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NUMBER SENSE AND ALGEBRA – ADDITION STRATEGIES (AdS)

AdS1 – EMERGENT STRATEGIES

- ☐ I can combine two groups of objects and attempt to find the total
- ☐ I can compare two quantities up to 10 and state which group has more

AdS2 – PERCEPTUAL STRATEGIES

- ☐ I can demonstrate one-to-one correspondence, e.g. one number name for each object
- ☐ I can count by ones to find the total of two groups
- ☐ I can build and subtract numbers by using objects or fingers
- ☐ I can make combinations to form numbers up 10, e.g. 7 and 3 makes 10

AdS3 – FIGURATIVE (IMAGINED UNITS)

- ☐ I can use visualising to find the total of two concealed collections of items, counting from one to find the total

AdS4 – COUNTING ON (BY ONES)

- ☐ I can treat a number word as a completed count when solving problems, e.g. I have 7 apples. I want 10. How many more do I need?
- ☐ I can use the *count-up from* strategy to solve addition problems, e.g. to find 6 + 3, start at 6 and count 7, 8, 9, the solution is 9
- ☐ I can use the *count-up to* strategy to solve problems involving missing numbers, e.g. to solve 6 + ? = 9, start at 9 and count 7, 8, 9, the solution is 3

AdS5 – COUNTING BACK (BY ONES)

- ☐ I can use the *count-down from* strategy to solve subtraction problems, e.g. 9 – 3 = ?, 9... 8, 7, 6, the solution is 6
- ☐ I can use the *count-down to* strategy to solve subtraction problems, e.g. 9 take away something equals 6, start at 9… 8, 7, 6, the solution is 3
- ☐ I can find the difference between two numbers less than 20
- ☐ I can count back to find the difference between two quantities where the difference is no greater than 4

AdS6 – FLEXIBLE STRATEGIES WITH COMBINATIONS TO 10

- ☐ I can use a range of non-count by one strategies when adding or subtracting numbers, e.g. bridging to 10, doubles or near doubles
- ☐ I can partition whole number into parts, e.g. 7 is 5 and 2, 6 and 1 or 4 and 3
- ☐ I can use my knowledge of the relationship between addition and subtraction to help me solve problems, e.g. I know that 7 and 3 makes 10 so 10 take away 7 is 3

AdS7 – FLEXIBLE STRATEGIES WITH TWO-DIGIT NUMBERS

☐ I can use my knowledge of 10 as a unit to add and subtract two-digit numbers, e.g. jump strategy, split strategy or compensation

☐ I can manipulate tens and ones to solve addition problems, e.g. 45 + 37 = ?

$$40 + 30 = 70$$
$$5 + 7 = 12$$
$$70 + 12 = 82$$

☐ I can manipulate tens and ones to solve subtraction problems, e.g. 45 – 37 = ?

$$45 – 30 = 15$$
$$15 – 7 = 8$$

☐ I can partition numbers in different ways to help me solve addition and subtraction problems, e.g.

$$53 – 27 = ?$$
$$40 + 13 – 20 – 7$$
$$= 40 – 20 + 13 – 7$$
$$= 20 + 6$$
$$= 26$$

AdS8 – FLEXIBLE STRATEGIES WITH THREE-DIGIT NUMBERS AND BEYOND

☐ I can manipulate hundreds, tens and ones to solve addition problems involving three-digit numbers and beyond, e.g.

$$457 + 250 = ?$$
$$457 + 200 = 657$$
$$657 + 50 = 707$$

☐ I can manipulate hundreds, tens and ones to solve subtraction problems involving three-digit numbers and beyond, e.g.

$$3000 – 260 = ?$$
$$3000 – 200 = 2800$$
$$2800 – 60 = 2740$$

☐ I can solve subtraction problems involving trading or the exchange of units

☐ I can use multiple strategies for solving everyday problems involving addition and subtraction