## Task: Raułaki Whakarea

## Approach: One to one

Focus: Multiplication strategies
Resources: Ngā kāri e 2
Kupu:
Questions / instructions:

## Whakatakotoria te kāri tuatahi (9 x 7) ki mua ite ākonga.

Mēnā ka wareware i ahau te otinga o te $9 \times 7$, me pēhea rā te whiriwhiri i te otinga?

Kāore āku tātaitai, ōku hoa rānei hei āwhina i ahau.
no appropriate response add seven 9's together10
add nine 7 's together
multiply 10 by 7 , get 70 , subtract one 7 , get 63
mulitply 9 by 10 , get 90 , take away 9 by 3, get 63

0
finger process
(explained adequately), including materials go through times table, get to nearest response, then add or subtract 7's as required
chant times table, hope it jogs memory student remembered it the other way around4010

## Whakatakotoria te kāri tuarua ( $19 \times 7$ ) ki muaite ākonga.

Me pēhea taku whiriwhiri i te otinga o tēnei whakareatanga mēnā kāore āku tātaitai?
no appropriate response
add 19 seven times
add 7 nineteen times multiply 20 by 7, get 140, subtract one 7 , get 133
note that $9 \times 7$ is 63 add $10 \times 7$ is 70 , get 133
finger process
(explained adequately), including materials normal multiplication algorithm
(clearly explained)

## Commentary:

In question 1, 75 percent of students had a valid strategy for working out $9 \times 7$. 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.

