The place value framework summary

L0 Ten as a count	L1 Ten as a unit	L2 Tens and ones (Requires part-whole knowledge to at least 20)	L3 Hundreds, tens and ones	L4 Decimal place value	L5 System place value
Can count on but uses single units of "one" or "ten" in counting strategies. Knows the sequence of multiples of ten (10, 20, 30, ...) as a sequenced count and it is in this sense that "ten" is used in counting, as a single unit. Ten is treated as something constructed of ten ones, but one ten and ten ones do not exist for the student at the same time. Typically reconstructs the units of ten by counting them.	Ten is treated as a single unit while still recognising that it contains ten ones (abstract composite unit). Students coordinate count by tens and units from the middle of the decade to find the total or difference of two 2-digit numbers. For example, 4 tens and 2 units visible, 25 units hidden, counts by tens and ones, "35, 45, 55, 65, 66, 67".	**2a: (Jump method)** Tens and ones are flexibly regrouped. To determine 37 + 19, the relationship between the units and tens is used without requiring either nine or seven individual counting activities. Ten is treated as a unit that can be repeatedly constructed in place of ten individual counts (iterable unit). The student anticipates iterating a composite unit of ten and units of one to solve addition and subtraction problems mentally (jump method). The term iterating is used to emphasise constructing composite units of ten as they are counted. **2b: (Split method)**[2] Ten is treated as an abstract composite unit that can be collected from within numbers.	**3a:** The student can use hundreds, tens and units in standard decomposition (e.g. 326 as three groups of one hundred, two groups of ten and six units). One hundred is treated as ten groups of ten and students at this level can increment by hundreds and tens to add mentally. They can, for example, determine the number of tens in 621 without counting by ten. **3b:** The positional value of numbers is used flexibly in regrouping without a need to rely on incrementing by tens or hundreds. The student has a "part-whole" knowledge of numbers to 1000.	The student uses tenths and hundredths to represent fractional parts with an understanding of the positional value of decimals. For example, 0.8 is taken to be of greater magnitude than 0.75 because of the positional value of the digits. Typically, the student has a *multi-unit* sense of decimals and interchanges tenths and hundredths.	The student appreciates that the place value system (as powers of ten) can be extended indefinitely to the left and right of the decimal point. Students can explain what happens when a number is multiplied or divided by a given power of ten. Students appreciate the relationship between values of adjacent places (units) in a numeral.

2 The two different descriptions (a and b) within level 2 and level 3 are not hierarchical. Rather they reflect different preferences that students develop for using abstract units, either sequentially for jumps or collection based for split.