New wave mental maths

E

Revised edition

FRIDAY REVIEW

Draw another line of symmetry.

5 1 2
4   4
2 1 5

Add 2 beads to each place value and write the new amount.

Th H T O
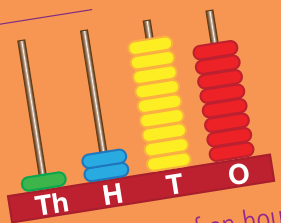
Add one-quarter of an hour to the time. _____

4:25

This solid 3D object is a _____

Colour the improper fraction of $\frac{7}{3}$.

PROBLEM-SOLVING

MONDAY

$450 000 $375 000

The difference in price is $ _____.

Ines, the investor, purchased both houses with a $40 000 discount.

She paid $ _____.

TUESDAY

Complete the 3rd pattern.

1	2		4	5		7	8		10	11
6	3		15	6		9	9		33	12

WEDNESDAY

Lines of symmetry	Triangle
0	Scalene
	Equilateral
1.	Isosceles
2.	

THURSDAY

An architect designed an auditorium. Row A has 25 seats. Each row has 25 more seats than the previous row. What is the seating capacity? _____

THURSDAY

A   B   C

Which angle is 180°? _____
Which angle is obtuse? _____
Which angle is acute? _____
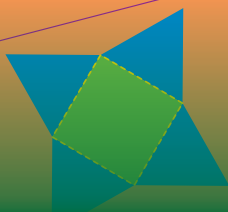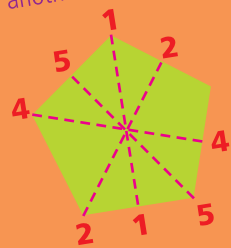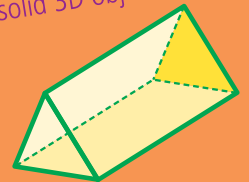
= $ _____

Favourite colours

100 Blue
Green   50 Red

Read the pie graph and calculate the amount for green. _____

Add two-thirds of an hour to this time. _____

6:15

This is a net of a _____.

Eddy Krajcar

STAGE
A B C D

R.I.C. Publications®

New wave mental maths revised edition

- Retains many of the bestselling features of **New wave mental maths**, with a range of added extras and new improvements, particularly in relation to problem-solving.

- Provides a 40-week, structured mental maths program linking to Australian Curriculum Mathematics, covering the strands of Number and Algebra, Measurement and Geometry, and Statistics and Probability.

- Provides daily practice of mental maths and problem-solving skills (10 daily questions for Book B; 15 daily questions for Book C; and 20 daily questions for Book D, Book E and Book F).

- Develops mathematical concepts and vocabulary sequentially, along with practice in speed of recall.

New features

- Modern and contemporary layout using subtle colours, which is not distracting or overwhelming for the student.

- A new 'Problem-solving' column in each week's unit of work.

- Problem-solving questions drawn from a mixture of strands and sub-strands, incorporating real-life maths contexts and situations.

- Problem-solving questions positioned in a separate column so teachers can use them flexibly: either for classwork or homework, or for a mental challenge before the maths daily lesson.

- Pictorial and written representatives of problems in both the problem-solving and daily columns.

- Maximum focus on maths concepts with the language and readability of questions simplified.

- Includes new question types, with the removal of some of the previous ones, based on feedback, comments and observations from practising teachers.

| *Book B*	*Books C–F*
• New 'Problem-solving' column with one carefully worded problem-solving question for each day. • Friday review is grouped by a strand icon (Number and Algebra, Measurement and Geometry, and Statistics and Probability) to assist with teacher assessment of student's ability.	• New format using a 3-page weekly unit with the Friday review now moved into the main week's unit of work for ease of access. • New 'Problem-solving' column with two carefully worded problem-solving questions for each day. • Friday review is grouped by a strand icon (Number and Algebra, Measurement and Geometry, and Statistics and Probability) to assist with teacher assessment of student's ability.

MONDAY

1. What is the time? _____

3. 1, 4, 9, _____, 25, 36

2. $3 \times 3 \times 2 =$ _____

4. Write the number shown on the abacus.

_____

Th   H   T   O
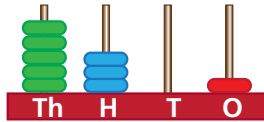
5. This polygon is known as a

_____.

6. $4 \times 5 =$ _____

7. $20 \div 4 =$ _____

8. Write $\frac{7}{100}$ as a decimal. _____

9. This is a

_____.

10. Does sunset occur during the am or pm? _____

11. $3 \times 6 = 6 + 6 + 6 =$ _____

12. Round 4766 to the nearest thousand. _____
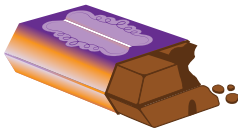
13. What is the place value of 4 in 473?

☐ 1   ☐ 10   ☐ 100   ☐ 4

14. How many days are in a fortnight? _____

15. $\frac{1}{3} + \frac{1}{3} =$ _____

16. Which is longer, 1 m or 80 cm? _____

17. Together, Alex and Mimi ate 12 pieces of chocolate. Alex ate twice as much as Mimi. How many pieces did Alex eat?

_____

18. How many odd numbers are there between 1 and 10?

_____

19. $13 - 9 =$ _____

20. $2.9 > 0.29$ ☐ true   ☐ false

TUESDAY

1. What is the time? _____

2. $10 - 6 =$ _____

3. $7 \times 7 =$ _____

4. Complete the multiples of 3.

3				
				45

5. $12 \div 3 =$ _____

6. Write *five thousand and five* as a numeral. _____

7. Does sunrise occur during the am or pm? _____

8. How far is it to Albury from the sign if Moppa is 8 km further away than Albury.

Albury ☐ km

Moppa 25 km

_____

9. This polygon is known as a

_____.

10. What is the date of the extra day in a leap year?
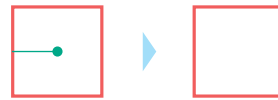
_____

11. $20 \times 6 = 120$, $19 \times 6 = 114$, $18 \times 6 =$ _____

12. How many days are in a year? _____

13. What is the value of 9 in 397?

☐ 9   ☐ 90   ☐ 900   ☐ 10

14. Rotate $\frac{1}{4}$ turn clockwise.

15. Which is heavier, 1 kg or 700 g? _____

16. $15 - 7 =$ _____

17. Which equation (number sentence) is equal to 9×7?

☐ $60 + 3 = 63$ ☐ $70 - 9 = 61$

☐ $50 + 40 = 90$ ☐ $90 + 7 = 97$

18. $0.2 < 0.02$ ☐ true   ☐ false

19. $800 + 700 =$ _____

20. $\frac{1}{4} + \frac{1}{4} =$ _____

MY SCORE

MY SCORE

WEDNESDAY

1. What is the time? _____

2. 3 × 4 = _____

3. 9 × 9 = _____

4. 9 ÷ 3 = _____

5. This is an _____.

6. Write *twelve thousand, eight hundred and one* as a numeral.

_____

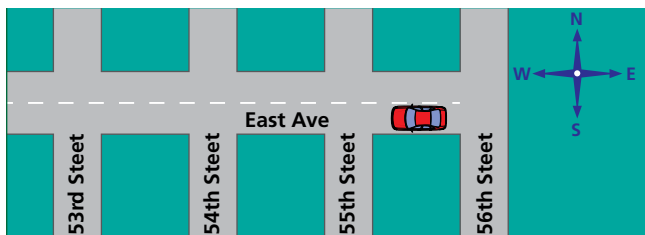**7.** How many days are in a leap year? _____

8. Name a quadrilateral shape.

_____

9. 2, 4, 8, 16, _____

10. $\frac{3}{10} + \frac{2}{10} =$ _____

11. How many even numbers are there between 10 and 20?

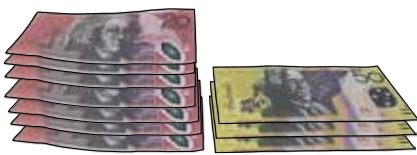_____

12. If yesterday was Saturday, what day will tomorrow be?

_____

East Ave

53rd Steet 54th Street 55th Street 56th Street

N W E S

13. If you travel west and turn right at the second street, what street are you in?

_____

14. One decade = _____ years

15. 1100 − 300 = _____

16. 60 ☐ 5 = 12

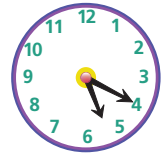**17.** Double 175. _____

18. _____ = $ _____

19. What is the perimeter of a regular hexagon with 6-cm sides?

_____

20. $0.09 > \frac{8}{100}$ ☐ true ☐ false

THURSDAY

1. What is the time? _____

2. 110 − 50 = _____

3. This shape is an

_____.

4. 6 × 10 = 60, 6 × 100 = 600, 6 × 1000 = 6000, 6 × 10 000 = _____

5. How many weeks are in one year? _____

6. Antonio purchased an ice-cream for [coins] .

He gave [$10 note] . What will be his change? _____

7. Complete the pattern. 5, 10, 20, 40, _____

8. 15 ÷ 3 = _____

9. $\frac{4}{9} + \frac{2}{9} =$ _____

10. This is a

_____.

11. Fill in the right spots for the numbers 2, 7, 9, 10.

	Prime	Composite
Odd		
Even		

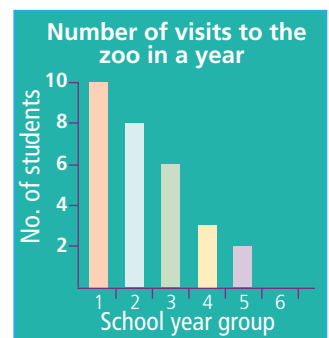**12.** One century = _____ years

13. 7 + 7 + 7 = _____

14. If the sun is in the east and is low to the horizon, is it likely to be morning or afternoon?

_____

15. Write the number before 510. _____

16. 4 + 7 = _____

17. (a) Which year group is the zoo popular with?

_____

(b) To promote the zoo, which year groups would you target?

Number of visits to the zoo in a year

No. of students / School year group

18. 1.1 > 1.04 ☐ true ☐ false

19. What is the place value of 8 in 218?

☐ 1 ☐ 10 ☐ 100 ☐ 8

20. Write $\frac{2}{100}$ as a decimal. _____

MY SCORE

MY SCORE

Monday

1. Chef bought 20 pizza boxes at $19.95 per box. Chef paid with $50 notes. How many notes will be needed at the checkout?

_____

2. Six of the twenty boxes of pizza were vegetarian. Write, in the simplest form, the fraction of vegetarian pizzas.

_____

Tuesday

1. The week prior Chef purchased 80 cans of beans at $1.95 each. Chef paid with $20 notes. How many notes did he use?

_____

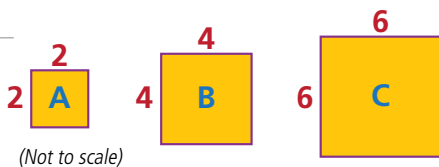**2.** What was the date when Chef bought the cans of beans?

_____

JUNE
TUESDAY
2
BUY PIZZA

Wednesday

Write in the missing digits.

1.

```
   3  9  ☐  5
+     ☐  5  4
----------------
   4  3  2  9
```

2.

```
   5  3  6  ☐
+  2  ☐  1  2
----------------
   8  1  8  0
```

Thursday

1. Which square would have a perimeter of 16 units?

_____

2 A (2)   **4** B (4)   **6** C (6)

(Not to scale)

2. Which quadrilateral would have an area of 20 square units?

_____

4 A (4)   **5** B (4)   **5** C (5)

(Not to scale)

---
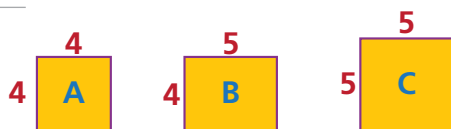
1 $4 \times 3 =$ _____

2 $11 - 5 =$ _____

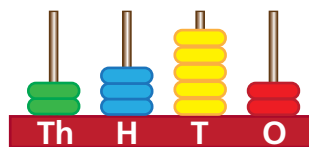**3** $12 \div 3 =$ _____

4 $\$10.00 - \$4.50 =$

_____

5 10, 20, 40, _____, 160

6 $\frac{3}{9} + \frac{5}{9} =$ _____

7 How many odd numbers are there from 10 to 20?

_____

8 Write the number shown on the abacus.

_____

Th	H	T	O

9 4, 8, _____, 16, 20,

_____, _____

10 $8 + 8 + 8 =$ _____

11 Together, Natasha and Sonja ate 9 pieces of chocolate. If Sonja ate twice as much as Natasha, how many pieces did Sonja eat?

_____

12 $8 < 10$ ☐ true ☐ false

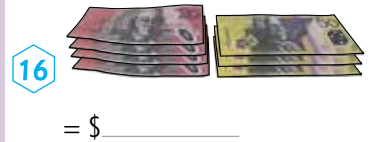**13** What is the place value of 9 in 397?

☐ 1   ☐ 10
☐ 100 ☐ 1000

14 $20 \times 7 = 140$,

$19 \times 7 = 133$,

$18 \times 7 =$ _____

15 Double 175. _____

16

= $_____

17 Write *eleven thousand, one hundred and ten* as a numeral.
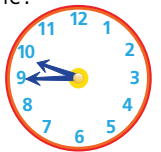
_____

18 The number before 1100 is

_____.

19 Write $\frac{4}{100}$ as a decimal.

_____

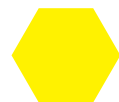**20** Which is longer, 90 cm or 2 m?

_____

21 From the 1 Jan to 31 Dec is

_____ days or

1 _____ .

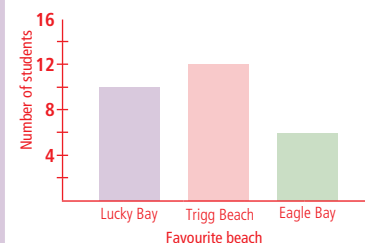**22** What is the time?

_____

23 This is a

_____.

24 Which is heavier, 2 kg or 400 g?

_____

25 The difference between the most to least favourite beach is

_____.

Year 5 favourite beach for selfies

MONDAY

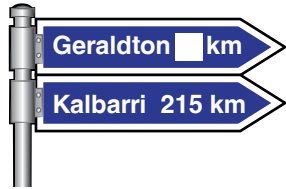**1.** What is the time? _____

2. 5 × 9 = _____

3. This is a

_____.

4. 1 minute = _____ seconds

5. 160, 80, _____, 20, 10

6. How far is it from the sign to Geraldton if Kalbarri is 10 km further away than Geraldton?

_____

Geraldton ⬜ km

Kalbarri 215 km

7. 24 ÷ 4 = _____

8. 3 × 7 = 7 + 7 + 7 = _____

9. Draw another line of symmetry.
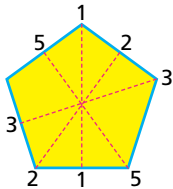
10. 5 × 5 × 20 = _____

11. 1 kg = _____ g

12. 70 + 7 + 4 = _____

13. Rotate a $\frac{1}{2}$ turn clockwise.

14. 120 − 70 = _____

15. Round 35 578 to the nearest ten thousand.

_____

16. 50 − 15 = _____

17. A ————————————— B

Measure the length of $\overline{AB}$ in cm. _____ cm

18. 1 m = _____ cm

19. Olivia had [image] and spent

[image] + [image] + [image] + [image] .

What amount of money did she have left? _____

20. $\frac{3}{5} + \frac{1}{5}$ = _____

TUESDAY

1. What is the time? _____

2. Double 145. _____

3. 3 × 9 = 9 + 9 + 9 = _____

4. 1250, 1000, _____, 500, 250

5. If 1 hour is 60 minutes, and 3 hours is 3 × 60 = 180 minutes, then

5 hours is 5 × _____ = _____ minutes.

6. 50 ÷ 5 = _____

7. 28 ⬜ 4 = 7

8. Share 30 balloons into groups of 6 .

_____

9. This is a

_____.

10. What is the cost of 2 kg of bananas at $1.50 per kg?

_____

11. Round 15 798 to the nearest thousand. _____

12. 60 + 6 + 7 = _____

13. Rotate a $\frac{1}{4}$ turn clockwise.
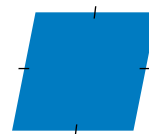
14. A ————————————— B

Measure the length of $\overline{AB}$ in cm. _____ cm

15. This is a:
⬜ square.
⬜ rhombus.
⬜ rectangle.

16. If 1783 is *17 hundred and 83,* then 2495 is

_____ *hundred and* _____.

17. 1 cm = _____ mm

18. $\frac{2}{10} + \frac{7}{10}$ = _____
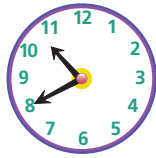
19. 23 × 8 = (20 × 8) + (3 × 8)

= _____ + _____

= 184

20. odd − even = _____

WEDNESDAY

1. What is the time? _____

2. Will 21 ÷ 3 equal a number greater than 10 or less than 10?

   _____

3. Write *forty thousand and four* as a numeral.

   _____

4. 1050, _____, 750, 600, 450

5. 5734 − 734 = _____

6. How many hours are in a day? _____

7. $5.00 − $1.90 = _____

8. This is an irregular

   _____.

9. 7 × 7 = _____

10. Rotate a $\frac{3}{4}$ turn clockwise.

11. 3 × 8 = 8 + 8 + 8 = _____

12. On holidays you stop and read this sign. What do the numbers represent?

    ☐ population
    ☐ distance in miles
    ☐ distance in kilometres

Melbourne	304
Geelong	220
Lorne	32

13. 1 L = _____ mL

14. (a) 3 × 8 = _____

    (b) 7 × 8 = _____

15. $\frac{3}{8} + \frac{4}{8}$ = _____

16. X _____ Y

    Measure the length of $\overline{XY}$ in cm.

    _____ cm

17. 1 m = _____ mm

18. How many tens are there in 640? _____

19. even + even = _____

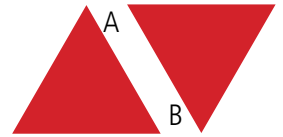20. Add 100 to 3980. _____

THURSDAY

1. What is the time? _____

2. E ⊢————⊣ F

   Measure the length of $\overline{EF}$ in cm.

   _____ cm

3. 2 equilateral triangles are joined at A and B. They make a:
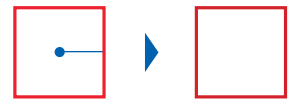   ☐ pentagon.
   ☐ rhombus.
   ☐ rectangle.

4.

   = $_____

5. Double 275. _____

6. $5.00 − $3.90 = _____

7. 45 ÷ 9 = _____

8. 1 t = _____ kg

9. Rotate a $\frac{1}{4}$ turn clockwise.

10. 40 × 7 = 280, 39 × 7 = 273, 38 × 7 = _____

11. Write the fractions in ascending order.

    $\frac{1}{5}$ $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{10}$ $\frac{1}{6}$

    _____

12. Write $\frac{4}{100}$ as a decimal. _____
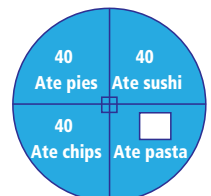
13. In Wednesday Question 12, what are the distances between:

    (a) Melbourne and Geelong? _____

    (b) Melbourne and Lorne? _____

14. 2100 − 700 = _____

15. Read the pie graph and calculate the number of students that ate pasta.

    _____

Lunchtime food survey

40 Ate pies	40 Ate sushi
40 Ate chips	Ate pasta

16. 1 km = _____ m

17. 13 − 8 = _____

18. odd + odd = _____

19. What is the perimeter of an equilateral triangle with 8-cm sides? _____

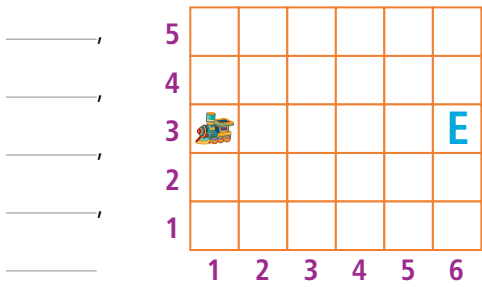20. What is the cost of 3 kg of grapes at $2.50 per kg?

    _____

MY SCORE

MY SCORE

PROBLEM-SOLVING

Monday

1. You are an animator. Write the coordinates for the train to slide (translate) to point E.
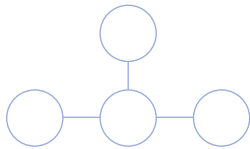
_____ ,

_____ ,

_____ ,

_____ ,

_____

2. Draw a cloud ☁ in 2,5 and 6,5.

Tuesday

1. Make the numbers across and down total 12.

Use 3, 4, 5 and 8.

2. Complete the time line.

1970   1990   2010

1960   1980
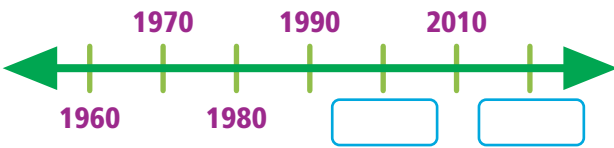
Wednesday

1. Emma had 5 times more 20c coins than Jess. Emma had $4. How many 20c coins did Jess have?
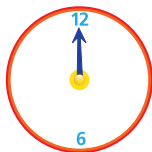
_____

2. $\frac{1}{3}$ of the pencils in a jar are red and the remaining 10 are green. How many are red?
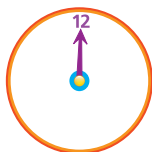
_____

Thursday

Complete the patterns.

1. A clock hand rotated from 12 to 6.

This is _____°.

2. A clock hand rotated from 12 to 12.

This is equal to _____°.

FRIDAY REVIEW

1 600, 450, 300, _____

2 Write the fractions in ascending order.

$\frac{1}{8}$ $\frac{1}{6}$ $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{5}$

_____

3 $2100 - 900 =$ _____

4 22×8

$= (20 \times 8) + (2 \times 8)$

$=$ _____ $+$ _____

$=$ _____

5 1 m = _____ mm

6 How far is it from the sign to Geelong if Lorne is 20 km further away than Geelong?

_____

Geelong ☐ km

Lorne 215 km

7 $6 \times 8 =$ _____

8 Add 100 to 2970.

_____

9 Kieran had $10 and spent $5 + $1 + 50 c. What money did he have left?

_____

10 $\frac{3}{9} + \frac{4}{9} =$ _____

11 Round 12 345 to the nearest thousand.

_____

12 100, 75, 50, _____

13 $8 + 8 + 8 =$ _____

14 Does $24 \div 3$ equal an amount <10 or >10?

_____

15 odd + even = _____

16 What is the cost of buying 4 kg of potatoes at 50c per kg?

_____

17 If Marissa and Angie together rode 60 km in one week and Marissa rode twice as far as Angie, how far did Marissa ride?

_____

18 2.5 < 2.05

☐ true   ☐ false

19 What is the time?
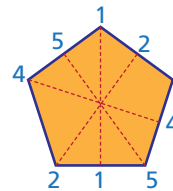
_____

20 1 kg = _____ g

21 Rotate a $\frac{3}{4}$ turn clockwise.

22 Draw another line of symmetry.

23 Draw a horizontal line.

24 Name this shape.

_____

25 Of the students that ate sushi, half were boys. Draw a line and label the pie graph to show this new data.

Lunchtime food survey

40 Ate pies   40 Ate sushi

40 Ate chips   ☐ Ate pasta

MY SCORE