

Maths Curriculum Sequence Year 6

Place Value
Position & Direction
Addition & Subtraction and Order of Operations
Statistics and Circles
Multiplication
Includes Unit Conversion
Assessment
Division
Includes Unit Conversion
Fractions & FDP
Ratio
Algebra
Shape, Area, Perimeter & Volume
Assessment
Shape, Area, Perimeter & Volume (continued)
Revision, Consolidation & Individual Pathways
SATs
Maths Projects: economic and financial literacy PS Skills Lessons 5 & 6

Number, Place Value, Calculations, Fractions
Geometry
Measurement
Statistics
Assessment

Y6 Maths Plan
Place Value

Do **NOT** start the unit until **ALL** children have passed the prior learning check. These are **NOT** lessons but learning steps and each one takes as long as it takes for **ALL** children to be secure.

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Learning Steps

Prior learning check & remediation/deepening of prior

Represent and know value of digits to 10,000,000

Partition numbers to 10,000,000

Value of digits to 10,000,000

Number Lines to 10,000,000

Compare two numbers using $<$ $>$ $=$ to 8-digit same PV

Compare two numbers with different PV

Order sets of numbers to 8-digit

PS lesson: PV, compare, order (more than one possibility)

Round 4-digit numbers to nearest 10, 100, 1000

Round to any given amount

PS Lesson: rounding (multi-domain)

Negative number practical lesson

Increases through zero

Decreases through zero

Differences between numbers including +/-

PS Lesson: negative numbers (real-life word)

Assessment

Pause & Stretch: re-assessment & deepening as required

PS Skills Lesson: trial & improvement

Y6 Maths Plan
Position & Direction

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Learning Steps

Prior learning check & remediation/deepening of prior

Read coordinates in all 4 quadrants

Plot coordinates in all 4 quadrants

Translations and coordinates

Reflections and coordinates

PS Lesson: coordinates (logic)

Assessment

Pause & Stretch: re-assessment & deepening as required

Y6 Maths Plan

Addition, Subtraction & Order of Operations

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Learning Steps

Prior learning check & remediation/deepening of prior

Missing number equations

Balancing equations

Column addition and subtraction – missing digits

Order of Operations – no brackets or orders

Order of Operations – brackets & orders

Assessment

Pause & Stretch: re-assessment & deepening as required

Y6 Maths Plan
Statistics

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Learning Steps**Prior learning check & remediation/deepening of prior**

Dual bar charts

Line charts

Circles

Interpreting pie charts

Pie charts & percentages

The mean

The mean & missing values

Assessment**Pause & Stretch:** re-assessment & deepening as required

Y6 Maths Plan

Multiplication & Unit Conversion

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Learning Steps

Prior learning check & remediation/deepening of prior

Moving digits multiplication including decimals

Convert large metric units to small

Convert large metric units to small

PS Lesson: converting units large to small (multi-step / visual)

Short multiplication refresh including decimals

Long multiplication with no regroup

Long multiplication with one regroup

Long multiplication with two regroup

Long multiplication with multiple regroup

PS Lesson: long multiplication (all possibilities)

Distributing for multiplying by a 2-digit number

Double and half to multiply without long multiplication

Prime factorisation to remove long multiplication

Most efficient method for multiplications

PS Lesson: multiplication (working backwards)

Assessment

Pause & Stretch: re-assessment & deepening as required

Y6 Maths Plan

Division & Unit Conversion

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Learning Steps

Prior learning check & remediation/deepening of prior

Moving digits division including decimals

Convert small metric units to large

Convert small metric units to large

PS Lesson: converting units small to large (working backwards)

Short division refresh including decimals

Short division with remainder as a decimal

Building multiple strings (fact bank)

Long division – no remainder – divisor smaller than first 2 digits of dividend

Long division – remainder – divisor smaller than first 2 digits of dividend

Long division – no remainder – divisor larger than first 2 digits of dividend

PS Lesson: long division (open-ended)

Factorising for dividing by a 2-digit number

Most efficient method for division

PS Lesson: division (multi-step / multi-domain)

Assessment

Pause & Stretch: re-assessment & deepening as required

PS Skills Lesson: working collaboratively

Y6 Maths Plan
Fractions & FDP

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Learning Steps

Prior learning check & remediation/deepening of prior

Common Factors

Simplifying

Common multiples

Comparing & ordering fractions

PS Lesson: common denominators (visual)

Adding fractions with different denominators

Adding mixed numbers with different denominators

Practice Lesson: adding fractions

Subtracting fractions

Subtracting mixed numbers

Practice Lesson: subtracting fractions including order of operations with fractions

PS Lesson: adding and subtracting fractions (multi-step / multi-domain)

Multiply fractions by integers

Multiply fractions by larger integers

Multiply fractions by fractions

Divide a fraction by integer (numerator-divisor match)

Divide a fraction by integer

Practice Lesson: dividing fractions

PS Lesson: multiplying and dividing fractions (visual)

Fraction and decimal equivalence to tenths

Fraction and decimal equivalence to hundredths

FD Equivalence Via Dividing

Percentages of amounts multiples of 25%, 50%, 75%

Percentages of amounts multiples of 10%

Percentages of amounts multiples of 5%

Percentages of amounts 1%

Most efficient method for percentages

Pie Charts & Percentages

PS Lesson: percentages of amounts (real-life word / working backwards)

FDP Equivalence

Assessment

Pause & Stretch: re-assessment & deepening as required

Y6 Maths Plan

Ratio

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Learning Steps

Prior learning check & remediation/deepening of prior

Practical with Numicon

Language of ratio – simplest form

Language of ratio – scaling up

PS Lesson: ratio problems (real-life word / multi-step)

Scale Drawings

Scale Factors

Assessment

Pause & Stretch: re-assessment & deepening as required

PS Skills Lesson: working systematically

Y6 Maths Plan
Algebra

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Learning Steps

Prior learning check & remediation/deepening of prior

1 and 2 step function machines

Form expressions

substitution

formulae

1 and 2 step equations

Pairs of values

Assessment

Pause & Stretch: re-assessment & deepening as required

PS Skills Lesson: finding starting points

Y6 Maths Plan

Shape, Area, Perimeter & Volume

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Learning Steps

Prior learning check & remediation/deepening of prior

- Area & Perimeter Links
- Classify types of triangles
- Calculate the perimeter and area of triangles
- Calculate missing triangle angles
- Classify types of quadrilaterals
- Calculate the perimeter and area of quadrilaterals
- Calculate missing quadrilaterals angles
- Practice Lesson: all missing angles
- Classify 2D shapes
- Nets and 3D shapes
- Compound perimeter and area
- Regular perimeter and area
- Irregular perimeter and area
- PS Lesson:** shape (investigations / rules & patterns)

Assessment

Pause & Stretch: re-assessment & deepening as required

Y6 Maths Plan

Financial Well-Being Projects

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Learning Steps

White Rose Bakery: Ratio and proportion

White Rose Bakery: Cost of ingredients

White Rose Bakery: Best Value

White Rose Bakery: Profit and loss

White Rose Bakery: Packaging

White Rose Bakery: Baking problems

White Rose Bakery: Cooking Problems

White Rose Tours: Choosing your destination

White Rose Tours: Climate

White Rose Tours: Locating your destination

White Rose Tours: Conversions

White Rose Tours: Choosing your flights

White Rose Tours: Airport

White Rose Tours: Choosing your accommodation

White Rose Tours: Creating your budget

White Rose Tours: Budget

White Rose Tours: Time problems

White Rose Futures: Exploring annual salaries

White Rose Futures: Annual salary

White Rose Futures: Exploring hourly rates

White Rose Futures: Hourly rates

White Rose Futures: Budgeting for your bills

White Rose Futures: Bills

White Rose Futures: Buying your dream home

White Rose Futures: Mortgages

White Rose Futures: Decorating your dream home

Y6 Maths Plan

Calculator Projects (Secondary Readiness)

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Learning Steps

Summer Sizzle (2024 Project)
 Re-Order (2024 Project)
 Three by Three (2024 Project)
 Fun with Fractions (2024 Project)
 A-Maze-Ment (2024 Project)
 Save the Bees
 An Odd Puzzle
 A game of Four Quarters
 Squaring Halves
 Seeing Double
 The Times Crossword or Cross Number
 Constant Function Challenges
 The Times Factor
 A-Maze Your Friends
PS Skills Lesson: visualising
PS Skills Lesson: generalising & conjecturing