HfL Assessment Criteria for Phase B Steps 1/2/3 (based on curriculum expectations for Year 3)

Maths – Number

Understanding the number system

Fluency Focus: Numbers with up to at least 3 digits (whole numbers and decimals with up to 1 dp) through a wide variety of models and representations

- counts:
- from 0 in multiples of 4, 8, 50 and 100 (3N1b)
- up and down in tenths; recognising that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 (3F1a)

- reads, writes, compares and orders numbers up to 1000 in numerals and words (3N2a)

- recognises the place value of each digit in a three-digit number (hundreds, tens, ones) (3N3)

- finds 10 or 100 more or less than a given number (3N2b)

- identifies, represents and estimates numbers using different representations (3N4) *including those related to measure*

- solves number problems and practical problems within the context of the fluency focus (3N6)

- understands unit fractions and non-unit fractions with small denominators:
  - recognises, finds, writes and uses fractions of a discrete set of objects (3F1b and 3F1c)
  - recognises and shows, using diagrams, equivalent fractions (3F2) *e.g. on a number line* and deduces relationships between them such as size and equivalence going beyond the [0,1] interval, including relating to measure

- compares and orders unit fractions and fractions with the same denominators (3F3)

Calculating

Arithmetic laws and relationships

- estimates the answer to a calculation and uses inverse operations to check answers (3C3)

Uses and understands commutativity and associativity (for example, 4 x 12 x 5 = 4 x 5 x 12 = 20 x 12= 240) and multiplication and division facts (for example, using 3 x 2 = 6, 6 ÷ 3 = 2 and 2 = 6 ÷ 3) to derive facts (30 x 2 = 60, 60 ÷ 3 = 20 and 20 = 60 ÷3)

Mental fluency

- adds and subtracts numbers mentally, including:
  - a three-digit number and ones
  - a three-digit number and tens
  - a three-digit number and hundreds (3C1)

- recalls and uses multiplication and division facts for the 3, 4 and 8 multiplication tables (3C6)

- writes and calculates mathematical statements for multiplication and division using the multiplication tables that children know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods (3C7)

Written fluency

- adds and subtracts numbers with up to three digits, using formal written methods of columnar addition and subtraction (3C2)

Fractions, decimals and percentages

- adds and subtracts fractions with the same denominator within one whole *e.g.:* $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ (3F4)

Solving problems

- Solves problems including:
  - missing number problems, using number facts, place value, and more complex addition and subtraction (3C4)
  - missing number problems involving multiplication and division
  - integer scaling problems *e.g. four times as high, eight times as long etc.*
  - correspondence problems in which n objects are connected to m objects *e.g. 3 hats and 4 coats, how many different outfits; 12 sweets shared equally between 4 children; 4 cakes shared equally between 8 children* (3C8)
  - fractions (3F10)

Algebra (in preparation for Year 6 statements)

- begins to generalise using simple algebraic statements e.g. there are 4 chairs for every table, calculate the chairs needed for 8/10/n tables

Measurement

Money

- continues to become fluent in recognising the value of coins (2M3a,b)

Metric / imperial measures

- uses standard metric units of length (m/cm/mm), capacity/volume (l/ml) and mass (kg/g) in a range of contexts to measure (3M2a,b,c), compares (3M1a,b,c), adds and subtracts (3M9b,c,d)
  - *includes mixed units and simple equivalence e.g. 5m = 500cm*
  - reads simple scales, e.g. increments of 2, 5 or 10
  - *includes simple scaling by integers when comparing e.g. 5 times as high or twice as long*

Perimeter, area, volume

- measures the perimeter of simple 2D shapes (3M7)
  - understands perimeter as a measure of length

Chronology

- estimates, reads, tells and writes the time with increasing accuracy to the nearest minute (3M4)
  - uses both analogue and digital including using Roman numerals from I to XII
  - 12 & 24 hour clocks using am and pm where necessary
  - records time
- knows and recalls: (3M4e)
  - the number of seconds in a minute
  - the number of days in each month, year and leap year
- uses vocabulary of time such as o'clock, morning, afternoon, noon, midnight (3M4d)
- compares duration of events (3M4f) including in terms of seconds, minutes and hours

Solves problems

- adds and subtracts amounts of money to give change using £ and p (3M9a) including mixed units
- solves problems in practical contexts
  - calculates the time taken by particular events or tasks
  - solves problems involving length, mass and capacity/volume (3M9)

Geometry

Properties of Shape

- draws and *describes* 2D shapes *and their properties* (3G3a, 3G4a,b)
- includes reflective symmetry, regular & irregular
- identifies right angles and angles greater than or less than 90°,
- *describes acute and obtuse for angles greater or lesser than a right angle* e.g. recognises right-angled and equilateral triangles
- makes, recognises and describes 3D shapes, *and their properties,* in different orientations (3G3b) e.g. triangular prism, square based pyramid
- *extends knowledge to symmetrical and non-symmetrical polygons and polyhedral*
  - identifies horizontal and vertical lines (3G2)
  - identifies pairs of perpendicular and parallel lines (3G2)
- connects decimals and rounding when drawing and measuring straight lines in cm in a variety of contexts

Position and Direction

- recognises that two right angles make a half turn, three make three quarters of a turn and four a complete turn (360°) (3G4a)
- continues to consolidate Y2 statements (2P1 and 2P2)

Statistics

Processing, representing and interpreting data

- interprets and presents data using bar charts, pictograms and tables (3S1)
- compares data e.g. say how many more…than… and recognise the category that has most/least
- uses a key to interpret represented data
- understands and uses simple scales in pictograms and bar charts with increasing accuracy *e.g. 2, 5, 10 units per cm includes reading between labelled divisions*
- solves one-step and two-step questions *e.g. How many more? How many fewer?* (3S2)
- uses information presented in scaled bar charts, pictograms and *tables in many contexts*
- responds to questions of a more complex nature *e.g. How many children took part in this survey altogether? How would the data differ if we asked the children in Year 6?*

Evidence of none or just a few of these skills – refer to Phase A sheets	**Entering** (some of these aspects secure, or occasional evidence across most skills) = **A6** (equivalent to B0)	**Developing** (many of these aspects secure, or more frequent evidence across most skills) = **B1**	**Securing** (most of these aspects secure most of the time) = **B2**	**Deepening** (almost all of these aspects secure) = **B3**

Please refer to the introduction to this document for further guidance about making judgements for tracking progress.