

Wk Progression Focus

- 26 **Multiplication and division and fractions**
Weeks 26 and 27 focus on factors and multiples; on securing the concept of equivalent fractions to enable calculations with fractions; and on further developing written methods of multiplication and division.

Weekly Summary

Identify factors and multiples, find factor pairs; revise equivalent fractions; compare and order fractions with related denominators; add fractions with same or related denominators, then convert answer into a mixed number; subtract fractions with same and related denominators, revise multiplying fractions by whole numbers

Strands

MMD Mental multiplication and division; **PRA** Problem solving, reasoning and algebra; **FRP** Fractions, ratio and proportion

Objectives

- **MMD.61** Identify factors and multiples, and begin to find common factors
- **PRA.71** Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- **PRA.72** Pursue a line of enquiry
- **FRP.60** Recognise the equivalence of simple fractions and decimals
- **FRP.68** Use equivalence to compare and order fractions that don't have the same denominator but are related
- **FRP.69** Use equivalence to add and subtract related fractions
- **FRP.65** Multiply fractions by whole numbers
- **FRP.66** Use the grid method to multiply mixed numbers by integers
- **WMD.62** Use short division to divide 3-digit by 1-digit numbers with integer remainders
- **WMD.67** Use short division to divide 4-digit by 1-digit numbers (harder numbers) with integer remainders
- **WMD.69** Understand

- 27 **Multiplication and division and fractions**
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Use short division to divide 3-digit numbers by 1-digit numbers and 4-digit numbers by 1-digit numbers, including those which leave a remainder; express a remainder as a fraction; use long multiplication to multiply 3-digit and 4-digit numbers by teens numbers

WMD Written multiplication and division

28 **Area and perimeter; volume**

Week 28 focuses on calculating areas, perimeters and volumes, and understanding the difference between measurement in one, two and three dimensions.

Find the area and perimeter of squares and rectangles by calculation and pursue a line of enquiry; estimate and find the area of irregular shapes; calculate the perimeter and area of composite shapes; use the relations of area and perimeter to find unknown lengths; begin to understand the concept of volume; find the volume of a cube or cuboid by counting cubes; understand volume as measurement in three dimensions; relate volume to capacity; recognise and estimate volumes

PRA Problem solving, reasoning and algebra; **MEA** Measurement

29 **Fractions, decimals and percentages**

Week 29 focuses on understanding percentages and how they relate to fractions and decimals, and solving

Understand what percentages are, relating them to hundredths; know key equivalences between percentages and fractions, finding percentages of amounts of money; find equivalent fractions, decimals and percentages; solve problems involving fraction and percentage equivalents;

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

that division can result in integer remainders, mixed numbers (e.g. $34\frac{1}{4}$), or answers accurate to one or two decimal places

- **WMD.65** Begin to use long multiplication to multiply 2-digit and 3-digit numbers by teens numbers
- **WMD.66** Begin to use long multiplication to multiply 4-digit numbers by teens numbers
- **PRA.68** Solve problems involving addition, subtraction, multiplication and division and a combination of these
- **PRA.72** Pursue a line of enquiry
- **MEA.66** Calculate and compare areas of squares and rectangles using standard units
- **MEA.67** Measure and calculate the perimeter of composite rectilinear shapes in m/cm
- **MEA.68** Estimate the area of irregular shapes using standard units
- **MEA.70** Recognise and estimate volume and capacity using ccs and ml
- **DPE.67** Recognise the % symbol; understand what percentage means (fraction with a denominator of 100)



problems by finding percentages of amounts.

write dates using Roman numerals

- **DPE.71** Relate percentages to fractions and find 10%, 20% and other easy percentages of whole numbers or amounts of money (whole pounds)
- **DPE.73** Understand equivalence between fractions, percentages and decimals e.g. $13\% = 0.13 = 13/100$
- **FRP.60** Recognise the equivalence of simple fractions and decimals
- **NPV.69** Read Roman numerals to 1000 (M) and recognise dates

30 Revision

Week 30 focuses on revision of: line graphs; calculating time intervals; finding cubes of numbers; using factors to multiply; and solving scaling problems involving fractions and measures.

Find cubes of numbers to 10; draw and interpret line graphs showing change in temperature over time; begin to understand rate; use timetables using the 24-hour clock and use counting up to find time intervals of several hours and minutes; solve problems involving scaling by simple fractions; use factors to multiply; solve scaling problems involving measure

NPV Number and place value; **STA** Statistics; **MEA** Measurement; **WMD** Written multiplication and division; **PRA** Problem solving, reasoning and algebra; **MMD** Mental multiplication and division

- **NPV.70** Find square and cube numbers, and use the notation for squared and cubed
- **STA.61** Interpret and present continuous data using line graphs
- **STA.71** Solve comparison, sum and difference problems using information presented in line graphs
- **STA.60** Use a line graph to compare changes in temperature over time
- **STA.62** Solve comparison and difference problems using information presented in line graphs
- **STA.65** Complete, read and interpret information in timetables
- **MEA.52** Compare durations of events to

calculate the time taken by particular events or tasks

- **WMD.68** Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates
- **PRA.73** Use all four operations to solve problems involving measure using decimal notation, including scaling
- **PRA.71** Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- **MMD.67** Use common factors and multiples to develop multiplication strategies with numbers ≤ 1000