

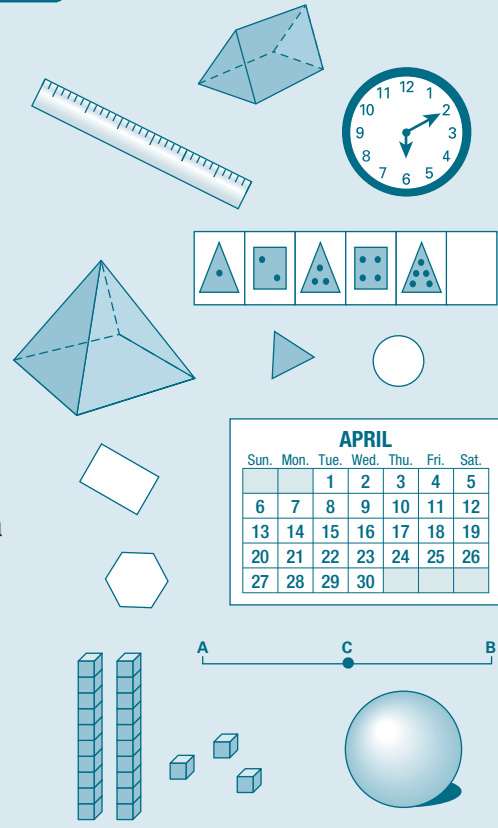
FOREWORD

New wave mental maths is a series of student workbooks, written to provide a comprehensive and structured daily mental maths program for students in Australian primary schools.

It has been revised to incorporate the requirements of the Australian maths curriculum and is designed to:

- encourage and develop students' mental calculation concepts and skills
- develop and reinforce students' problem-solving strategies
- develop and maintain students' speed of recall
- introduce students to, and help them practise and understand, a range of mathematics vocabulary.

Assessment activities are provided for students to assess, monitor and record their own performance on a weekly basis. A separate teachers manual is available that accompanies the **New wave mental maths** series. This manual contains guidelines to help develop mental strategies, suggestions for classroom use, assessment tools, a list of the concepts developed and answers.

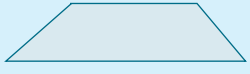


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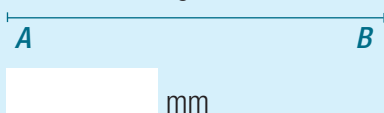
MONDAY



1. What is the time?
2. $9 + 9 + 9 =$
3. Is $1\frac{3}{4}$ closer to 1 or 2?
4. Mark the parallel sides.

5. $\$5.00 - \$3.50 =$
6. Halve 1250.
7. $XC =$
8. $\frac{1}{2} > \frac{1}{3}$ true false
9. $49 \times 9 =$ (a) 40×9 less than 50×9 .
 (b) 1×9 less than 50×9 .
 (c) 1×1 less than 50×9 .

10. $1 \text{ m} =$ cm
11. Which is symmetrical,
 A or G?
12. Write *one thousand and ten* as a numeral.

13. What is the length of \overline{AB} ?



14. Round 1151 to the nearest hundred.
15. $8^2 =$
16. 6, 12, 18, , 30,
17. Name this 3-D shape.



18. Does sunset occur at am or pm time?
19. EFTPOS and credit cards are forms of exchanging money. Write one advantage of using EFTPOS over cash.




20. In which season is July?

MY SCORE

TUESDAY



1. What is the time?
2. Is $2\frac{4}{5}$ closer to 2 or 3?
3. In which season is October?
4. 
 A truck driver travelled 32 km from the sign towards Melbourne. How many kilometres are left to travel?
5. $8 + 8 + 8 =$
6. $500 + 700 =$
7. $\$5.00 - \$2.90 =$
8. $2091 - 100 =$
9. What is the speeding fine?



5–12 km/h \$75
 13–19 km/h \$150
 20–27 km/h \$200


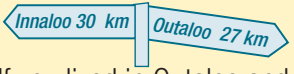
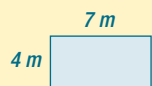
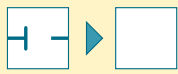




10. Write *one thousand, one hundred and eleven* as a numeral.
11. $70 \times 9 =$
12. $69 \times 9 =$
13. $1 \text{ cm} =$ mm
14. $180 - 90 =$
15. This is a:
 (a) rectangle.
 (b) parallelogram.
 (c) rhombus.
16. $\frac{1}{2} > \frac{1}{6}$ true false
17. $4 \times 7 =$
18. 4, 8, , 16,
19. Is Z symmetrical?
20. $1 \text{ kg} =$ g





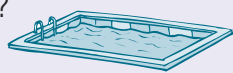


MY SCORE

WEDNESDAY

1. On a clock, at what number does the big hand point to show twenty past?
2. $14/4 = 14 \div 4 =$ r
3. $3/4 =$ $/_8$
4. $80 + 70 =$, $180 + 170 =$
5. $40 \times 8 = 80 \times$ $= 160 \times$
 $=$ $\times 1$
6. 30 days = weeks days
7. 219 $10 = 2190$
8. Halve 40%.
9. Round 15.4 to the nearest whole.
10. What 2-D shape is this?
 
11. 
 If you lived in Outaloo and worked in Innaloo, how far would you travel each day?
12. Perimeter = m 
13. $5/10 < 1/5$ true false
14. 2.5, , 3.5, 4, 4.5
15. (Roman numeral) LXXXIX =
16. Draw as a $3/4$ turn clockwise. 
17. Write $6\frac{1}{3}$ as an improper fraction.
18. Fold paper. Cut shape. Unfold and draw new shape.
 
19. $0.5 \text{ km} =$ m,
 $0.05 \text{ km} =$ m
20. $\$50.00 - \$23.50 =$


MY SCORE

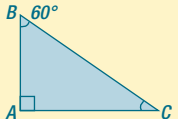
THURSDAY

1. What is the time if the big hand is on 11 and the small hand is almost on 11?
2. $5 + 8 =$
3. Double $2/3$
4. 1645 hours is the same as 'quarter to '.
5. $12\ 896 - 1000 =$
6. even - odd =
7. $1505 > 1550$ true false
8. $1.05 \text{ km} =$ m
9. If you scored 40 runs in 8 innings, what would your batting average be?
10. How many odd-numbered houses are there in a street with houses numbered from 1 to 43?
 
11. How many vertices does a triangular pyramid have?
12. If $9 \times 6 = 54$, then $18 \times 6 = 108$.
 If $9 \times 7 = 63$, then $18 \times 7 =$.
13. $1111 < 1101$ true false
14. Show as a $3/4$ turn clockwise. 
15. $2 \times 9 =$ $\times 3$
16. $8.9 \text{ m} =$ mm
17. The rule for this pattern is $3x$.
 $7,$, $63,$
18. A nonagon has sides and is a 2-D polygon.
19. If you swam 40 laps of a 25-m pool, what is the total distance in metres?
 m 
20. Fold paper. Cut shape. Unfold and draw new shape.
 


MY SCORE

WEDNESDAY

1. $600 + 7000 + 40 =$
2. $4777 - 9 =$
3. If $200 \div 10 = 4 \times u$, then $u =$.
4. Halve 560.
5. Circle the heavier side. 
6. If a tap leaks at a rate of 1 L per half minute, how many litres are lost after 10 minutes?

7. Round 10.43 to the nearest tenth.
8. What is the value of $\angle C$? 

9. $17 + 13 =$
10. If 2 lines alongside each other never meet, they are to each other.

11. $8^2 =$
12. This 3-D shape is a 

13. The difference between 121 and 8 is .
14. $1 \div 10 = \frac{1}{10} = 0.$

15.

4.28

3.43

4.04

ABC

Eliza Emu beat Esther Emu by 21 seconds.
Which time is Eliza's?
Esther's?

16. $630\ 000 + 70\ 000 =$
17. If a map has a scale of 1 cm = 10 km, how far is 4.2 cm? km
18. In 3235, the first 3 is greater than the second 3 by:
(a) 10x (b) 100x (c) 1000x

19. $\$50.00 - \$43.60 =$
20. 10 t = kg

MY SCORE


THURSDAY

1. $80\ 000 - 2500 =$
2. If a tap leaks 0.5 L every half minute, how many litres are lost after half an hour?
3. If $40 \div 8 = 5 \times t$, then $t =$.
4. If it is 4 pm, what time will it be in 47 hours?
5. $9981 - 8 =$
6. Round 10.56 to the nearest tenth.
7. $\frac{1}{2} + \frac{1}{4} = \frac{\quad}{4}$
8. $8 \times 6 =$
9. Rank in ascending order. 1, 5, -3, 6, -4, 0, -2

10. Rotate the shape 90° clockwise. 

11. In 8038, the first 8 is greater than the second 8 by:
(a) 1x (b) 10x
(c) 100x (d) 1000x

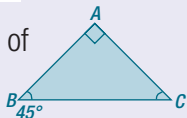
12. Double 275.
13. $1 \div 5 = \frac{\quad}{\quad} = 0.2$

14. Circle the 2 congruent shapes. 

15. Write in ascending order. 3.3, 0.3, 0.33, 3.33, 3.13, 3.03

16. Start at 99 and count by 9s. What is the 7th number in the sequence?
17. What 2-D shape has 4 equal sides but is not a square?

18. Write the number sentence. Mrs Wartnose spent \$8.40 at Cauldron's Cafe. What is her change from \$10?

19. Simplify $\frac{4}{12}$
20. What is the value of $\angle C$? 

MY SCORE

WEDNESDAY

1. If your favourite jelly beans cost \$1.25 per 200 g, how much would 800 g cost?

\$

2. Rotate 45° clockwise.



3. $50 + 70 + 60 =$

4. If $a^2 = 90 - 9$, then $a =$.

5. Which shape has more sides?

hexagon decagon octagon

6. Share \$50.00 among 20 people.

\$ each

7. Write *one million, ten thousand, one hundred and ten* as a numeral.

8. $6 + 9 + 7 =$

9. Double a number, multiply it by 3, add 10 and the answer is 160.

What is the starting number?

10. Area = cm^2



11. 4 km = m

12. Round 482 819 to the nearest ten thousand.

13. $11^2 =$

14. If the current time is 3 am, what will it be in 20 hours?

15. Shade the heaviest set of boxes.

A 1.1 kg B

550 g
450 g

 C 1011 g

16. $1 \div 2 =$ = %

17. If $n \div 9 = 4$, then $n =$.

18. $\frac{8}{10} =$ /

19. $23 + 19 =$

20. How many odd numbers are between 120 and 132?

MY SCORE

THURSDAY

1. If your favourite sweets cost \$1.10 per 200 g, how much would 1 kg cost?

\$

2. Estimate the size of the shaded angle.



3. Show as a 270° turn anticlockwise.



4. Write 17.28 in an expanded form.

+ + +

5. $0.01 + 0.4 =$

6. $\frac{3}{4}$ of 80 =

7. $\frac{1}{2} - \frac{1}{4} =$ /

8. 5 km = m

9. What is the area of the pavement?

square units



10. $900 + 600 =$

11. Write *one million, one hundred* as a numeral.

12. Start at 23 and increase by 9s. What position is 86 in the sequence?

13. $12^2 =$

14. $697 \times 2 =$

15. Which has fewer sides?

hexagon pentagon oblong

16. 1415 hours = am or pm

17. $28\,505 - 9 =$



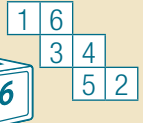
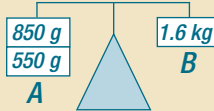
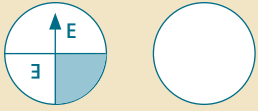


18. $97 + 8 + 6 =$

19. $2 \times 2 \times 2 =$

20. If a fierce north-easterly wind was blowing, in which direction would your kite fly?



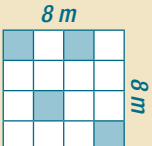

MY SCORE

FRIDAY TEST WEEK 35

- $68 + 38 + 58 =$
- Write *three and a quarter million* as a numeral.
- $48 \div 8 =$
- $57 + 23 =$
- 20% of \$80.00 is .
- $\frac{7}{10} + \frac{4}{100} = 0.$
- 500 kg = t
- 7.2 L = mL
- Halve 41 150.
- Which cube matches the net?
(a)  (b)  (c) 
- If $y^4 = 16$, then $y =$.
- Circle the side that will tip the scales down.

- $\frac{4}{5}$ of 50 =
- (Roman numeral) DCL =
- Rotate 540° clockwise.

- $300 - 25 =$
- Label the boxes 9, 11, 15, 10 by following the instructions. The even number is between 2 odd but not prime numbers. The prime is on the far left with the far right number divisible by 3 and 5.
, , ,
- $24 \div 6 =$
- What is this shape?
 
- $\frac{5}{8} + \frac{6}{8} + \frac{3}{8} =$ =
- If Bruno has a total of \$4.80 in his pocket, of which \$1.80 is 20c coins and the balance are 50c coins, how many coins altogether?
- $0.37 + 0.40 =$ 
- Area = 21 m^2 ; therefore $a =$ m, perimeter = m
- Round 7.92 to the nearest tenth.
- Mumsie paid \$80 for 4 Lewie Vitonee handbags. She received 20c in change. What is the cost per bag?

MY SCORE

FRIDAY TEST WEEK 36

- How many 20c coins make up \$11.40?
- $1.2 \div 3 =$
- $9^2 =$
- Rotate 90° anticlockwise. 
- $38 \times 9 =$
- $1 + 99\,999 =$
- $600\,002 - 7 =$
- 1, 4, 9, 16,
- Double 139.
- $\div 4 - 10 \div 5 = 3$
- $15\,000 - 3500 =$
- If $8 \times 7 = 50 + y$, then $y =$.
- Olivia's average spelling was 5 out of 10 after 4 tests. If she scored 10 out of 10 on her 5th test, her average will be .
- Label the boxes $\frac{5}{10}$, $\frac{3}{4}$, $\frac{4}{100}$, 0.9 by following the instructions. $\frac{1}{2}$ is on the far left. $\frac{9}{10}$ is on the far right. 4% is between $\frac{5}{10}$ and $\frac{3}{4}$.
, , ,
- 40% of \$60.00 is .
- Write the factors of 15. 1, , , 15
- 2.003 km = m
- Order from greatest to least in value.
3, -2, -4, 2, 1, -1
- What is the surface area of this shape made of 1-cm cubes? 
- What is the probability of rolling an even number with a dice?
- $180 + 90 =$
- What is the area of the roses? m^2 
- What is the area of the lawn? m^2 
- A hat has 20% off the original price of \$30.00. What is the new price?
- $40 \times$ $= 80 \times 2$

MY SCORE