Medium Term Plans for Mathematics (revised version) -Year Two (Summer Term)

Oral mental starters (ongoing, throughout the term):

- Count forwards from 0, and backwards in twos, fives and tens to the 10th multiple and recall multiplication and division facts
- Recall multiplication and division facts for the 2, 5 and 10 times table
- Count forwards from 0, and backwards in threes to the 10th multiple
- Say the number that is 10 more/less than any number within 100, beginning to bridge 100 (refer to the 100 square/200 grid)
- Count on and back in 10s from any one or two digit number (refer to the 100 square) beginning to bridge 100 (refer to 200 grid)
- Count in fractions up to 10 e.g. ½, 1, 1 ½ , 2 …
- Recall and use all pairs of numbers with a total of 20 and all pairs of numbers within 20; give addition and subtraction facts for the pair of numbers
- Derive pairs of multiples of 10 with totals up to 100 and give related addition and subtraction facts (e.g. 60+40=100, 100–40=60)
- Add three one-digit numbers, using knowledge of number pairs e.g. 8 + 2 + 6 = 10 + 6 = 16
- Make estimates of quantities within 100 by grouping objects into 2s, 5s or 10s
- Recall the doubles of multiples of 10 to 100 (e.g. double 50 is 100) and recall the related halves (e.g. half of 100 is 50)
- Read the time to the nearest five minutes including to the hour, the half hour and the quarter hour (past and to) using an analogue clock (use daily routines to support this)

Areas of Study	No of days	Statutory requirements and non-statutory guidance	Suggested Key Vocabulary
Number Number and place value **Week 1**	5	Read and write numbers to at least 100 in numerals **and** words Given a number, say/ identify the number that is 10 more or less within 100 (**begin** to bridge 100) Say the number that comes between two numbers within 100 Recognise the place value of each digit in a two-digit number to 100 and partition into tens and units/ones using practical apparatus e.g. straws, cubes, ten sticks and ones/units, Dienes, Unifix, arrow/ place value cards Partition numbers into tens and units/ones; **begin** to partition two-digit numbers **in different ways** (e.g. 56 = 50 + 6; 56 = 40 + 16) Order numbers from 0 up to 100 (and beyond) and position them on a number line and/or a 100 square/ 200 grid; compare numbers from 0 up to 100 (and beyond); use <, > and = signs (consider as mental/oral activities) **Extend** by beginning to partition three-digit numbers into hundreds, tens and units/ones; **begin** to recognise the place value of each digit in a **three-digit number** using practical apparatus e.g. hundred blocks/ ten sticks and ones/units, Dienes, arrow/ place value cards **(from Y3 programme of study)** Use place value to solve problems including missing number problems	Number, numerals Zero, one, two……to one hundred Ten more, ten less Between, before, after Place value Digit, hundreds, tens, ones/units Partition Order, compare Greater than (>) Less than (<)

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Number Addition **Week 2**	5	Continue to use the vocabulary and symbols (+, =) related to addition Derive pairs of multiples of 10 with totals up to 100, using place value and knowledge of number pairs that total ten; give addition facts (e.g. 60 + 40 = 100) Show that addition of two numbers can be done in any order Add numbers mentally and by using **empty number lines** and/or a hundred square – a two-digit number and ones; a two-digit number and tens and two two-digit numbers (numbers within 100 and **beginning** to bridge 100) **(See Calculation Policy)** Solve **one- step** word problems, which involve addition	Addition,+, add, plus, more, put together, altogether, total =, equals, is the same as Partition, tens, ones/units Empty number line, count on Problem, answer/solution, calculate
Number Subtraction **Week 3**	5	Continue to use the vocabulary and symbols (-, =) related to subtraction Derive pairs of multiples of 10 with totals up to 100, using place value and knowledge of number pairs that total ten, and give subtraction facts (e.g. 100 – 30 = 70); recognise the inverse relationship between addition and subtraction Show that subtraction of one number from another **cannot** be done in any order Subtract numbers mentally and by using **empty number lines** and/or a hundred square – a two-digit number and ones; a two-digit number and tens and two two-digit numbers (numbers within 100 and **beginning** to bridge 100) **(See Calculation Policy)** Solve **one- step** word problems, which involve subtraction	Subtraction,- , take away, subtract, minus How many are left? Empty number line, count back Inverse Problem, answer/solution, calculate
Number Multiplication and Division **Week 4**	5	Continue to use the vocabulary and symbols related to multiplication and division Count forwards and backwards to and from 0 in twos, fives and tens to the 10th multiple Count forwards and backwards to and from 0 in **threes** to the 10th multiple Represent multiplication using an **empty number line** and using known multiples e.g. 2, 3, 5 and 10 **(See Calculation Policy)** Recall and use multiplication facts for the 2, 5 and 10 multiplication tables Show that multiplication of two numbers can be done in any order (e.g. 3 x 5 = 15 and 5 x 3 = 15) Represent division using an **empty number line** and using known multiples **(See Calculation Policy)** Recall and use division facts for the 2, 5 and 10 multiplication tables Use the **inverse** relationship between multiplication and division to solve missing number problems (e.g. 12 ÷ ☐ = 6; ☐ x 2 = 12)	Lots of, groups of, repeated addition, times, multiply, multiplied by, multiplication x, array, row, column Empty number line Count forwards Multiple Share, groups of, divide, divided by, shared equally, repeated subtraction ÷, = Count backwards Inverse

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Measurement Length **Week 5**	5	Choose and use appropriate standard units to estimate and **measure** length/ height in any direction (m/cm) of everyday objects to the nearest appropriate unit, using rulers and metre sticks Know that there are 100cm in a metre (100cm = 1m) Compare and order lengths and record results using < and > signs Follow a line of enquiry relating to length e.g. Is this true or false? All 6/7 year olds can jump more than one metre; our classroom is more than 10 metres in length Solve simple word problems involving length/height using addition and subtraction; solve problems using simple multiples e.g. twice as tall; half as wide **(Possible link to the Science curriculum)**	Estimate, compare, measure metre(m), centimetre (cm) metre stick, ruler Longer than, shorter than, taller than Longest, tallest, shortest < and > signs
Number Addition and subtraction **Week 6**	5	Continue to use the vocabulary and symbols (+, -, =) related to addition and subtraction **Begin** to use the **partitioning method** to add two two-digit numbers with totals within 100, initially with calculations that do not bridge tens e.g. 34 + 25 and then with calculations that do bridge tens e.g. 38 + 24 **(See Calculation Policy)** Use complementary addition to find **small differences** using concrete objects and by counting up on a number line, e.g. the difference between 29 and 32 is 3 **(See Calculation Policy)** Use knowledge of place value and number facts to solve **one -step** word problems involving addition and subtraction, including problems set in the context of money or measures	Addition +, add, plus, more, put together, altogether, total, sum of, count on =, equals, is the same as Empty number line Partition, tens, ones/units Subtraction,- , take away, subtract, minus, count back, difference How many are left? Problem, solution Calculate

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Statistics Data handling **Week 7**	5	Interpret tally charts, simple tables, pictograms and block diagrams Ask and answer simple questions about totalling and comparing the data e.g. how many children altogether chose apples and bananas? How many more children chose cherries than pears? **Begin** to use simple ratios in pictograms for example where one face represents two children Follow a line of enquiry e.g. How did children in our class get to school today? Ask and answer questions e.g. How many children came to school by bus? Did most of the class walk to school today? How do you know?	Block diagram, pictogram Table, list, tally chart Data Collect (data)
Number Fractions **Week 8**	5	Recognise, name and write fractions 1/2, 1/4, 2/4, 3/4 and **1/3** using words and fraction notation **Consolidate** finding 1/2 and 1/4 of familiar shapes, lengths, sets of objects or quantity Find 2/4 and 3/4 of familiar shapes and a set of objects **in practical contexts** Find **1/3** of familiar shapes and a set of objects **in practical contexts** (connect unit fractions to division and arrays) Solve problems, which involve fractions, **using concrete objects and pictorial representations to support** e.g. There are 12 bananas in a bunch. I give 1/3 of them to my friend. How many does he have and how many do I have?	Fraction Half, one quarter, two quarters, three quarters, third 1/2, 1/4, 2/4, 3/4, 1/3
Measurement Time &	3	**Consolidate** telling the time using an analogue clock to o'clock, half past, quarter past/quarter to; tell and write the time to **five minutes**, including quarter past/to the hour and draw the hands on a clock to show these times Use units of time (minutes & hours) and know the relationships between them; know that there are 60 minutes in an hour and 24 hours in one day Compare and sequence intervals of time and solve problems relating to time e.g. I catch a train at 9 o'clock in the in the morning to go on holiday. My journey lasts for two hours. At what time do I arrive? My favourite TV programme starts at 5 o'clock and lasts for half an hour. At what time does it finish? Lunchtime begins at half past twelve and ends at half past one. How long does lunchtime last? **Extend** by beginning to tell the time on a 12 hour digital clock and relate this to time on an analogue clock **(taken from Y3 programmes of study)**	O'clock, half past, quarter past, quarter to, five past, ten past, etc five to, ten to etc Analogue clock (Digital clock) Minutes/hours Days/hours

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Geometry Position and direction **Week 9**	2	Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line Use the concept and language of angles to describe turns (clockwise and anti-clockwise) Give instructions using the language of position, direction and movement **in practical contexts** Recognise that a quarter turn is the same as a right angle	Forwards/backwards, left/right Turn, whole turn, half turn, quarter turn, three-quarter turn, right angle Clockwise/anti-clockwise
Measurement Money **Week 10**	5	Consolidate recognising different coins (including £2) and notes (£5, £10, £20) and understand their value and use the symbols (£) and pence (p); know relationship between pounds and pence (£1 = 100p) Find different combinations of coins that equal the same amount of money e.g. I want to buy this apple for 25p. How can I pay for it just using silver coins? Is there more than one solution? Have you found all of the solutions? Solve word problems involving addition, subtraction, multiplication and division, halving & doubling in contexts of money (to £1and **extend** by crossing £1) including giving change e.g. in the context of shopping or a café	Coins Pence (p), penny Pound (£) Buy, spend, change, pay, costs How much? Calculate, calculation Problem, answer/solution How did you work it out?
Additional weeks To be used for: • assessment, consolidation and responding to AfL • additional using and applying activities			