

Trend Task: Cheeses

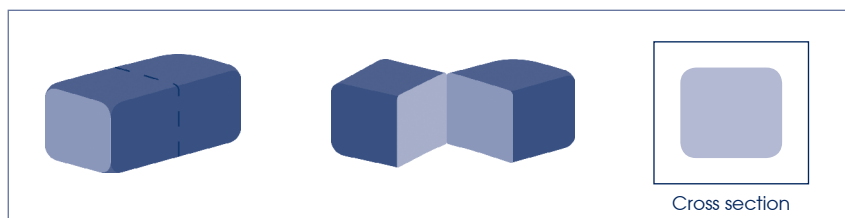


Approach: Independent
Focus: Identifying shapes of cross sections
Resources: Answer booklet

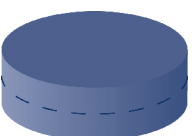
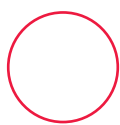
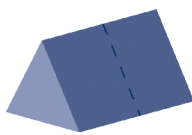
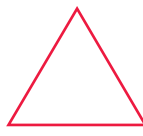
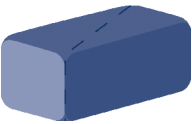

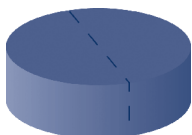

Year: 4 & 8

Questions / instructions:

The cheese has been cut through with one straight cut. The cut made a square shaped cross section.



Look at the pictures. They show the places where the different cheeses have been cut. Draw the cross section for each cheese.

		% response 2009 ('05)				% response 2009 ('05)	
		year 4	year 8			year 4	year 8
1.				3.			
	Drew:	circle	77 (68) 85 (80)		Drew:	triangle	55 (51) 77 (71)
2.				4.			
	Drew:	rectangle X triangle	18 (7) 47 (46) 40 (43) 27 (18)		Drew:	rectangle X curved shape (semicircle, circle, etc)	18 (10) 52 (54) 50 (49) 29 (23)
				Total Score:		4	9 (2) 40 (40)
						3	14 (11) 17 (18)
						2	33 (35) 20 (12)
						1	24 (24) 10 (13)
						0	20 (28) 13 (17)

Subgroup Analyses:

Year 4					
Score Range	Boys	Girls	Pakeha	Māori	Pasifika
4	13 %	6 %	10 %	8 %	4 %
3	15 %	11 %	15 %	11 %	11 %
2	32 %	35 %	35 %	34 %	24 %
1	22 %	26 %	21 %	27 %	33 %
0	18 %	22 %	19 %	20 %	28 %
Year 8					
Score Range	Boys	Girls	Pakeha	Māori	Pasifika
4	47 %	32 %	44 %	30 %	26 %
3	14 %	21 %	18 %	20 %	12 %
2	17 %	23 %	19 %	17 %	27 %
1	8 %	12 %	8 %	14 %	17 %
0	14 %	12 %	11 %	19 %	18 %

Commentary:

The second and fourth shapes caused greater visualisation problems than the other two, with many students seeing the surface rather than the cross section. Year 4 students scored a little higher in 2009 than in 2005, but there was little change for year 8 students. Year 4 Pakeha and Māori students performed similarly.