

Approach: Station

Year: 4 & 8

Focus: Fractions, decimals, percentages

Resources: Computer program on laptop computer

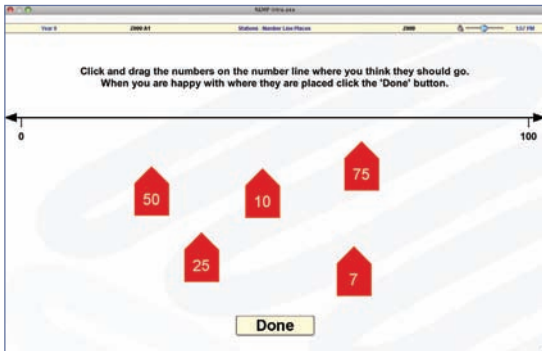
Questions / instructions:

This activity uses the computer.

Click on the button that says **Number Line Places**.  
[Instructions given as voice-over as well as on screen.]

VOICE-OVER:

Click and drag the numbers onto the number line where you think they should go. When you are happy with where they are, click the 'Done' button.



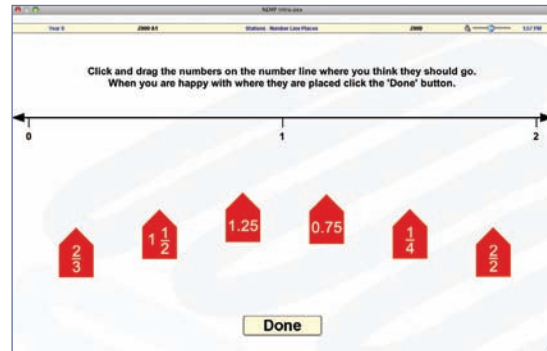
7 placed between 2 and 12  
10 placed between 5 and 15  
25 placed between 20 and 30  
50 placed between 45 and 55  
75 placed between 70 and 80

**Y4 Total Score:** 4-5  
3  
2  
1  
0

% responses  
y4 y8

76 91  
24 64  
23 59  
32 80  
36 76  
14  
17  
24  
29  
16

YEAR 8 ONLY:



$\frac{1}{4}$  placed between 0.15 and 0.35  
 $\frac{2}{3}$  placed between 0.56 and 0.76  
 $\frac{3}{4}$  placed between 0.65 and 0.85  
 $\frac{2}{2}$  placed between 0.90 and 1.10  
1.25 placed between 1.15 and 1.35  
 $1\frac{1}{2}$  placed between 1.40 and 1.60  
 $\frac{2}{3}$  placed before  $\frac{3}{4}$

**Y8 Total Score:** 11-12  
9-10  
7-8  
5-6  
0-4

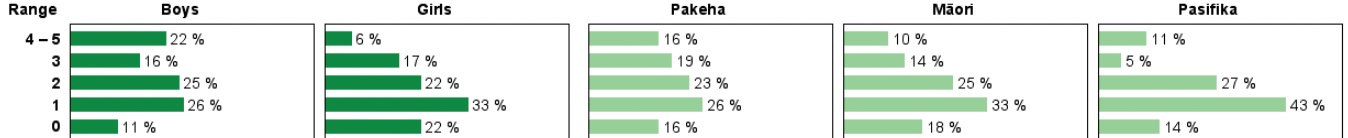
% responses  
y4 y8

44  
25  
56  
35  
68  
75  
35  
15  
20  
24  
17  
24

Subgroup Analyses:

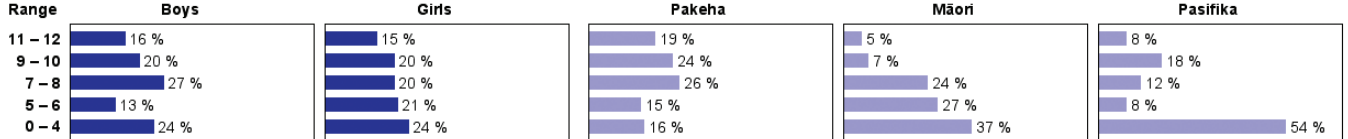
Year 4

Score Range



Year 8

Score Range



Commentary:

On average, year 8 students were much more successful than year 4 students in placing numbers appropriately on the 0 to 100 scale. Year 4 boys were significantly more successful than year 4 girls, but there was little difference at year 8 level, where Pakeha students were substantially more successful than Māori and Pasifika students.