ADDITION PROBLEMS

KS1 – 2001 Paper

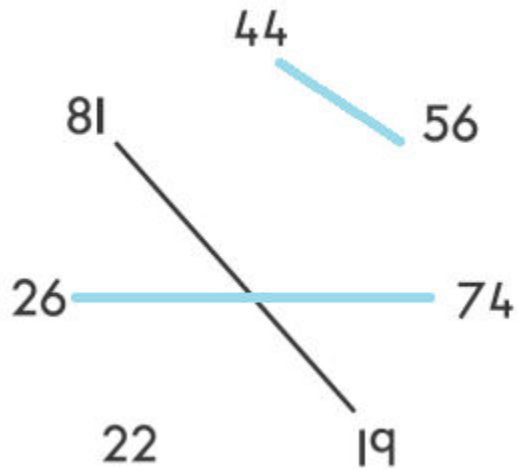1.

15, 25 and 35

2.

3 more fives.

So: 5 + 5 + **5 + 5 + 5** = 25

3.

4.

136

KS1 – 2002 Papers

5.

| 16 | 20 (children) | 1 | |

6.

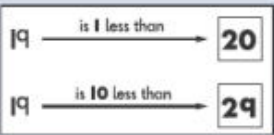|			
25	Ticks drawn on 24 and 26	1	Accept any other clear way of indicating the correct numbers. Do not award the mark if extra numbers are ticked unless it is clear that the correct two are the child's final choice.

7.

26	Writes 20 and 29 as shown:	1	

KS1 – 2003 Paper 1

8.

8 (U1)	Writes in upper shapes any two numbers that total 17, eg 8 and 9.	1	☞ **Do not** award the second mark if both calculations are identical **or** if the child uses the same numbers in reverse order, eg writes 5 + 12 for the first total and 12 + 5 for the second total. Accept 0 and 17 written in one of the pairs of shapes.
	Writes in lower shapes any two **different** numbers that total 17, eg 11 and 6.	1	

KS1 – 2005 Paper 1

9.

One example: 13+7+3=23 etc.

KS1 – 2007 Paper 1

10.

(U1)	17	46 (eggs)	2	Award both marks for the correct answer by entering **1** in each mark box.
				● A child with a correct answer can be awarded two marks even if they have failed to record a correct method or any method at all, since it can be assumed that they used a correct mental method to reach their answer.
			OR	
		This mark may be awarded for children who have the **wrong answer** but have recorded a **complete method** which, without arithmetical errors, would give the correct answer.	1	If **one** mark is awarded, enter **1** then **0** in the mark boxes.
				One mark may be awarded to children who have failed to record the correct answer, provided they have demonstrated a complete and viable method for adding 10, 13, 11 and 12. (This might be numerals, signs, words, diagrams or any mixture of these.)
		Use the acceptable and unacceptable responses given on pages 28 and 29 to help you make your decision.		● Children who record an ambiguous method, ie a pictorial method, the correct numbers without an operation or the correct operation, can be awarded one mark if they give an answer between **41** and **45** or **47** and **49** inclusive.

KS1 – 2007 Paper 2

11.

| | 10 | Missing numbers written as shown: $60 + \boxed{40} = 100 = 20 + \boxed{80}$ | 1 | Both numbers must be correct for the award of the mark. |

KS1 – 2009 Paper 1

12.

| 7 | 10 | | 1 | |

13.

| 10 | Writes 4, 8 and 3 in any order to create an addition, eg

4 + 8 + 3 = 15

or

8 + 3 + 4

or

4 + 8 = 12 + 3 = 15 | 1 | Accept a correct addition without an answer or with an incorrect answer.

Accept any of the following:

■ partially complete additions, ie 12 + 3, 11 + 4 or 7 + 8

■ a given number split into two new numbers, eg 2 + 2 + 8 + 3

■ tallies used with symbols, eg IIII + IIIIIIII + III

Do not accept the answer 15 given without an addition. |

14.

| 11 | 14 (seeds) | 1 | |

KS1 – 2016 Paper - Reasoning

15.

| 23 | Award the mark for either calculation:

31 + 26 = 57

OR

26 + 31 = 57 | 1m | |

KS1 – 2016 Paper - Arithmetic (Second)

16.

| 13 | 61 | 1m | |

KS1 – 2016 Paper – Reasoning (Second)

17.

| 7 | 12 (shells) | 1m | |

18.

25		1m	All three pairs must be correctly matched for the award of the mark.

Left column: 20 + 8, 50 + 8, 80 + 8, 90 + 8
Right column: 30 + 28, 70 + 18, 10 + 18, 50 + 48

Do not award the mark if a sum is matched to more than one sum.

Ignore any extra lines drawn from 20 + 8

KS1 – 2017 Paper – Arithmetic

19.

17	7	1m	

KS1 – 2017 Paper – Reasoning

20.

18	Award **TWO** marks for the three sums completed correctly using six different numbers, e.g.	2m	All three sums must be correct for the award of **TWO** marks.
	26 + 1 = 27		Accept 0 + 27 as a correct answer.
	25 + 2 = 27	or	
	20 + 7 = 27		
	Award **ONE** mark for any two sums completed correctly, such that all three calculations are correct but numbers are repeated in two of the calculations **or** there is an error in one of the calculations, e.g.	1m	Any two sums can be correct for the award of **ONE** mark.
	26 + 1 = 27		
	1 + 26 = 27		
	20 + 7 = 27		

21.

19	61 (cars)	1m	

22.

25	Sums completed correctly as shown:	1m	Both sums must be completed correctly for the award of the mark.

$$3 + 7 = 10$$

$$33 + \boxed{7} = 40$$

$$\boxed{73} + 7 = 80$$

KS1 – 2018 Paper – Reasoning

23.

22	Award **TWO** marks for two number sentences completed correctly, using four different number cards from those that are given, e.g.	2m	Accept any other clear way of indicating the correct answers, e.g. matching correct cards to answer boxes.

Award **TWO** marks for two number sentences completed correctly, using four different number cards from those that are given, e.g.

$$55 + 5 = 60$$

$$15 + 45 = 60$$

$$25 + 35 = 60$$

Award **ONE** mark for any one number sentence completed correctly using the given cards only, e.g. **1m**

$$25 + 35 = 60$$

$$10 + 50 = 60$$

OR

Award **ONE** mark if one number sentence is correct, but the pupil has used the same numbers cards for the other number sentence, e.g.

$$55 + 5 = 60$$

$$5 + 55 = 60$$

2m Accept any other clear way of indicating the correct answers, e.g. matching correct cards to answer boxes.

Do not award any marks if the pupil uses numbers that are not given in the question, e.g.

$$59 + 1 = 60$$

$$50 + 10 = 60$$

KS1 – 2019 Paper – Reasoning

24.

13	Number pairs completed as shown:	1m	Both numbers must be correct for the award of the mark.
	10 60 40 30		(Refer to general marking principles 10 and 11 on pages 7 and 8.)

KS1 – 2022 Paper – Arithmetic

25.

14	5	1m	

KS1 – 2022 Paper – Reasoning

26.

8	31 (beads)	1m	

27.

10	100 (stickers)	1m	

28.

27	All number sentences completed correctly as shown:	1m	All three numbers must be correct for the award of the mark.
	$7 + 7 = 14$		
	$17 + 7 = 24$		
	$27 + 7 = 34$		
	$37 + 7 = 44$		