Trend Task: How Much Could It Hold?

Approach:	Station
Year:	4 & 8
Focus:	Capacity estimation
Resources:	4 containers: milk bottle, yoghurt pottle, juice packet, medicine container; answer booklet

Questions / instructions:

Here are four containers.

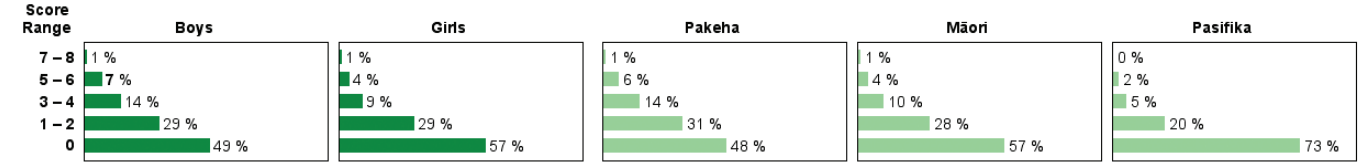
Write down how much each container holds using litres (L) or millilitres (ml).

	% response 2009 ('05) year 4	year 8
1. How many mls of milk do you think the bottle could hold?		
✓ 800 – 1200 ml	22 (24)	48 (53)
1201 – 2000 ml	6 (5)	7 (6)
more than 2 litres	10 (8)	0 (2)
500 to less than 800 ml	6 (2)	11 (6)
less than 500 ml	42 (46)	24 (28)
2. How much yoghurt do you think the pottle could hold?		
✓ 120–180 ml	2 (1)	17 (16)
181–300 ml	5 (3)	16 (21)
more than 300 ml	18 (17)	6 (7)
75–119 ml	7 (6)	14 (14)
less than 75 ml	42 (52)	26 (27)

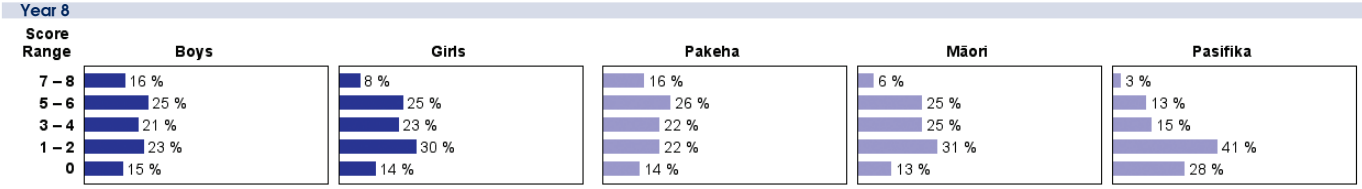
	% response 2009 ('05) year 4	year 8
3. How much juice do you think the packet *[juice box]* could hold?		
✓ 200–300 ml	9 (7)	40 (46)
301–500 ml	7 (4)	12 (12)
more than 500 ml	13 (16)	5 (6)
125–199 ml	2 (2)	6 (6)
less than 125ml	46 (51)	22 (21)
4. How much medicine do you think the container could hold?		
✓ 40–60ml	10 (7)	26 (24)
61–100ml	6 (5)	15 (18)
more than 100ml	15 (15)	9 (13)
25–39ml	3 (4)	8 (8)
less than 25ml	38 (47)	19 (21)
Total Score: 7–8	1 (1)	12 (15)
5–6	5 (4)	25 (26)
3–4	12 (8)	22 (24)
1–2	29 (31)	26 (18)
0	53 (56)	15 (17)

Subgroup Analyses:

Year 4



Year 8



Commentary:

The volume estimates on this task were handled poorly, with about half of year 4 students and one quarter of year 8 students estimating more than double or less than half of the actual capacity of the containers. At both levels, students performed very similarly in 2005 and 2009.