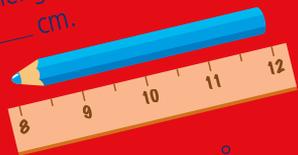


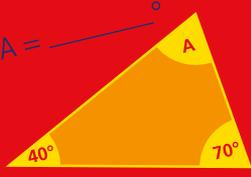
Mental Maths

THURSDAY

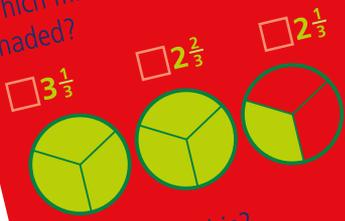
The length of the pencil is _____ cm.



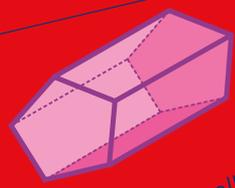
Angle A = _____°



Which mixed fraction is shaded?



What shape is this?



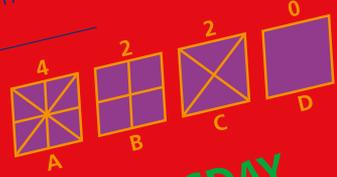
Colour 1,500 mL equally, using 2 colours.



PROBLEM-SOLVING

MONDAY

Which rhombus shows the correct lines of symmetry?



TUESDAY

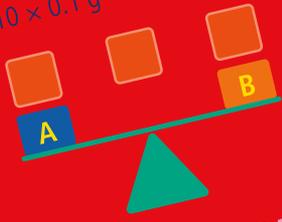
What is the perimeter? _____ cm



WEDNESDAY

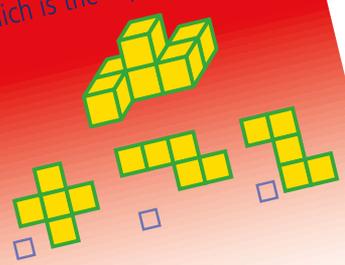
Use \downarrow or $=$.

$A = 10 \times 0.1 \text{ g}$ $B = 10 \times 100 \text{ g}$



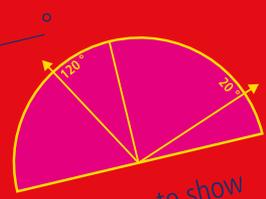
THURSDAY

Which is the top view?



FRIDAY REVIEW

What is the angle size?



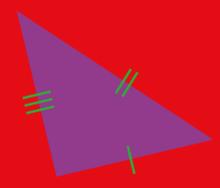
Draw the arrow to show 3,600 g.



The 5th row will have _____ s.



Which triangle is shown?
 isosceles scalene



Complete.

Coin	Number of coins	Value
20c	15	€3
50c		
		Total €8.50

FOREWORD

New Wave Mental Maths is a series of seven pupil workbooks, written to provide a comprehensive and structured daily mental maths programme for classes from Senior Infants to 6th Class. All strands and strand units of the mathematics curriculum are covered. The series has been updated and revised. Contemporary colour and appealing artwork have been added. Question types have been revised, reworded or rewritten. New to this edition is the inclusion of a separate problem-solving column in each week's unit of work, to enable teachers to focus on specific problem-solving skills and strategies.

New Wave Mental Maths is designed to:

- provide complete coverage of all mental maths-related strands and strand units of the mathematics curriculum;
- encourage and develop mental calculation concepts and skills;
- constantly revise the different strands and strand units;
- develop and reinforce problem-solving strategies;
- develop and maintain speed of recall; and
- introduce, practise and consolidate a range of mathematical vocabulary and language.

Assessment activities are provided for pupils to assess, monitor and record their own performance on a weekly basis. A separate **Teachers Manual** is available to accompany the **New Wave Mental Maths** series. This manual contains guidelines to help develop mental strategies; suggestions for classroom use; assessment material; list of concepts developed and answers for all the pupil workbooks.

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Pupil Record Sheet	iv–v	Week 21	62–64
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Week 5	14–16	Week 26	77–79
Week 6	17–19	Week 27	80–82
Week 7	20–22	Week 28	83–85
Week 8	23–25	Week 29	86–88
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Week 20	59–61	Maths Facts	122–128

- 15:00 hours = 3 a.m. 3 p.m.
- Which is better value for money?
 8 bananas for 50c 4 bananas for 20c
- Is $3\frac{3}{10}$ closer to 3 or 4? _____
- $950 + 475 =$ _____
- Draw a 90° turn clockwise.



- $90 \times 50 =$ _____
- $\text{€}3.05 + \text{€}2.20 + \text{€}4.55 = \text{€}$ _____
- Is this angle acute? reflex?



- Tick the prime number.
 13 14 15
- Tick which you would use to measure a door.
 ruler metre stick
- Write the numeral twenty-one thousand and one.

- A wizard's potion was 600 ml of apple juice and 500 ml of lemon juice. Colour the total.



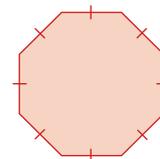
- $5^2 =$ _____ \times _____ $=$ _____
- $30 \times 80 =$ _____
- Tick the larger. $\frac{1}{3}$ $\frac{4}{6}$
- Tick the smaller. 30,401 3,401
- $850 - 225 =$ _____
- $\frac{1}{2} < \frac{1}{5}$ True False
- $30 + 30 + 30 + 6 =$ _____
- $6\overline{)96} =$ _____

- 18:00 hours = 6 a.m. 6 p.m.
- Write the numeral twenty thousand and twenty.

- Draw a 180° turn clockwise.



- Is $2\frac{2}{3}$ closer to 2 or 3? _____
- $650 + 705 =$ _____
- $4^2 =$ _____ \times _____ $=$ _____
- Tick the prime number.
 15 16 17
- $920 - 760 =$ _____
- $210 - 70 =$ _____
- ✓ Yes ✗ No
 Regular Irregular
 Hexagon Octagon
- Tick which you would use to measure the playground.
 metre stick trundle wheel

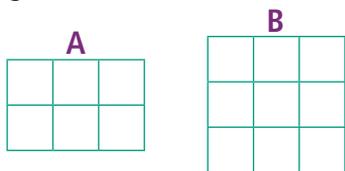


- $90 \times 30 =$ _____
- Which is better value for money?
 9 drinks for 75c 12 drinks for 95c
- How long? _____ cm

- $\text{€}10.10 + \text{€}2.60 + \text{€}4.25 = \text{€}$ _____
- Tick the larger. $\frac{3}{9}$ $\frac{3}{6}$
- Tick the smaller. 54,910 54,009
- $\frac{1}{4} > \frac{1}{2}$ True False
- Is this angle
 reflex?
 obtuse?
- $5 \times 89 \times 2 =$ _____



1. Which diagram shows 3^2 ? _____



2. $700 + 40 + 800 =$ _____

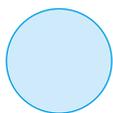
3. $2,680 + 3,275 =$ _____

4. Round 9.7 (nearest whole). _____

5. Tick which scales you would use to weigh a school bag.

kitchen scales bathroom scales

6. Will a circle tessellate?



7. $50 \div 8 =$ _____ r _____

8. This is a _____.



9. $1,055 < 1,060$ True False

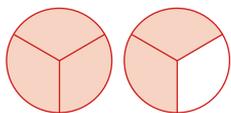
10. $9,000 \div 10 =$ _____

11. 100, 90, 70, 40, _____

12. $5\frac{1}{2} = 5$. _____

13. Which improper fraction is shaded?

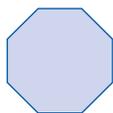
$\frac{5}{3}$ $\frac{6}{5}$



14. $70 \times 80 =$ _____

15. Write the numeral sixty-three thousand and fifty-five.

16. Name this 2-D shape.



17. $25\% =$ $\frac{1}{4}$ $2\frac{1}{2}$

18. $\frac{3}{4} = \frac{2}{10}$ True False

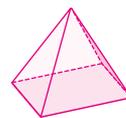
19. Which is prime: 9, 11 or 22? _____

20. 00:30 hours = _____ a.m./p.m.

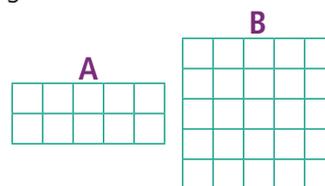
1. 8 p.m. = 08:00 hours 20:00 hours

2. $80 + 800 + 500 =$ _____

3. What 3-D shape is this?



4. Which diagram shows 5^2 ? _____



5. How many faces has Question 3's shape? _____

6. $70 \div 8 =$ _____ r _____

7. $\frac{1}{4} = \frac{3}{6}$ True False

8. $7,402 + 1,257 =$ _____

9. 0.3, 0.6, 0.9, _____, 1.5

10. Tick which scales you would use to weigh cherries.

kitchen bathroom

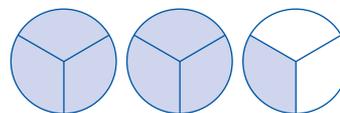
11. $50\% =$ $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{5}$

12. Which unit would you use to measure your fingernail?

mm m km

13. Which mixed number is shaded?

$3\frac{1}{3}$ $2\frac{2}{3}$ $2\frac{1}{3}$



14. Draw a 90° turn clockwise.



15. 20:00 hours = _____ a.m./p.m.

16. Will an equilateral triangle tessellate?



17. Write the numeral seventy thousand, five hundred and five.

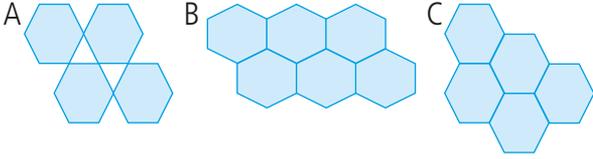
18. $5 \overline{)130} =$ _____

19. $1\frac{1}{2} =$ (improper fraction) _____

20. $0.7 > 1$ True False

Monday

1. Which tessellation is not working for a regular hexagon? _____



2. Conor had 5 times more money saved than Charlie. Conor had €100. How much did Charlie have?

€ _____

Tuesday

1. Lil downloaded 438 MB of photos. Each photo was 3 MB in size. How many photos were there?

2. A cloud data company charges €3.50 for 1 GB. What is the cost of 8 GB?

€ _____

Wednesday

During each full week of November, Alex practised his guitar three times a week for 45 minutes.

NOVEMBER						
SUN	MON	TUE	WED	THU	FRI	SAT
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

1. How many times did he practise? _____
2. What was the total number of hours he played his guitar in November?

_____ hours

Thursday

1. A fast train can travel at 500 kilometres per hour. How long would it take to travel 1,500 km?

2. 250 km? _____

1. 4 p.m. = 04:00 hours
 16:00 hours

2. Round 9.2 (nearest whole).

3. $5,362 + 2,154$
 = _____

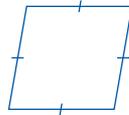
4. How many vertices has a square-based pyramid?

5. 100, 80, 60, 40, _____

6. What pyramid has 4 faces?

7. $70 + 500 + 400$
 = _____

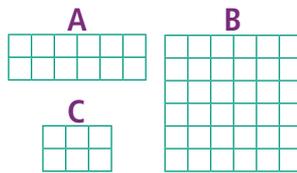
8. Draw the 2 diagonal lines of symmetry.



9. Will a circle tessellate?

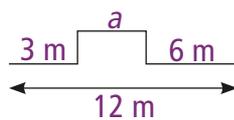


10. Which diagram shows 6^2 ? _____



11. $7^2 =$ _____

12. An architect drew a wall plan. What is the length of a? _____ m

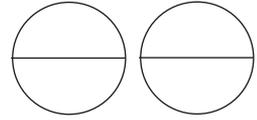


(Not to scale)

13. 20×80
 = _____

14. $0.9 > 1$ True False

15. Colour $1\frac{1}{2}$.



16. Draw a 90° turn clockwise.



17. 1 GB of cloud data costs €2.50. The cost of 6 GB is € _____.

18. Write the numeral sixty-nine thousand and ninety.

19. $3\frac{2}{10} = 3.$ _____

20. Which would you use to weigh a potato?

- kitchen scales
 bathroom scales

21. A square has 4
 obtuse angles.

- right angles.

22. $\text{€}20.00 - \text{€}18.50$
 = € _____

23. Which unit would you use to measure a maths book?

- cm m

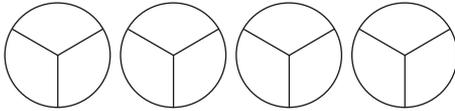
24. Which is the prime number?

- 9 10

- 11 12

25. Which fraction equals 25%?

- $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{5}$

- 04:00 hours = _____ a.m.
- $7,450 + 3,265 =$ _____
- Colour the mixed number $3\frac{1}{3}$.

- $3\frac{1}{3}$ as an improper fraction is _____.
- $90 + 70 =$ _____
- Round 5,467 (nearest 10). _____
- $3\frac{1}{2} =$ (improper fraction) _____
- Which unit would you use to weigh a dog?
 g kg
- Jane is 10 years old. Jack is 12. Jim's age is twice Jane's age, less half of Jack's. What is Jim's age?

- 3, 8, 13, 18, _____, 28
- $\frac{5}{3} =$ (mixed number) _____
- $0.3 > 0.2 > 0.1$ True False
- $6\frac{1}{2} \text{ l} =$ _____ ml
- $9,000 \div 90 =$ _____
- Which fraction is 25%?
 $\frac{1}{2}$ $\frac{1}{25}$ $\frac{1}{4}$

- $\text{€}50.00 - \text{€}30.50 = \text{€}$ _____
- Draw a 90° turn anticlockwise.



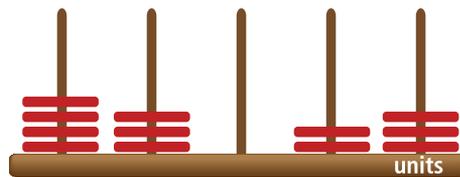
18. $7 \overline{)100} =$ _____ r _____

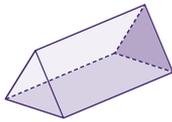
19. Complete the multiples of 6.

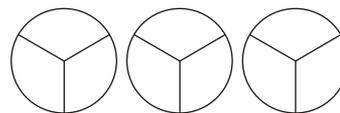
6				
		48		
				90

20. Which is heavier: 1 kg or 100 g? _____

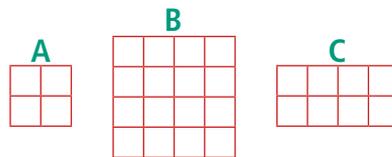
- 13:00 hours = _____ p.m.
- Write the numeral. _____



- This triangular prism has _____ edges.

- Round 11.3 (nearest whole). _____
- $400 + 3,000 + 800 =$ _____
- $0.8 > 0.10$ True False
- Colour the improper fraction $\frac{8}{3}$.



- $\frac{8}{3}$ as a mixed number is _____.
- $60\% = \frac{6}{10}$ True False
- $701 - 80 =$ _____
- Tick the smaller. $\frac{3}{4}$ $\frac{7}{8}$
- Which diagram matches 4^2 ? _____



- Which unit would you use to weigh a packet of crisps?
 g kg
- $4 \overline{)100} =$ _____
- Draw a 180° turn clockwise.

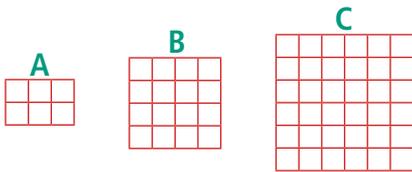


- $\text{€}50.00 - \text{€}31.50 = \text{€}$ _____
- $5,000 \div 50 =$ _____
- 00:10 hours = _____ a.m./p.m.
- Will a semicircle tessellate? _____

- Which is longest?
 2 m 200 cm 2.05 m

1. 11:00 hours = _____ a.m.

2. Which diagram shows 6^2 ? _____



3. Which is longer: 3 km or 2,900 m? _____

4. $\frac{1}{2} > \frac{1}{3} > \frac{1}{4}$ True False



5. What type of pyramid is shown?

6. How many faces on the shape above? _____

7. $5,425 + 2,383 =$ _____

8. Which is lighter: 150 g or 15 kg? _____

9. 2, 22, 222, 2,222, _____

10. $\text{€}1.00 - \text{€}0.25 =$ _____ c

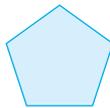
11. $3,000 \div 100 =$ _____

12. $3 \overline{)100} =$ _____ r _____

13. The 5 angles in this pentagon are

right angles.

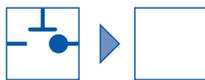
obtuse angles.



14. $37 \div 9 =$ _____ r _____

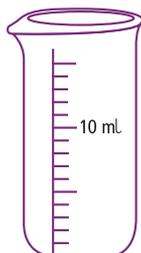
15. $60\% = \frac{3}{5}$ True False

16. Draw a 270° turn clockwise.



17. $\text{€}50.00 - \text{€}33.50 = \text{€}$ _____

18. Colour 12 mL in 3 equal colours.



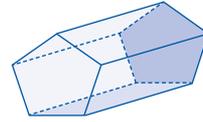
19. $\frac{4}{3} =$ (mixed number) _____

20. $6\frac{1}{5} =$ (improper fraction) _____

1. 20:00 hours = _____ p.m.

2. Tick the larger. $\frac{1}{5}$ $\frac{3}{6}$

3. This shape is a _____



4. $\frac{1}{8} < \frac{1}{7} < \frac{1}{6}$ True False

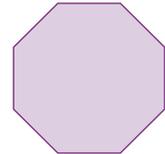
5. $500 + 800 + 2,000 =$ _____

6. How many faces has the shape in Question 3?

7. The 8 angles in this octagon are

acute.

obtuse.



8. $40 \times 20 =$ _____

9. $3\frac{1}{10} =$ (improper fraction) _____

10. Which is prime: 9, 19 or 90? _____

11. The chance of rolling a 5 on a 6-sided dice is

_____ in _____.

12. 8, 17, 26, 35, _____, 53

13. $80,000 \div 100 =$ _____

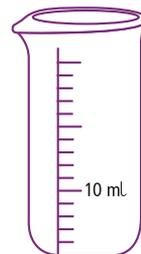
14. $6 \overline{)100} =$ _____ r _____

15. Find the whole number when $\frac{1}{2}$ is 12. _____

16. $3,000 - 145 =$ _____

17. $\frac{10}{3} =$ (mixed number) _____

18. Colour 24 mL in 3 equal colours.



19. Which is shortest: 3 m, 0.3 km or 30 cm?

20. Round 10.6 (nearest whole). _____

Monday

1. Which cake was the boys' least favourite?

5th Class Favourite Cakes		
Flavour	Boys	Girls
Lemon	5	8
Chocolate	13	10
Orange	4	8
Vanilla	6	4

2. True or false? Only one 5th Class was asked about their favourite cakes.

Tuesday

A		B
3×8	5^2	1 m
4×6	25	100 cm
24	Hexagon	

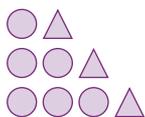
1. 5th Class created a huge poster filled with maths facts. Each square is 2 m by 2 m.

What is the perimeter? _____ m

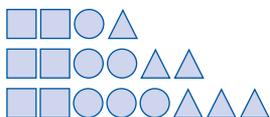
2. Without using a ruler, calculate the length from A to B in a clockwise direction. _____ m

Wednesday

1. Draw the 7th row.



2. Draw the 6th row.



Thursday



1. A group walked from the gift shop to the cafe and rested at the picnic area.

How many metres did they walk? _____ m

2. Another group left the picnic area, visited the waterfall and waited at the bus bay.

How far did they walk? _____ m

1. 07:00 hours = _____ a.m.

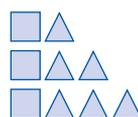
2. $6,570 + 2,465$
= _____

3. Which multiple of 6 is missing from 6 to 60?

(18) (24) (6) (60) (54)

(42) (12) (30) (36)

4. Draw the 6th row.



5. $\frac{11}{4}$ = (mixed number)

6. $4\frac{2}{3}$ = (improper fraction)

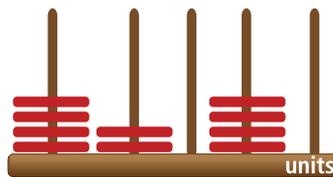
7. 70×60 = _____

8. $5,000 \div 50$ = _____

9. 7, 16, 25, 34, _____

10. €50.00 – €27.50
= € _____

11. Write the numeral.

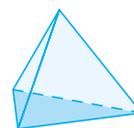


12. $0.8 > 0.2 > 0.3$
 True False

13. Which is longer?
 4 km 3,700 m

14. $40\% = \frac{4}{10}$
 True False

15. A triangular pyramid has _____ vertices.



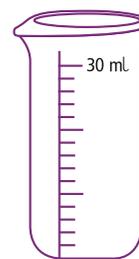
16. Round 9.8 (nearest whole).

17. Will a rectangle tessellate?



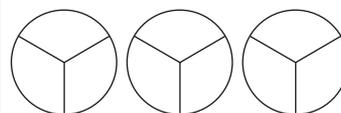
18. $402 - 145$ = _____

19. Colour 21 mL in 3 equal colours.



20. $9\frac{1}{2}$ l = _____ mL

21. Colour the mixed number $2\frac{2}{3}$.



22. $500 + 6,000 + 400$

= _____

23. $83 \div 10$ = _____ r _____

24. Which is the lightest?

- 10 kg
 100 g
 1 kg

25. This shape is a

- hexagon.
 pentagon.

