WRM – Year 6 – Scheme of Learning 2.0s

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	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, Subtraction, Multiplication and Division					Number: Fractions				Geometry: Position and Direction
Spring	Number: Decimals		Number: Percentages		Number: Algebra		Measurement: Converting Units	Measurement: Perimeter, Area and Volume		Number: Ratio		Statistics
Summer	Geometry: Properties of Shape			Consolidation or SATs preparation		Consolidation, investigations and preparations for KS3						

Overview

Small Steps

Notes for 2020/21

Numbers to 10,000 ®

Numbers to 100,000 ®

Numbers to a million ®

Numbers to ten million

Compare and order any number

Round numbers to 10, 100 and 1,000 ®

Round any number

Negative numbers

Many children may struggle to work immediately with numbers to 10,000,000 so we are suggesting that this might build up from smaller numbers.

It's vital that children have that understanding/recap of place value to ensure they are going to be successful with later number work.

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Overview

Small Steps

Notes for 2020/21

Add whole numbers with more than 4 digits .... (R)

Subtract whole numbers with more than 4 digits .... (R)

Inverse operations (addition and subtraction) .... (R)

Multi-step addition and subtraction problems .... (R)

Add and subtract integers

Multiply 4-digits by 1-digit .... (R)

Multiply 2-digits (area model) .... (R)

Multiply 2-digits by 2-digits .... (R)

Multiply 3-digits by 2-digits .... (R)

Multiply up to a 4-digit number by 2-digit number

Divide 4-digits by 1-digit .... (R)

Divide with remainders .... (R)

Short division

Division using factors

Year 6 assumes a lot of prior understanding of four operations. A deep understanding of these concepts are essential to help prepare children for secondary education and beyond.

Some children may not have had much practice in the last few months so we've included extended blocks and plenty of recap.

Overview

Small Steps

- Long division (1)
- Long division (2)
- Long division (3)
- Long division (4)
- Factors   R
- Common factors
- Common multiples
- Primes to 100
- Squares and cubes
- Order of operations
- Mental calculations and estimation
- Reason from known facts

Notes for 2020/21

Year 6 assumes a lot of prior understanding of four operations. A deep understanding of these concepts are essential to help prepare children for secondary education and beyond.

Some children may not have had much practice in the last few months so we've included extended blocks and plenty of recap.

Overview

Small Steps

Notes for 2020/21

Equivalent fractions ®

Simplify fractions

Improper fractions to mixed numbers ®

Mixed numbers to improper fractions ®

Fractions on a number line

Compare and order (denominator)

Compare and order (numerator)

Add and subtract fractions (1)

Add and subtract fractions (2)

Add mixed numbers ®

Add fractions

Subtract mixed numbers ®

Subtract fractions

Many children may have missed the block of learning from Y5 on fractions therefore we are suggesting recapping this.

Spend time ensuring children can add and subtract proper fractions, before moving onto mixed numbers.

These skills require understanding of equivalent fractions.

Overview

Small Steps

- Mixed addition and subtraction
- Multiply fractions by integers
- Multiply fractions by fractions
- Divide fractions by integers (1)
- Divide fractions by integers (2)
- Four rules with fractions
- Fraction of an amount
- Fraction of an amount – find the whole

Notes for 2020/21

Many children may have missed the block of learning from Y5 on fractions therefore we are suggesting recapping this.

Spend time ensuring children can add and subtract proper fractions, before moving onto mixed numbers.

These skills require understanding of equivalent fractions.

Overview

Small Steps

Notes for 2020/21

- The first quadrant
- Four quadrants
- Translations
- Reflections

Position and direction was probably missed in the summer of Y5 so treat this topic as brand new learning.

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Overview

Small Steps

Notes for 2020/21

Decimals up to 2 decimal places (R)

Understand thousandths (R)

Three decimal places

Multiply by 10, 100 and 1,000

Divide by 10, 100 and 1,000

Multiply decimals by integers

Divide decimals by integers

Division to solve problems

Decimals as fractions

Fractions to decimals (1)

Fractions to decimals (2)

The recap steps are at the beginning of this block to ensure children have a good understanding of numbers up to three decimal places before moving on to multiplication and division.

This should build on place value work in the autumn term and make use of place value grids and counters to build on previous learning.

Overview

Small Steps

Understand percentages   (R)

Fractions to percentages

Equivalent FDP

Order FDP

Percentage of an amount (1)

Percentage of an amount (2)

Percentages – missing values

Notes for 2020/21

Children should have been introduced to percentages briefly in Y5 but this work may have been missed. Time spent exploring 100 as a denominator, making the link to decimals and hundredths is important.
Bar models and hundred squares should be used to support understanding.

Overview

Small Steps

Notes for 2020/21

Find a rule – one step

Find a rule – two step

Forming expressions

Substitution

Formulae

Forming equations

Solve simple one-step equations

Solve two-step equations

Find pairs of values

Enumerate possibilities

All of this block is new learning for Year 6 so there are no recap steps.

Children first look at forming expressions before moving on to solving more complex equations.

This should be introduced using concrete and pictorial methods alongside the abstract notation.

Overview

Small Steps

Notes for 2020/21

- Metric measures
- Convert metric measures
- Calculate with metric measures
- Miles and kilometres
- Imperial measures

All of this block is new learning for Year 6 so there are no recap steps.

Children explore measures in context and build on previous learning about place value.

Overview

Small Steps

Notes for 2020/21

- Shapes – same area
- Area and perimeter
- Area of a triangle (1)
- Area of a triangle (2)
- Area of a triangle (3)
- Area of parallelogram
- What is volume? (R)
- Volume – counting cubes
- Volume of a cuboid

Much of this block is new learning where children build on their knowledge of area and perimeter to explore the area of a triangles and parallelograms.

The recap step on volume covers the difference between volume and capacity and gives time to explore the conservation of volume using centimetre cubes.

Overview

Small Steps

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

Notes for 2020/21

All of this block is new learning for Year 6 so there are no recap steps.

Bar models are a key representation in this topic. Children may need some extra input here if they have not used bar models throughout KS2.

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Overview

Small Steps

Notes for 2020/21

- Read and interpret line graphs
- Draw line graphs
- Use line graphs to solve problems
- Circles
- Read and interpret pie charts
- Pie charts with percentages
- Draw pie charts
- The mean

Time is limited at this stage in Year 6. Line graphs have been covered extensively in Year 4 and 5 so you may choose to skip these steps or merge them into one lesson. This will leave more time for pie charts and the mean.

Overview

Small Steps

- Read and interpret line graphs
- Draw line graphs
- Use line graphs to solve problems
- Circles
- Read and interpret pie charts
- Pie charts with percentages
- Draw pie charts
- The mean

Notes for 2020/21

Originally this had been planned in for the end of the Spring term. Due to SATs being cancelled and therefore time gained for year 6 teachers, this can now be covered in more detail at the start of the summer term.

There will be more opportunity to draw pie charts in the next block when children recap measuring and drawing angles.

Overview

Small Steps

Notes for 2020/21

Measure with a protractor

Draw lines and angles accurately ® R

Introduce angles

Angles on a straight line ® R

Angles around a point ® R

Calculate angles

Vertically opposite angles

Angles in a triangle

Angles in a triangle – special cases

Angles in a triangle – missing angles

Angles in special quadrilaterals

Angles in regular polygons

Draw shapes accurately

Draw nets of 3-D shapes

In this block children will build on learning from year 5 to look at properties of shape in detail, specifically angles.

There is time available after this block so it can span a longer period of time if needed.

Consider recapping the drawing of pie charts from the previous block when working with protractors.

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