

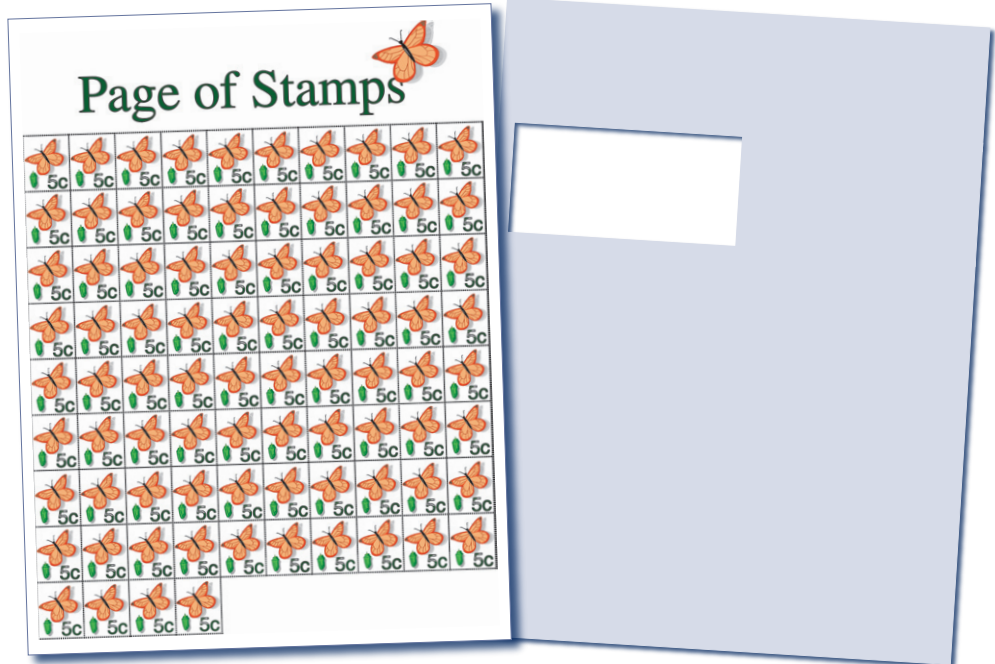
Approach: One to one
 Focus: Estimating and calculating
 Resources: Page of 5c stamps, guide sheet



Questions / instructions:

I'm going to show you a page of stamps. I want you to have a quick look at it, then tell me about how many stamps are on the page.

Show the page of stamps for 3 seconds (count silently to yourself: one higgledy piggledy, two higgledy piggledy, three higgledy piggledy), then turn the page face down.



	% response 2005 ('01)			% response 2005 ('01)	
	year 4	year 8		year 4	year 8
1. About how many stamps were on the sheet?	60–110	57 (46) 72 (65)	<p>Place the guide sheet over the page of stamps so that 5 x 2 stamps are shown.</p> <p>4. Explain to me how you would work out how much it would cost to buy this number of stamps. Don't tell me how much yet. Just tell me how you would work out the cost.</p> <p>added 5 cents for each stamp</p> <p>found number of stamps by counting, multiplied by 5</p> <p>found number of stamps by multiplication, multiplied by 5</p> <p>found cost of row then doubled</p> <p>found cost of column then added or multiplied by 5</p> <p>Allow time.</p> <p>5. Now tell me how much it would cost to buy this number of stamps. 50c</p> <p>Total score:</p>	47 (55)	21 (15)
Now I'll give you a longer look at the page of stamps, so that you can check your estimate. Then you can tell me again how many stamps are on the sheet. But please don't try to count every stamp. Try to think of a quicker way to work it out.				6 (7)	23 (24)
Show sheet of stamps, and allow about half a minute.				3 (3)	18 (23)
2. Now how many stamps do you think are on the page?	84	51 (42) 76 (68)		11 (3)	16 (11)
3. How did you work that out?				19 (7)	14 (16)
counted in rows of 10, then added or subtracted the balance		23 (16) 9 (5)			
counted across (10), counted down (9), multiplied (90), subtracted 6 (84).		2 (0) 5 (9)			
counted across (10), counted down to last complete row(8), multiplied (80), added 4 (84)		33 (29) 67 (64)			
counted across (10), counted down (9), multiplied (90), didn't correct for incomplete row		3 (1) 4 (4)			
tried to count all, or counted part way and estimated balance		5 (8) 1 (1)			
			5	27 (21) 53 (46)	
			4	24 (20) 24 (27)	
			2–3	21 (29) 15 (15)	
			0–1	27 (30) 9 (12)	

Commentary:

Students showed moderate levels of success at this task, with solid increases from year 4 to year 8. There were moderate gains in performance from 2001 to 2005.