Numeracy Framework: Securing number facts, relationships and calculating (E2) - 3 weeks

School -

Class: Year 3	Year:	Term:	Week (to)	Teacher:
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Prior learning – check that children can already:

- solve one-step word problems involving all four operations
- choose and use suitable equipment when following a given line of enquiry
- select, organise and present information in lists, tables and simple diagrams
- partition two-digit numbers and recognise the importance of place value
- recognise simple fractions and find halves and quarters of sets of objects and small numbers
- recall addition and subtraction facts for all numbers to 10 and multiples of 10
- understand inverse operations and use the inverse relationships of addition and subtraction to generate number facts
- understand multiplication and division and derive and recall multiplication and division facts for 2, 5 and 10

Learning objectives:

- Solve one-step and two-step problems involving numbers, money or measures, including time, choosing and carrying out appropriate calculations
- Read and write proper fractions (e.g. ³/₇, ⁹/₁₀), interpreting the
 denominator as the parts of a whole and the numerator as the number
 of parts; identify and estimate fractions of shapes; use diagrams to
 compare fractions and establish equivalents
- Derive and recall multiplication facts for the 2, 3, 4, 5, 6 and 10 times-tables and the corresponding division facts (covered in homework and weekly test); recognise multiples of 2, 5 or 10 up to 1000 (already good on multiples)
- Multiply one-digit and two-digit numbers by 10 or 100, and describe the effect (covered in D2)
- Use practical and informal written methods to multiply and divide two-digit numbers (e.g. 13 × 3, 50 ÷ 4); round remainders up or down, depending on the context
- Understand that division is the inverse of multiplication and vice versa; use this to derive and record related multiplication and division number sentences (covered in D2)
- Find unit fractions of numbers and quantities (e.g. 1/2, 1/3, 1/4 and 1/6 of 12 litres)
- Develop and use specific vocabulary in different contexts (covered throughout unit)
- Know the relationships between kilometres and metres, metres and centimetres, kilograms and grams, litres and millilitres; choose and use appropriate units to estimate, measure and record measurements (taken from D2)
- Draw and complete shapes with reflective symmetry; draw the reflection of a shape in a mirror line along one side (taken from D2)

Vocabulary:

problem, solution, calculate, calculation, inverse, answer, method, explain, predict, estimate, reason, pattern, relationship, compare, order, information, test, list, table, diagram

place value, partition, ones, tens, hundreds, one-digit number, two-digit number, three-digit number

sign, equals (=), operation, symbol, number sentence, equation, mental calculation, written calculation, informal method, jottings, number line

count on, count back, add, plus, sum, total, subtract, take away, minus, difference, double, halve, inverse, multiply, times, multiplied by, product, multiple, share, share equally, divide, divided by, divided into, left, left over, remainder, round up, round down

fraction, part, equal parts, one whole, parts of a whole, number of parts, one half, one third, one quarter, one fifth, one sixth, one tenth, two thirds, three quarters, three fifths, unit fraction

Weekly homework includes children learning their times-tables and number bonds (differentiated to the numbers they are up to), which they are then tested on once a week When HA are working on MA work without listening to my model a TA will check they understand it and are doing it correctly