

*New wave mental maths* is a series of six student workbooks written for Australian primary schools.

Comprehensively revised in 2011 to take into account the requirements of the new national curriculum, *New wave mental maths* provides an ideal platform for the development of mental skills and mathematical concepts.

New wave mental maths provides:

- comprehensive coverage of mental mathematics concepts
- opportunities for consolidation of mathematical concepts
- practice in speed of recall
- opportunities for reinforcement of ongoing mathematical concepts
- sequential development of mathematical concepts
- a structured daily program for the whole year
- pictorial, graphic and written representation of problems
- an in-built review and assessment program (levels D-G).

Each level provides coverage of all mathematical strands applicable to mental mathematics activities.

A teachers manual, to accompany the *New wave mental maths* workbook, is also available. This contains suggestions to help develop mental strategies, a list of concepts covered, assessment and answers.

## Books available in this series

New wave mental maths	Book B	RIC-1701	978-1-921750-00-7
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New wave mental maths	Teachers guide	RIC-1707	978-1-921750-06-9

Australian School Age Levels







**Revised 2011** 

## **R.I.C. Publications®**

PO Box 332, Greenwood Western Australia 6924 Tel: (08) 9240 9888 Fax: (08) 9240 1513 Email: mail@ricgroup.com.au International Tel: +61 8 9240 9888 International Fax: +61 8 9240 1513

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**Trial booklet** 

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week 18







week 19





## THURSDAY 1. Which four coins are needed to make \$4.60? and 23 hours later 3. Does the shadow of the В chair come from a light (A) 🔰 $(\mathbf{C})$ located at A, B or C? **10.** When is the next leap year? **12.** If a wind is blowing south, is the wind direction described as a northerly or southerly? 13. Draw the right side view. **15.** If you are going for a 50-km ride on your bike and so far you have travelled 26 km, how far is left to go? (A Potato Potato Chips Chips 50 g 25 g 500 g 500 q How many 50-g packets will fit in Box A? How many 25-g packets will fit in Box B? **18.** 7 + 10 000 + 400 + 60 =

MY SCORE

NEW WAVE MENTAL MATHS





WEEK 17	<b>20</b> 57 km	<b>10.</b> Answers will vary: e.g.	<b>11.</b> 0	<b>5.</b> \$20 - \$14.80 = \$5.20
		450, 490, 500.	<b>12.</b> 5	<b>6.</b> 200 km
MONDAY	1 0 00	<b>11.</b> 25	<b>13.</b> 1050	<b>7.</b> 1500
<b>1.</b> 10:55	<b>1.</b> 2.30	<b>12.</b> 1.2 m	<b>14.</b> 0.1 km	<b>8.</b> 5.7
<b>2.</b> 20 000	2.00	°	<b>15.</b> 600	ha
ac	<b>3.</b> / <b>4</b> 717	13. 🕒	<b>16.</b> 1988	ο DO
	<b>4.</b> / 1 / <b>5</b> 0 7 or 0 9	<b>14.</b> 20 + 1 + 0.09	<b>17.</b> 16 chickens, 58 eggs	10 north-west
4. 99	<b>3.</b> 2.7 UI 2.0 <b>6.</b> 12 hours	15. true	<b>18.</b> 6 × 9 = 54	<b>11</b> . 0.75
<b>5.</b> 110	<b>7</b> 20 mm	16. true	<b>19.</b> 2.0	<b>12</b> , 366
6. Answers may vary: e.g.	<b>8</b> 200 m	17. 40 mm, Teacher check	<b>20.</b> <sup>12</sup> / <sub>40</sub>	<b>13.</b> 40.9
360, 390, 400.	<b>9</b> 35	shading	FRIDAY	<b>14.</b> 409
<b>7.</b> 33 720	<b>3.</b> 00	<b>18.</b> 0.1 t	1. 3	m
<b>8.</b> 10		<b>19.</b> 17	<b>2.</b> 85	15.
<b>9.</b> B	11 110 000	<b>20.</b> 3890	<b>3.</b> 6 × 9 = 54	16. Answers will vary; e.g.
<b>10.</b> 89	<b>10</b> 7420	TUESDAY	4. sphere	270, 290, 300.
<b>11.</b> 1500	<b>12.</b> $(50 \times 7) + (2 \times 7) =$	<b>1.</b> 3 (\$1, 20c, 10c)	5. 31 May	<b>17.</b> 18.7 or 18.07
<b>12.</b> 6	<b>13.</b> $(30 \times 7) + (3 \times 7) =$ 350 + 21 - 371	<b>2.</b> no	<b>6.</b> 40	$\wedge$
<b>13.</b> am		<b>3.</b> 5	<b>7.</b> 10 + 8 + 0.1 + 0.08	10
<b>14.</b> 2	<b>15</b> 0.7	<b>4.</b> 50	8. yes	<b>10.</b> 105
<b>15.</b> 1.4	<b>16</b> . 4	<b>5.</b> 35	<b>9.</b> 1150	<b>20</b> 0.0
<b>16.</b> 50	<b>17</b> . an open box	<b>6.</b> 0	<b>10.</b> 250	
<b>17.</b> 30	<b>18.</b> 50	<b>7.</b> 7 × 8 = 56	<b>11.</b> 4700	WEDNESDAY
<b>18.</b> 750 m	<b>19.</b> 309 000	<b>8.</b> 33	<b>12.</b> 1.4 m	<b>1.</b> 12.10
<b>19.</b> A = \$4.50, B = \$52.50	<b>20</b> , 200	<b>9.</b> 17 hours	<b>13.</b> 225	<b>2.</b> 104
<b>20.</b> <sup>8</sup> ⁄ <sub>10</sub>	ERIDAY	<b>10.</b> \$36		<b>3.</b> 994
TUESDAY	1 1 25	11. 6900		4. 30
<b>1.</b> 4.10	<b>2</b> 30	12. ÷	<b>15.</b> % <sub>10</sub>	EG L
2. hemisphere	3 99	13. Sunday	<b>16.</b> 1992	5.
<b>3.</b> 55	4 36	<b>14.</b> 3.0	17. 61 10. Tasahari ahasili	<b>6.</b> 23
<b>4.</b> 0	5. 40	15. 22	18. leacher check	7. 4600 g
<b>5.</b> 0.01		<b>10.</b> 30 June <b>17.</b> 250	<b>19.</b> \$07.20	8. 28 915 0. 04
<b>6.</b> 35		<b>17.</b> 200 <b>19</b> 1/	<b>20.</b> 30 IIIII <b>21.</b> 1500 m	<b>9.</b> 94
7.36	6.	<b>10.</b> 7 <sub>2</sub> <b>10.</b> 58	<b>21.</b> 1300 m <b>22</b> 70	
8. August	<b>7.</b> $(40 \times 6) + (4 \times 6) =$	<b>20</b> 3 t	<b>22.</b> 78 <b>23.</b> 5	
9. /	240 + 24 = 264		<b>24</b> 200 kg	3 5 7
10. 51 11. Togobar abaak	<b>8.</b> 32 mm		<b>25.</b> 20 000	11. 4 9 2
	<b>9.</b> 3.48	<b>Ι.</b> \$2, \$1, 200	201 20 000	<b>12.</b> the number of people
<b>12.</b> 0.0 cm	<b>10.</b> 1.6	<b>2.</b> 120 <b>3.</b> 21	WEEK 19	living in a town
<b>14</b> 0.75	11. 100	<b>4</b> 20		<b>13.</b> 40
15. Wednesday	12. 1101/agon	5. 00	MONDAY	14. SUITITIEI 15. 0000
<b>16.</b> 25 500	<b>13.</b> 40 <b>14.</b> 2607	6. 9.9	<b>1.</b> 12.25	IJ. 2300
<b>17.</b> 3470	<b>15</b> 90 090	<b>7.</b> 37	<b>2.</b> 3500	
<b>18.</b> 150 m	16 Teacher check	<b>8.</b> 5500 m	, qi	
<b>19.</b> <sup>5</sup> / <sub>10</sub>	<b>17</b> 4/2	<b>9.</b> 49	<b>J</b> 31	16. 🖸
<b>20.</b> 14 000	<b>18.</b> 1000 m	<b>10.</b> \$6.50	<b>5</b> 16 160	<b>17.</b> 3.1
WEDNESDAY		<b>11.</b> 20 000	<b>6.</b> 3700 m	18. extremely hot
<b>1.</b> 5.40		<b>12.</b> \$6.75	<b>7.</b> 500	<b>19.</b> 3.0
<b>2.</b> 3.00 am	<b>20</b> , 25 hours	<b>13.</b> yes	<b>8.</b> 6	20. 525
<b>3.</b> 1700		14. 7	9. trapezium	THURSDAY
<b>4.</b> 140	21.	<b>15.</b> 2.5	<b>10.</b> 80c	<b>1.</b> 8.50
5. Teacher check	<b>22.</b> 48	<b>16.</b> 3.0	<b>11.</b> 52	2. yes, leacher check
<b>6.</b> 0.03	<b>23.</b> 7	17. 9	<b>12.</b> 425	3 1001119 2 10
7. Answers may vary; e.g.	<b>24.</b> 10 000	10. 0 10. 260	<b>13.</b> 10 000	<b>3.</b> 40
900, 990, 10 000.	<b>25.</b> 59 km	<b>20</b> 8/	<b>14.</b> 6	<b>5</b> 3 <i>4</i>
8. 33 9. Tuesday			<b>15.</b> 7	<b>6</b> , 870
9. Tuesday	WEEK 18		<b>16.</b> 360 + 18 = 378	<b>7</b> , 99,000
<b>10.</b> 000ay011	MONDAY	1. \$2, \$2, 50 <b>0</b> 05	17 m w	<b>8.</b> 80, 160
<b>12</b> 00 8	<b>1</b> , 2 (\$1, 50c)	<b>2.</b> 20 <b>2.</b> 21 July	18. %	<b>9.</b> 3
<b>13</b> . 3	<b>2.</b> 1 May	<b>1</b> 41	<b>19.</b> 1.4	20
<b>14</b> 100	<b>3.</b> cone	<b>5</b> C	<b>20.</b> 68 km	
<b>15.</b> 121	<b>4.</b> 66	6. ves	TUESDAY	<b>11.</b> 66 km
Π	<b>5.</b> 35	<b>7.</b> 0.8	1, 9.55	<b>12.</b> 9 t
16. 🔟	<b>6.</b> 9	<b>8.</b> 35	<b>2.</b> 97	13. false
<b>17.</b> 14 700	<b>7.</b> 93	9. 88 or 99	<b>3.</b> 53	E
<b>18.</b> <sup>4</sup> / <sub>6</sub>	<b>8.</b> 25		<b>4.</b> \$5.20	14.
<b>19.</b> \$12.50	9. square pyramid	10.		

Trial booklet

<b>15.</b> 1.9	<b>6</b> , \$15,40	<b>6</b> . 15½ or 15.5	
10 100	7 1000		
IO. yes	<b>7.</b> 1060		
<b>17.</b> 219	8. isosceles		
18. 4.2	<b>9</b> , 7.3	7. ⊻+-×	
<b>10</b> 24 06	<b>10</b> 9407	8, 15	
19. 24, 90	IU. 0407	0, 000	
<b>20.</b> 6 r 5	11. 2	9. 320	
EDIDAV	<b>12</b> , 4.5	<b>10.</b> 50°	
TRIDAT	12 0	<b>11</b> , 113	
<b>1.</b> 7.45	13. 9		
2. true	<b>14.</b> 27 mm	<b>12.</b> $A = 23, B = 20$	
<b>n</b> 40	<b>15</b> , \$25	<b>13.</b> 48	
<b>3.</b> 43	<b>16</b> 60°	<b>14</b> , no	
<b>4.</b> 420 + 21 = 441	10.00	<b>1F</b> 010	
5.6t	<b>17.</b> <u>120</u>	13. 210	
		<b>16.</b> 1	
ar	10 E	<b>17.</b> 6.5	
6.		19 202	
7 89	<b>19.</b> 250	10. 232	
<b>n</b> 00.000	<b>20.</b> 0.25	<b>19.</b> scalene	
8. 90 000	WEDNESDAY	<b>20.</b> 25 000	
9. decagon	WEDNESDAT	<b>21</b> 160 m	
<b>10</b> 40	<b>1.</b> \$2, \$1, 50c, 20c, 5c	21. 100 m	
14 70	<b>2</b> 2089	22. /	
11. /.0	2 00	<b>23.</b> \$400.00	
<b>12.</b> 270	<b>3.</b> 99	<b>24</b> , \$68, 50	
<b>13</b> , \$1,90	<b>4.</b> 2.7	<b>26</b> 0.05	
14 pouth cost	5. 4 00 pm	<b>23.</b> 0.25	
14. South-east	<b>6</b> 250 700		
15. yes	0. 330,700		
A	<b>7.</b> 19.5		
	8. triangular pyramid		
	9.6		
16. 山	10 Taaahar ahaal		
17 0500	IU. leacher check		
17. 3500	11. easterly		
<b>18.</b> 25 025	<b>12</b> 120		
<b>19</b> , 120,354	10 0		
20 0.5	13. 0		
20. 0.5	<b>14.</b> 250, 125		
<b>21.</b> B	15. check		
<b>22</b> , 700	16 0050		
<b>22</b> 100	<b>ΙΟ.</b> φ230		
<b>23.</b> 120	<b>17.</b> 7		
<b>24.</b> 1.1	<b>18.</b> 20 cm		
<b>25.</b> 0.7	10 162		
	19. 102		
	<b>20.</b> 90		
WEEK 20	THURSDAY		
	1 00 00 50- 10-		
MONDAY	<b>1.</b> \$2, \$2, 50C, 10C		
<b>1</b> \$1 50c 20c 20c	<b>2.</b> 1.00 am		
<b>0</b> 007	3. B		
<b>Z.</b> 997	4 070		
<b>3.</b> 140 m	<b>4.</b> 270		
4 731	<b>5.</b> 170		
	6, \$23		
	7 161		
	7. 101		
5. ×+×	<b>8.</b> 6		
<b>6.</b> 1800	<b>9.</b> 121		
7 36	10. Teacher check		
<b>n</b> 10 000	<b>11</b> 07		
<b>8.</b> 10,000	11. 2/		
<b>9.</b> 65°	12. northerly		
<b>10</b> , 150			
11 125			
10.0	13		
<b>12.</b> no			
10			
13. ↓			
<b>14.</b> 900	14. 💷		
<b>15.</b> 1.8	<b>15.</b> 24 km		
<b>16</b> 100	<b>16</b> 21		
10. 100			
<b>17.</b> 37 mm	<b>17.</b> $A = 10, B = 20$		
<b>18.</b> 29	<b>18.</b> 10 467		
<b>19</b> 32 Jans	<b>19</b> , 26.3		
$\mathbf{n}$ $\mathbf{n}$ $\mathbf{n}$	20 262		
20. 2500	20. 203		
TUESDAY	FRIDAY		
1 \$2,200,100	1 \$2 \$1 200 100		
1. φ2, 20C, 10C	<b>1.</b> φ2, φ1, 200, 100		
<b>2.</b> 35	<b>2.</b> 46		
3. no	<b>3.</b> 50		
4 125	4. westerly		
<b>F</b> (12.0	E homionhoro		
<b>5.</b> \$230	<b>5.</b> nemisphere		

Answers

