

Arithmetic Skills - End of Year Expectations

Richard Avenue Primary School

<u>Year</u>	<u>Skill</u>	<u>Example</u>	<u>Core Model(s)</u>
Year 1	One more and one less than any number up to 100.	$36 + 1 = 37$ and $98 - 1 = 97$	Base 10
	Number pairs with a total of 5.	$3 + 2$ and $4 + 1$	Base 10 / Bar Model
	Number bonds to 10.	$3 + 5$ and $7 + 2$	Tens Frame / Bar Model
	Subtraction facts within 10.	$4 - 1$ and $5 - 3$	Tens Frame / Bar Model
	Missing number questions within 10.	<u>$3 + ? = 5$</u> and <u>$? - 2 = 3$</u>	Tens Frame / Bar Model
	Partition small numbers.	$7 + 4 = 7 + 3 + 1$	Part, part whole
	Partition and combine tens and ones.	$34 = 30$ and 4	Part, part whole
	Partition using doubles to add near doubles.	$6 + 7 = 6 + 6 + 1$	Part, part whole
Year 2	Number bonds to 20: addition and subtraction facts.	$3 + 17$ and $20 - 7$ and $12 + 8$	Tens Frame / Bar Model
	Number pairs with a total of 20.	$7 + 8$ and $7 - 1$ and $17 - 8$ and $18 - 3$	Tens Frame / Bar Model
	Missing number questions within 20.	<u>$6 + ? = 12$</u> and <u>$? - 3 = 15$</u>	Tens Frame / Bar Model
	Add/subtract a pair of single digit numbers, crossing 10.	$5 + 8$ and $12 - 7$	Base 10 / Number line
	Partition 2-digit numbers in different ways.	$45 = 40 + 5$ and $30 + 15$ etc	Part, part whole
	Multiples of 10 with a total of 100.	$90 + 10$ and $60 + 40$	Base 10 / Bar Model
	Add or subtract a multiple of 10 to/from any 2-digit number.	$27 + 60$ and $72 - 50$	Base 10 / Number line
	Count on from the smallest number to find the difference between two near numbers to 100.	Difference between 38 and 41	Number line
	Subtract any single digit number from a multiple of 10.	$60 - 8$	Base 10 / Number line
	Add/subtract a single digit number to/from a 2-digit number, not crossing the tens and then to the tens boundary.	Not crossing ten: $41 + 5$ and $58 - 6$ Crossing ten: $43 + 7$ and $58 - 8$	Base 10 / Number line
Use number bonds to make the next multiple of 10.	$67 + _ = 70$	Bar Model	
Use known number bonds to derive facts.	$3 + 7 = 10$ and $30 + 70 = 100$ and $100 - 70 = 30$	Tens Frame / Base 10	

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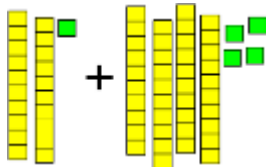
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<u>Year</u>	<u>Skill</u>	<u>Example</u>	<u>Core Model(s)</u>
Year 3	Subtraction facts within 20.	$17 - 6$ and $13 - 9$	Base 10 / Bar Model
	Add and subtract multiples of 10 and 100.	$90 + 70$ and $800 - 500$ and $120 - 90$	Base 10 / Bar Model
	Missing number questions within 50.	$16 + ? = 42$ and $? - 13 = 25$	Bar Model
	Add a single digit number to a 2-digit number, including crossing 10 using partitioning and recombining.	$35 + 8 = 35 + 5 + 3$	Part, part whole
	Subtract single digit number from a tens.	$40 - 6$	Base 10 / Number line
	Subtract a single digit number from a 2-digit number, including crossing 10 using partitioning.	$32 - 7 = 32 - 2 - 5$	Part, part whole
	Partition using doubles of multiples of 10 to add near doubles.	$60 + 61 = 60 + 60 + 1$	Part, part whole
	Add/subtract a multiple of 10 to/from any 2-digit number, without crossing 100. Then crossing then crossing 100.	Not crossing hundreds: $27 + 60$ and $72 - 50$ Crossing hundreds: $57 + 60$ and $78 + 30$	Base 10 / Number line
	Add 9, 19, 29 or 11, 21, 31 by adding a multiple of 10 and adjusting by 1.	$28 + 9 = 28 + 10 - 1$ and $57 + 19 = 57 + 20 - 1$	Bar Model
	Add 2-digit numbers without crossing the tens and with tens using partitioning.	Not crossings tens: $43 + 52$ Crossing tens: $38 + 46$	Part, part whole
Year 4	Add and subtract multiples of 10, 100 and 1000.	$70 + 90$ and $1800 - 500$	Base 10 / Bar Model
	Missing number questions within 100.	$76 + ? = 32$ and $? - 13 = 65$	Bar Model
	Add/subtract a multiple of 10 to/from any 2-digit number with an answer over 100.	$57 + 600$ and $700 - 64$	Base 10 / Number line
	Subtract a 2-digit number from a 2-digit number, including crossing 10 using partitioning or counting on.	$54 - 17$ and $67 - 29$	Base 10 / Number line
	Add a 2-digit number to a 2-digit number using partitioning and recombining.	$35 + 18 = 35 + 10 + 8$	Part, part whole
	Add 8, 18, 28 or 12, 22, 32 to a 2-digit number by adding a multiple of 10 and adjusting by 2.	$28 + 8 = 28 + 10 - 2$ and $57 + 18 = 57 + 20 - 2$	Base 10 / Number line

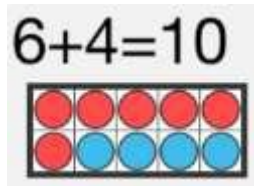
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Year 5	Adding decimals from known number bonds.	$0.7 + 0.5$ and $1.1 + 0.6$	Tens Frame / Bar Model
	Subtracting decimals from known subtractions facts within 20.	$1.7 - 0.6$ and $1.3 - 0.9$	Tens Frame / Bar Model
	Add and subtract multiples of 10, 100 and 1000.	$70 + 90$ and $1800 - 500$	Base 10 / Bar Model
	Work out sums and differences of decimals to 2 decimal places.	$5.21 + 2.75$ and $3.67 - 1.34$	Part, part whole / Bar Model
	Add a 2-digit number to a 3-digit number using partitioning and recombining.	$158 + 35 = 158 + 30 + 5$	Part, part whole
	Subtract a 2-digit number from a 2-digit number using partitioning or counting on.	$87 - 38$ ($87 - 30$ & $57 - 8$) and $75 - 46$ ($46 + ? = 75$)	Part, part whole / Count on with Number line
Year 6	Estimate addition and subtraction calculations by rounding.	$389 + 512$ rounded to $400 + 500 = 900$	Number line (to round)
	Use partitioning and recombining to add 2 and 3-digit numbers mentally.	$367 + 425 = 300 + 400, 60 + 20, 7 + 5$	Part, part whole
	Subtract 2 and 3-digit numbers by counting up from the smaller to larger number.	$694 - 587$, rewritten as $587 + ? = 694$	Count on with Number line
	Calculate difference between a positive and negative number, or two negative numbers.	$-5 + 9 = ?$ and $-7 - 8 = ?$	Number line

Base 10

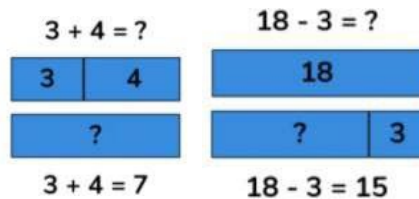
$21 + 44 = 65$



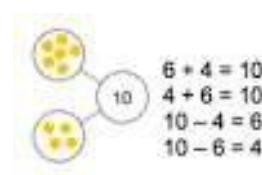
Tens Frame



Bar Model



Part, Part, Whole



Number Line

