Trend Task: Packages

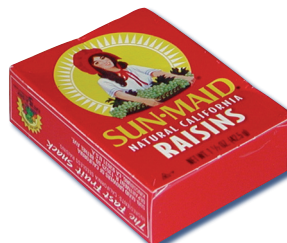|	
Approach:	One to one **Year:** 4 & 8
Focus:	Describing 3D shapes
Resources:	*Toblerone* box, raisin box, *Rolo* packet

Questions / instructions:

Put three boxes in front of student.

In this activity we will be talking about these three packages.

	% response 2005 ('01)	
1. Pick up the *Toblerone* box and have a good look at it. Tell me all the different things you can about the shape of the box.	**year 4**	**year 8**
PROMPT: *Is there anything else you can tell me about the shape of the box?*		
Refers to triangles: triangular prism	13 (17)	39 (38)
ends are triangles/3D triangle	18 (29)	18 (18)
mentions triangles	62 (52)	38 (40)
any other response *(including prism)*	7 (6)	6 (4)
sides are rectangles	12 (10)	9 (9)
long *(relative to x-section)*	29 (29)	33 (34)
ends are parallel	2 (0)	1 (1)
regular shape *(equilateral triangles, rectangles same)*	4 (2)	5 (5)
number of faces/sides = 5	6 (15)	20 (12)
number of edges = 9	3 (6)	10 (6)
number of corners = 6	9 (13)	13 (9)

	% response 2005 ('01)	
2. Pick up the raisin box and have a good look at it. Tell me all the different things you can about the shape of the box.	**year 4**	**year 8**
PROMPT: *Is there anything else you can tell me about the shape of the box?*		
Refers to rectangles: rectangular prism/cuboid	8 (10)	24 (18)
rectangle/oblong *(3D sense)*/ rectangular cube	17 (11)	35 (21)
all sides rectangles/oblongs	7 (4)	5 (4)
rectangles/oblongs mentioned	34 (43)	18 (40)
any other response *(including prism)*	33 (31)	18 (17)
opposite faces parallel *(or equivalent)*	3 (4)	8 (7)
number of faces/sides = 6	14 (22)	30 (23)
number of edges = 12	3 (4)	8 (7)
number of corners = 8	14 (19)	21 (14)

	% response 2005 ('01)	
3. Pick up the *Rolo* packet and have a good look at it. Tell me all the different things you can about the shape of the package.	**year 4**	**year 8**
PROMPT: *Is there anything else you can tell me about the shape of the package?*		
Refers to cylinder: cylinder/circular prism	26 (34)	59 (56)
ends are circles/round *(3D)*	14 (15)	5 (10)
round, circular	50 (40)	30 (29)
any other response *(including prism)*	10 (10)	6 (5)
ends are parallel	2 (0)	2 (1)
long *(relative to x-section)*	18 (17)	17 (20)
number of flat faces/sides = 2	12 (19)	21 (15)
other face is rectangle rolled out	1 (1)	2 (1)
number of edges *(circular)* = 2	5 (5)	8 (6)
number of corners = 0	14 (19)	17 (12)

Total score:	year 4	year 8
17–27	1 (1)	4 (1)
14–16	3 (3)	7 (4)
11–13	5 (8)	16 (16)
8–10	15 (21)	29 (29)
5–7	32 (34)	30 (32)
2–4	41 (31)	13 (17)
0–1	3 (2)	1 (1)

Commentary:

This task involved the use of geometry terminology and the ability to describe shapes. Students in year 8 were much more likely to use precise terminology but many students at both year levels did not do so. There was little change between 2001 and 2005.