

DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Department of Curriculum Management
Educational Assessment Unit
End of Primary Benchmark – 2015

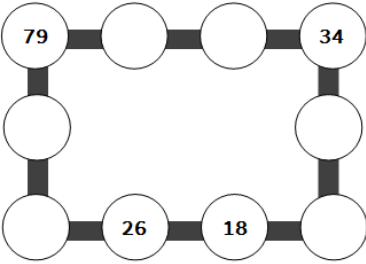
MATHEMATICS MARKING SCHEME

MENTAL PAPER

(1 mark each c.a.o.)

1.	79
2.	6023
3.	110
4.	40
5.	7 and 9 or 1 and 63 or 3 and 21 (in any order)
6.	3250
7.	903
8.	60
9.	1·800 or 1·80 or 1·8
10.	3·80
11.	240
12.	35
13.	0·63
14.	10
15.	9
16.	9
17.	23
18.	25
19.	42
20.	45

WRITTEN PAPER

Question No.	Answers and Requirements	Marks	Additional Guidance
1. a)	565	1	c.a.o.
b)	181	1	c.a.o.
c)	280	1	c.a.o.
d)	14	1	c.a.o.
2.		1,1, 1,1	c.a.o. (Award 1 mark for any line that adds up to 150)
3.	$\frac{1}{2}$ of 20 cm^2 or $\frac{1}{2}$ of $10 \text{ cm}^2 + \frac{1}{2}$ of 10 cm^2 10 cm^2	2 2	Accept any other valid method c.a.o.
4.	$\frac{1}{2}$ of 108 = 54 men $\frac{1}{4}$ of 108 = 27 women $\frac{1}{4}$ of 108 (children) 27 children	1 1 1 1	Accept any other valid method c.a.o.
5. a)	$20 + 20 + 160 + 500$ $700 \text{ cents} = \text{€}7.00$	2 1	Accept any other valid method c.a.o.
b)	$1050 - 700$ $350 \text{ cents} = \text{€}3.50$	1 1	Accept any other valid method (f.t. from 5a)

Question No.	Answers and Requirements	Marks	Additional Guidance																		
6. a)	42 + 31 + 38	1	Attempt to add all plants sold																		
	111 ÷ 3 37 plants	1 1	Attempt to divide by 3 seen c.a.o.																		
b)	111 + 57 168 plants	1 1	Attempt to add 57 to the total number of plants sold c.a.o. (f.t. from 6a)																		
7.	<table border="1"> <thead> <tr> <th>decimal numbers</th> <th>fractions</th> <th>percentages</th> </tr> </thead> <tbody> <tr> <td>0.5</td> <td>$\frac{1}{2}$</td> <td>50%</td> </tr> <tr> <td>0.2</td> <td>$\frac{1}{5}$</td> <td>20%</td> </tr> <tr> <td>0.75</td> <td>$\frac{3}{4}$</td> <td>75%</td> </tr> <tr> <td>0.25</td> <td>$\frac{1}{4}$</td> <td>25%</td> </tr> <tr> <td>0.04</td> <td>$\frac{4}{100}$</td> <td>4%</td> </tr> </tbody> </table>	decimal numbers	fractions	percentages	0.5	$\frac{1}{2}$	50%	0.2	$\frac{1}{5}$	20%	0.75	$\frac{3}{4}$	75%	0.25	$\frac{1}{4}$	25%	0.04	$\frac{4}{100}$	4%		
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a)		1	c.a.o.																		
b)		1	c.a.o.																		
c)		1	c.a.o.																		
d)		1	c.a.o.																		
e)		1	c.a.o.																		
8. a)	0.5 kilograms	1	c.a.o.																		
b)	2 eggs = 10 muffins 1 egg = 5 muffins 35 muffins	1 1	Accept any other valid method c.a.o.																		
	c)	75 grams of sugar = 5 muffins 5 muffins = 90 grams of butter 90 grams	1 1	Accept any other valid method c.a.o.																	
9. a)	Any shape that has a vertical line of symmetry and a horizontal line of symmetry	2	c.a.o. Accept only if shape is drawn using a ruler																		
b)	48° + 48°	1	seen or implied																		
	subtract two known angles from 180°	1	seen or implied																		
	84°	1	c.a.o.																		

Question No.	Answers and Requirements	Marks	Additional Guidance
10. a)	Brian	1	c.a.o.
b)	250 ml	1	c.a.o.
c)	1200 ml	1	c.a.o.
d)	No The girls drink 550 ml more than the boys. / The boys drink 550 ml less than the girls. / The girls drink 1750 ml, while the boys drink 1200 ml.	2	c.a.o. Award marks only if NO is accompanied by a valid reason
11. a)	13:30	1	c.a.o. Accept also 1:30 p.m.
b)	8.5 or 8 ½ hours	1	c.a.o.
c)	half past seven	1	c.a.o.
d)	8.5 hours or × 5 seen/implied	1	Accept any other valid method
	42 hours 30 minutes	1	c.a.o. (f.t. from 11b)
12. a)	+	1	c.a.o.
b)	-	1	c.a.o.
c)	-	1	c.a.o.
d)	÷	1	c.a.o.
e)	×	1	c.a.o.
13. a)	Brown	1	c.a.o.
b)	14 women	1	c.a.o.
c)	12 + 14 + 23 + 28 + 19 96 women	1 1	Accept any other valid method c.a.o.
d)	96 × 50 seen or implied 4800 c / €48	1 1	Accept any other valid method c.a.o. (f.t. from 13c)

Question No.	Answers and Requirements	Marks	Additional Guidance
14. a)	(1.7 × 5) + 500 g seen or implied	1	Accept any other valid method
	9000 g	1	c.a.o.
b) i.	9000 ÷ 250 seen or implied	1	Accept any other valid method
	36 packets	1	c.a.o. (f.t. from 14a)
b) ii	36 × 3 seen or implied	1	Accept any other valid method
	€108	1	c.a.o. (f.t. from 14bi)
15. a)	15 × 4 seen or implied	1	Accept any other valid method
	60 cm	1	c.a.o.
b)	60 + 60 + 15 + 15	1	Accept any other valid method
	150 cm	1	c.a.o. (f.t. from 15a)
c)	144 ÷ 4 = 36cm ²	1	Accept any other valid method
	6 cm	1	c.a.o.
16. a)	2, 4, 7, 14, 16 (in any order)	6	Award 1 mark for each of these correct steps: <ul style="list-style-type: none"> • Two of the five numbers are square numbers • Two of the five numbers are multiples of seven. • Four out of the five numbers are even. • The sum of the five numbers is less than 45.

Legend to Marking Scheme:

c.a.o. correct answer only

f.t. follow through

Other guidelines:

1. No mark in the marking scheme is sub-divisible.
2. A correct answer scores full marks, even if no working is shown.
3. Incorrect answers – even though nearly correct – score no marks but marks are awarded for correct working.
4. No marks are awarded when a wrong method leads to a correct answer.
5. Incorrect working or statement following a correct answer is ignored.
6. An answer or working that is crossed out and not replaced is marked as if it was not crossed out. If the answer or working is **replaced**, then the crossed out answer or working should **not** be considered in your marking.
7. If a correct answer is copied incorrectly from the working area to the answer area, then the marks are awarded fully.
8. In the case of misreading, f.t. may be applied and only the final accuracy mark is lost. The method marks may still be earned provided that the misreading doesn't oversimplify the question.