

Year 5/6 Mixed Year Group Guidance

Last Updated: September 2024

Year 5/6 mixed year groups to follow the year 6 White Rose Maths order. The year 5 objectives have been matched to this. Although we're using White Rose Maths to support with planning, the year 5/6 maths curriculum has been carefully planned and adapted overtime to ensure coverage prior to SATs. This means some units may be taught in a different order and small steps combined to cover multiple small steps within one lesson.

Highlighted objectives are standalone and need to be only taught to that year group. The other year group to continue with more mastery, problem solving and reasoning from the previous objective, depending if they are ready to move on or not.

It is ok if year 6s need to do the year 5 objectives also if AFL through the pre-task has shown this

Year 5	Year 6	Notes and Guidance
<p>Au Block 1 – Number: Place Value Su Block 4 – Number: Negative Numbers</p>	<p>Au Block 1 – Number: Place Value</p>	
<ol style="list-style-type: none"> 1. Numbers to 10,000 2. Roman numerals to 1000 3. Round to nearest 10, 100, 1000 4. Numbers to 100,000 5. Compare and order numbers to 100,000 6. Round numbers within 100,000 7. Numbers to a million 8. Counting in 10s, 100s, 1000s, 10000s and 100000s 9. Compare and order numbers to one million 10. Round numbers to one million 11. Negative numbers <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Roman numerals to 1000 2. Numbers to 10,000 3. Numbers to 100, 000 4. Numbers to 1,000,000 5. Read and write numbers to 1,000,000 6. Powers of 10 7. 10/100/1000/10,000/100,000 more of less 	<ol style="list-style-type: none"> 1. Numbers to ten million 2. Compare and order any number 3. Round any number 4. Negative numbers <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Numbers to 1,000,000 2. Numbers to 10,000,000 3. Read and write numbers to 10,000,000 4. Powers of 10 5. Number line to 10,000,000 6. Compare and order any integers 7. Round any integer 8. Negative numbers 	<p>Where objectives are similar but different size numbers, make sure examples of both are given in the teaching input.</p> <ul style="list-style-type: none"> ➤ 1, 1, 4, 7 ➤ 2,5, 9 ➤ 3, 3, 6, 10 ➤ 4, 11 ➤ 2 year 6s to have the opportunity to consolidate any year5 objectives or move on to applying through problem solving and reasoning <p>8 to be covered through starters,</p>

8. Partition numbers to 1,000,000
9. Number line to 1,000,000
10. Compare and order numbers to 100,000
11. Compare and order numbers to 1,000,000
12. Round to the nearest 10,100, 1000
13. Round within 100,000
14. Round within 1,000,000

There has been an additional block added to year 5 around negative numbers

15. Understand negative number
16. Count through zero in 1s
17. Count through zero in multiples
18. Compare and order negative numbers
19. Find the difference

<p>Au Block 2 – Number: Addition and Subtraction Au Block 3 – Number: Multiplication and Division Spr Block 1 – Number: Multiplication and Division</p>	<p>Au Block 2 – Number: Addition, Subtraction, Multiplication and Division</p>	
<ol style="list-style-type: none"> 1. Add whole numbers with more than 4 digits (column method) 2. Subtract whole numbers with more than 4 digits (column method) 3. Round to estimate and approximate 4. Inverse operations (addition and subtraction) 5. Multi-step addition and subtraction problems 6. Multiples 7. Factors 8. Common factors 9. Prime numbers 10. Square numbers 11. Cube numbers 12. Multiply by 10, 100, 1000 13. Divide by 10, 100 and 1000 14. Multiples of 10, 100, 1000 15. Multiply 4-digits by 1-digit 16. Multiply 2-digits (area model) 17. Multiply 2-digits by 2-digits 18. Multiply 3-digits by 2-digits 19. Multiply 4-digits by 2-digits 20. Divide 4-digits by 1-digit 21. Divide with remainders <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Mental strategies 2. Add whole numbers with more than four digits 3. Subtract whole numbers with more than four digits 4. Round to check answers 5. Inverse operations (addition and subtraction) 6. Multi-step addition and subtraction problems 7. Compare calculations 	<ol style="list-style-type: none"> 30. Add and subtract integers 31. Multiply up to a 4 digit number by a 2 digit number 32. Short division 33. Division using factors 34. Long division (1) 35. Long division (2) 36. Long division (3) 37. Long division (4) 38. Common factors 39. Common multiples 40. Primes to 100 41. Squares and cubes 42. Order of operations 43. Mental calculations and estimation 44. Reason from known facts <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Add and subtract integers 2. Common factors 3. Common multiples 4. Rules of divisibility 5. Primes to 100 6. Square and cube numbers 7. Multiply up to a 4-digit number by a 2-digit number 8. Solve problems with multiplication 9. Short division 10. Division using factors 11. Introduction to long division 12. Long division with remainders 13. Solve problems with division 	<p>Where objectives are similar but different size numbers, make sure examples of both are given in the teaching input.</p> <ul style="list-style-type: none"> ➤ 1, 1, 2 ➤ 3 ➤ 4 ➤ 12, 13, 14 ➤ 15 ➤ 2, 16, 17, 18, 19 ➤ 3, 20, 21 ➤ 5,6,7, 8 ➤ 10, 6 ➤ 9, 7, 8 ➤ 11, 9 ➤ 12, 10 ➤ 12, 11 ➤ 13 ➤ 14 ➤ 15 ➤ 5 <p>4 (To be done through mental maths, starters, etc. regularly, little and often)</p>

8. Find missing numbers

9. Multiples

10. Common multiples

11. Factors

12. Common factors

13. Prime factors

14. Square numbers

15. Cube numbers

16. Multiply by 10, 100 and 1000

17. Divide by 10, 100 and 1000

18. Multiples of 10, 100 and 1000

19. Multiply up to a 4-digit number by a 1-digit number

20. Multiply a 2-digit number by a 2-digit number (area model)

21. Multiply a 2 digit number by a 2 digit number

22. Multiply a 3 digit number by a 2 digit number

23. Multiply a 4 digit number by a 2 digit number

24. Solve problems with multiplication

25. Short division

26. Divide a 4 digit number by a 1 digit number

27. Divide with remainders

28. Efficient division

29. Solve problems with multiplication and division

14. Solve multi-step problems

15. Order of operations

16. Mental calculations and estimation

<p>Au Block 4 – Number: Fractions Spr Block 2 – Number: Fractions</p>	<p>Au Block 3 and 4 – Number: Fractions</p>	
<p>1. Equivalent fractions 2. Improper fractions to mixed numbers 3. Mixed numbers to improper fractions 4. Number sequences 5. Compare and order fractions less than 1 6. Compare and order fractions greater than 1 7. Add and subtract fractions 8. Add fractions within 1 9. Add 3 or more fractions 10. Add fractions 11. Add mixed numbers 12. Subtract fractions 13. Subtract mixed numbers 14. Subtract – breaking the whole 15. Subtract 2 mixed numbers 16. Multiply unit fractions by an integer 17. Multiply mixed numbers by integers 18. Fractions of an amount 19. Using fractions as operators</p> <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <p>1. Find fractions equivalent to a unit fraction 2. Find fractions equivalent to a non-unit fraction 3. Recognise equivalent fractions 4. Convert improper fractions to mixed numbers 5. Convert mixed numbers to improper fractions 6. Compare fractions less than 1 7. Order fractions less than 1 8. Compare and order fractions greater than 1 9. Add and subtract fractions with the same denominator 10. Add fractions within 1</p>	<p>25. Simplify fractions 26. Fractions on a number line 27. Compare and order (denominator) 28. Compare and order (numerator) 29. Add and subtract fractions (1) 30. Add and subtract fractions (2) 31. Add fractions 32. Subtract fractions 33. Mixed addition and subtraction 34. Multiply fractions by integers 35. Multiply fractions by fractions 36. Divide fractions by integers (1) 37. Divide fractions by integers (2) 38. Four rules with fractions 39. Fractions of an amount 40. Fractions of an amount – find the whole</p> <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <p>1. Equivalent fractions and simplifying 2. Equivalent fractions on a number line 3. Compare and order (denominator) 4. Compare and order (numerator) 5. Add and subtract simple fractions 6. Add and subtract any two fractions 7. Add mixed numbers 8. Subtract mixed numbers 9. Multi-step problems</p> <p>10. Multiply fractions by integers 11. Multiply fractions by fractions 12. Divide a fraction by an integer</p>	<p>➤ 1, ➤ 1, ➤ 2, ➤ 3, ➤ 2, 4 ➤ 3, 4, 5, 6 ➤ 5, 6, 7, 8, 9, 7, 8, 9, 10, 11, 12, 13, 14 ➤ 10, 16, 17 ➤ 11, ➤ 12, 13, ➤ 14, ➤ 15, 18 ➤ 16</p> <p>➤ 19 to be taught as a plenary once fractions of amount and multiplying fractions has been taught</p>

11. Add fractions with total greater than 1
12. Add to a mixed number
13. Add two mixed numbers
14. Subtract fractions
15. Subtract from a mixed number
16. Subtract from a mixed number – breaking the whole
17. Subtract two mixed numbers

18. Multiply a unit fraction by an integer
19. Multiply a non-unit fraction by an integer
20. Multiply a mixed number by an integer
21. Calculate a fraction of a quantity
22. Fraction of an amount
23. Find the whole
24. Use fractions as operators

13. Divide any fraction by an integer
14. Mixed questions with fractions
15. Fractions of an amount
16. Fractions of an amount – find the whole

Su Block 2 – Geometry: Position and Direction	Su Block 2 – Geometry: Position and Direction	
<ol style="list-style-type: none"> 1. Position in the first quadrant 2. Reflection 3. Reflection with co-ordinates 4. Translation 5. Translation with co-ordinates <p><i>White Rose Maths 2024</i></p> <p>These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Read and plot co-ordinates 2. Problem solving with co-ordinates 3. Translation 4. Translation with co-ordinates 5. Lines of symmetry 6. Reflection in horizontal and vertical lines 	<ol style="list-style-type: none"> 7. The first quadrant 8. Four quadrants 9. Translations 10. Reflections <p><i>White Rose Maths 2024</i></p> <p>These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. The first quadrant 2. Read and plot points in four quadrants 3. Solve problems with co-ordinates 4. Translations 5. Reflections 	<ul style="list-style-type: none"> ➤ 1, 1, ➤ 2 ➤ 3, 4, 5 ➤ 4, 2, 3

<p>Spr Block 3 – Number: Decimals and Percentages</p> <p>Su Block 3 – Number: Decimals</p>	<p>Spr Block 3 – Number: Decimals</p>	
<ol style="list-style-type: none"> 1. Decimals up to 2 d.p. 2. Decimals as fractions (1) 3. Decimals as fractions (2) 4. Understand thousandths 5. Thousandths as decimals 6. Rounding decimals 7. Order and compare decimals 8. Adding decimals within 1 9. Subtracting decimals within 1 10. Complements to 1 11. Adding decimals – crossing the whole 12. Adding decimals with the same number of decimal places 13. Subtracting decimals with the same number of decimal places 14. Adding decimals with a different number of decimal places 15. Subtracting decimals with a different number of decimal places 16. Adding and subtracting wholes and decimals 17. Decimal sequences 18. Multiplying decimals by 10, 100, 1000 19. Dividing decimals by 10, 100, 1000 <p><i>White Rose Maths 2024</i></p> <p>These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Decimals up to 2 decimal places 2. Equivalent fractions and decimals (tenths) 3. Equivalent fractions and decimals (hundredths) 4. Equivalent fractions and decimals 5. Thousandths as fractions 6. Thousandths as decimals 7. Thousandths on a place value chart 8. Order and compare decimals (same number of decimal places) 9. Order and compare any decimals with up to 3 decimal places 10. Round to the nearest whole number 	<ol style="list-style-type: none"> 1. Three decimal places 2. Multiply by 10, 100 and 1,000 3. Divide by 10, 100 and 1,000 4. Multiply decimals by integers 5. Divide decimals by integers 6. Division to solve problems 7. Decimals as fractions 8. Fractions to decimals (1) 9. Fractions to decimals (2) <p><i>White Rose Maths 2024</i></p> <p>These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Place value within 1 2. Place value – integers and decimals 3. Round decimals 4. Add and subtract decimals 5. Multiply by 10, 100 and 1000 6. Divide by 10, 100 and 1000 7. Multiply decimals by integers 8. Divide decimals by integers 9. Multiply and divide decimals in context 	<ul style="list-style-type: none"> ➤ 1, 1, 4 ➤ 17 ➤ 6 ➤ 7 ➤ 8, 9, 10, 11, 12, 13, 14, 15, 16 ➤ 4 ➤ 5, 6 ➤ 7, 2, 3, 5 ➤ 8, 9 ➤ 2, 3, 18, 19 (Completed as part of the four operations unit)

11. Round to 1 decimal place
12. Understand percentages
13. Percentages as fractions
14. Percentages as decimals
15. Equivalent fractions, decimals and percentages

16. Use known facts to add and subtract decimals within 1
17. Complements to 1
18. Add and subtract decimals across 1
19. Add decimals with the same number of decimal places
20. Subtract decimals with the same number of decimal places
21. Add decimals with different numbers of decimal places
22. Subtract decimals with different numbers of decimal places
23. Efficient strategies for adding and subtracting decimals
24. Decimal sequences
25. Multiply by 10, 100 and 1000
26. Divide by 10, 100 and 1000
27. Multiply and divide decimals – missing values

Spr Block 4 – Number: Fractions Decimals and Percentages

1. Understand percentages
2. Percentages as fractions and decimals
3. Equivalent F.D.P.

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These may be used to adjust planning, break down learning further or add in additional questions to lessons.

See the above objectives as the units have been merged

1. Fractions to percentages
2. Equivalent FDP
3. Order FDP
4. Percentage of an amount (1)
5. Percentage of an amount (2)
6. Percentages – missing values

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These may be used to adjust planning, break down learning further or add in additional questions to lessons.

1. Decimal and Fraction Equivalents
2. Fractions as Division
3. Understand Percentages
4. Fractions to Percentages
5. Equivalent fractions, decimals and percentages
6. Order fractions, decimals and percentages
7. Percentages of an amount – one step
8. Percentages of an amount – multi-step
9. Percentages – missing values

- 1
- 1
- 2, 2, 3
- 3
- 4, 5,
- 6,

Year 5s to be given the opportunity to consolidate previous units and complete problem solving and reasoning to extend their understanding.

Spr Block 2 – Number: Algebra

1. Find a rule – one step
2. Find a rule – two step
3. Forming expressions
4. Substitution
5. Formulae
6. Forming equations
7. Solve simple one-step equations
8. Solve two-step equations
9. Find pairs of values
10. Enumerate possibilities

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The steps are the same as above (slightly renamed).

Algebra to be taught to the year 6s only. Year 5s to be given the opportunity to consolidate previous units and complete problem solving and reasoning to extend their understanding.

Su Block 5 – Measurement: Converting Units	Au Block 5 – Measurement: Converting Units	
<ol style="list-style-type: none"> 1. Kilograms and kilometres 2. Milligrams and millimetres 3. Metric units 4. Imperial units 5. Converting units of time 6. Timetables <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons. The steps are the same as above (named slightly different)</p>	<ol style="list-style-type: none"> 1. Metric measures 2. Convert metric measures 3. Calculate with metric measures 4. Miles and kilometres 5. Imperial measures <p><i>White Rose Maths 2024</i> The steps are the same as above</p>	<ul style="list-style-type: none"> ➤ 1, 3 ➤ 2, 3 1, 2 ➤ 4 ➤ 5, 4 ➤ 5, ➤ 6,

Spr Block 4 – Measurement: Perimeter and Area Su Block 6 – Measurement: Volume	Spr Block 5 – Measurement: Perimeter, Area and Volume	
<ol style="list-style-type: none"> 1. Measure perimeter 2. Calculate perimeter 3. Area of rectangles 4. Area of compound shapes 5. Area of irregular shapes 6. What is volume? 7. Compare volume 8. Estimate volume 9. Estimate capacity <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> 7. Cubic centimetres 8. Compare volume 9. Estimate volume 10. Estimate capacity 	<ol style="list-style-type: none"> 1. Shapes – same area 2. Area and perimeter 3. Area of a triangle (1) 4. Area of a triangle (2) 5. Area of a triangle (3) 6. Area of parallelogram 7. Volume – counting cubes Volume of a cuboid <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Shapes – same area 2. Area and perimeter 3. Area of a triangle – counting squares 4. Area of a right-angled triangle 5. Area of any triangle 6. Area of a parallelogram 7. Volume – counting cubes 8. Volume of a cuboid 	<ul style="list-style-type: none"> ➤ 1, 2 ➤ 2 ➤ 1, 3 ➤ 4, 5 ➤ 3, 4, 5 ➤ 6, ➤ 7, 6, 7, 8, 9

Spr Block 1 – Number: Ratio

1. Using ratio language
2. Ratio and fractions
3. Introducing the ratio symbol
4. Calculating ratio
5. Using scale factors
6. Calculating scale factors
7. Ratio and proportion problems

White Rose Maths 2024

These may be used to adjust planning, break down learning further or add in additional questions to lessons.

1. Add or multiply?
2. Use ratio language
3. Introduction to the ratio symbol
4. Ratio and fractions
5. Scale drawing
6. Use scale
7. Similar shapes
8. Ratio problems
9. Proportion problems
10. Recipes

Ratio to be taught to the year 6s only. Year 5s to be given the opportunity to consolidate previous units and complete problem solving and reasoning to extend their understanding.

Su Block 1 – Geometry: Properties of Shapes	Su Block 1 – Geometry: Shape	
<ol style="list-style-type: none"> 1. Measuring angles in degrees 2. Measuring with a protractor (1) 3. Measuring with a protractor (2) 4. Drawing lines and angles accurately 5. Calculation angles on a straight line 6. Calculating angles around a point 7. Calculating lengths and angles in shapes 8. Regular and irregular polygons 9. Reasoning about 3D Shapes <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Understand and use degrees 2. Classify angles 3. Estimate angles 4. Measure angles up to 180 degrees 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. 3D shapes 	<ol style="list-style-type: none"> 11. Measure with a protractor 12. Introduce angles 13. Calculate angles 14. Vertically opposite angles 15. Angles in a triangle 16. Angles in a triangle – special cases 17. Angles in a triangle – missing angles 18. Angles in special quadrilaterals 19. Angles in regular polygons 20. Draw shapes accurately 21. Draw nets of 3D shapes <p><i>White Rose Maths 2024</i> These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Measure and classify angles 2. Calculate angles 3. Vertically opposite angles 4. Angles in a triangle 5. Angles in a triangle – special cases 6. Angles in a triangle – missing angles 7. Angles in quadrilaterals 8. Angles in polygons 9. Circles 10. Draw shapes accurately 11. Nets of 3D shapes 	<ul style="list-style-type: none"> ➤ 1, 2, 1, 2, 3 ➤ 3 ➤ 5, ➤ 6, ➤ 4 ➤ 5, 6, 7, ➤ 8, ➤ 9, ➤ 10, 4, 7 ➤ 11, 8, 9

Spr Block 5 - Statistics	Spr Block 6 - Statistics	
<ol style="list-style-type: none"> 1. Read and interpret line graphs 2. Draw line graphs 3. Use line graphs to solve problems 4. Read and interpret tables 5. Two-way tables 6. Timetables <p><i>White Rose Maths 2024</i></p> <p>These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Draw line graphs 2. Read and interpret line graphs 3. Read and interpret tables 4. Two-way tables 5. Read and interpret timetables 	<ol style="list-style-type: none"> 6. Read and interpret line graphs 7. Draw line graphs 8. Use line graphs to solve problems 9. Circles 10. Read and interpret pie charts 11. Pie charts with percentages 12. Draw pie charts 13. The mean <p><i>White Rose Maths 2024</i></p> <p>These may be used to adjust planning, break down learning further or add in additional questions to lessons.</p> <ol style="list-style-type: none"> 1. Line graphs 2. Dual bar charts 3. Read and interpret pie charts 4. Pie charts with percentages 5. Draw pie charts 6. The mean 	<p>Could also be taught through science</p> <ul style="list-style-type: none"> ➤ 4 (to be taught first to link with geometry) ➤ 1, 1 ➤ 2, 2 ➤ 3, 3 ➤ 4, ➤ 5, ➤ 6, ➤ 5, ➤ 6, ➤ 7, ➤ 8