

Autumn Scheme of Learning

Year 4/5

#MathsEveryoneCan

2019-20



How to use the mixed-age SOL

In this document, you will find suggestions of how you may structure a progression in learning for a mixed-age class.

Firstly, we have created a yearly overview.

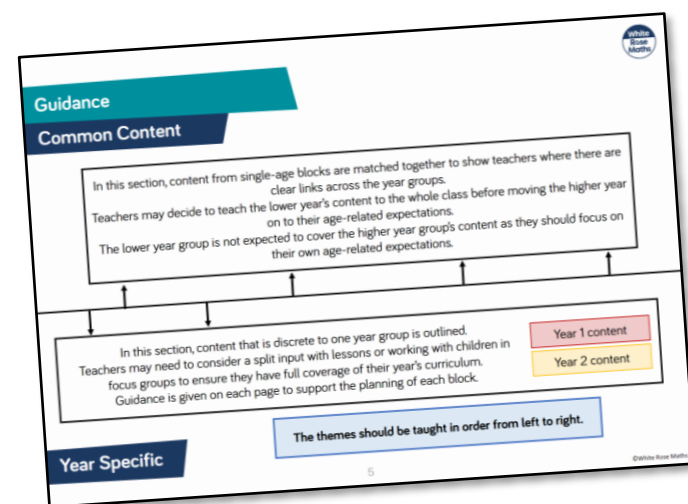
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value Y1 – Numbers to 20 Y2 – Numbers to 100			Number: Addition and Subtraction Year 1- Numbers within 20 (including recognising money) Year 2- Numbers within 100 (including money)						Number: Year 1: Place Value to 50 and Multiplication Year 2: Multiplication		
Spring	Number: Year 1: Division & consolidation Year 2: Division		Year 1: Place Value to 100		Measurement: Length and Height		Geometry: Year 1: Shape and Consolidation Year 2: Properties of Shape		Number: Year 1: Fractions and Consolidation Year 2: Fractions		Consolidation	
Summer	Geometry: Position and Direction	Measurement: Time		Problem solving and efficient methods		Measurement: Year 1: Weight and Volume Year 2: Mass, Capacity and Temperature		Consolidation and Investigations				

Each term has 12 weeks of learning. We are aware that some terms are longer and shorter than others, so teachers may adapt the overview to fit their term dates.

The overview shows how the content has been matched up over the year to support teachers in teaching similar concepts to both year groups. Where this is not possible, it is clearly indicated on the overview with 2 separate blocks.

For each block of learning, we have grouped the small steps into themes that have similar content. Within these themes, we list the corresponding small steps from one or both year groups. Teachers can then use the single-age schemes to access the guidance on each small step listed within each theme.

The themes are organised into common content (above the line) and year specific content (below the line). Moving from left to right, the arrows on the line suggest the order to teach the themes.



How to use the mixed-age SOL

Here is an example of one of the themes from the Year 1/2 mixed-age guidance.

Subtraction

Year 1 (Aut B2, Spr B1)

- How many left? (1)
- How many left? (2)
- Counting back
- Subtraction - not crossing 10
- Subtraction - crossing 10 (1)
- Subtraction - crossing 10 (2)

Year 2 (Aut B2, B3)

- Subtract 1-digit from 2-digits
- Subtract with 2-digits (1)
- Subtract with 2-digits (2)
- Find change - money

In order to create a more coherent journey for mixed-age classes, we have re-ordered some of the single-age steps and combined some blocks of learning e.g. Money is covered within Addition and Subtraction.

The bullet points are the names of the small steps from the single-age SOL. We have referenced where the steps are from at the top of each theme e.g. Aut B2 means Autumn term, Block 2. Teachers will need to access both of the single-age SOLs from our website together with this mixed-age guidance in order to plan their learning.

Points to consider

- Use the mixed-age schemes to see where similar skills from both year groups can be taught together. Learning can then be differentiated through the questions on the single-age small steps so both year groups are focusing on their year group content.
- When there is year group specific content, consider teaching in split inputs to classes. This will depend on support in class and may need to be done through focus groups .
- On each of the block overview pages, we have described the key learning in each block and have given suggestions as to how the themes could be approached for each year group.
- We are fully aware that every class is different and the logistics of mixed-age classes can be tricky. We hope that our mixed-age SOL can help teachers to start to draw learning together.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value				Number: Addition and Subtraction			Number: Multiplication and Division			Measurement: Length, Perimeter and Area	
Spring	Number: Multiplication and Division			Number: Fractions					Number: Decimals (including Y5 Percentages)			
Summer	Number: Decimals (including Y4 Money)		Measurement: Time	Statistics		Geometry: Properties of Shape		Geometry: Position and Direction	Y4: Consolidation		Y5: Converting Units & Volume	Consolidation

Guidance

Common Content

In this section, content from single-age blocks are matched together to show teachers where there are clear links across the year groups. Teachers may decide to teach the lower year's content to the whole class before moving the higher year on to their age-related expectations. The lower year group is not expected to cover the higher year group's content as they should focus on their own age-related expectations.

In this section, content that is discrete to one year group is outlined. Teachers may need to consider a split input with lessons or working with children in focus groups to ensure they have full coverage of their year's curriculum. Guidance is given on each page to support the planning of each block.

Year 4 content

Year 5 content

The themes should be taught in order from left to right.

Year Specific

Place Value

Common Content

Roman Numerals

- Year 4 (Aut B1)
 - Roman Numerals to 100
- Year 5 (Aut B1)
 - Roman Numerals to 1,000

Representing numbers

- Year 4 (Aut B1)
 - 1000s, 100s, 10s and 1s
 - Partitioning
 - Number line to 10,000
- Year 5 (Aut B1)
 - Numbers to 10,000
 - Number to 100,000
 - Numbers to a million

Counting

- Year 4 (Aut B1)
 - Count in 1,000s
 - 1,000 more or less
 - Count in 25s
- Year 5 (Aut B1)
 - Counting in 10s, 100s, 1,000s, 10,000s and 100,000s

Compare and order

- Year 4 (Aut B1)
 - Compare numbers
 - Order numbers
- Year 5 (Aut B1)
 - Compare and order numbers to 100,000
 - Compare and order numbers to one million

Rounding

- Year 4 (Aut B1)
 - Round to the nearest 10
 - Round to the nearest 100
 - Round to the nearest 1,000
- Year 5 (Aut B1)
 - Round to the nearest 10, 100 and 1,000
 - Round numbers within 100,000
 - Round numbers to one million

Negative Numbers

- Year 4 (Aut B1)
 - Negative numbers
- Year 5 (Aut B1)
 - Negative numbers

Year 4 and 5 have a great deal of common content in this block.

Year 4 work with numbers up to 10,000 while Year 5 work with numbers to one million. Year 5 may recap Year 4 content before moving onto similar ideas with larger numbers e.g. comparing and ordering and rounding.

Year Specific

Addition and Subtraction

Common Content

Addition

Year 4 (Aut B2)

- Add two 4-digit numbers - no exchange
- Add two 4-digit numbers - one exchange
- Add two 4-digit numbers - more than one exchange

Year 5 (Aut B2)

- Add whole numbers with more than 4-digits (column method)

Subtraction

Year 4 (Aut B2)

- Subtract two 4-digit numbers - no exchange
- Subtract two 4-digit numbers - one exchange
- Subtract two 4-digit numbers - more than one exchange
- Efficient subtraction

Year 5 (Aut B2)

- Subtract whole numbers with more than 4 digits (column method)

Estimate and check

Year 4 (Aut B2)

- Estimate answers
- Checking strategies

Year 5 (Aut B2)

- Round to estimate and approximate
- Inverse operations (addition and subtraction)

Add and subtract multiples of 10

Year 4 (Aut B2)

- Add and subtract 1s, 10s, 100s and 1'000s

In this block, the Year 4 steps for both addition and subtraction are broken down into steps that focus on the number of exchanges the children are dealing with. Whilst Year 5 only have one small step for both addition and subtraction, teachers may decide to recap previous learning or break down their learning in a similar way to Year 4.

Although Year 4 focus on 4-digit numbers and Year 5 focus on 5-digit numbers, the skills that children use are similar across both year groups allowing teachers to teach the class as a whole group.

Multi-step problems

Year 5 (Aut B2)

- Multi-step addition and subtraction problems

Year Specific

Multiplication and Division

Common Content

Times-tables and multiples
 Year 4 (Aut B4, Spr B1)

- Multiply and divide by 6
- 6 times table and division facts
- Multiply and divide by 9
- 9 times table and division facts
- Multiply and divide by 7
- 7 times table and division facts
- 11 and 12 times table

Year 5 (Aut B4)

- Multiples

Factors
 Year 4 (Spr B1)

- Factor pairs

Year 5 (Aut B4)

- Factors
- Common factors

× and ÷ by multiples of 10
 Year 4 (Aut B4)

- Multiply by 10
- Multiply by 100
- Divide by 10
- Divide by 100

Year 5 (Aut B4)

- Multiply by 10, 100 and 1,000
- Divide by 10, 100 and 1,000
- Multiples of 10, 100 and 1,000

× and ÷ by 1 and 0
 Year 4 (Aut B4)

- Multiply by 1 and 0
- Divide by 1

Multiply 3 numbers
 Year 4 (Spr B1)

- Multiply 3 numbers

Primes, Squares and Cubes
 Year 5 (Aut B4)

- Prime numbers
- Square numbers
- Cube numbers

In this block, Year 4 children focus on times-tables and Year 5 children link this learning to the concept of multiples. It is important that children focus on all times-tables up to the 12 times-table to improve fluency. Practicing on a daily basis will support children with retention.

Year 5 move onto learning about prime, square and cube numbers whilst Year 4 may focus on multiplying 3 numbers and the associative law.

Year Specific

Length, Perimeter and Area

Common Content

Perimeter

Year 4 (Aut B3)

- Perimeter on a grid
- Perimeter of a rectangle
- Perimeter of rectilinear shapes

Year 5 (Aut B5)

- Measure perimeter
- Calculate perimeter

Area

Year 4 (Spr B2)

- What is area?
- Counting squares
- Making shapes
- Comparing area

Year 5 (Aut B5)

- Area of rectangles
- Area of compound shapes
- Area of irregular shapes

Kilometres

Year 4 (Aut B3)

- Kilometres

Year 4 start the block looking at kilometres, this is a good opportunity for Year 5 to recap their previous year's learning ready for the rest of the block.

Both year groups explore measuring and calculating the perimeter of rectilinear shapes in both centimetres and metres.

When looking at area, Year 4 focus on counting squares to calculate the area of rectilinear shapes whilst Year 5 move onto using a formula to calculate the area of rectangles. They also calculate the area of rectilinear shapes and estimate the area of irregular shapes.

Year Specific