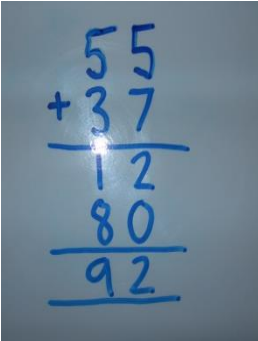
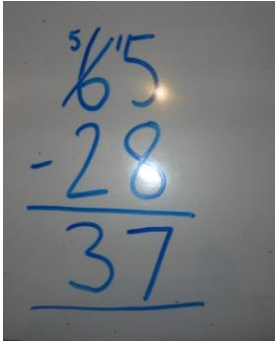

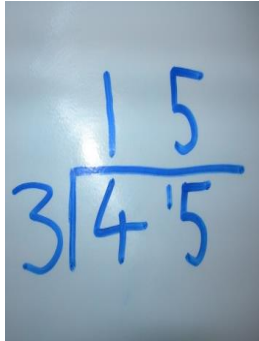
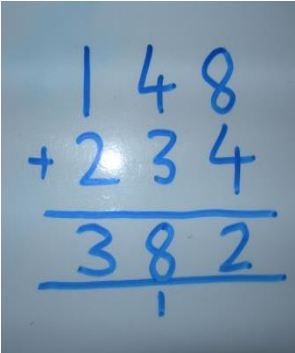
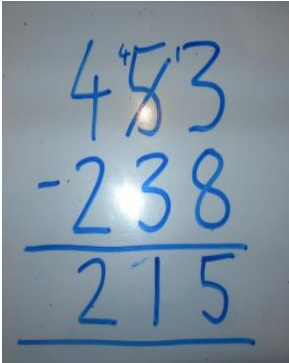
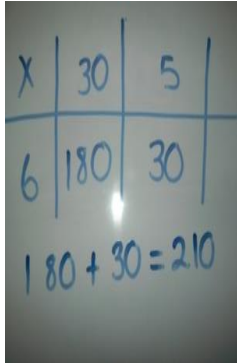
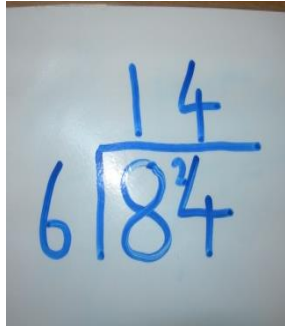



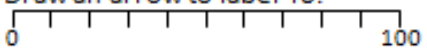

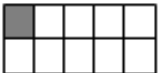


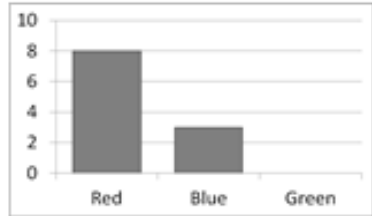

MELLING PRIMARY SCHOOL

Year 3 Mathematics Learning Objectives	
PLACE VALUE	1. Count from 0 in multiples of 3, 4, 8, 50 and 100. Find 10 or 100 more or less than a given number.
	2. Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).
	3. Compare and order numbers up to 1000. Read and write numbers up to 1000 in numerals and in words.
	4. Identify, represent and estimate numbers using different representations.
	5. Solve number problems and practical problems involving these ideas.
ADDITION AND SUBTRACTION	6. Add and subtract numbers mentally, including: a 3-digit number and 1s, 10s, 100s.
	7. Add and subtract numbers with up to 3 digits, using formal written methods of column addition and subtraction.
	8. Estimate the answer to a calculation and use inverse operations to check answers.
	9. Solve problems, including missing number problems, using number facts, place value, and more complex addition/subtraction
MULTIPLICATION AND DIVISION	10. Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
	11. Write and calculate math statements for \times and \div using the tables they know, including 2-digit numbers times 1-digit numbers, using mental and formal written methods.
	12. Solve problems and missing number problems, involving \times and \div
FRACTIONS	13. 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.
	14. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
	15. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
	16. Recognise and show, using diagrams, equivalent fractions with small denominators.
	17. Add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$).
	18. Compare and order unit fractions, and fractions with the same denominators.
MEASURE	19. Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
	20. Measure the perimeter of simple 2-D shapes.
	21. Add and subtract amounts of money to give change, using both £ and p in practical contexts.
	22. Tell/write the time from an analogue clock, including Roman numerals from I to XII, and 12-hr/24-hr clocks.
	23. Estimate and read time with increasing accuracy to nearest min; record/compare time in seconds, minutes, hours. Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.
	24. Know the number of seconds in a minute and the number of days in each month, year and leap year.
GEOMETRY	25. Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.
	26. Recognise that angles are a property of shape or a description of a turn.
	27. Identify right angles, recognise that 2 right angles make a half-turn, 3 make three quarters of a turn and 4 a complete turn. Identify whether angles are greater than or less than a right angle.
	28. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
STATISTICS	29. Interpret and present data using bar charts, pictograms and tables.
	30. Solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables.

Calculation Methods to be taught to Y3 children during the year

Year 3 (emerging)			
Addition	Subtraction	Multiplication	Division
<p>Expanded column addition TU with multibase if required</p> 	<p>Column subtraction of 2 2 digit numbers with exchanging</p> 	<p>Simple grid method TU x U using x2,x3,x4,x5</p> 	<p>Short division by 2,3,4 and 5 with carrying</p> 
Year 3 (expected)			
Addition	Subtraction	Multiplication	Division
<p>Compact column addition of 2 3-digit numbers</p> 	<p>Column subtraction of 2 3-digit numbers with exchanging</p> 	<p>Grid method TU x U using x2, x3, x4, x5, x6 x8</p> 	<p>Short division method by 2,3,4,5,6,8, with carrying</p> 

Example of Weekly Maths Skills covered in Year 3

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure, Geometry and Statistics	
1. What is the missing number? 0 8 <input type="text"/> 24 32	3:1	11. $36 \div 3 =$	3:10	23. About how long does it take for a full kettle to boil? a. 50 seconds b. 5 minutes c. 50 minutes	3:23
2. What is the 2 worth in this number? 257	3:2	12. $8 \times 3 =$	3:10		
3. Put these in order, smallest first. 293 329 932 392	3:3	13. Use $5 \times 6 = 30$ to solve: $300 \div 6 =$	3:11	22. Which of these is a correct description of a cuboid? a. I have 6 faces and 6 vertices. b. I have 6 edges and 8 vertices. c. I have 6 faces and 12 edges.	3:25
4. Draw an arrow to label 40. 	3:4	14. Eggs come in boxes of 6. I need 20 eggs. How many boxes should I buy?	3:12	23. Label two acute angles using the letter 'A'. 	3:26
5. Circle all the multiples of 8. 6 8 14 16 20	3:5	15. What fraction is shaded? 	3:13		
6. $462 + 100 =$	3:6	16. Circle $\frac{3}{5}$ of the marbles. 	3:14		
7. $256 + 128 =$	3:7	17. What fraction is labelled? 	3:15	24. Favourite colours of students: 	3:29
8. Write the sum to check $82 - 37 = 45$. Check: $45 + \square = \square$	3:8	18. $\frac{1}{4} = \frac{?}{8}$ 	3:16	6 people said green. Show this.	
9. To a no. I add 27 then subtract 19. I now have 13. What did I start with?	3:9	19. Subtract the fractions. $\frac{7}{8} - \frac{3}{8}$	3:17	25. How many more people said 'Red' than said 'Blue'?	3:30
10. What is the missing number? $149 + \square = 211$	3:9	20. Write the largest fraction. $\frac{2}{5}$ $\frac{1}{5}$ $\frac{4}{5}$ $\frac{3}{5}$	3:18		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)	Y (10-19)	G (20-25)	

Example of a multiplication tables test used in Y3

Name: _____

3 x table test a

1) $5 \times 3 =$

2) $6 \times 3 =$

3) $3 \times 2 =$

4) $3 \times 7 =$

5) $10 \times 3 =$

6) $3 \times 11 =$

7) $3 \times 3 =$

8) $12 \times 3 =$

9) $4 \times 3 =$

10) $0 \times 3 =$

Score: _____

If children are going to become confident with all forms of maths, they **MUST** develop an instant recall of all multiplication facts. This means being able to answer random multiplication questions within a few seconds such as $8 \times 3 = 24$. This is not the same as being able to count in 3s.

They will need to practice these types of questions frequently at home to build up their instant recall of these facts. The online programme Times Table Rockstars will help with this.

Y3 Multiplication Tables Testing

In school, Y3 children are tested at least twice a week on their multiplication tables. They are expected to get all 10 questions correct in one minute on three separate occasions before moving onto their next multiplication table. Marked tests are sent home each week by the class teacher which will help parents to see the progress their child is making and which multiplication tables need further practice. At the start of Year 3, children are re-tested on their 10s, 2s and 5s, which they should have a good knowledge of from Y2. They then progress onto their other multiplication tables in the following order:

3 x table

4 x table

8 x table

6 x table

9 x table

7 x table

11 x table

12 x table

Each time children progress onto a new multiplication table, there will be less facts to learn. For example, when learning the 6 x table, children should already know 1 x 6, 2 x 6, 3 x 6, 4 x 6, 5 x 6, 8 x 6 and 10 x 6 from their previous tables.

Useful websites for Maths

The school subscribes to the following interactive maths programs. Children have their own login details so they are able to access both of these programs at home as well as in school.

Mathletics

<https://login.mathletics.com/>

Times Table Rockstars

<https://trockstars.com/>

Other useful websites for practising tables are :

<https://www.timestables.co.uk/multiplication-tables-check/>

<https://www.topmarks.co.uk/maths-games/hit-the-button>