# YEARLY OVERVIEW OF MATHS COVERAGE: 2021-2022

**This document outlines the coverage for each year group.**

**At Birklands we believe that coverage in this way will ensure the aims (as listed below) of Math in the National Curriculum are achieved. In addition, this approach will give wider opportunity for mastery and working at greater depth.**

The national curriculum for mathematics aims to ensure that all pupils:

become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

**reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

At Birklands we have agreed that the different aspects of problem solving will be inter-woven through all the blocks, through reasoning, word problems and open-ended challenges. During these activities pupils will have the opportunity to independently communicate/ show their mathematical thinking.

When planning all staff will use White Rose Maths Hub mastery materials, Focus Maths, NRich, NCTEM, Power Maths and I see reasoning materials to support teaching and learning.

# SIX KEY AREAS OF EARLY MATHEMATICS LEARNING

**Progression documents:**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Autumn 1** | Child Led Exploration | Child Led Exploration | Cardinality & Counting | Cardinality & Counting | Cardinality & Counting | Comparison | Comparison | Pattern |
| **Autumn 2** | Shape & Space | Cardinality & Counting | Composition | Composition | Measures | Measures | | |
| **Spring 1** | Cardinality & Counting | Cardinality & Counting | Comparison | Comparison | Pattern | Composition | | |
| **Spring 2** | Composition | Shape & Space | Shape & Space | Cardinality & Counting | Cardinality & Counting | | | |
| **Summer 1** | Measures | Cardinality & Counting | Composition | Composition | Measures | Comparison | Comparison | |
| **Summer 2** | Cardinality & Counting | Composition | Pattern | Comparison | Shape & Space | Shape & Space | | |

Cardinality & Counting: https://www.ncetm.org.uk/media/zpujdwv4/typical-progression-cardinality-and-counting.pdf

Comparison: https://www.ncetm.org.uk/media/wvqgcfqm/typical-progression-comparison.pdf

Composition: https://www.ncetm.org.uk/media/a5cetjqq/typical-progression-composition.pdf

Shape & Space: https://www.ncetm.org.uk/media/4uljtty3/typical-progression-shape-and-space.pdf

Pattern: https://www.ncetm.org.uk/media/5csbtyon/typical-progression-pattern.pdf

Measures: https://www.ncetm.org.uk/media/v51dhp3r/typical-progression-measures.pdf

# Reception Maths Overview

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Autumn** | Getting to know you <br> - Key times of the day <br> - Class routines <br> - Positional language | | | Just like me! <br> - Match and sort <br> - Compare amounts <br> - Compare mass, size and capacity <br> - Exploring pattern | | | It's me 1, 2, 3! <br> -Representing, comparing and compositokn of 1, 2 and 3 <br> - Circles and triangles <br> - Positional language | | | Light and dark <br> - Representing numbers to 5 <br> - One more, one less <br> - Shapes with four sides <br> - Time | | Alive in 5! <br> - Introducing zero <br> - Comparing numbers to five <br> - Composition of 4 and 5 <br> - Comparing mass and capacity | | Assessment week |
| **Spring** | Alive in 5! <br> - Introducing zero <br> - Comparing numbers to five <br> - Composition of 4 and 5 <br> Comparing mass and capacity | | | Growing 6, 7, 8! <br> - 6, 7 and 8 <br> - Making pairs <br> - Combining two groups <br> - Length and height <br> - Time | | | Building 9 and 10 <br> - 9 and 10 <br> - Comparing numbers to 10 <br> - Length and height <br> - Time | | | Consolidation | | | | |
| **Summer** | To 20 and beyond <br> - Building numbers beyond 10 <br> - Counting patterns beyond 10 <br> - Spatial reasoning <br> - Match, rotate, manipulate | | | First, then, now <br> - Spatial reasoning <br> - Compose and decompose | | | Find my pattern <br> - Special reasoning <br> - Visualise and build | | | On the move <br> - Deepening understanding <br> - Patterns and reasoning <br> - Spatial reasoning <br> - Mapping | | | Assessment week | |

# Year 1 Maths Overview

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Autumn | Place value | | | | Addition and subtraction (including money) | | | | | | Assessment week | Shape | | |
| Spring | Measures (Length, height, mass and volume) | | | | Multiplication and division | | | | Assessment week | | Fractions | | | |
| Summer | Fractions | | Time | | Statistics | | Position and direction | | Assessment week | | Reasoning and problem solving: Four operations | | | |

# Year 2 Maths Overview

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Autumn** | Place value | | | | Addition and subtraction (including money) | | | | Assessment week | Addition and subtraction (including money) | | Shape | | |
| **Spring** | Measures (Length, height, mass, temperature and volume) | | | | Multiplication and division | | | | Assessment week | Fractions | | | | |
| **Summer** | Fractions | Time | | Statistics | | KS1 SATS | | | Position and direction | | Reasoning and problem solving: Four operations | | | |

# Year 3 Maths Overview

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Autumn | Place value | | | | | Addition & subtraction, including money | | | | | Assessment week | Addition & subtraction, including money | Measures: mass & volume | |
| Spring | Multiplication & division | | | | | | | Geometry: Properties of shape, angles/lines & turns | Assessment week | Geometry: Properties of shape, angles/lines & turns | | | | |
| Summer | Fractions | | | | Time | | | Assessment week | Measures: length & perimeter | | | Statistics | | |

Year 4 Maths Overview

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Autumn | Number & Place value | | | | Measures: Money | | Addition & Subtraction | | | | Assessment week | Measures: Time, including roman numerals | | Statistics |
| Spring | Multiplication & division | | | | | | Geometry, including properties of shapes & position/direction | | Assessment week | | Geometry, including properties of shapes & position/direction | | | |
| Summer | Fractions & Decimals | | | | | | | Assessment week | Measures: Conversations | | Measures: Length, perimeter, area | | Statistics | |

# Year 5 Maths Overview

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Autumn** | Place value | | | | Addition & subtraction | | | | Geometry: Properties of shape | | Assessment week | Geometry: Position/ Direction | Statistics | |
| **Spring** | Multiplication & Division | | | | | Fractions | | | Assessment week | Fractions | | | | |
| **Summer** | Measures: Volume | Decimals & Percentages | | | | | | Assessment week | Measures: Conversion | | | Measures: Perimeter & Area | | +/-/ x/ ÷ |

# Year 6 Maths Overview

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Week 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Autumn | Place value | | Addition, subtraction, multiplication & division | | | Assessment week | Geometry: properties of shape & position/ direction | | | Measure: perimeter, area & volume | | Ratio | | Measure: conversion |
| Spring | Algebra | Assessment week | Algebra | Statistics | | Fractions, decimals, percentages and FDP equivalents | | Assessment week | Fractions, decimals, percentages and FDP equivalents | | | | | |
| Summer | Fractions, decimals, percentages and FDP equivalents | | Retrieval/ Recap | End of KS2 SATs | Post SATs project | | | | | | | | | |