

Add to 100

Purpose

To develop a range of mental computation strategies, including bridging to the decade, to solve addition and subtraction tasks

Outcomes

NS1.2: Uses a range of mental strategies and informal recording methods for addition and subtraction involving one- and two-digit numbers

MA1-5NA

Framework reference

To move students to Place value level 2

Materials


Add to 100 grids

Teaching point

The empty number line is a model of informal recording.



Suggested *Short, focussed, frequent* activity

	Outline	Questions
Introduction	<p>Write the number <i>one</i> on the board.</p> <p> Repeat the task for other single-digit numbers. (when using this activity as an SFF, you may extend to two-digit numbers or use numbers and charts beyond 100)</p> <p>Write the number 45 on the board.</p>	<p><i>How many more would we need to make 100? How do you know?</i></p> <p><i>How could you work out how many more are needed to make 100?</i></p>
Concept development	<p>Have the students discuss strategies with a partner.</p> <p>Select pairs of students to share their strategies and answers with one student recording the strategy informally on the board while the other student explains.</p> <p>Discuss the effectiveness of each strategy.</p> <p>Repeat the task with the numbers 59 and 71. Discuss other numbers if needed.</p>	<p><i>If a student said that 38 needed to be added to 72 to make 100, would the student be right?</i></p>



	Outline	Questions
	Investigate other misconceptions that arise in the students' responses during the previous discussion.	<i>How might the student have determined this answer?</i>
Strengthening the concept	<p>Provide each pair of students with an <i>Add to 100</i> grid.</p> <p>Ask the students to circle adjacent pairs of numbers, either horizontally or vertically, that add up to 100.</p> <p>After the students have completed the task, have them compare the results with another pair of students.</p>	



Add to 100 grid

40	60	50	50	20
10	30	70	20	80
90	40	60	80	40
90	30	70	50	50
10	20	80	30	70

25	35	65	55	45
75	85	15	20	5
50	50	55	45	95
60	35	25	25	75
40	65	85	15	35

12	59	41	28	49
88	61	39	11	51
15	85	30	89	48
73	76	22	78	52
27	24	50	30	70

76	24	42	19	81
3	97	58	47	33
29	71	44	53	67
83	8	92	6	47
17	84	26	74	53



Add to 100 grid



Add to 100 solutions

40	60	50	50	20
10	30	70	20	80
90	40	60	80	40
90	30	70	50	50
10	20	80	30	70

25	35	65	55	45
75	85	15	20	5
50	50	55	45	95
60	35	25	25	75
40	65	85	15	35

12	59	41	28	49
88	61	39	11	51
15	85	30	89	48
73	76	22	78	52
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