End-of-KS1 Statements for "working towards the expected standard"

The pupil can demonstrate an understanding of place value, though may still need to use apparatus to support them (e.g. by stating the difference in the tens and ones between 2 numbers i.e. 77 and 33 has a difference of 40 for the tens and a difference of 4 for the ones; by writing number statements such as 35 < 53 and 42 > 36).

Evidence for this "working towards" statement would be showing a child's developing security around place value, with the need to use apparatus to support thinking. For example, when comparing two 2-digit numbers, pupils would make and represent the two numbers with Diennes or Numicon tiles– or other structured apparatus and use this to support their explanations e.g. "I know this number is greater because it has more tens." "This number is 40 greater because there are four more tens". Children's explanations and reasoning will need to be captured using for example thought bubbles.

The pupil can count in twos, fives and tens from 0 and use counting strategies to solve problems (e.g. count the number of chairs in a diagram when the chairs are organised in 7 rows of 5 by counting in fives).

Confident counting skills are essential. Demonstrating the skill of "unitizing" (i.e. grouping in 2's, 5's or 10's and seeing these groups as one thing to count) is an essential pre-requisite skill to conceptual understanding of multiplication. The example in the statement describes children being able to count in groups, for example in an array, rather than having to count in ones. This skill would need to be evidenced before work on more formal multiplication.

The pupil can read and write numbers correctly in numerals up to 100 (e.g. can write the numbers 14 and 41 correctly).

This should be evidenced throughout, with pupils not making reversals. If pupils have an understanding of place value in two digit numbers, any reversals should have been eliminated through pupils making and representing numbers to clarify their thinking and their understanding.

The pupil can use number bonds and related subtraction facts within 20 (e.g. 18 = 9 + ?; 15 = 6 + ?).

Core Year 1 learning is knowing number bonds to ten and then 20, and using these, for example, to add 2 single digit numbers together (e.g. if I add 7 to 8, I know that 8 + 2 is 10, then there will be 5 left to make 15 (because I can also partition 7 mentally) – no fingers! To be "working towards", this skill must still be evidenced, with pupils using and applying all of the known facts to calculate, rather than reverting to counting in ones. This mental fluency has to be a relentless focus.

The pupil can add and subtract a two-digit number and ones and a two-digit number and tens where no regrouping is required (e.g. 23 + 5; 46 + 20), they can demonstrate their method using concrete apparatus or pictorial representations.

When adding a single digit to a two digit number, or when adding a multiple of ten, it is important that pupils can demonstrate their growing security with place value by showing that they recognise which digit will change and why. Again, this is also about use and application of known facts – I can add ten to any number (I can use resources to show this), and I can use my number bonds to add units (ones) together. So when adding 23 and 5, the pupils should be able to say that they know the answer is 28 because they know 5 + 3 = 8, and they are not adding any sets of ten, using structured apparatus to support this. When adding 20 to 46, they should be able to explain and demonstrate with structured apparatus that they are adding 2 sets of ten, and the units digit will stay the same. Arrow cards support this well, alongside Diennes or Numicon tiles, asking the child which digit will change and why.

The pupil can recall doubles and halves to 20 (e.g. pupil knows that double 2 is 4, double 5 is 10 and half of 18 is 9).

Using known doubles is a useful mental skill to make calculations more efficient. It is also the beginning of understanding times tables and multiplicative reasoning. Understanding the relationship between doubling and halving also links to their understanding of the relationship between multiplication and division. Bar model representations support this structure: "Half of 10 is five; double five is 10, two 5's are 10." (It also links to the "part /whole relationship in fractions.) This helps children spot important connections in mathematics. At this "working towards" stage, it is important that these links and connections are made explicit to ensure greater mental fluency and understanding of core mathematical relationships moving forwards. These are key "bricks" in the wall to be mastered which will make the wall stronger.