P7 Benchmarks: Numeracy and Maths

Numeracy

Counting 

- I can identify, write, read and order numbers up to 1,000,000, including 3-decimal place numbers.
- I can count forwards and backwards in 1s, 1,000s, 5,000s and 10,000s from different starting points within 1,000,000.
- I can count forward and backwards in thousandths (e.g. *0.006, 0.007…*)
- I can confidently order negative numbers and place them accurately on a number-line.

Calculations + − × ÷ =

- Within 1,000,000, I can round numbers to the nearest 10, 100 and 1000.
- I can apply my rounding knowledge to decimal numbers (e.g. *2.756 to 3*).
- I can use my rounding knowledge to estimate answers or check them.
- I can partition numbers up to 1,000,000 and identify the value of a digit within a number, including in 3-decimal place numbers (e.g. 3.73**1** = $\frac{1}{1000}$).
- Using a range of different strategies, I can add and subtract 6-digit numbers through a ten (e.g. 2*45,345 + 132,267 = 377, 612*)
- I can add and subtract multiples of tens, hundreds and thousands to/from numbers up to 1,000,000, including crossing a ten (e.g. 8*44,452 – 4000 = 840,452*).
- I can solve addition, subtraction, division and multiplication calculations that involve 2-decimal place numbers (e.g. *3.42 – 1.21 = 2.21)*

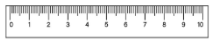
Maths

Fractions.  $\frac{1}{2}$

- I can confidently use my timestables and division knowledge to find fractions of an amount (e.g. $\frac{7}{9}$ of 63).
- I can convert between simple fractions, decimal fractions and percentage (e.g ½ = 0.5 = 50%).
- Using my understanding of percentages and decimals, I can find fractions of an amount (e.g. $\frac{3}{5}$ *or 0.6* or *60%* of an amount).
- With confidence, I can find equivalent fractions and simplify fractions (e.g. $\frac{4}{12} = \frac{1}{3}$).

Time 

- I can confidently read all times on analogue and 24-hour digital clocks and I can convert times *(e.g. 8.45pm = 20.45).*
- I can confidently convert between seconds, minutes and hours (e.g. $2\frac{3}{4}$ hours = 165 minutes).
- I can use 12-hour and 24-hour timetables to plan activities and journeys.
- I can calculate the time taken for a journey, given the speed and distance.

Measurement 

- I can confidently estimate and record a range of different measurements.
- Using my knowledge of decimal numbers, I can confidently convert different units of measurement (e.g. *3.4cm = 34mm*)
- I can accurately calculate the perimeter and area of common 2D shapes.

- I am consolidating my knowledge of the 2 – 10 timestables and their related division facts (e.g. *9 x 8 = 72 so 72 ÷ 8 = 9 and 72 ÷ 9 = 8*).
- I can multiply and divide any whole number by 10, 100 and 1000 (e.g. *6720 ÷ 10 = 672*)
- Using a range of strategies, I can solve 2-digit x 2-digit calculations (e.g. *34 x 26 = 884)*
- I can complete more challenging division calculations with and without remainders (e.g. *67 ÷ 9 = 7 r 4*)
- I can solve multi-step multiplication and division calculations, including those which involve decimal numbers, and I can explain my strategy.
- I can solve calculations by completing operations in the right order (e.g. 6 x 4 ÷ 3 = 8).
- I can use my knowledge of **multiples** and **factors** to solve a range of calculations.
- I can find a missing number in a calculation and I can solve a simple algebraic equations (e.g. *5a = 25* so *a = 5*).

Money 

- I can confidently use a range of strategies to solve money problems (e.g. *£24.56 + £15.44 = £40* and *£3.60 divided by 6 = £0.60).*
- I am developing my budgeting skills and my understand of how to keep my money safe.
- I understand the difference between a debit and credit card and I am developing my understanding of how debt can build up.

- I can calculate of cubes and cuboids using the formula: *Volume = length x breadth x height*

Patterns 

- I have explored the Fibonacci sequence numerically and I can continue it.
- I can use my understanding of multiples, square numbers and triangular numbers to create my own number pattern.

Shape 

- I can identify, name and describe the different triangles and quadrilaterals.
- I can describe the properties of circles using the language of *centre, radius, diameter* and *circumference.*
- By understanding that the *radius* is half of the *diameter*, I can calculate the *diameter* and *radius* of a circle.
- I can identify common 3D shapes from their nets.

Directions 

- I can interpret a simple scale (e.g. 1cm:10km) to help me understand a map, model or plan.

Angles and symmetry 

- I can confidently identify *obtuse*, *acute*, *right, reflex* and *straight* angles and I can accurately estimate and then measure these angles.

Information Handling 

- I can interpret and create a range of graphs, such as using my knowledge of percentages to understand and create pie charts.
- I can answer comparison questions about different graphs.
- Using data, I can make predictions about the likelihood of a scenario, using the language of fractions and percentages (e.g *there is as 100% chance*).