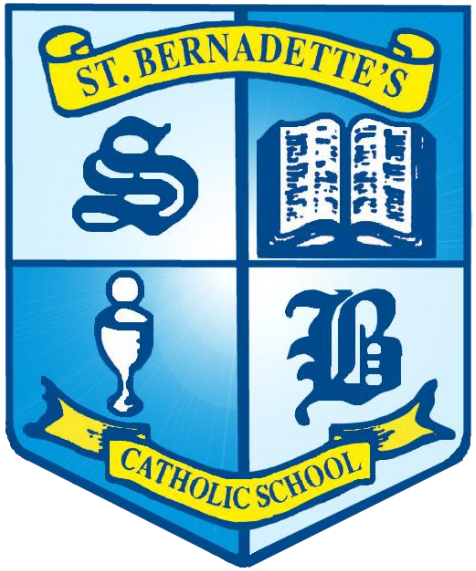
Mathematics



Long Term Overview and Small Steps

Year 5

Created May 2024 – adapted from White Rose Schemes of work

15 weeks

Autumn

Number Place Value	Number Addition and Subtraction	Number Multiplication and Division
6 weeks	4 weeks	4 weeks

Autumn

1. Numbers to 10,000
2. Numbers to 100,000
3. Numbers to 1,00,000
4. Read and write number to 1,000,000 (numerals & words)
5. Numbers to 1, 000,000
6. Partition numbers to 1,000,000
7. Number line to 1, 000,000
8. Powers of 10
9. Decimals up to 2 decimal places (DP Spring)
10. Equivalent fractions and decimals (tenths) (DP Spring)
11. Equivalent fractions and decimals (hundredths) (DP Spring)
12. Thousandths as decimals (DP Spring)
13. Thousandths as fractions (DP Spring)
14. Thousandths on a place value chart (DP Spring)
15. Compare and order numbers to 100,000
16. Compare and order numbers to 1,000,000
17. Order and compare decimals (same number of decimal places) (DP Spring)
18. Order and compare any decimals with up to 3 decimal places (DP Spring)
19. 1/10/100/1000/10,000/100,000 more or less
20. Round to the nearest 10, 100 or 1000
21. Round within 100,000
22. Round within 1,000,000
23. Round to the nearest whole number (DP Spring)
24. Round to 1 decimal place (DP Spring
25. Multiply by 10, 100 and 1,000 (WR Multiplication and division)
26. Divide by 10, 100 and 1,000 (WR Multiplication and division)
27. Multiply decimals by 10, 100 and 1,000 (Decimals Summer)
28. Divide decimals by 10, 100 and 1,000 (Decimals Summer)
29. Multiply and divide decimals - missing values (Decimals Summer)
30. Kilograms and kilometres (Converting units)
31. Millimetres and millilitres (Converting units)
32. Understand negative numbers
33. Count through zero in 1s
34. Count through zero in multiples
35. Compare and order negative numbers
36. Find the difference
37. Roman numerals to 1,000

1. Teach mental methods for addition and subtraction
2. Complements to 1 (Decimals Summer)
3. Use known facts to add and subtract decimals within 1 (Decimals Summer)
4. Add and subtract decimals across 1 (Decimals Summer)
5. Add whole numbers with more than 4 digits
6. Add decimals with the same number of decimal places (Decimals Summer)
7. Add decimals with a different number of decimal places (Decimals Summer)
8. Subtract whole numbers with more than 4 digits
9. Subtract decimals with the same number of decimal places (Decimals Summer)
10. Subtract decimals with a different number of decimal places (Decimals Summer)
11. Efficient strategies for adding and subtracting decimals (Decimals Summer)
12. Round to check answers
13. Inverse operation (addition and subtraction
14. Multi-step addition and subtraction problems
15. Compare calculations
16. Find missing numbers

1. Multiples
2. Common multiples
3. Factors
4. Common Factors
5. Prime numbers
6. Square numbers
7. Cube numbers
8. Multiples of 10, 100 and 1,000
9. Multiply up to a 4-digit number by a 1-digit number
10. Multiply a 2-digit number by a 2-digit number (area model)
11. Multiply a 2-digit number by a 2-digit number
12. Multiply a 3-digit number by a 2-digit number
13. Multiply a 4-digit number by a 2-digit number
14. Solve problems with multiplication

13 weeks	Spring		
	Number Multiplication and Division	Number Fractions, Decimals and Percentages	Measurement Perimeter and Area
	2 weeks	9 weeks	2 weeks
Spring	1. Divide a 4-digit number by a 1-digit number 2. Divide with remainders 3. Efficient division 4. Solve problems with multiplication and division	1. Find fractions equivalent to a unit fraction (Fractions A) 2. Find fractions equivalent to a non-unit fraction (Fractions A) 3. Recognise equivalent fractions (Fractions A) 4. Convert improper fractions to mixed numbers (Fractions A) 5. Convert mixed numbers to improper fractions (Fractions A) 6. Compare fractions less than 1 (Fractions A) 7. Order fractions less than 1 (Fractions A) 8. Compare and order fractions greater than 1 (Fractions A) 9. Calculate a fraction of a quantity (Fractions B) 10. Fraction of an amount (Fractions B) 11. Find the whole (Fractions B) 12. Add and subtract fractions with the same denominator (Fractions A) 13. Add fractions within 1 (Fractions A) 14. Add fractions with total greater than 1 (Fractions A) 15. Add to a mixed number (Fractions A) 16. Add two mixed numbers (Fractions A) 17. Subtract fractions (Fractions A) 18. Subtract from a mixed number (Fractions A) 19. Subtract from a mixed number breaking the whole (Fractions A) 20. Subtract two mixed numbers (Fractions A) 21. Multiply a unit fraction by an integer (Fractions B) 22. Multiply a non-unit fraction by an integer (Fractions B) 23. Multiply a mixed number by an integer (Fractions B) 24. Use fractions as operators (Fractions B) 25. Equivalent fractions and decimals (WR DP) 26. Understand percentages (WR DP) 27. Percentages as fractions (WR DP) 28. Percentages as decimals (WR DP) 29. Equivalent fractions, decimals and percentages (WR DP) 30. Decimal sequences (Decimals Summer)	1. Perimeter of rectangles 2. Perimeter of rectilinear shapes 3. Perimeter of polygons 4. Area of rectangles 5. Area of compound shapes 6. Estimate area

11 weeks	Summer				
	Measurement Volume	Measurement Converting Units	Geometry Shape	Geometry Position and Direction	Statistics
	1 weeks	2 weeks	3 weeks	2 weeks	2 weeks
Summer	1. Cubic centimetres 2. Compare volume 3. Estimate volume 4. Estimate capacity	1. Tell the time using the digital, analogue and 24-hour clock 2. Convert units of time 3. Calculate with timetables 4. Convert units of length 5. Convert between metric and imperial units	1. Understand and use degrees 2. Classify angles 3. Estimate angles 4. Measure up to 180 5. Draw lines and angles accurately 6. Calculate angles around a point 7. Calculate angles on a straight line 8. Lengths and angles in shapes 9. Regular and irregular polygons 10. 3-D shapes	1. Read and plot coordinates 2. Problem solving with coordinates 3. Translation 4. Translation with coordinates 5. Lines of symmetry 6. Reflection in horizontal and vertical lines	1. Draw line graphs 2. Read and interpret line graphs 3. Read and interpret tables 4. Two-way tables 5. Read and interpret timetables

White Rose - Suggested number of weeks	
Place Value *Small steps from Decimals and Negative Numbers added*	3 weeks
Addition and Subtraction	2 weeks
Multiplication and Division	6 weeks
Fractions	6 weeks
Decimals and Percentages	3 weeks
Decimals *Added to Place Value*	3 weeks
Perimeter and Area	2 weeks
Statistics	2 weeks
Shape	3 weeks
Position and Direction	2 weeks
Negative Numbers *Added to Place Value*	1 weeks
Converting Units	2 weeks
Volume	1 weeks