Spring Scheme of Learning

Year 5/6

#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.

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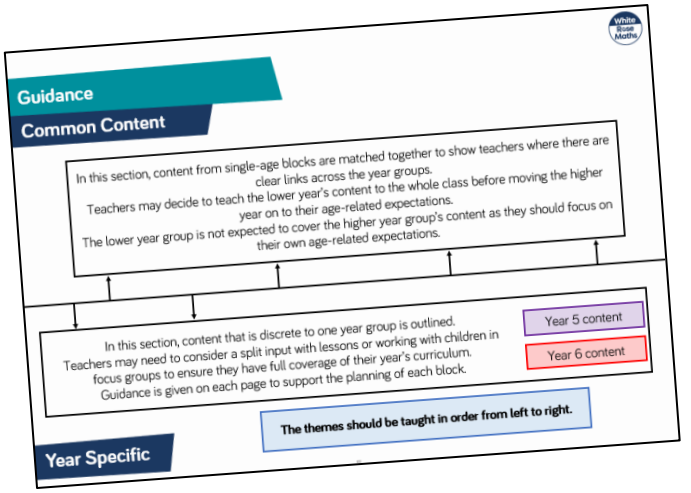
Each term has 12 weeks of learning. We are aware that some terms are longer and shorter than others, so teachers may adapt the overview to fit their term dates.

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: Four Operations					Number: Fractions				
Spring	Y5: Number: Fractions		Number: Decimals and Percentages			Y5: Number: Decimals		Measurement: Converting Units	Measurement: Perimeter, Area and Volume		Statistics	
	Y6: Number: Ratio					Y6: Number: Algebra						
Summer	Geometry: Properties of Shape		Geometry: Position and Direction	Y5: Four Operations consolidation			Y5: FDP consolidation		Y5: Measure consolidation		Consolidation	
				Y6: SATS		Investigations						

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 5 content

Year 6 content

Year Specific

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

Fractions and Ratio

Common Content

Year 5 and 6 are studying different topics in this unit. Skills common to both topics (multiplication, division, simplifying) could be covered together in starter activities.

This is a chance for Year 5 to consolidate their learning in fractions. Teachers can decide where they feel they need to fill the gaps in learning from this unit as there was a great deal of content covered in the Autumn term.

Year 6 make the link from fractions to Ratio as they are introduced to this new concept.

Year Specific

Fractions

Using knowledge of the previous term's learning on fractions, consider which aspects children may need to spend longer on to deepen understanding.

Ratio

Year 6 (Spr B6)

- Using ratio language
- Ratio and fractions
- Introducing the ratio symbol
- Calculating ratio
- Using scale factors
- Calculating scale factors
- Ratio and proportion problems

Decimals and Percentages

Common Content

Decimals up to 3 d.p.

Year 5 (Spr B3)
- Decimals up to 2 d.p.
- Decimals as fractions (1)
- Decimals as fractions (2)
- Understand thousandths
- Thousandths as decimals

Year 6 (Spr B1)
- Three decimal places
- Decimals as fractions

Multiply & Divide by Powers of 10

Year 5 (Sum B1)
- Multiplying decimals by 10, 100 and 1,000
- Dividing decimals by 10, 100 and 1,000

Year 6 (Spr B1)
- Multiply by 10, 100 and 1,000
- Divide by 10, 100 and 1,000

Percentages

Year 5 (Spr B3)
- Understand percentages
- Percentages as fractions and decimals
- Equivalent F.D.P

Year 6 (Spr B2)
- Fractions to percentages
- Equivalent F.D.P
- Order F.D.P

Round, Order & Compare

Year 5 (Spr B3)
- Rounding decimals
- Order and compare decimals

Multiply & Divide

Year 6 (Spr B1)
- Multiply decimals by integers
- Divide decimals by integers
- Division to solve problems

Fractions to Decimals

Year 6 (Spr B1)
- Fractions to decimals (1)
- Fractions to decimals (2)

Percentage of an Amount

Year 6 (Spr B2)
- Percentage of an amount (1)
- Percentage of an amount (2)
- Percentages- missing values

Year Specific

Both year groups start by looking at decimals with up to 3 decimal places. Teachers may decide to recap rounding, ordering and comparing with both year groups before moving on to multiplying and dividing. Whilst Year 6 deepen their understanding of decimals and percentages, ensure Year 5 have plenty of opportunity to link their learning back to fractions.

Decimals and Algebra

Common Content

Year 5 and 6 are studying different topics in this unit.

Teachers may decide to recap adding and subtracting decimals with Year 6. This can then be applied throughout other topics including in their algebra block.

Year Specific

Decimals

Year 5 (Sum B1)

- Adding decimals within 1
- Subtracting decimals within 1
- Complements to 1
- Adding decimals- crossing the whole
- Adding decimals (same d.p.)
- Subtracting decimals (same d.p.)
- Adding decimals (different d.p.)
- Subtracting decimals (different d.p.)
- Adding and subtracting wholes and decimals
- Decimal sequences

Algebra

Year 6 (Spr B3)

- Find a rule- one step
- Find a rule- two steps
- Forming expressions
- Substitution
- Formulae
- Forming equations
- Simple one-step equations
- Solve two-step equations
- Find pairs of values
- Enumerate possibilities

Converting Units

Common Content

Metric Measures

Year 5 (Sum B4)
- Kilograms and Kilometres
- Milligrams and millilitres
- Metric Units

Year 6 (Spr B4)
- Metric measures
- Convert metric measures
- Calculate with metric measures

Imperial Measures

Year 5 (Sum B4)
- Imperial units

Year 6 (Spr B4)
- Imperial measures

In this block, both year groups look at metric and imperial measures.

Year 6 extend their learning by looking at converting between miles and kilometres.

Teachers may decide to recap converting units of time with both year groups. Time is covered again later in the term when reading timetables in the Statistics block.

Miles & Kilometres

Year 6 (Spr B4)
- Miles and kilometres

Time

Year 5 (Sum B4)
- Converting units of time

Year Specific

Perimeter, Area and Volume

Common Content

Perimeter

Year 5 (Aut B5)
- Measure perimeter
- Calculate perimeter

Year 6 (Spr B5)
- Area and perimeter (focus on perimeter questions)

Area

Year 5 (Aut B5)
- Area of rectangles
- Area of compound shapes
- Area of irregular shapes

Year 6 (Spr B5)
- Shapes- same area
- Area and perimeter (focus on area questions)

Volume

Year 5 (Sum B5)
- What is volume?
- Compare volume
- Estimate volume

Year 6 (Spr B5)
- Volume- counting cubes
- Volume of a cuboid

Triangles

Year 6 (Spr B5)
- Area of a triangle (1)
- Area of a triangle (2)
- Area of a triangle (3)

Parallelograms

Year 6 (Spr B5)
- Area of a parallelogram

Capacity

Year 5 (Sum B5)
- Estimate Capacity

Year Specific

Both year groups find the perimeter and area of rectilinear shapes. Year 6 then move on to finding the area of triangles and parallelograms, applying their understanding of the link with rectangles. Both year groups then calculate the volume of cuboids.

Statistics

Common Content

Line Graphs

Year 5 (Aut B3)
- Read and interpret line graphs
- Draw line graphs
- Use line graphs to solve problems

Year 6 (Sum B3)
- Read and interpret line graphs
- Draw line graphs
- Use line graphs to solve problems

Both year groups start by reading, drawing and interpreting line graphs.

Teachers may decide to look at tables with both year groups, this is a good opportunity to recap time from earlier in the term.

Year 6 then move on to looking at pie charts and finding the mean. At this point, teachers may decide to continue work on line graphs with Year 5 to secure their understanding.

Tables

Year 5 (Aut B3)
- Read and interpret tables
- Two-way tables
- Timetables

Circles

Year 6 (Sum B3)
- Circles

Pie Charts

Year 6 (Sum B3)
- Read and interpret pie charts
- Pie charts with percentages
- Draw pie charts

Averages

Year 6 (Sum B3)
- The mean

Year Specific