Assessment Schedule – 2008

Mathematics: Solve straightforward number problems in context (90151)

Evidence Statement

	Achievement Criteria	No	Evidence	Code	Judgement	Sufficiency
Achievement	Solve straightforward number problems in context.	1	$320 \div 8 \times 3 = 120$ g	A	Units not required anywhere.	**Achievement:** 2 of Code A OR At least M in Q8 Replacement evidence: Q5, 6, 7 and 8.
		2	$\frac{2}{3} \times \frac{3}{4} = \frac{1}{2}$	A	Accept correct rounding/ truncating.	
		3	$\frac{5.20 - 3.90}{5.20} \times 100\% = 25\%$	A		
		4	$17.6 \times 1.125 = \$19.80$	A	\$19.8 accepted.	
Achievement with Merit	Solve number problems in context involving manipulation, several steps or reversing processes.	5	$\frac{5.4 \times 10^6}{1.8 \times 10^9} \times 100\% = 0.3\%$	A/M	Units not required anywhere. Accept correct rounding / truncating.	**Achievement** PLUS 2 of Code M OR 3 of Code M Replacement evidence: Q8.
		6	$1.9 \div 1.055 = 1.8009\ldots \approx \$1.80$	A/M	Accept \$1.8.	
		7	***Nature's Best***: $310 \div 780$ $= 0.3974...$ cents / g ***Fresha:*** $280 \div 680$ or $140 \div 340$ $= 0.4117..$ cents / g ***Nature's Best*** is cheaper.	M	**A** if two correct calculations to enable comparison of values.	

Achievement with Excellence	Devise a strategy and solve a number problem.	8	<u>Find the total cost of food</u>: Sausages $250 \div 6 = 41.666.. \approx 42$ $42 \times \$5 \times 0.9 = \$189$ Bread $250 \div 10 = 25$ $25 \times \$2.50 = \$62.50$ Tomato Sauce $250 \div 15 \approx 17$ $17 \times \$2.80 = \$47.60$ Total food cost = \$299.10 B.O.T. will pay $0.15 \times \$299.10 = \$44.87$ P.A. will pay $0.25 \times \$299.10 = \$74.78$ <u>Balance</u>: $\$299.10 - \$44.87 - \$74.78 = \$179.45$ or $(1 - (0.15 + 0.25)) \times \$299.10 = \$179.46$ <u>Cost per student</u>: $\$179.45 \div 90 = \$1.99$ or $\$179.46 \div 90 = \$1.99$ [or $\$178.56 \div 90 = \$1.99$] etc ie \$2.00 (nearest 10 cents)	A A A M E	Only 1 A can be gained from calculation of sausages, bread & sauce Accept either the "exact" amounts or sensibly rounded ones, eg 41.666… kg or 42 kg sausages. Total PLUS a further correct calculation for M Calculations consistent with minor error may gain M. Accept any reasonable rounding for money within the context. For "E", answer is one that is explained by relevant words and calculations and allows for the calculated costs to be just covered. Answer consistent with candidate's strategy.	**Achievement with Merit:** **plus** Code E

Judgement Statement – 2008

Achievement	Achievement with Merit	Achievement with Excellence
Solve straightforward number problems in context.	Solve number problems in context involving manipulation, several steps or reversing processes.	Devise a strategy and solve a number problem.
	Achievement plus	Achievement with Merit plus
$2 \times$ A	$2 \times$ M	$1 \times$ E
OR	OR	
$1 \times$ M from Q8	$3 \times$ M	

The following Mathematics-specific marking conventions may also have been used when marking this paper:

- Errors are circled.
- Omissions are indicated by a caret (^).
- **NS** may have been used when there was not sufficient evidence to award a grade.
- **C** may have been used to indicate 'consistency' where an answer is obtained using a prior, but incorrect answer and **NC** if the answer is not consistent with wrong working.
- **CAO** is used when the 'correct answer only' is given and the assessment schedule indicates that more evidence was required.
- # may have been used when a correct answer is obtained but then further (unnecessary) working results in an incorrect final answer being offered.
- **RAWW** indicates right answer, wrong working.
- **R** for 'rounding error' and **PR** for 'premature rounding' resulting in a significant round-off error in the answer (if the question required evidence for rounding).
- **U** for incorrect or omitted units (if the question required evidence for units).
- **MEI** may have been used to indicate where a minor error has been made and ignored.