## END OF PRIMARY BENCHMARK

Directorate for Quality and Standards in Education Educational Assessment Unit

MENTAL MATHEMATICS
(1 mark each. c.a.o.)

| 1. | 30 | 2. | 6 or 6 faces |
| :---: | :--- | :--- | :--- |
| 3. | 48 or 48 h or 48 hours | 4. | 170 |
| 5. | 60 |  |  |
|  |  |  |  |
| 6. | 991 | 7. | 3700 or 3700 g |
| 8. | 3 | 9. | 45 or 45 min or 45 minutes |
| 10. | 3 or 3 lines | 11. | 100 or $€ 100$ |
| 12. | $17 \cdot 2$ | 13. | 475 |
| 14. | 35 | 15. | $\frac{3}{4}$ |
|  |  |  |  |
| 16. | 262 | 17. | 30 |
| 18. | 11 or 11 cm | 19. | 20 or 20 minutes |
| 20. | $9 \frac{3}{4}$ |  |  |

## WRITTEN PAPER

| No. | Requirements | Mark | Additional Guidance |
| :---: | :--- | :---: | :--- |
| 1. a) | 200 | 1 | c.a.o. |
| b) | 1200 | 1 | c.a.o. |
| c) | 78 | 1 | c.a.o. |
| d) | 106 | 1 | c.a.o. |
| 2. a) | 8 cm | 1 | c.a.o. |
| b) i) | 25 kg | 1 | c.a.o. |
| ii) | 3 m | 1 | c.a.o. |
| c) | $32,000 \mathrm{~kg}$ | 1 | c.a.o. |
| 3 |  |  | 1 |
|  | a) | The cuboid has 6 faces. | c.a.o |
| b) | The cuboid has 12 edges. | 1 | c.a.o 2 circular edges. |
|  | This shape has no vertices. | 1 | c.a.o <br> c.a.o |
| a) | $42 \cdot 5 \mathrm{~km}$ | 1 |  |
| b) | $0 \cdot 09 \mathrm{~km}$ | 1 | c.a.o |
| c) | $41 / 4 \mathrm{~km}$ | 1 | c.a.o |
| d) | $41 \cdot 9 \mathrm{~km}$ | 1 | c.a.o |


| No. | Requirements | Mark | Additional Gut |
| :---: | :---: | :---: | :---: |
| 5. a) | $\begin{aligned} & \mathrm{a}=2 \cdot 4 \text { (given) } \\ & \mathrm{b}=2 \cdot 8 \text { or } 2 \cdot 80 \\ & \mathrm{c}=3 \cdot 2 \text { or } 3 \cdot 20 \\ & \mathrm{~d}=3 \cdot 7 \text { or } 3 \cdot 70 \\ & \mathrm{e}=3.8 \text { or } 3.80 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | c.a.o |
| b) | Valid marking of $3 \cdot 4$ | 1 | c.a.o. |
| 6. | $\begin{aligned} & \underline{30}+100+20 \\ & 40+\underline{10}+100 \\ & \underline{80}+20+50 \\ & \underline{10}+\underline{80}+\underline{60} \\ & \underline{20}+70+60 \end{aligned}$ | $\begin{aligned} & \hline 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | $\begin{aligned} & \text { c.a.o. } \\ & \text { c.a.o. } \\ & \text { c.a.o. } \\ & \text { f.t. } \\ & \text { f.t. } \end{aligned}$ |
| 7. a) | $\begin{aligned} & 1800 \div 3 \\ & 600 \mathrm{~g} \end{aligned}$ | $\begin{aligned} & \hline 1 \\ & 1 \end{aligned}$ | Seen or implied. |
| b) i) | 750 g | 1 | c.a.o. |
| ii) | $\begin{aligned} & 350 \mathrm{~g} \mathrm{x} 5=1750 \mathrm{~g} \\ & 1750 \mathrm{~g}+750 \mathrm{~g}= \\ & 2500 \mathrm{~g} \end{aligned}$ | $\begin{aligned} & \hline 1 \\ & 1 \end{aligned}$ | Accept any valid method. |
| 8. | Identifying even numbers. <br> Crossing out the square number. <br> Identifying 8 as a factor. <br> Identifying numbers divisible by 5 . <br> Choosing 40 between 32 and 40. | $\begin{aligned} & \hline \hline 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | Seen or implied. <br> c.a.o. |
| 9. a) | $24+8$ | 1 | c.a.o. |
| b) | $24 \div 8$ | 1 | c.a.o. |
| c) | half of 24 | 1 | c.a.o. |
| d) | $\text { double } 24$ $8 \times 6$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | $\begin{array}{\|l} \text { c.a.o. } \\ \text { c.a. } \end{array}$ |
| 10. a) | Accept any valid method. $825 \div 25$ <br> 33 rows | $\begin{aligned} & \hline 2 \\ & 1 \\ & \hline \end{aligned}$ | Seen or implied. |
| b) | $\begin{aligned} & 40 \times 25 \text { or } 40 \times 30 \\ & 1000 \text { people } \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | Seen or implied. Accept $39 \times 25$ c.a.o. |
| 11. a) | Sunday $27^{\text {th }}$; Monday $28^{\text {th }}$ | 2 | c.a.o. |
| b) | 4 times | 1 | c.a.o. |
| c) | $17^{\text {th }}$ February | 2 | c.a.o. |
| 12. a) i) | $36 \mathrm{~cm}^{2}$ | 1 | c.a.o. |
| ii) | $\begin{aligned} & 12+12+12+9+3+3+3 \\ & 54 \mathrm{~cm} \\ & \hline \end{aligned}$ | $1$ | Seen or implied. |
| b) i) | $40^{\circ} \pm 2^{\circ}$ | 1 |  |
| ii) | $50^{\circ}$ | 1 | c.a.o. |


| No. | Requirements | Mark | Additional Gu |
| :---: | :---: | :---: | :---: |
| 13. a) | 6 pupils | 1 | c.a.o. |
| b) | $12-8=$ <br> 4 pupils | 1 | c.a.o. |
| c) | $6+8+12+10+12+2$ <br> 50 pupils | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | Seen or implied. |
| d) | $\begin{aligned} & 10 \% \text { of } 50 \\ & 5 \text { pupils } \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | Seen or implied. |
| 14. a) | $\begin{aligned} & \frac{250}{1000} \text { or } \frac{25}{100} \text { or } \frac{5}{20} \\ & \frac{1}{4} \end{aligned}$ | $1$ | Seen or implied. c.a.o. |
| b) | 1500 ml | 1 | c.a.o. |
| c) i) | Paul | 1 | c.a.o. |
| ii) | $\begin{aligned} & 30 \boldsymbol{\ell} \div 1.5 \boldsymbol{\ell}=20 \text { or } \\ & 1.5 \boldsymbol{\ell} \times 2=3 \boldsymbol{\ell} \text { or } 1.5 \boldsymbol{\ell} \times 20=30 \boldsymbol{\ell} \end{aligned}$ | 2 | Seen or implied. <br> Accept any valid reason. |
| 15. a) | $\begin{aligned} & 12: 25-11: 00= \\ & 1: 25 \text { or } 1 \mathrm{~h} 25 \mathrm{~min} \end{aligned}$ | $\begin{aligned} & \hline 1 \\ & 1 \\ & \hline \end{aligned}$ | Seen or implied. |
| b) i) |  | 1 | c.a.o. |
| ii) | 3:25 p.m. | 1 | c.a.o. |
| c) | $\begin{aligned} & 8: 15-1: 25=6: 50 \\ & 6: 50 \text { or } 6: 50 \mathrm{a} . \mathrm{m} . \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | Seen or implied. |
| 16. a) | Scheme A | 1 | c.a.o. |
| b) | Valid working shown. Scheme B | $\begin{aligned} & 1 \\ & 1 \\ & \hline \end{aligned}$ | c.a.o. |
| c) i) | Yes | 1 | c.a.o. |
| ii) | Scheme A - $€ 20-400 \mathrm{msg}$ Scheme B - $€ 20-600 \mathrm{msg}$ | 2 | Accept any valid reason |

## Legend to Marking Scheme:

c.a.o. correct answer only
f.t. follow through
-1 e.e.0.0. -1 for each error or omission

## Other guidelines:

1. No mark in the marking scheme is sub-divisible.
2. Even if no working is shown, a correct answer scores full marks.
3. Incorrect answers - even though nearly correct - score no marks.
4. Incorrect working or statement following a correct answer is ignored.
5. An answer or working that is crossed out and not replaced is marked as if it was not cros, the answer or working is replaced, then the crossed out answer or working should not be co in your marking.
6. If the answer is copied from the working area to the answer area incorrectly, then the marks are awarded fully.
7. Misread loses only the final accuracy mark but f.t. may be allowed on subsequent parts. The method marks may still be earned provided that the part question is not oversimplified.
