

Wk Progression Focus

Weekly Summary

Strands

Objectives

<p>6 Multiplication and division; fractions</p> <p>Weeks 6 and 7 focus on multiplication and division, and extend children's understanding of fractions.</p>	<p>Recognise which numbers are divisible by 2, 3, 4, 5, 6, 9 and 25 and identify multiples; find factors; recording results systematically and finding all factors of a given number; compare and place fractions on a line; find equivalent fractions and reduce them to their simplest form</p>	<p>MMD Mental multiplication and division; FRP Fractions, ratio and proportion</p>	<ul style="list-style-type: none"> • MMD.62 Apply divisibility tests for 2, 3, 4, 5, 6, 9, 10 and 25 • MMD.63 Recognise common factors and relate these to common multiples • MMD.61 Identify factors and multiples, and begin to find common factors • FRP.55 Compare and order unit fractions and related fractions, using fraction walls and strips • FRP.63 Place mixed fractions on a number line to compare fractions with the same denominator • FRP.52 Identify the equivalent fraction for any given fraction • FRP.58 Use equivalent fractions to reduce any given fraction to its simplest form
<p>7 Multiplication and division; fractions</p> <p>Weeks 6 and 7 focus on multiplication and division, and extend children's understanding of fractions.</p>	<p>Use mental strategies to multiply and divide multiples of 10 and 100; use a written method to multiply 3-digit and 4-digit numbers by 1-digit numbers and estimate answers, divide 3-digit numbers by 1-digit numbers using a written method and express remainders as a fraction and solve division word problems</p>	<p>MMD Mental multiplication and division; WMD Written multiplication and division; PRA Problem solving, reasoning and algebra</p>	<ul style="list-style-type: none"> • MMD.58 Understand multiplication and division as inverses of each other and use this to find relationships • MMD.60 Multiply and divide multiples of 10, 100 and 1000 by 1-digit numbers • WMD.49 Multiply 2- and 3-digit by 1-digit numbers using the ladder method • WMD.60 Use the ladder

8

Angles

Week 8 focuses on the concept of angles as degrees of 'turn', and on comparison, identification and measurement of angles.

Use a protractor to measure and draw angles in degrees; recognise, use terms and classify angles as obtuse, acute and reflex; recognise that angles on a line total 180° and angles round a point total 360° ; identify and name parts of a circle including diameter, radius and circumference; draw circles to a given radius using a pair of compasses; relate angles to turns, and recognise that a 360° angle is a complete turn; use angle facts to solve problems related to turn

GPS Geometry: properties of shapes; **PRA** Problem solving, reasoning and algebra

method to multiply 4-digit by 1-digit numbers

- **WMD.52** Divide 3-digit by 1-digit numbers using a written method drawn from mental strategies with integer remainders and answers < 50
- **WMD.58** Divide 3-digit by 1-digit numbers using a written method drawn from mental strategies with answers > 50 , and give answers as appropriate
- **WMD.57** Divide numbers just beyond the tables, with remainders given as fractions where the fraction is obvious
- **PRA.65** Use mathematical reasoning to explain findings, patterns and relationships
- **PRA.68** Solve problems involving addition, subtraction, multiplication and division and a combination of these
- **GPS.54** Estimate and measure angles, recognising that they are measured in degrees
- **GPS.55** Use a protractor to measure angles, including of a given size
- **GPS.56** Compare and classify acute and obtuse angles; order angles up to 180°
- **GPS.65** Draw a specified given angle and measure it in degrees
- **GPS.68** Compare angles

9 **Whole numbers, decimals and fractions**

Week 9 focuses on comparing and ordering whole numbers and decimals, and on equivalence in relation to proper fractions and decimals.

Place numbers to 100 000 and decimals up to two places on a line, round numbers to the nearest 10, 100 and 1000 and decimals up to two places to the nearest whole number; compare and order numbers with up to two decimal places; reduce fractions to their simplest form; know and recognise equivalent fractions and decimals to half, tenths and fifths

NPV Number and place value; **DPE** Decimals, percentages and their equivalence to fractions; **FRP** Fractions, ratio and proportion

up to 360° , including reflex angles

- **GPS.61** Recognise and identify angles that are multiples of 90°
- **GPS.62** Recognise that angles on a straight line total 180° and angles round a point total 360°
- **GPS.72** Know and use the terms radius and diameter; identify the radius and diameter of different circles
- **GPS.73** Draw circles and arcs, including using compasses
- **GPS.74** Draw circles and arcs with a given radius
- **GPS.70** Find missing angles using angles round a point = 360° or angles on a straight line = 180°
- **PRA.65** Use mathematical reasoning to explain findings, patterns and relationships
- **NPV.58** Understand place value in 5-digit numbers by creating 5-digit numbers, placing them on a number line and solving place value additions and subtractions
- **NPV.61** Round 5-digit numbers up or down to the nearest 10, 100, 1000 or 10000
- **DPE.59** Locate and write 2- place decimals on a number line using length as a context
- **DPE.64** Round 1- and 2- place decimals up and

10 Revision

Week 10 provides in-depth revision of the four operations, including calculation strategies and the inverse relation between addition and subtraction, multiplication and division.

Revise mental and written addition and subtraction strategies, choose to use a mental strategy or written method to solve addition and subtraction, choose to solve word problems involving multiplication and division questions including 2- and 3-digit by 1-digit and 2-digit by 2-digit using a mental or a written method, use mathematical reasoning to work out a function, identify the operation being used on numbers, understand that addition and subtraction are inverse operations multiplication and division, use function machines

MAS Mental addition and subtraction; **WAS** Written addition and subtraction; **MMD** Mental multiplication and division; **WMD** Written multiplication and division; **PRA** Problem solving, reasoning and algebra

down to the nearest whole number

- **DPE.63** Order and compare 1- and 2-place decimals and find a number between
- **FRP.58** Use equivalent fractions to reduce any given fraction to its simplest form
- **FRP.60** Recognise the equivalence of simple fractions and decimals
- **MAS.56** Use mental strategies to add 2-digit, 3-digit and 4-digit numbers
- **MAS.59** Add and subtract larger numbers using place value and number facts
- **MAS.55** Subtract 3-digit from 4-digit numbers by counting up
- **MAS.61** Use counting up as an efficient mental strategy with minimal jottings
- **MAS.58** Understand addition and subtraction as inverses of each other and use this to find relationships
- **WAS.56** Use column addition to add several numbers with up to 4-digits with answers > 10000
- **WAS.58** Use expanded or compact decomposition to subtract numbers with up to 4-digits (harder)
- **MMD.43** Multiply mentally 2-digit by 1-digit numbers using partitioning
- **MMD.57** Use mental

strategies to solve divisions including dividing by 1

- **MMD.60** Multiply and divide multiples of 10, 100 and 1000 by 1-digit numbers
- **MMD.37** Understand division as the inverse of multiplication
- **WMD.49** Multiply 2- and 3-digit by 1-digit numbers using the ladder method
- **WMD.56** Use the grid method to multiply 2-digit by 2-digit numbers and solve problems in which n objects are connected to m objects (distributive law)
- **WMD.58** Divide 3-digit by 1-digit numbers using a written method drawn from mental strategies with answers > 50 , and give answers as appropriate
- **PRA.68** Solve problems involving addition, subtraction, multiplication and division and a combination of these
- **PRA.65** Use mathematical reasoning to explain findings, patterns and relationships