

Numeracy Framework

Year 5

Identify processes and connections

- transfer mathematical skills to a variety of contexts and everyday situations
- identify the appropriate steps and information needed to complete the task or reach a solution
- select appropriate mathematics and techniques to use
- select and use suitable instruments and units of measurement
- choose an appropriate mental or written strategy and know when it is appropriate to use a calculator
- estimate and visualise size when measuring and use the correct units

Represent and communicate

- explain results and procedures clearly using mathematical language
- refine informal methods of recording written calculations, moving to formal methods of calculation when developmentally ready
- use appropriate notation, symbols and units of measurement
- select and construct appropriate charts, diagrams and graphs with suitable scales

Review

- select from an increasing range of checking strategies to decide if answers are reasonable
- interpret answers within the context of the problem and consider whether answers, including calculator displays, are sensible
- draw conclusions from data and recognise that some conclusions may be misleading



I am able to (use number skills to)...

- read and write numbers to 100 000
- compare 1-place decimals and 2-place decimals
- use a range of mental strategies to recall multiplication tables for 2, 3, 4, 5, 6, 8 and 10 and use to solve division problems
- multiply and divide numbers and decimals by 10 and 100
- use understanding of simple fraction and decimal equivalences when measuring and calculating, e.g. $1 = 0.5$, $\frac{1}{10} = 0.1$
- calculate fractional quantities based on unitary fractions, e.g. $\frac{1}{8}$ of 24 = 3, so $\frac{5}{8}$ of 24 = 15
- use doubling and halving strategies when working with simple proportions, e.g. recipes
- find differences within 1-place decimals, e.g. when measuring
- add and subtract 3-digit numbers using an appropriate written method
- multiply and divide 3-digit numbers by a single-digit number
- check answers using inverse operations
- estimate by rounding to the nearest 10, 100 or 1 000
- order and compare the cost of items up to £1 000
- add and subtract 2-place decimal numbers in the context of money (total less than £100)
- manage money, compare costs from different retailers and determine what can be bought within a given budget
- realise budgeting is important



I am able to (use measuring skills to)...

- record using decimal notation, e.g. 4.2mm
- read scales with 10 equal divisions between each major unit
- make use of simple conversions, e.g. 1 of a km = 250m
- measure perimeters
- read and use analogue and digital clocks
- use stopwatches to time events in minutes and seconds, and order the results
- carry out practical activities involving timed events and explain which unit of time is the most appropriate
- measure and record temperatures involving positive and negative readings
- calculate temperature differences, including those involving temperature rise and fall across 0°C



I am able to (use data skills to)...

- represent data using:
 - lists, tally charts, tables and diagrams, frequency tables
 - bar charts, grouped data charts, line graphs, conversion graphs
- extract and interpret information from an increasing range of diagrams, timetables and graphs, including simple pie charts
- use averages and range to describe a data set.

