linear number sequences | **Monday :** Algebra – missing numbers  **Tuesday:** Algebra – two unknowns  **Wednesday:** Draw 2-D shapes using given dimensions and angles  **Thursday:** Parts of circles, describe regular and irregular polygons  **Friday:** Read Roman numerals | ***REVISION WEEK: Shape, measures, statistics and algebra***  **Monday :** 1. Find areas of irregular shapes by counting, including half squares.  2. Calculate areas and perimeters of rectangles and rectilinear shapes.  **Tuesday:** 1. Use fact about angles around a point, on a straight line and triangles to find missing angles.  **Wednesday:** 1. Reflect and translate shapes in all quadrants and label the co-ordinates of the vertices.  **Thursday:** 1. Interpret bar charts, pie charts and line graphs.  **Friday:** 1. Describe and continue a linear sequence of numbers of shapes.  2. Use the rule of the sequence to find other later terms without working out every term in between.  ASSERTIVE MENTORING TARGETS: 16, 20,21, 26, 29, 30, |
| 5 | **SATs week** | | |
| 6 | ***Problem solving and using a calculator***  **Monday :** Use a calculator to convert fractions to decimals; read recurring displays  **Tuesday:** Realise when a calculator has produced a rounding error  **Wednesday:** Use a calculator and reasoning skills to aid problem solving  **Thursday:** Begin to use the memory (M+, M- and MR) keys  **Friday:** Begin to use the memory (M+, M- and MR) keys | **Monday :** Equivalent fractions and decimals  **Tuesday:** Convert improper fractions to mixed numbers  **Wednesday:** Approximating  **Thursday:** Order of calculations  **Friday:** Division facts tables | ***Problem solving and using a calculator***  **Monday :**  1. Use a calculator to convert fractions to decimals.  2. Read recurring displays.  **Tuesday:** 1. Realise that a calculator can produce rounding errors.  **Wednesday:** 1. Use a calculator to try different solutions and then use these to inform problem solving.  2. Decide when it is appropriate to use a calculator and when it is not.  **Thursday:** 1. Begin to use the memory (M+, M- and MR) keys.  **Friday:** 1. Begin to use the memory (M+, M- and MR) keys.  2. Use knowledge of order of calculations and memory function to enter a series of calculations into a calculator. |
| 7 | ***Problem solving and investigations***  **Monday :** Solve logic puzzles  **Tuesday:** Work systematically to solve visual puzzles  **Wednesday:** Use mathematical reasoning to solve number puzzles  **Thursday:** Find, describe and predict patterns  **Friday:** Use short division, long division and short multiplication;  Find, describe and predict patterns | **Monday :** Spotting relationships  **Tuesday:** Factors  **Wednesday:** Number facts  **Thursday:** Division facts  **Friday:** Factors and products | ***Problem solving and investigations***  **Monday :**  1. Solve logic puzzles.  **Tuesday:** 1. Work systematically to solve visual puzzles.  **Wednesday:** 1. Use reasoning to solve number puzzles.  **Thursday:** 1. Find, describe and predict patterns.  2. Use protractors and compasses.  **Friday:** 1. Find, describe and predict patterns.  2. Use short and long division.  ASSERTIVE MENTORING TARGETS: 2,13 |
| 8 | ***THEME: Measuring ourselves and what’s around us* Monday :** Old units of measure, relationships between body measurements  **Tuesday:** Make estimations by using samples  **Wednesday:** Make estimations by using samples; find a mean  **Thursday:** Find rates, construct and interpret line graphs  **Friday:** Measure heights and angles using a protractor; draw heights of objects to scale | **Monday :** Pairs with a total of 1 metre  **Tuesday:** Order numbers to 1 million  **Wednesday:** Thousands and millions  **Thursday:** Estimating one minute  **Friday:** Estimate angles | ***Measuring ourselves and what’s around us* Monday :** 1. Make general statements about relationships.  **Tuesday:** 1. Make and justify estimates and approximations of large numbers.  2. Explain methods and reasoning orally.  3. Find a mean.  **Wednesday:** 1. Make and justify estimates and approximations of large numbers.  2. Explain methods and reasoning orally.  **Thursday:** 1. Construct and interpret line graphs.  **Friday:** 1. Measure heights and angles using a protractor.  2. Draw heights of objects to scale |
| 9 | ***THEME: Large numbers, games and puzzles* Monday :** Have a sense of the size of 1 million  **Tuesday:** Have a sense of the size of 1 million  **Wednesday:** Use mathematical reasoning to solve number puzzles  **Thursday:** Use brackets and order of operations to solve a number puzzle  **Friday:** Solve a shape puzzle | **Monday :** Place value  **Tuesday:** Measures  **Wednesday:** Number facts and reasoning  **Thursday:** Mental calculation  **Friday:** 2D shape | ***Large numbers, games and puzzles* Monday :** 1. Have a sense of the size of one million.  2. Break down a real life problem into smaller parts.  **Tuesday:** 1. Have a sense of the size of one million.  2. Break down a real life problem into smaller parts.  **Wednesday:** 1. Explain methods and reasoning orally.  2. Make general statements about patterns and relationships.  3. Pursue and develop their own line of enquiry.  **Thursday:** 1. Add, subtract, multiply and divide mentally.  2. Use brackets and order of operations.  **Friday:** 1. Work systematically to solve mathematical puzzles.  A |
| 10 | ***THEME: History of maths***  **Monday :** Begin to understand something about the history of numerals  **Tuesday:** Recognise prime numbers; Investigate a general statement  **Wednesday:** Explore different methods of multiplication  **Thursday:** Describe and extend sequences  **Friday:** Use and test a formula | **Monday :** Japanese numbers  **Tuesday:** Factors and prime numbers  **Wednesday:** Multiplication and division facts  **Thursday:** Sequences  **Friday:** Squares | ***History of maths***  **Monday :** 1. Find out how different number systems work.  **Tuesday:** 1. Recognise prime numbers up to 50.  2. Investigate a general statement.  **Wednesday:** 1. Understand how an alternative method of multiplication works.  **Thursday:** 1. Describe and extend sequences.  2. Test a general statement.  **Friday:** 1. Use and test a formula. |
| 11 | ***Maths in art and nature***  **Monday :** Tessellate 2D shapes  **Tuesday:** Draw lines accurately; Create fractals  **Wednesday:** Translations, rotations and reflections  **Thursday:** Use ratios; Identify a sequence  **Friday:** Find ratios | **Monday :** 2D shape  **Tuesday:** Mental calculation  **Wednesday:** Symmetry  **Thursday:** Ratios  **Friday:** Round decimal answers on a calculator | ***Maths in art and nature***  **Monday :**  1. Tessellate 2D shapes.  **Tuesday:** 1. Draw lines to the nearest millimetre.  2. Use mathematics to produce art!  **Wednesday:** 1. Carry out translations, rotations and reflections.  **Thursday:** 1. Continue a pattern.  2. Recognise a sequence.  **Friday:** 1. Interpret and round answers with decimals places on the calculator.  2. Find ratios. |