Oral mental starters (ongoing, throughout the term):
- Count from (and back to) 0 in multiples of 3, 6, 4, 8, 7, 9, **11, 12,** 25, 50,100, **1000**
- Recall and use multiplication and division facts for the 2, 3, 4, 5, 6,7,8, 9, 10, **11, 12** times tables (up to the 12th multiple)
- Find all factor pairs of a given number
- Use known multiplication and division facts to derive other related facts e.g. 4 x 12 = 48 to calculate 4 x 120 = 480; 40 x 12 = 480
- Use place value and known and derived facts to multiply and divide mentally, including multiplying by 0 and 1; dividing by 1
- Multiply numbers with up to two decimal places by 10 and 100 and divide corresponding numbers by 10 and 100
- Compare and order numbers with up to two decimal places (including in the context of money and measures)
- Find pairs of decimal numbers that total one
- Recall and use addition and subtraction facts for multiples of 10 to 1000 (e.g. 490 + 510 = 1000, 1000 - 750 = 250)
- Given a number, say/identify the number that is 100/1000 more or less within 10,000
- Add three (or more) small numbers together mentally e.g. 18 + 9 + 12 = 30 + 9 = 39; 25 + 14 + 5 = 30 + 14 = 44
- Find doubles of three-digit numbers (using knowledge of partitioning and place value) and find corresponding halves
- Count backwards through zero to include negative numbers (refer to number line)
- Tell the time to the nearest minute on an analogue clock (including using Roman numerals I-XII) and relate to 12/24 hour digital clocks
- Convert between different units of measurement e.g. km to m, cm to mm, ml to l, kg to g

Areas of Study	No of days	Statutory requirements and non-statutory guidance	Suggested Key Vocabulary
Number Number and place value **Week 1**	3-5	Read and write numbers to 10,000 Given a number, say/identify the number that is ten, one hundred or one thousand more or less within 10,000 Order and compare numbers within 10,000 Round numbers to the nearest 10, 100 or 1000 Recognise the place value of each digit in a four-digit number, including zero as a place holder Partition four-digit numbers into thousands, hundreds, tens and ones/units; continue to use place value cards and Diennes apparatus to support Partition whole numbers **in different ways** e.g. 2383 = 2000 + 300 + 80 + 3 = 2000 + 300 + 70 + 13 = 2000 + 200 + 180 + 3; encourage children to find as many different ways as possible Solve problems, including empty box problems, using knowledge of place value	Partition, Place Value Digit, number Units/ones, Tens, Hundreds, Thousands Place holder Order Compare More than, Less than, <, > Round

Number Decimals (and place value) **Week 2**	5	Consolidate the connection between **tenths** and **hundredths** and decimal fractions; count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and when dividing tenths by ten (consider using a blank hundred square and a place value chart to support)	Partition, Place value Digit, number, decimal tenth, hundredth
		Use **decimal notation** (to two decimal places); link decimal notation to money and length	
		Recognise and write decimal equivalents of any number of tenths or hundredths e.g. 4/10 = 0·4 and 35/100 = 0·35 Recognise that 1/4 = 0·25, 1/2 = 0·5 and 3/4 = 0·75 (consider using a blank 100 square to support understanding)	Order Compare More than, greater than, less than, <, >
		Recognise the place value of each digit in a decimal number with up to two decimal places (tens, units/ones, tenths, hundredths) Partition decimal numbers into tens, units/ones, tenths and hundredths; use place value cards and charts to support Round decimal numbers with one decimal place to the nearest whole number **Begin** to round decimal numbers with two decimal places to the nearest whole number (in the context of money or measures)	Round
		Compare and order decimal numbers with up to two decimal places; relate to money and measures e.g. put these amounts of money in order from least to most: £11.50, £10.00, £5.05, £11.05, £5.50	
Number Addition **and** Subtraction **Week 3**	5	**Consolidate using the formal written method of addition** to add a three-digit number and a two-digit number; two three-digit numbers; extend with four-digit numbers **(See Calculation Policy)**	Digit Hundreds, tens, ones/units
		Consolidate using formal written method of subtraction to subtract a two-digit number from a three-digit number; a three- digit number from a three- digit number; extend with four-digit numbers **(See Calculation Policy)**	Formal written method Calculate, calculation Problem, solution
		Solve addition and subtraction one-step and two-step word problems (including money and measures problems), deciding which operations to use e.g. I have £5.75 and you have £2.80 more than me. How much money do you have?	
Number Multiplication and division (Mental Methods) **Week 4**	5	Multiply and divide numbers by ten and one hundred (including numbers/answers with one decimal place) e.g. 9 x 100 = 900; 42 x 100 = 4200; 3.5 x 100 = 350; 460 ÷ 100 = 4.6; describe the effect using the language of place value and the movement of the digits	Place value, digit, decimal place
		Use known multiplication and division facts to derive other facts e.g. 7 x 4 = 28 so 70 x 4 = 280 Recognise and use factor pairs in **mental calculations** to multiply three numbers together e.g. 2 x 6 x 5 = 10 x 6 = 60	Factor pairs Partition
		Use distributive law/partitioning method to calculate **mentally** (with jottings), e.g. 39 x 7 = (30 x 7) + (9 x 7); 78 ÷ 6 = (60 ÷ 6) + (18 ÷ 6) Solve integer scaling problems, e.g. When I was born I was 48cm long. Now I am three times as tall. How tall am I?	Calculate, calculation

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Number Multiplication **Week 5**	5	Count in multiples of 11 and multiples of 12, forwards and backwards (consider as mental/oral starters) Recall and use multiplication facts for the 11 times table; look at patterns in the 11 times table Recall and use multiplication facts for the 12 times table; look at patterns in the 12 times table (Consider the use of a multiplication grid to look for patterns in all multiplication tables) Write and calculate mathematical statements for multiplication using 11 and 12 times tables (and other known tables); include multiplying by 0; solve missing number problems Find **all** factor pairs of a given number Use the **formal written method of short multiplication** to multiply a two - digit number by a single digit number e.g. 37 x 8 = 296 **(See Calculation Policy);** extend by multiplying a three-digit number by a single-digit number Solve word problems, which involve multiplication e.g. How many hours are there in a week? There are 32 cherries in a punnet. I have 8 punnets of cherries. How many cherries do I have altogether?	Multiply, multiplication, times, product Partition, value, tens, ones/units Multiplication grid Formal method of short multiplication Factor pairs Calculation Problem, solution
Number Division **Week 6**	5	Count in multiples of 11 and multiples of 12, forwards and backwards (consider as mental/oral starters) Recall and use division facts for the 11 times table; recall and use division facts for the 12 times table Write and calculate mathematical statements for division using 11 and 12 times tables (and other known tables); solve missing number problems (empty boxes); use the inverse operation to check answers Use the **formal method** to divide two-digit numbers by a single-digit number (short division) e.g. 98 ÷ 7 = 14 **(See Calculation Policy)** **Begin** to divide numbers over 100 by a one-digit number using the formal method of short division e.g. 132 ÷ 6 = 22 **(See Calculation Policy - Y5)** Solve word problems, which involve division, using the formal method e.g. I have 96 grapes and I share them equally between six friends. How many grapes do they each have?	Divide, division Short division Formal layout) Inverse Calculation Problem, solution

3

Number Fractions **Week 7**	5	Continue to recognise fractions in the context of parts of a whole, of numbers, of measurements, of shapes and of quantities; use the terms numerator and denominator; write fractions (unit fractions and non-unit fractions) using notation and words	Whole Unit fraction, non-unit fraction Numerator, denominator Equivalent fractions, mixed number, improper fractions
		Solve word problems involving finding unit and non-unit fractions of numbers and quantities (including measurements) e.g. What is 1/8 of 56cm? I have £45. I give 2/5 of my money to my sister. How much do I give her? How much have I got left?	
		Recognise and show common equivalent fractions **using diagrams and fraction walls to support; extend** to using factors and multiples to recognise equivalent fractions and to simplify where appropriate e.g. 6/9 = 2/3	
		Place fractions on a number line e.g. 0 - 1 or 0 - 2 (include improper fractions and mixed numbers - **taken from Y5 programme of study**)	
		Add **and** subtract fractions with the same denominator within one whole e.g. 5/7 + 1/7 = 6/7; 7/8 – 3/8 = 4/8 (=1/2); and beyond one e.g. 3/8 + 7/8 = 10/8 **(using diagrams to support)**; where appropriate refer to mixed numbers and improper fractions (**taken from Y5 programme of study**)	
Measurement Time & Money **Week 8**	3	Convert between 12 hour digital clocks and 24 hour digital clocks e.g. What time on the 12 hour clock is 17:45? What time on the 24 hour clock is 11:15 pm?	All relevant vocabulary from previous years relating to time including: 24 hour digital clock Problem, solution
		Use simple charts to solve time problems e.g. Use a newspaper TV guide to calculate how long each programme lasts	
		Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days e.g. How many days are there in nine weeks? It takes me ten minutes to walk to school- how many seconds is this? I sleep for eight hours. How many minutes is this?	
	2	Use decimal notation to record money and convert between pounds and pence e.g. 545p = £5.45; £8.04 = 804p; £12.50 =1250p	Pound (£), pence (p)
		Order amounts of money, using knowledge of decimal place value to support e.g. put these amounts of money in order from smallest to largest- £185.50, £158.45, £185.05, £158.50	
		Solve problems/investigations involving money e.g. In my purse I have some 50p coins, some £1 coins and some 5p coins. Altogether I have ten coins. How much money have I got? How many different solutions can you find?	

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Measurement Perimeter and Area **Week 9**	5	Measure the perimeter of rectilinear shapes using cm and m Calculate the perimeter of rectilinear shapes (where the length of the sides is given). Express the formula for finding the perimeter of a rectangle in words e.g. Tom found the perimeter of a rectangle by measuring the length and the width, adding these two measurements together and doubling his answer. Was he right? Solve problems relating to perimeter e.g. the perimeter of a square is 28cm. What is the length of one side? Draw two rectangles with the same perimeter as the square. Find the area of rectangles by counting squares; use the notation for square centimetres (cm²); find area of rectangles by relating to arrays and multiplication Solve problems involving area and perimeter e.g. Draw a rectangle with an area of 24 cm² and a perimeter of 28 cm. Can you find any other rectangles with the same area?	Perimeter, cm, m Area Square centimetres, cm²
Geometry Position and Direction **&** **Statistics** Data Handling **Week 10**	2 3	Describe positions on a 2-D grid as co-ordinates in the first quadrant e.g. (2,3); plot specified points using co-ordinates in the first quadrant; draw sides to complete a given polygon using co-ordinates in the first quadrant Describe movements of shapes between positions as **translations** of a given unit to the left/right and up/down; describe the new position using co-ordinates Interpret and present **discrete** data using appropriate graphical methods including bar charts, **using a greater range of scales** e.g. 2, 5 ,10, 20, 25; solve comparison, sum and difference problems Interpret and present **continuous** data using time graphs and relate to recording change over time Follow a line of enquiry e.g. **linked to the science curriculum**; collect data from their own observations and measurements, make decisions about how to record and analyse the data	Co-ordinates, first quadrant Translation, translate, left, right, up, down Discrete, continuous, data, scale

5

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| Measurement

Length, Mass and Capacity

Week 11 | 5 | Consolidate understanding of measures and know the relationship between units of measurement including **kilometres** to metres; make estimates of measurements and choose and use suitable equipment and units of measure; read a range of scales

Solve problems involving length, mass, capacity, e.g.
A full jug holds 2 litres of orange juice. A full glass holds 1/4 litre. How many glasses will the jug fill?
On Monday I cycled 13.5km. On Tuesday I cycled 25km. How far did I travel altogether?
A potato weighs about 250g. How much do 10 potatoes weigh, approximately?
Here is a recipe for 6 people. Change the ingredients to make enough for 12 people.

Investigate statements relating to measurement, e.g. People with longer arms can throw a ball further. True or false? How will you find out? | Weight, mass, measure
Kilograms, kg, grams, g

Capacity, measure
Litre, l, millilitre, ml

Length, height, distance, km, kilometres, cm, centimetre, m, metre, mm, millimetre |

Additional weeks

To be used for:
- assessment, consolidation and responding to AfL
- additional using and applying activities

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