

Approach: Station

Year: 4 & 8

Focus: Subtraction facts

Resources: Computer program on laptop computer, answer booklet

Questions / instructions:

This activity uses the computer.

[The problems were presented on the computer screen and soundtrack at eight-second intervals. The answer sheets did not show the problem again.]

If you cannot answer a question, put an "x" where you would write the answer.

		% response 2009 ('05)		% response 2009 ('05)	
		year 4	year 8	year 4	year 8
1.	$9 - 2 = \boxed{7}$	71 (70)	96 (88)		
2.	$15 - 6 = \boxed{9}$	61 (62)	94 (89)		
3.	$13 - 4 = \boxed{9}$	67 (67)	96 (94)		
4.	$7 - 0 = \boxed{7}$	84 (86)	97 (94)		
5.	$18 - 9 = \boxed{9}$	68 (66)	98 (93)		
6.	$12 - 6 = \boxed{6}$	74 (78)	97 (96)		
7.	$17 - \boxed{6} = 11$	47 (47)	89 (86)		
8.	$8 - \boxed{3} = 5$	72 (70)	97 (94)		
9.	$11 - \boxed{5} = 6$	57 (58)	93 (91)		
10.	$9 - \boxed{9} = 0$	66 (61)	90 (88)		
11.	$18 - \boxed{8} = 10$	72 (71)	97 (95)		
12.	$\boxed{1} - 0 = 1$	72 (68)	95 (93)		
13.	$\boxed{12} - 5 = 7$	13 (14)	61 (60)	Total Score:	16
14.	$\boxed{14} - 4 = 10$	32 (33)	76 (76)		4 (5)
15.	$\boxed{16} - 8 = 8$	16 (20)	63 (65)		8 (10)
16.	$\boxed{10} - 7 = 3$	15 (20)	65 (67)		30 (30)
					11-13
					34 (27)
					23 (25)
					8-10
					19 (24)
					7 (6)
					0-7
					35 (34)
					2 (4)

Subgroup Analyses:

Year 4

Score

Range

Boys

Girls

Pakeha

Māori

Pasifika

16

14-15

11-13

8-10

0-7

4 %

11 %

33 %

20 %

32 %

3 %

7 %

33 %

20 %

37 %

5 %

12 %

37 %

20 %

26 %

1 %

1 %

28 %

19 %

51 %

0 %

6 %

25 %

20 %

49 %

Year 8

Score

Range

Boys

Girls

Pakeha

Māori

Pasifika

16

14-15

11-13

8-10

0-7

40 %

29 %

24 %

6 %

1 %

36 %

31 %

22 %

9 %

2 %

46 %

30 %

18 %

4 %

2 %

20 %

33 %

37 %

9 %

1 %

17 %

30 %

23 %

27 %

3 %

Commentary:

This task focused on quick recall or derivation of basic subtraction facts. At both year levels, there was little change in performance between 2005 and 2009. Finding the first number in a subtraction, with the answer given, proved particularly difficult. Year 4 Māori students and year 8 Pasifika students scored substantially lower than their Pakeha counterparts.