

## Wk Progression Focus

- 16 **Place value**  
Week 16 focuses on ensuring a robust understanding of that place value in decimal numbers.

## Weekly Summary

Recognise, use, compare and order decimal numbers; understand place value in decimal numbers; recognise that decimals are tenths; round decimals numbers to the nearest whole number; divide 2-digit numbers by 10 to get decimal numbers; multiply decimal numbers by 10 to get 2-digit numbers; divide 3-digit multiples of ten by 100 to get decimal numbers; multiply decimal numbers by 100 to get 3-digit multiples of ten; add four digit numbers using written method with answers greater than 10 000

## Strands

**DPE** Decimals, percentages and their equivalence to fractions;  
**NPV** Number and place value;  
**PRA** Problem solving, reasoning and algebra; **WAS** Written addition and subtraction

## Objectives

- **DPE.48** Match 1-place decimals to  $1/10$ s
- **DPE.50** Locate and write 1-place decimals on a number line and match to  $1/10$ s
- **DPE.51** Count in decimal steps of 0.1 (tenths)
- **DPE.52** Round 1-place decimals to the nearest integer, by placing on a number line
- **DPE.64** Round 1- and 2-place decimals up and down to the nearest whole number
- **DPE.53** Divide integers by 10, 100 and 1000 to get 1-place decimal answers
- **NPV.47** Divide 2-digit numbers by 10 to get 1-place decimal answers
- **NPV.53** Divide 3-digit multiples of 10 by 100 to get 1-place decimal answers
- **NPV.62** Understand the effect of multiplying or dividing a given number by 10, 100 or 1000; answers  $< 100000$  and with not more than 2 decimal places
- **PRA.53** Use, explain and justify mathematical reasoning
- **PRA.59** Solve addition



17 **Addition and subtraction**

Week 17 focuses on using understanding of place value to choose appropriate strategies when calculating with decimals or money; written methods then include larger whole numbers.

Add amounts of money using written methods and mentally using place value and number facts; choose to add using the appropriate strategy: mental or written; subtract, choosing appropriate mental strategies: counting up or taking away (using counting back, place value or number facts); solve subtractions using a suitable written method (column subtraction)

**MAS** Mental addition and subtraction; **WAS** Written addition and subtraction; **MEA** Measurement; **PRA** Problem solving, reasoning and algebra

and subtraction two-step problems in contexts

- **PRA.60** Solve number and practical problems with increasingly large positive numbers
- **WAS.54** Use column addition to add two 4-digit numbers with answers > 10000
- **MAS.52** Add mentally several amounts of money
- **MAS.65** Use mental strategies to add amounts of money with 2 decimal places
- **MAS.49** Count up to subtract any 3-digit from 3-digit number
- **MAS.53** Use place value to subtract amounts of money and calculate price decreases
- **WAS.45** Use column addition to add several 2-digit numbers
- **WAS.46** Use column addition to add several 3-digit numbers with a total > 1000
- **WAS.50** Use compact decomposition to subtract 3-digit from 3-digit numbers
- **MEA.45** Add and subtract amounts of money to give change, using pounds and pence
- **PRA.51** Organise work in a logical way
- **PRA.53** Use, explain and justify mathematical

18 **Time; length**

Week 18 focuses on time-telling and the 24-hour clock, including calculating time intervals; the week ends with some practice in finding missing lengths in rectilinear shapes.

Tell the time on a 24 hour clock, using am and pm correctly; convert pm times to 24 hour clock and vice versa; use 24 hour clock in calculating intervals of time; measure and calculate perimeters of rectilinear shapes where each side is labelled in cm and m; find missing lengths in rectilinear composite shapes; find the perimeters of rectilinear shapes with some lengths not marked; convert from one unit of length to another; solve word problems involving lengths including those involving perimeters

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

19 **Subtraction**

Week 19 focuses on using understanding of place value to solve subtraction problems using appropriate methods.

Understand place value in 4-digit numbers; partition 4-digit numbers; solve subtraction of 4-digit numbers using column subtraction (decomposition); choose an appropriate method to solve subtractions, either mental or written, and either column or counting up (Frog)

**NPV** Number and place value; **WAS** Written addition and subtraction; **MAS** Mental addition and subtraction

reasoning

- **PRA.60** Solve number and practical problems with increasingly large positive numbers
- **MEA.47** Use vocabulary such as morning, afternoon, noon, and midnight; also am and pm times and 12 hour clocks
- **MEA.55** Use 24 hour clocks
- **MEA.63** Read, write and convert time between analogue and digital 12 and 24 hour clocks
- **MEA.62** Measure and calculate the perimeter of rectilinear figures in cm and m
- **MEA.67** Measure and calculate the perimeter of composite rectilinear shapes in m/cm
- **MEA.42** Measure, compare, add and subtract lengths or heights using m/cm/mm
- **MEA.65** Convert between different units of measure, e.g. kilometres to metres, metres to centimetres, etc.
- **PRA.58** Solve simple measure and money problems involving fractions and decimals up to 2 decimal places
- **NPV.45** Understand place value in 4-digit numbers by creating 4-digit numbers, placing them on a number line and solving place value additions and

20 **Multiplication and division**  
Week 20 focuses on developing a good understanding of the processes involved in more complex written algorithms for multiplication and division.

Use the vertical algorithm to multiply 3-digit numbers by 1-digit numbers; explore patterns; use mental strategies and tables facts to divide 2-digit and 3-digit numbers by 1-digit numbers to give answers between 10 and 35, without remainders; solve word problems

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

subtractions

- **WAS.55** Use expanded or compact decomposition to subtract numbers with up to 4-digits (easier)
- **WAS.58** Use expanded or compact decomposition to subtract numbers with up to 4-digits (harder)
- **MAS.56** Use mental strategies to add 2-digit, 3-digit and 4-digit numbers
- **MAS.61** Use counting up as an efficient mental strategy with minimal jottings
- **WMD.49** Multiply 2- and 3-digit by 1-digit numbers using the ladder method
- **WMD.51** Divide 2- and 3-digit by 1-digit numbers using a written method drawn from mental strategies with integer remainders and answers between 10 and 20
- **WMD.52** Divide 3-digit by 1-digit numbers using a written method drawn from mental strategies with integer remainders and answers < 50
- **PRA.52** Describe, predict and explain patterns
- **PRA.59** Solve addition and subtraction two-step problems in contexts
- **MAS.56** Use mental strategies to add 2-digit, 3-digit and 4-digit numbers
- **WAS.52** Use column addition to add two 4-digit numbers with a total  $\leq$



10000

- **WAS.55** Use expanded or compact decomposition to subtract numbers with up to 4-digits (easier)