## Task: Rautaki Whakarea

Approach: Focus: Resources: Kupu: One to one Multiplication strategies Ngā kāri e 2

Questions / instructions:	% response
Whakatakotoria te kāri tuatahi (9 x 7)	
ki mua i te akonga.	
Mēnā ka wareware i ahau te otinga o te 9 x 7, me pēhea rā te whiriwhiri i te otinga?	
Kāore āku tātaitai, ōku hoa rānei hei āwhina i ahau.	
no appropriate response	25
add seven 9's together	10
add nine 7's together	10
multiply 10 by 7, get 70, subtract one 7, get 63	2
mulitply 9 by 10, get 90, take away 9 by 3, get 63	0
finger process (explained adequately), including materials	40
go through times table, get to nearest response, then add or subtract 7's as required	10
chant times table, hope it jogs memory	0
student remembered it the other way around	3
Whakatakotoria te kāri tuarua (19 x 7) ki mua i te ākonga.	
Me pēhea taku whiriwhiri i te otinga o tēnei whakareatanga mēnā kāore āku tātaitai?	
no appropriate response	38
add 19 seven times	5
add 7 nineteen times	0
multiply 20 by 7, get 140, subtract one 7, get 133	7
note that 9 x 7 is 63 add 10 x 7 is 70, get 133	24
finger process (explained adequately), including materials	7
normal multiplication algorithm (clearly explained)	17

## Commentary:

In question 1, 75 percent of students had a valid strategy for working out 9 x 7. Twenty percent reported an additive strategy and only two percent reported a part-whole strategy. A large number of students (40 percent) used a simple finger process that gives the answers to the nine times table. In comparison, 31 percent of students described a valid part-whole strategy for question 2.