Trend Task: Muffin Mix

Approach:	Independent	**Year:**	4 & 8
Focus:	Double and triple fractions and whole numbers		
Resources:	Answer booklet		

Questions / instructions:
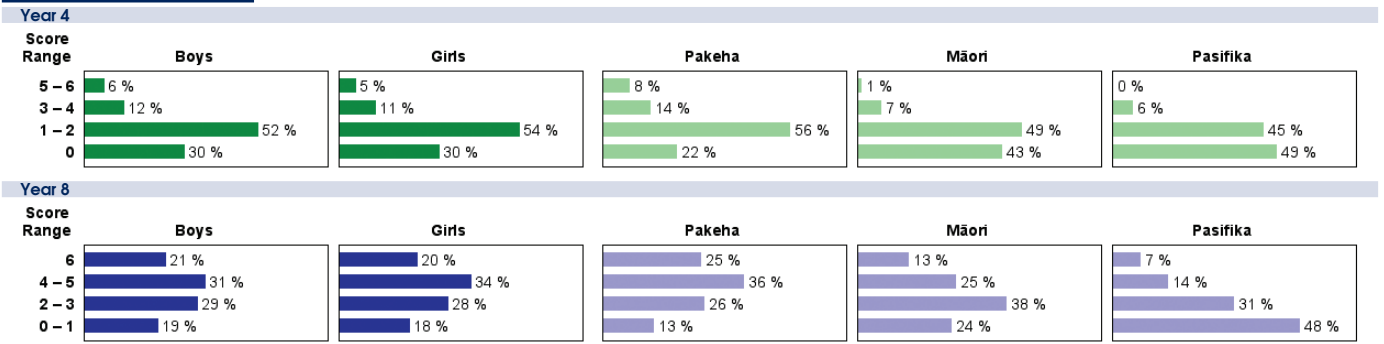
This recipe makes 10 muffins.

For 10 Muffins:

2 eggs

$1\frac{1}{2}$ cups of self-raising flour

$\frac{3}{4}$ cup of milk

$\frac{1}{4}$ cup of sugar

$\frac{2}{3}$ cup of diced apple

75 grams of butter

	% response 2009 ('05) year 4
YEAR 4:	
1. For each ingredient write down how much you would need to make **20** muffins.	
<u>4</u> eggs	66 (69)
$\frac{1}{2}$ cup of sugar	14 (37)
<u>3</u> cups of self-raising flour	13 (16)
$1\frac{1}{3}$ or $\frac{4}{3}$ cups of diced apple	11 (13)
$1\frac{1}{2}$ or $1\frac{2}{4}$ or $\frac{6}{4}$ cups of milk	10 (9)
<u>150</u> grams of butter	26 (22)
Total Score: 5–6	6 (7)
3–4	11 (17)
1–2	53 (48)
0	30 (28)

	% response 2009 ('05) year 8
YEAR 8:	
1. For each ingredient write down how much you would need to make **30** muffins.	
<u>6</u> eggs	88 (88)
$\frac{3}{4}$ cup of sugar	70 (66)
$4\frac{1}{2}$ cups of self-raising flour	60 (60)
<u>2</u> cups of diced apple	39 (31)
$2\frac{1}{4}$ cups of milk	38 (32)
<u>225</u> grams of butter	60 (62)
Total Score: 6	21 (16)
4–5	32 (35)
2–3	29 (30)
0–1	18 (19)

Subgroup Analyses:

Year 4

Score Range	Boys	Girls	Pakeha	Māori	Pasifika
5 – 6	6 %	5 %	8 %	1 %	0 %
3 – 4	12 %	11 %	14 %	7 %	6 %
1 – 2	52 %	54 %	56 %	49 %	45 %
0	30 %	30 %	22 %	43 %	49 %

Year 8

Score Range	Boys	Girls	Pakeha	Māori	Pasifika
6	21 %	20 %	25 %	13 %	7 %
4 – 5	31 %	34 %	36 %	25 %	14 %
2 – 3	29 %	28 %	26 %	38 %	31 %
0 – 1	19 %	18 %	13 %	24 %	48 %

Commentary:

The tasks were different for year 4 and year 8 students, so their results cannot be compared directly. There was little change in performance from 2005 to 2009 at both year levels. Pasifika students averaged much lower than Pakeha students at year 8 level.