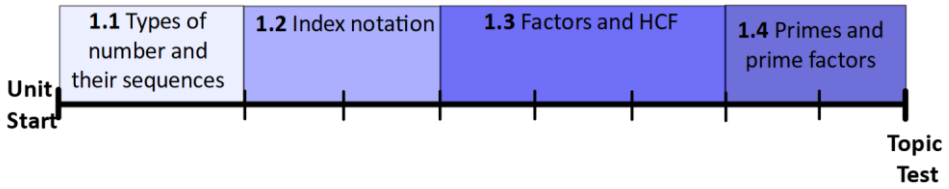
Meridian Maths Curriculum
Year 7

Year 7	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Aut	SPARX BL 1. Number Properties					2. Place Value 1			Mid Term 1 2. Continued		3. Place Value 2			Equipment Use	
Spr	4. Conventions and Properties of Shapes			5. Addition and Subtraction					Mid Term 2 6. Multiplication and division						
Sum	7. Generalising Number					8. Linear Sequences			8. Continued		Mid Term 3 9 Ordering & Equivalence				

Click the topic in the overview above to take you directly to the page for that topic.
Clicking the mid term will take you directly to the page showing the content covered in that assessment.

Note:
Timings are suggestions and class teachers will adapt to suit the needs of their class. This may include different topics being taught where classes have two teachers.

Topic 1: Number Properties



Key Idea 1.1: Types of number and their sequences

1.1: Squares, roots, cubes and triangle numbers

Key Idea 1.2: Index Notation

1.2a: Notation

1.2b: Evaluating powers

Key Idea 1.3: Factors and HCF

1.3a: Recapping factors

1.3b: Listing factors systematically

1.3c: Highest common factors

Key Idea 1.4: Primes and Prime Factors

1.4a: Prime numbers and prime factors

1.4b: Products of prime factors

Sparx Maths

Independent Learning Codes

Skill	Code
Calculating with roots and powers	M135
Special sequences	M981
Index rules with positive indices	M608
Finding factors and using divisibility tests	M823
Finding the highest common factor (HCF)	M698
Prime factor decomposition	M108
Finding prime numbers	M322

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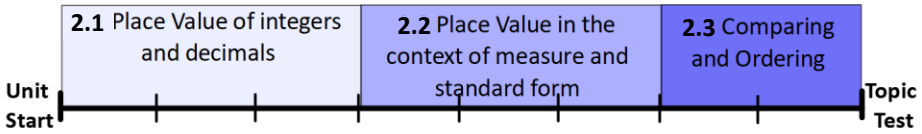
Topic 2: Place Value 1



Key Idea 2.1: Place value of Integers and Decimals

2.1a: Place value of integers

2.1b: Place value of decimals

2.1c: Making links between each place value column

Key Idea 2.2: Place value in the context of measure and Standard Form

2.2a: Converting metric units

2.2b: Writing numbers in Standard form (large numbers only)

2.2c: Writing Standard form as an ordinary number

Key Idea 2.3: Comparing and Ordering integers and decimals (with median)

2.3a: Comparing and ordering integers (Inc. Standard Form)

2.3b: Comparing and ordering decimals (Inc. Standard Form)

Sparx Maths

Independent Learning Codes

Skill	Code
Using number lines	M763
Integer place value	M704
Decimal place value	M522
Partitioning decimals	Q127
Converting units of length	M772
Converting units of mass	M530
Using standard form with positive indices	M719
Understanding and ordering whole numbers	Q976
Ordering decimals	Q509

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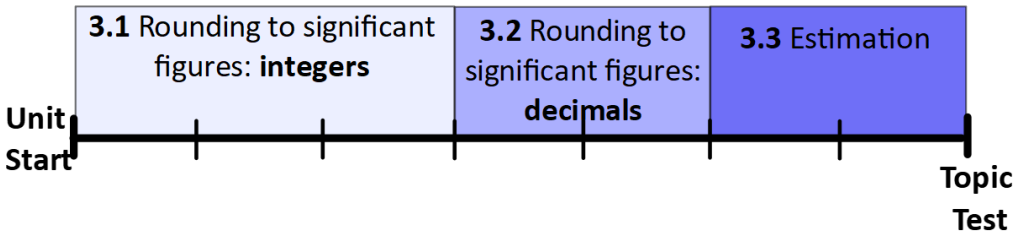
Topic 3: Place Value 2



Key Idea 3.1: Rounding to significant figures: integers

3.1a: What are significant figures?

3.1b: Identifying and finding the value of significant figures

3.1c: Rounding to significant figures (integers)

Key Idea 3.2: Rounding to significant figures: decimals

3.2a: Identifying and finding the value of significant figures

3.2b: Rounding to significant figures

Key Idea 3.3: Estimation

3.3a: Estimating with integers

3.3b: Estimating with decimals

Sparx Maths

Independent Learning Codes

Skill	Code
Rounding integers	M111
Rounding integers using significant figures	M994
Rounding decimals using significant figures	M131
Estimating calculations	M878

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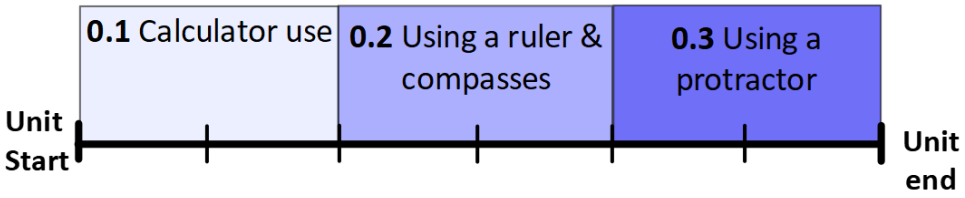

Key Idea 0.1: Calculator use

0.1a: Basic calculator functions

0.1b: Fractions, decimals, power and roots

Key Idea 0.2: Using a ruler and pair of compasses

0.2a: Using a ruler

0.2b: Using a pair of compasses

Key Idea 0.3: Using a protractor and project

0.3a: Using a protractor

0.3b: Project

Sparx Maths

Independent Learning Codes

Skill	Code
Using a ruler	M985
Using a pair of compasses	M196
Estimating angles	M541
Measuring angles	M780
Drawing angles	M331

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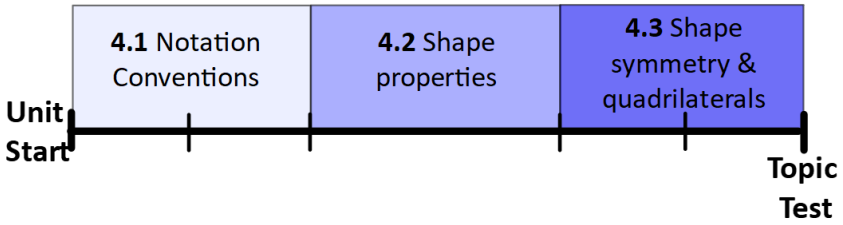
Topic 4: Conventions and Properties of Shapes



Key Idea 4.1: Notation Conventions

4.1a: On shape notation (hatch and feather marks, right angles and equal angles).

4.1b: Line segment and angle notation (using letters at vertices to identify line segments and angles).

Key Idea 4.2: Shape Properties

4.2a: 2D Shape properties.

Key Idea 4.3: Symmetry and Properties of Quadrilaterals

4.3a: Line and rotational symmetry.

4.3b: Properties of quadrilaterals.

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Independent Learning Codes

Skill	Code
Line properties	M814
Shape properties	M276
Symmetry	M523
Line properties	M814
Properties of triangles	Q763
Properties of quadrilaterals	Q787

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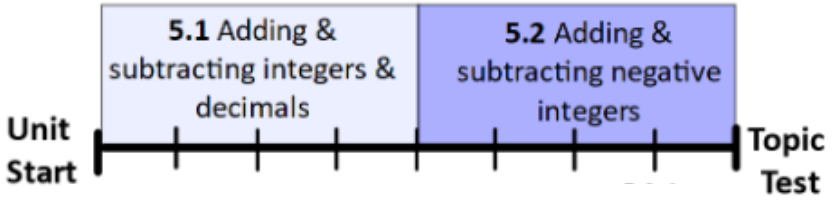

Key Idea 5.1: Adding and subtracting integers and decimals

5.1a: Misconceptions and method selection (integers).

5.1b: Misconceptions and method selection (decimals).

5.1c Applying addition and subtraction to perimeter.

5.1d: Adding and subtracting with time.

Key Idea 5.2: Adding and subtracting negative integers

5.2a: Introduction to negatives and double-sided counters.

5.2b: Adding positive and negative numbers.

5.2c: Subtracting positive and negative numbers.

5.2d: Adding and subtracting negative numbers.

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Independent Learning Codes

Skill	Code
Adding integers	M928
Adding decimals	M429
Subtracting integers	M347
Subtracting decimals	M152
Finding the perimeter of rectangles and simple shape	M635
Adding and subtracting with time	Q547

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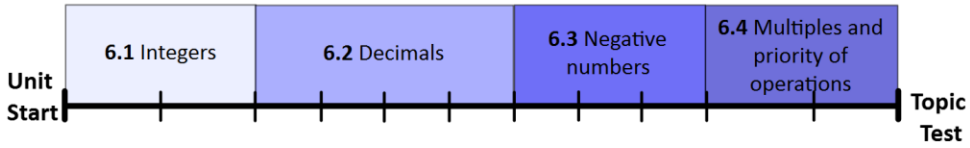
Topic 6: Multiplication and Division



Key Idea 6.1: Multiplying and dividing integers

6.1a: Multiplication with integers (retrieval)

6.1b: Division with integers (retrieval)

Key Idea 6.2: Multiplying and dividing decimals

6.2a: Mental methods

6.2b: Multiplying decimals

6.2c: Dividing decimals

6.2d: Applying decimal multiplication and division

Key Idea 6.3: Multiplying and dividing negative numbers

6.3a: Multiplying

6.3b: Dividing

6.3c: Applying multiplication and division of negative numbers

Key Idea 6.4: Multiples and priority of operations

6.3a: Multiples

6.3b: Order of operations

Sparx Maths

Independent Learning Codes

Skill	Code
Multiplying using place value	M911
Using a written method to multiply integers	M187
Using a written method to multiply decimals	M803
Dividing numbers into equal groups	M462
Using a written method to divide integers	M354
Dividing with a remainder	M873
Using a written method to divide by integers (decimal answers)	M262
Using a written method to divide by decimals	M491
Using the correct order of operations	M521
Multiplying and dividing with negative numbers	M288
Finding the lowest common multiple (LCM)	M227

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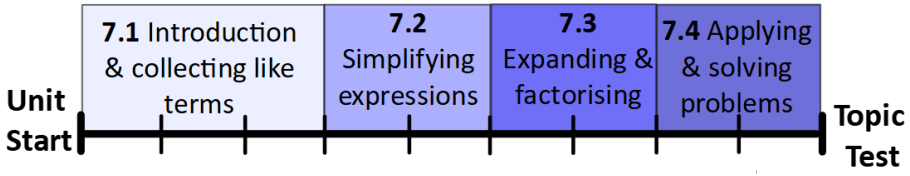
Topic 7: Generalising Number (Introduction to Algebra)



Key Idea 7.1: Introduction and Collecting Like Terms

7.1a: Representing and generalising

7.1b: Adding and subtracting terms

7.1c: Collecting like terms with negatives

Key Idea 7.2: Simplifying Expressions

7.2.a Multiplying terms

7.2b: Dividing terms

Key Idea 7.3: Expanding and Factorising Expressions

7.3a: Expanding

7.3b: Factorising

Key Idea 6.4: Applications and Problem Solving

7.3a: Collecting like terms and multiplying terms

7.3b: Perimeter, area and algebra

Sparx Maths

Independent Learning Codes

Skill	Code
Algebraic notation	M813
Algebraic terminology	M830
Function machines with numbers	M175
Function machines with letters	M428
Simplifying expressions containing a single variable	M795
Simplifying expressions containing multiple variables	M531
Simplifying expressions containing non-linear terms	M949
Expanding single brackets	M237
Factorising into one bracket	M100
Expanding single brackets and simplifying expressions	M792

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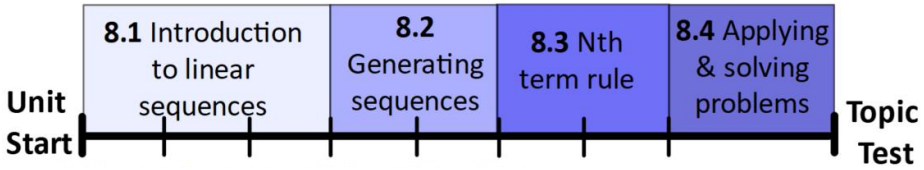

Key Idea 8.1: Introduction to Linear Sequences

8.1a: What is a sequence?

8.1b: Term-term rule and different types of sequences

8.1c: What is a linear sequence?

Key Idea 8.2: Generating Sequences

8.2a: Generating sequences from a term-term rule

8.2b: Generating sequences from function machines

Key Idea 8.3: Nth term rule

8.3a: Generating sequences using the nth term rule

8.3b: Calculating the nth term rule

8.3c: Problem solving with the nth term

Key Idea 8.4: Applications and Problem Solving

8.4a: Growing patterns investigation

Sparx Maths

Independent Learning Codes

Skill	Code
Term-to-term rules for numerical sequences	M381
Term-to-term rules for sequences of patterns	M241
Substituting into position-to-term rules	M166
Position-to-term rules for arithmetic sequences	M991
Position-to-term rules for sequences of patterns	M866
Special sequences	M981
Substituting into expressions with one operation	M417
Substituting into expressions with multiple operations	M327

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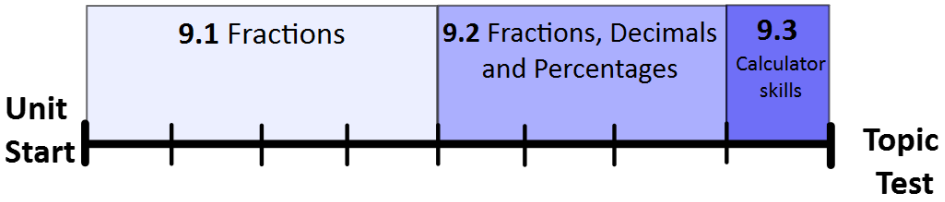
Topic 9: Ordering and Equivalence



Key Idea 9.1: Fractions

9.1a: Fractions as numbers on a number line

9.1b: Mixed numbers and improper fractions

9.1c: Simplifying and equivalent fractions

9.1d: Ordering and comparing fractions

Key Idea 9.2: Fractions, Decimals and Percentages

9.2a: FDP equivalences

9.2b: Types of decimals

9.2c: Rounding to decimal places

Key Idea 9.3: Calculator skills

9.3a: Using a calculator for conversions

Sparx Maths

Independent Learning Codes

Skill	Code
Converting from mixed numbers to improper fractions	Q347
Converting from improper fractions to mixed numbers	Q621
Converting between fractions and decimals	Q200
Converting between fractions and decimals using equivalent fractions	Q128
Converting between fractions and percentages	Q490
Converting between decimals and percentages	Q709
Mixed problems: Converting between fractions, decimals and percentages	Q503
Finding equivalent fractions	Q310
Simplifying fractions	Q954
Rounding decimals	M431

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Mid Term Assessment Content Information

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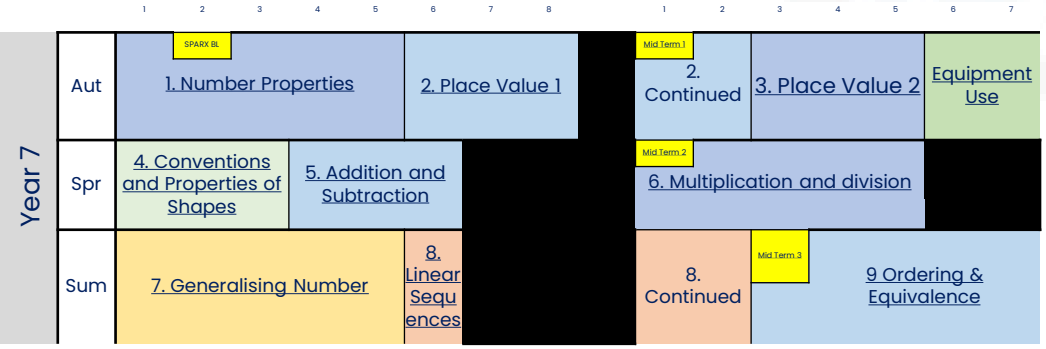
Mid Term 1 – Topics Included

Recently Studied	Topic Number
Factors	1
Product of Prime Factors	1
Finding the Highest Common Factor	1
Square numbers and cube numbers	1
Prime numbers	1
Indices	1
Converting metric units of length	2
Express numbers written in figures	2
Ordering Integers	3
Ordering decimals and basic fractions	3
Multiplying and dividing by powers of 10	3



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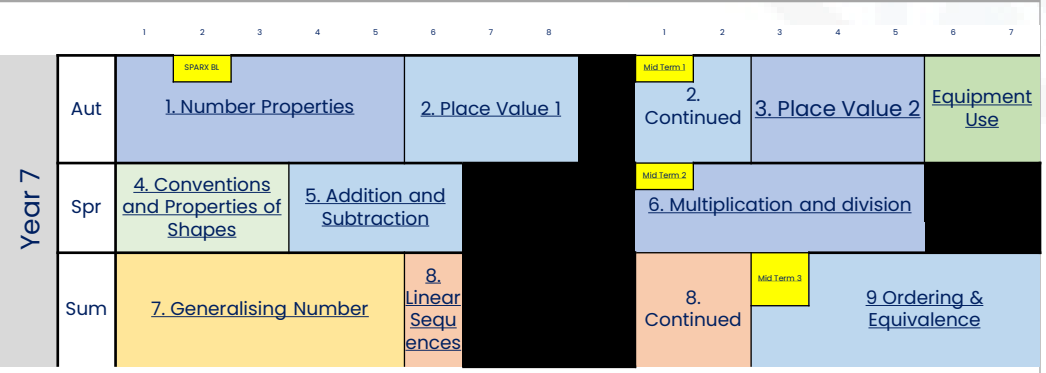
Mid Term 2 – Topics Included

Recently Studied	Topic Number
Rounding to significant figures	2
Estimating calculations	2
Shape notation	4
Naming polygons	4
Rotational symmetry	4
Line symmetry	4
Properties of quadrilaterals	4
Adding and subtracting integers	5
Adding and subtracting decimals	5
Perimeter	5
Adding and subtracting money	5

Previously Studied	Topic Number
Factors	1
Square numbers	1
Prime numbers	1
Indices	1
Converting metric units of length	2



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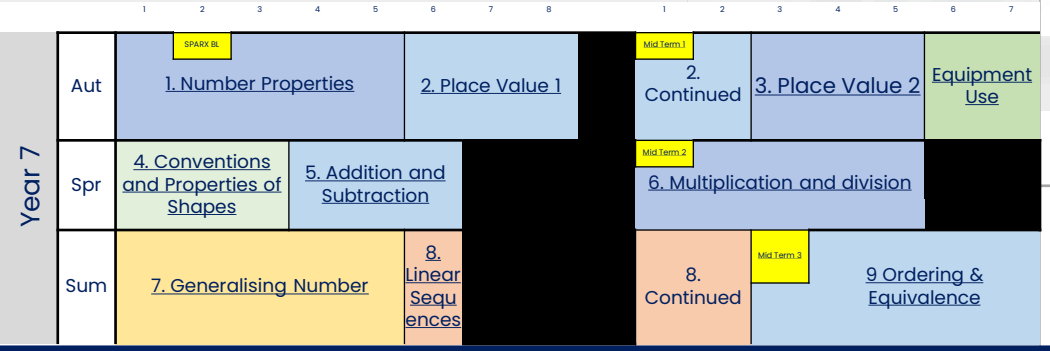
Mid Term 3 – Topics Included

Recently Studied	Topic Number
Multiplying and dividing integers	6
Multiplying and dividing decimals	6
Multiplying and dividing negatives	6
Order of operations	6
Algebra notation and convention	7
Simplify expressions by addition and subtraction	7
Simplify expressions by multiplication and division	7
Expand brackets	7
Factorise expressions	7
Find missing terms of a sequence	8
Nth term of a sequence	8



Previously Studied	Topic Number
Factors	1
Indices	1
Place value including decimals	2
Standard form	2
Compare and order	2
Rounding	2
Estimating	2
Properties of 2D shape	4
Symmetry	4
Add and subtract integers	5
Perimeter	5
Add and subtract decimals	5
Money	5
Add and subtract negatives	5

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