HfL Assessment Criteria for Phase A Steps 4/5/6 (based on curriculum expectations for Year 2)
Maths – Number

Understanding the number system	Calculating

Fluency focus:
 	
Numbers with up to and beyond 3 digits (read and write numbers up to at least 100 in numerals and words)
 	
- counts in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward (2N1)
 	
- *counts in fractions up to 10, starting from any number, using the ½ and $\frac{2}{4}$ equivalents on the number line (e.g. $1\frac{1}{4}$, $1\frac{2}{4}$ (or 1 ½), $1\frac{3}{4}$, 2)*
 	
- reads and writes numbers to at least 100 in numerals and in words (2N2a)
 	
- compares and orders numbers from 0 up to 100; use <, > and = signs (2N2b)
 	
- recognises the place value of each digit in a two-digit number (tens, ones) (2N3)
 	
- identifies, represents and estimates numbers using different representations, including the number line (2N4)
 	
- uses place value and number facts to solve problems (2N6)
 	
- recognises, finds, names and writes fractions $\frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity (2F1a)
	Arithmetical laws and relationships
	- recognises and uses the inverse relationship between addition and subtraction and uses this to check calculations and missing number problems (2C3)
	- shows that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot (2C9a)
	- shows that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot (2C9b)
	
	Mental fluency
	- recalls and uses addition and subtraction facts to 20 fluently, and derives and uses related facts up to 100 *such as 3+7=10, 10-7=3 and 7=10-3 to calculate 30+70=100, 100-70=30 and 70= 100-30* (2C1)
	- adds and subtracts numbers, using concrete objects and pictorial representations, mentally, including:
	  - a two-digit number and ones
	  - a two-digit number and tens
	  - two two-digit numbers
	  - adding three one-digit numbers (2C1b)
	- recalls and uses multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (2C6) *e.g. pupils work with a range of materials and contexts in which multiplication and division relate to grouping and sharing discrete and continuous quantities, to arrays and to repeated addition*
	
	Written fluency
	- adds and subtracts numbers using concrete objects and pictorial representations, including:
	  - a two-digit number and ones
	  - a two-digit number and tens
	  - two two-digit numbers
	  - adding three one-digit numbers (2C2)
	- calculates mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs (2C7)
	
	Fractions, decimals and percentages
	- finds fractions $\frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity (2F1a) (both discrete and continuous quantities)
	- writes simple fractions *e.g. ½ of 6 = 3* (2F1b)
	- recognises the equivalence of $\frac{2}{4}$ and ½ (2F2)
	
	Solving numerical problems
	- solves problems with addition and subtraction:
	  - using concrete objects and pictorial representations, including those involving numbers, quantities and measures
	  - applying their increasing knowledge of mental and written methods (2C4)
	- solves problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts (2C8)
	
	Algebra
	recognises patterns within the number system up to and beyond 100

Measurement	Geometry

Measurement

Money
- recognises and uses symbols for pounds and pence; combining the amounts to make a particular value (2M3a)

Metric measures
- estimates, chooses and uses standard units in a variety of contexts to the nearest appropriate unit, including
  - length and height in any direction (m/cm)
  - mass (g/kg)
  - temperature (°C)
  - capacity (litres/ml)   (2M2)
- uses all measuring apparatus accurately *e.g. rulers, thermometers, scales and measuring vessels*
- compares and orders lengths, mass, volume/capacity and records the results using >, < and = (2M1)

Chronology
- tells and writes the time on an analogue clock to 5 minutes, including quarter past/to the hour and draw the hands on a clock face to show these times (2M4a)
- knows key time related facts including the number of minutes in an hour, number of hours in a day (2M4c)
- compares and sequences intervals of time (2M4b)

Solves problems
- solves simple problems involving
  - finding different combinations of coins that equal the same amount of money (2M3b)
  - addition and subtraction of money including giving change (2M9)

Geometry

Properties of shape
- identifies and describes properties of common 2-D shapes including the number of sides/ vertices and recognising symmetry in a vertical line (2G2a)
  - *pupils read and write names for shapes that are appropriate to their word reading and spelling range*
- identifies and describes properties of common 3-D shapes including the number of edges, vertices and faces *(surfaces)* (2G2b)
  - *pupils read and write names for shapes that are appropriate to their word reading and spelling range*
  - *pupils recognise 3-D images within 2-D representations*
- identifies 2-D shapes on the surface of 3-D shapes *e.g. a circle on a cylinder and a triangle in a pyramid*   (2G3)
- compares and sorts common 2-D *(including semi circles, regular polygons)* (2G1a) and 3-D shapes (including *cones, cylinders, triangular prisms and pyramids)* (2G1b) and everyday objects

Position and direction
- demonstrates ability to order and arrange mathematical objects, *including those in different orientations,* in patterns and sequences (2P1)
- describes position, direction and movement using mathematical vocabulary in a variety of contexts *e.g.*
  - *movement in a straight line*
  - *distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise)*
  - *giving instructions to other pupils and programming robots using instructions given in right angles*   (2P2)

Statistics
- interprets and constructs simple pictograms, tally charts, block graphs and simple tables *to compare information (e.g. using many-to-one correspondence with simple ratios 2, 5, 10)* (2S1)
- communicates findings by asking and answering questions in relation to their data (2S2a)
  - totalling
  - by comparing categorical data using more than one criterion (2S2b)
  - sorting categories by quantity

Evidence of none or just a few of these skills – refer to A0/1/2/3 sheet	**Entering** (some of these aspects secure, or occasional evidence across most skills) = **A3**	**Developing** (many of these aspects secure, or more frequent evidence across most skills) = **A4**	**Securing** (most of these aspects secure most of the time) = **A5**	**Deepening** (almost all of these aspects secure) = **A6**	All aspects secure, now going 'broader and deeper' = **A+**

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

Herts for Learning