MATHEMATICS

Year 6/Primary 7

PRIM-ED PUBLISHING

www.prim-ed.co.uk

020 3773 9620

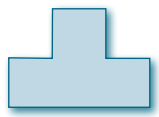
PARENT PACK

MONDAY

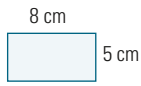
1. $^3/_4 - {}^1/_2 =$
2. 4.25 x 3 =
3. Draw a 90° turn clockwise.

4. 0.02 + 0.04 =
5. 500 x 9
6. 6.432 + 1.203 + 2.264 =
7. $10^2 > 110$ ☐ *true* ☐ *false*
8. 399 965 – 7 =
9. 73.85 – 21.42 =
10. Round 6815 (nearest thousand).
11. Write the numeral one hundred and ten thousand and ten.
12. Sally shared 36 apples between 6 people.

    =
13. 10% of £20 = £
14. Is this octagon regular or irregular?



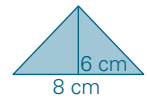
15. 20% = $^1/_4$ ☐ *true* ☐ *false*
16. $12^2 =$
17. Area = cm^2



18. 5 x 0.8 =
19. A cube has vertices.
20. $^3/_5 = {}/_{20}$

TUESDAY

1. $^7/_8 - {}^1/_4 =$
2. Area = cm^2



3. 89.63 – 54.25 =
4. 999 997 + 4 =
5. 631 304 – 5 =
6. $^1/_5 + {}^3/_5 =$
7. Julie has £150 and David has £250. How much altogether?

   =
8. Write the numeral one hundred thousand.
9. Draw a 90^0 turn clockwise.

10. What are the chances of picking a king or jack from a pack of playing cards?

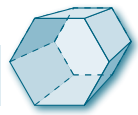
    out of
11. $1^2 =$
12. $^1/_4$ of 80 =
13. Round 24.02 to the nearest whole number.
14. An equilateral triangle has equal sides.
15. Circle which is symmetrical.

    P **N** **D**
16. 12 a.m. = ☐ *0000 hours* ☐ *1200 hours*
17. $^7/_2$ = (mixed number)
18. 1550 + 350 =
19. What is the next prime number after 7? =
20. The place value of 3 in 13 200 is

    .

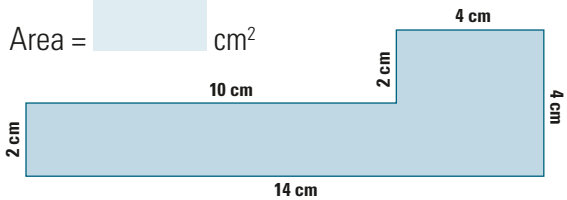
WEDNESDAY

1. $^{6}/_{10} - {}^{2}/_{5} =$
2. 10% of £50.00 = £
3. The number before 10 000 is .
4. $^{32}/_{5}$ = (improper fraction)
5. What shape is this?



6. 6.75 x 2 =
7. 20 000 – 7 =
8. If you stacked this shape would it make a ☐ *prism* or ☐ *pyramid*?

9. $^{\quad}/_{12} = {}^{3}/_{4}$
10. 7, 12, 9, 14, 11,
11. 4.032 + 4.635 + 8.232 =
12. Area = cm²



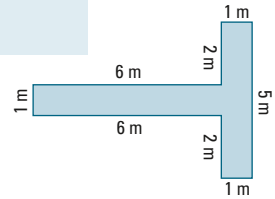
13. Joseph has 500 football stickers. He gives 75 to Adam.

=

14. $^{7}/_{10}$ of 90 =
15. 60 x 70 =
16. Draw a net for a cube.
17. 1520 hours = a.m./p.m.
18. Round 17 380 (nearest hundred).
19. The angles in an isosceles triangle are
    ☐ *acute* ☐ *right*
20. Which unit would you use to measure the length of Great Britain?
    ☐ *m* ☐ *km*

THURSDAY

1. $^{4}/_{6} - {}^{1}/_{3} =$
2. 99 973 + 7 =
3. Area = m²



4. 0.8 + 0.01 =
5. 199 005 – 8 =
6. There are 20 chocolates per box. There are 6 boxes. How many chocolates altogether?

=

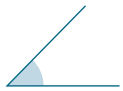
7. The number after 99 999 is .
8. 11^2 =
9. 5.105 + 10.621 + 5.273 =
10. 10% of £80.00 = £
11. $^{1}/_{2} < {}^{1}/_{4}$ ☐ *true* ☐ *false*
12. Will a hexagon and a square tessellate together?
13. Which scales would you use to weigh some grapes? ☐ *kitchen* ☐ *bathroom*
14. 250 x 5 =
15. What 3-D shape has 2 triangles and 3 rectangles?

The timetable shows daily flights from Dublin to London.

Flight	ZZ01	ZZ02	ZZ03	ZZ04
Depart Dublin	0630	1115	1600	2145
Arrive London	0745	1230	1715	2300

16. How long does each flight take to complete the journey?
17. Which flight takes off at 11.15 a.m.?
18. Which flight lands at 11 p.m.?
19. You need to be in London by 6 p.m. Which flight should you take?
20. You need to be in London by 12 noon. Will ZZ02 get you there in time?

MONDAY

1. 20% of £50 =
2. Round 15 825 (nearest 1000).
3. If you have a piece of carpet 9 m by 2 m, how many square metres are there?
   m^2
4. 999 992 + 9 =
5. Jeans cost £30. They have 10% off. The new price is
6. 189 001 – 7 =
7. Write the numeral one million.
8. $^{8}/_{10} - {}^{2}/_{5}$ =
9. 5.45 x 2 =
10. 10% of £100 =
11. $5\overline{)6.005}$ =
12. £100.00 – £20.50 =
13. degrees 
14. $^{3}/_{4} + {}^{2}/_{4} = {}^{5}/_{4}$ = (mixed number)
15. $^{43}/_{100}$ = %
16. 3.00 x 0.03 =
17. Draw a 180° turn anticlockwise. 
18. Kelly shares 75 badges between 3 people. How many badges each?
    =
19. 0.07 + 0.2 =
20. The diameter of a circle with a radius of 2.52 cm is cm

TUESDAY

1. 50% of £50.00 =
2. 999 993 + 8 =
3. 95.26 – 62.08 =
4. 3.92 x 3 =
5. $10\overline{)300}$ =
6. 268 808 – 10 =
7. Write the numeral one million one hundred.
8. Draw a 270° turn clockwise. 
9. What 3-D shape has 4 triangles?
10. Your mum buys 40 L of petrol. If it cost 20p per litre, the total will be .
11. £100.00 – £40.50 =
12. $^{3}/_{4} = {}/_{12}$
13. £7.00 x 4 =
14. 5.402 + 6.253 + 7.314 =
15. Write in ascending order.

7	0.07	70	0.7

16. $^{4}/_{5}$ of 40 =
17. 5% = $/_{100}$
18. Simon has 48 toy cars. He gives 5 to Ahmed. How many does Simon have left?
    =
19. $^{4}/_{5} + {}^{4}/_{5} = {}/_{5}$ =
20. Perimeter of an oblong building 50 m by 45 m
    = m

WEDNESDAY

1. 10% of £50 =

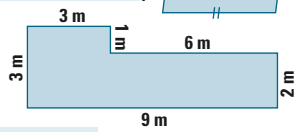
This timetable shows daily trains from London to Cardiff.

Train	Departs London	Arrives Cardiff
A	0800	1105
B	1025	1330
C	1500	1810
D	1930	2235

2. How long does train A take?
3. Which train takes 3 hours 10 minutes?
4. Which train leaves London at 3 p.m.?
5. Which train arrives in Cardiff at 1.30 p.m.?
6. You need to be in Cardiff by 3.30 p.m. Which train should you take?
7. You need to be in Cardiff by 5.30 p.m. Does train C get you in on time?
8. If you ride your bike for a quarter of an hour and travel 4 km—how far will you ride in 2 hours?

   km
9. An isosceles triangle has equal sides.
10. $^{2}/_{3} + {}^{2}/_{3} =$ =
11. Is 244 divisible by 9?
12. 4.85 x 4 =
13. The number after 129 999 is .
14. £100.00 – £80.50 =
15. Stacey has £12, John has £15 and Karen £18. How much altogether?

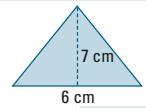
    =
16. This is a .
17. Area = m²



18. $^{18}/_{5}$ = (mixed number)
19. 0000 hours = a.m./p.m.
20. Simplify $^{15}/_{18}$.

THURSDAY

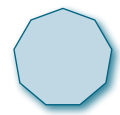
1. 5% of £50 =
2. Draw a net of a triangular prism.
3. Area = cm²



4. Round 4.87 (nearest tenth).
5. 999 996 + 7 =
6. $100 = 10^{a}$, therefore a =
7. 32 = x 4
8. Jumpers cost £40. They have 25% off. The new price is
9. $^{2}/_{3}$ of 27 =
10. Write in descending order.

30	0.3	3.3	0.03

11. $^{9}/_{12} - {}^{3}/_{6} =$
12. 85.63 – 24.25 =
13. $10\overline{)450}$ =
14. What shape is this?



15. There are 6 apples in each bag. There are 10 bags. How many apples altogether?

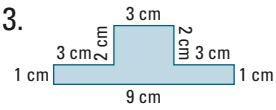
    =
16. What is the cost of flour at 60p per 500 g if you buy 3 kg?
17. $^{1}/_{4} + {}^{3}/_{6} =$
18. $6^{2} =$
19. 15 000 – 6500 =
20. In 7.8, what is the place value of the 8?

FRIDAY TEST *Week 31*

1. $^{6}/_{9} - {}^{2}/_{6} =$
2. 4.75 x 3 =
3. Circle the symmetrical letter shape.

   S K Z
4. 0.9 + 2 + 0.01 =
5. Is 731 divisible by 9?
6. 998 x 3 =
7. $^{1}/_{2} > {}^{1}/_{5}$

   ☐ *true* ☐ *false*
8. 2.103 + 3.522 + 4.274 =
9. Eilish shared 49 badges between 7 children. How many badges each?

   =
10. $^{2}/_{3}$ of 27 =
11. 94.58 – 52.05 =
12. $^{3}/_{4} = {}^{\square}/_{24}$
13. 

    Area = cm²
14. Perimeter = cm
15. 10% of £60 =
16. 70 x 800 =
17. What is the next prime number after 17?
18. $11^{2} =$
19. 

    Draw a 90° turn anticlockwise.
20. The place value of 7 in 714 323

    =
21. The area of a wall 5 m by 2 m is

    m².
22. What is the total area of walls in a four-wall room when each wall is 5 m by 2 m?

    m²
23. 12 p.m. =

    ☐ *0000 hours*

    ☐ *1200 hours*
24. 4 x 0.07 =
25. Kate has £250. She gives £120 to her mum. How much does Kate have left?

    =

FRIDAY TEST *Week 32*

1. 20% of £60 =
2. Is 274 divisible by 9?
3. Round 17 769 (nearest thousand).
4. A jacket costs £50. It has 10% off. The new price is

   .
5. $^{3}/_{4} + {}^{3}/_{4} =$

   =
6. 70 x 90 =
7. 15 000 – 9500 =
8. $^{9}/_{10} - {}^{1}/_{5} =$
9. $10\overline{)400} =$
10. Does a nonagon or a decagon have 9 sides?
11. The place value of 3 in 2.3

    =
12. 100 = 50 x a,

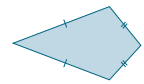
    therefore a =
13. There are 15 sweets in a packet. There are 5 packets . How many sweets altogether?

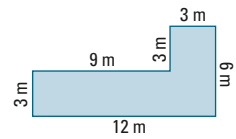
    =
14. If you bought 2 L of cool drink at 90p per 500 mL, how much would it cost?

    £
15. 3.412 + 2.035 + 1.432

    =
16. $^{63}/_{100} =$ %
17. Write the numeral one million, one hundred and one.
18. Simplify $^{20}/_{25}$.
19. Write in ascending order.

    9 0.09 0.9 0.19

    , , ,
20. 4.25 x 5 =
21. This is a 
22. Area = m²

23. Perimeter =

    m
24. Draw a 90° turn clockwise.

    
25. $^{29}/_{6}$ = (mixed number)

NEW WAVE MENTAL MATHS Year 6/Primary 7 book – Answers

WEEK 31 pages 62 – 63

Monday

1. $^1/_4$
2. 12.75
3. 
4. 0.06
5. 4500
6. 9.899
7. false
8. 399 958
9. 52.43
10. 7000
11. 110 010
12. 36 ÷ 6 = 6
13. £2.00
14. irregular
15. false
16. 144
17. 40 cm^2
18. 4
19. 8
20. $^{12}/_{20}$

Tuesday

1. $^5/_8$
2. 24 cm^2
3. 35.38
4. 1 000 001
5. 631 299
6. $^4/_5$
7. 150 + 250 = 400
8. 100 000
9. 
10. 2 out of 13
11. 1
12. 20
13. 24
14. 3
15. D
16. 0000 hours
17. $3^1/_2$
18. 1900
19. 11
20. thousands

Wednesday

1. $^1/_5$
2. £5.00
3. 9999
4. $6^2/_5$
5. hexagonal prism
6. 13.5
7. 19 993
8. prism
9. $^9/_{12}$
10. 16
11. 16.899
12. 36 cm^2
13. 500 – 75 = 425
14. 63
15. 4200
16. Teacher check
17. 3.20 p.m.
18. 17 400
19. acute
20. km

Thursday

1. $^1/_3$
2. 99 980
3. 11 m^2
4. 0.81
5. 198 997
6. 20 x 6 = 120
7. 100 000
8. 121
9. 20.999
10. £8.00
11. false
12. yes
13. kitchen
14. 1250
15. triangular prism
16. 1 hour 15 minutes
17. ZZ02
18. ZZ04
19. ZZ03
20. no

Friday test – page 97

1. $^1/_3$
2. 14.25
3. K
4. 2.91
5. no
6. 2994
7. true
8. 9.899
9. 49 ÷ 7 = 7
10. 18
11. 42.53
12. $^{18}/_{24}$
13. 15 cm^2
14. 24 cm
15. £6.00
16. 56 000
17. 19
18. 121
19. 
20. hundred thousands
21. 10 m^2
22. 40 m^2
23. 1200 hours
24. 0.28
25. 250 – 120 = 130

WEEK 32 pages 64 – 65

Monday

1. £10.00
2. 16 000
3. 18 m^2
4. 1 000 001
5. £27.00
6. 188 994
7. 1 000 000
8. $^2/_5$
9. 10.9
10. £10
11. 1.201
12. £79.50
13. approx. 45°
14. $1^1/_4$
15. 43%
16. 0.09
17. 
18. 75 ÷ 3 = 25
19. 0.27
20. 5.04 cm

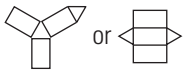
Tuesday

1. £25.00
2. 1 000 001
3. 33.18
4. 11.76
5. 30
6. 268 798
7. 1 000 100
8. 
9. triangular pyramid
10. £8.00
11. £59.50
12. $^9/_{12}$
13. £28.00
14. 18.969
15. 0.07, 0.7, 7, 70
16. 32
17. $^5/_{100}$
18. 48 – 5 = 43
19. $^8/_5 = 1^3/_5$
20. 190 m

Wednesday

1. £5.00
2. 3 hours 5 minutes
3. C
4. C
5. B
6. B
7. no
8. 32 km
9. 2
10. $^4/_3 = 1^1/_3$
11. no
12. 19.4
13. 130 000
14. £19.50
15. 12 + 15 + 18 = 45
16. parallelogram
17. 21 m^2
18. $3^3/_5$
19. 12 a.m.
20. $^5/_6$

Thursday

1. £2.50
2. 
3. 21 cm^2
4. 4.9
5. 1 000 003
6. 2
7. 8
8. £30.00
9. 18
10. 30, 3.3, 0.3, 0.03
11. $^1/_4$
12. 61.38
13. 45
14. nonagon
15. 6 x 10 = 60
16. £3.60
17. $^3/_4$
18. 36
19. 8500
20. tenths

Friday test – page 97

1. £12.00
2. no
3. 18 000
4. £45.00
5. $^6/_4 = 1^2/_4$ or $1^1/_2$
6. 6300
7. 5500
8. $^7/_{10}$
9. 40
10. nonagon
11. tenths
12. 2
13. 15 x 5 = 75
14. £3.60
15. 6.879
16. 63%
17. 1 000 101
18. $^4/_5$
19. 0.09, 0.19, 0.9, 9
20. 21.25
21. kite
22. 45 m^2
23. 36 m
24. 
25. $4^5/_6$

WEEK 33 pages 66 – 67

Monday

1. +1, –2
2. 1 000 002
3. $^{40}/_9$
4. 12 + 8 = 20
5. 9992
6. 18 000
7. 60 000
8. £20.00
9. 50
10. $^4/_{16}$
11. 720
12. £5.00
13. 
14. 21.93
15. 180°
16. 6400
17. 13 m^2
18. 24 m
19. $2^3/_7$
20. 2

Tuesday

1. +2, –2
2. 64
3. 5.5
4. 1 000 004
5. square pyramid
6. 1 100 010
7. $^{12}/_{18}$
8. tenths
9. 25 m^2
10. 72 – 12 = 60
11. 65
12. 9.899
13. decagon
14. yes
15. 90°
16. 4
17. 80 000
18. 200
19. yes
20. 12.59 a.m.

Wednesday

1. 0, –10
2. $^8/_4 = 2$
3. 320
4. $^6/_{10}$ or $^3/_5$
5. 75 ÷ 3 = 25
6. 0.01
7. 109 899
8. £45.00
9. bathroom
10. 18 m^2
11. 81
12. Teacher check
13. 50 000

CHALLENGER SERIES

Date: _____

Name: _____

Level EE — Not so Easy

1.	6 X 2 = _____	26.	6 x 9 = _____
2.	2 x 5 = _____	27.	4 x 7 = _____
3.	7 x 3 = _____	28.	6 x 8 = _____
4.	6 x 4 = _____	29.	12 x 9 = _____
5.	6 x 3 = _____	30.	3 x 12 = _____
6.	4 x 2 = _____	31.	12 x 4 = _____
7.	4 x 5 = _____	32.	9 x 9 = _____
8.	6 x 5 = _____	33.	12 x 12 = _____
9.	9 x 5 = _____	34.	7 x 7 = _____
10.	11 x 7 = _____	35.	9 x 6 = _____
11.	4 x 4 = _____	36.	2 x 9 = _____
12.	3 x 7 = _____	37.	8 x 9 = _____
13.	4 x 6 = _____	38.	8 x 12 = _____
14.	9 x 4 = _____	39.	4 x 0 = _____
15.	10 x 10 = _____	40.	11 x 8 = _____
16.	11 x 0 = _____	41.	12 x 7 = _____
17.	12 x 1 = _____	42.	5 x 5 = _____
18.	3 x 9 = _____	43.	8 x 7 = _____
19.	2 x 12 = _____	44.	4 x 11 = _____
20.	2 x 7 = _____	45.	10 x 11 = _____
21.	3 x 3 = _____	46.	8 x 6 = _____
22	7 x 8 = _____	47.	5 x 12 = _____
23.	4 x 8 = _____	48.	9 x 7 = _____
24.	11 x 11 = _____	49.	6 x 7 = _____
25.	12 x 6 = _____	50.	9 x 8 = _____

Your Score: _____

CHALLENGER SERIES

2 × 9 = ?!

Date: _____

Name: _____

Level EE — Not so Easy

1. 6 X 2 = _____ 26. 6 x 9 = _____
2. 2 x 5 = _____ 27. 4 x 7 = _____
3. 7 x 3 = _____ 28. 6 x 8 = _____
4. 6 x 4 = _____ 29. 12 x 9 = _____
5. 6 x 3 = _____ 30. 3 x 12 = _____
6. 4 x 2 = _____ 31. 12 x 4 = _____
7. 4 x 5 = _____ 32. 9 x 9 = _____
8. 6 x 5 = _____ 33. 12 x 12 = _____
9. 9 x 5 = _____ 34. 7 x 7 = _____
10. 11 x 7 = _____ 35. 9 x 6 = _____
11. 4 x 4 = _____ 36. 2 x 9 = _____
12. 3 x 7 = _____ 37. 8 x 9 = _____
13. 4 x 6 = _____ 38. 8 x 12 = _____
14. 9 x 4 = _____ 39. 4 x 0 = _____
15. 10 x 10 = _____ 40. 11 x 8 = _____
16. 11 x 0 = _____ 41. 12 x 7 = _____
17. 12 x 1 = _____ 42. 5 x 5 = _____
18. 3 x 9 = _____ 43. 8 x 7 = _____
19. 2 x 12 = _____ 44. 4 x 11 = _____
20. 2 x 7 = _____ 45. 10 x 11 = _____
21. 3 x 3 = _____ 46. 8 x 6 = _____
22 7 x 8 = _____ 47. 5 x 12 = _____
23. 4 x 8 = _____ 48. 9 x 7 = _____
24. 11 x 11 = _____ 49. 6 x 7 = _____
25. 12 x 6 = _____ 50. 9 x 8 = _____

5 × 9

Your Score: _____

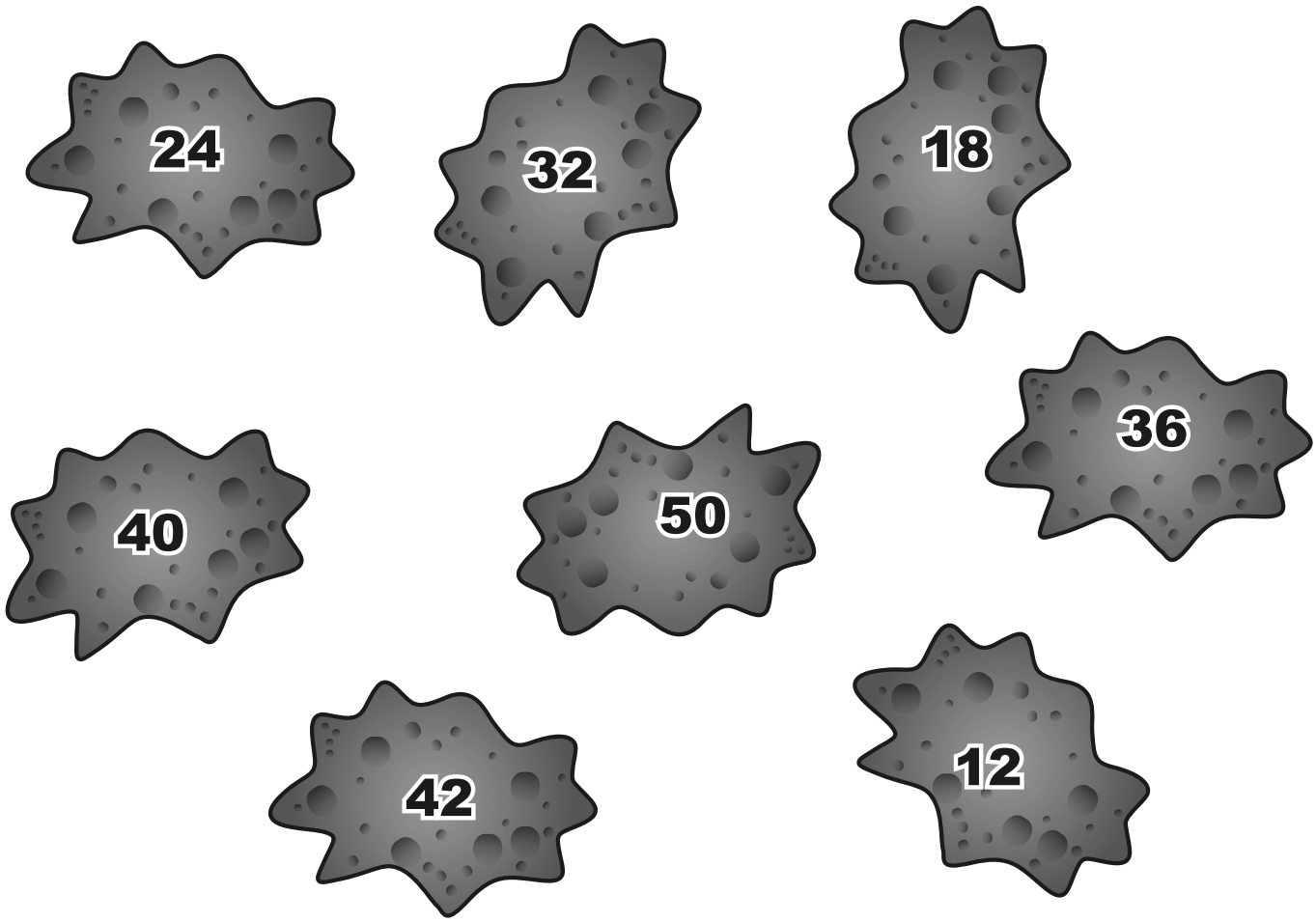
TIMES TABLE CHALLENGE - Prim-Ed Publishing - 25

Answers

	P	Q	R	S	T	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ
1	16	99	9	24	12	6	8	9	14	12	45	21	8	27	24
2	12	40	9	33	30	0	14	18	3	10	16	12	21	20	32
3	5	33	14	0	4	4	0	15	16	21	12	20	27	1	70
4	9	50	12	36	24	9	10	2	15	24	15	8	32	12	0
5	8	11	50	60	8	8	8	12	20	18	8	18	72	16	28
6	7	20	77	12	35	7	70	20	6	8	60	10	30	24	30
7	0	44	100	77	0	4	6	21	40	20	18	15	56	18	48
8	45	10	6	48	25	12	16	30	18	30	32	18	48	96	54
9	10	30	21	99	28	10	18	10	0	45	4	12	18	32	120
10	24	88	16	55	1	16	20	4	18	77	12	0	36	45	63
11	16	60	27	84	18	10	12	35	0	16	27	100	100	70	132
12	30	55	24	22	16	12	27	18	9	21	10	0	0	0	96
13	3	80	4	110	36	15	10	5	5	24	27	12	4	72	18
14	32	66	24	11	20	60	18	16	35	36	24	8	72	28	12
15	24	70	40	72	16	18	100	40	25	100	36	40	84	90	96
16	77	22	36	44	35	2	9	12	18	0	20	16	27	110	60
17	15	80	18	96	22	20	30	30	32	12	100	18	12	54	120
18	28	60	28	0	27	40	28	0	21	27	32	45	16	30	60
19	6	77	6	88	14	0	36	49	100	24	36	24	36	108	84
20	80	10	32	120	40	33	21	27	24	14	56	36	48	48	36
21	44	66	15	0	9	18	4	24	45	9	24	55	49	8	72
22	49	100	8	96	70	10	55	45	64	56	36	1	48	54	108
23	4	20	49	66	132	30	24	16	48	32	24	36	12	48	48
24	88	50	18	108	24	14	0	48	42	121	28	42	50	110	108
25	36	0	121	11	100	16	24	28	110	72	48	27	108	121	99
26	64	110	132	84	49	12	90	56	0	54	45	30	144	120	81
27	100	11	25	22	32	22	24	36	28	28	40	42	110	132	54
28	60	132	63	144	6	55	32	70	99	48	55	121	36	144	96
29	110	70	11	33	4	0	16	54	80	108	21	50	99	72	72
30	54	22	20	132	36	20	18	14	4	36	0	48	56	96	144
31	21	77	48	44	40	10	12	55	24	48	24	25	110	96	132
32	18	0	45	110	54	44	25	8	56	81	36	56	132	63	8
33	42	121	30	66	121	16	35	36	22	144	42	36	25	55	64
34	24	90	0	121	20	50	24	24	12	49	25	54	2	40	45
35	120	0	42	120	21	9	3	25	40	54	36	49	120	60	72
36	25	40	64	55	0	6	88	63	81	18	30	45	40	54	84
37	36	90	36	36	64	12	0	10	48	72	49	28	108	84	60
38	72	120	42	12	77	15	22	40	49	96	54	80	144	132	90
39	35	30	56	99	28	6	10	24	16	0	88	0	0	60	110
40	12	55	81	24	108	18	16	32	0	88	80	32	72	48	54
41	20	120	70	0	56	16	24	1	24	84	24	81	81	108	40
42	63	33	16	60	10	30	40	42	56	25	33	28	14	36	48
43	18	132	96	88	81	8	36	0	30	56	48	50	32	84	108
44	48	44	132	48	48	20	45	30	88	44	24	24	42	81	72
45	0	99	54	72	36	14	20	8	63	110	64	64	24	108	48
46	40	110	10	132	132	18	25	36	36	48	27	110	90	72	36
47	96	0	72	96	15	0	28	44	24	60	0	16	80	84	84
48	99	88	21	77	144	30	21	21	54	63	32	56	100	72	10
49	84	44	36	84	96	25	36	24	32	42	99	54	72	120	16
50	56	132	72	108	63	12	35	42	72	72	56	12	96	108	36

COMPLETE THE FACTOR ASTEROIDS

1. Around the 'spikes' of each asteroid, record the factors for each nominated number.



2. Use divisibility rules to test the following statements. Mark a tick in the box if it is true and a cross if it is false.

	6	7	8	9
The number 1467 is a multiple of				
The number 9382 is a multiple of				
The number 1005 is a multiple of				
The number 3856 is a multiple of				
The number 2296 is a multiple of				
The number 9385 is a multiple of				
The number 7705 is a multiple of				
The number 1904 is a multiple of				
The number 4408 is a multiple of				
The number 3199 is a multiple of				

Content description: Identify and describe factors and multiples of whole numbers and use them to solve problems (ACMNA098) AC

THE LAWS OF DIVIDING – TRY 6

The law says, 'a number is divisible by 6 if the last digit is an even number and the sum of all the digits is divisible by 3'. Follow the example below to test out the law.

676 6 + 7+ 6 = 19 19 ÷ 3 = 6 and 1 remainder Therefore 676 is not divisible by 6	**958**	**1032**
559	**663**	**1105**
498	**376**	**580**
564	**869**	**642**
676	**834**	**426**

Content description: Identify and describe factors and multiples of whole numbers and use them to solve problems (ACMNA098)

THE LAWS OF DIVIDING – THIS TIME TRY 7

The law says, 'a number is divisible by 7 if the last digit when doubled and subtracted from the remaining digits gives a difference that is divisible by 7'. Follow the example below to test out the law.

959 9 x 2 = 18 95 – 18 = 77 77 ÷ 7 = 11 Therefore 959 is divisible by 7	**557**	**208**
572	**613**	**476**
445	**413**	**711**
398	**644**	**233**
406	**884**	**915**

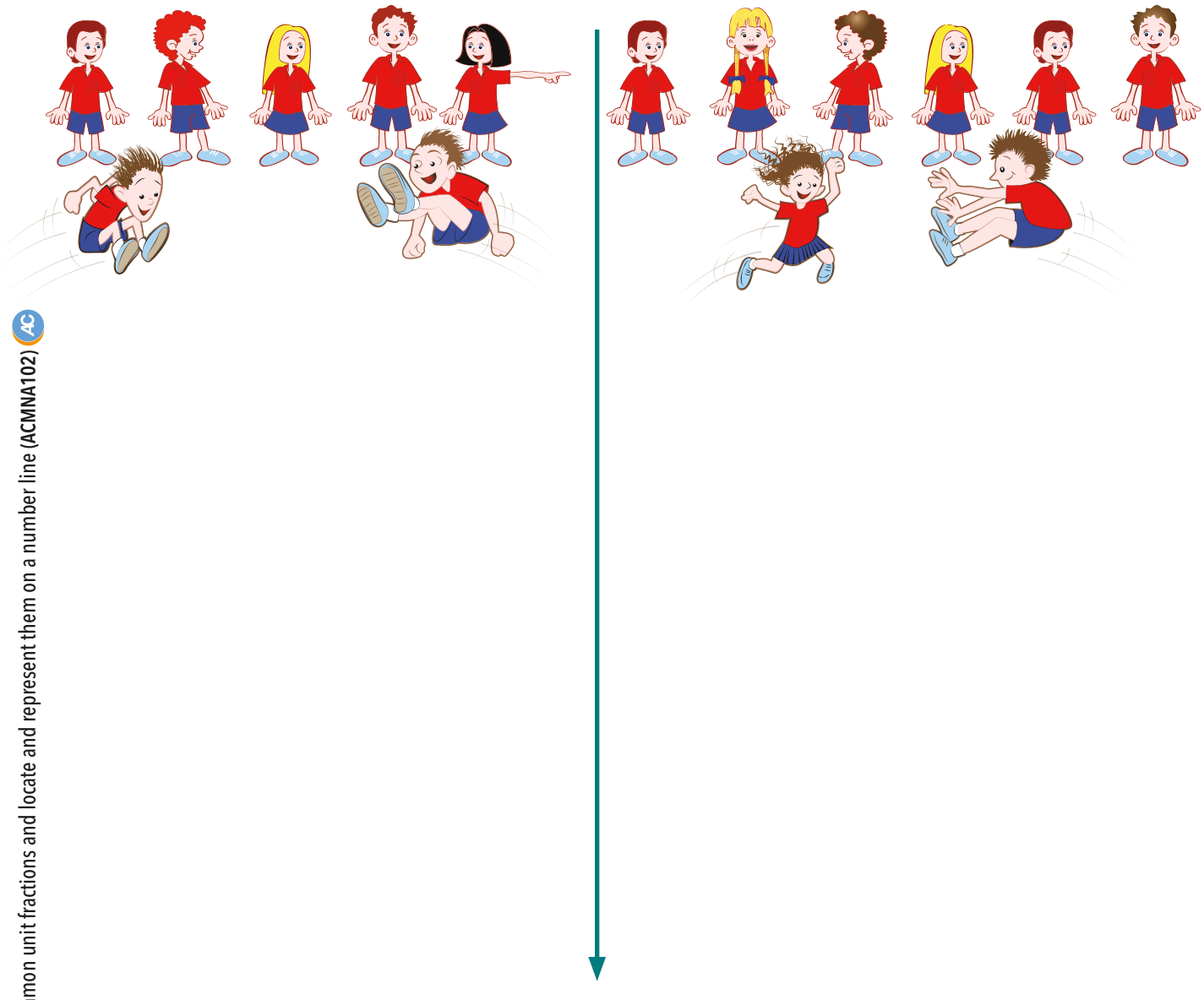
Content description: Identify and describe factors and multiples of whole numbers and use them to solve problems (ACMNA098)

A FRACTION OF A LONG JUMP

Year 5 were preparing for the upcoming athletics season and all the class tried out against the existing school long jump record.

Abbey jumped ⅜ of the record, Bianca ⅙, Charli ¾, Donna ⅓, Eddie ⅛, Frankie ⅚, Gina ¼, Harry ¾, Indy ⅝, Jessie ⅖, Ky ⅔ and Liam ⅞ of the record.

1. On the line below, measure and place where each jumper's leap places him or her against the school record.



2. If the record was 4.8 metres, work out how far each competitor jumped in metres and centimetres.

Abbey _____ Bianca _____ Charli _____ Donna _____

Eddie _____ Frankie _____ Gina _____ Harry _____

Indy _____ Jessie _____ Ky _____ Liam _____

WHICH IS BIGGER?

1. Circle the fraction which is bigger.

1/5 or 1/2	1/4 or 1/3	1/6 or 1/9	1/8 or 1/4
2/10 or 2/8	2/6 or 2/5	2/6 or 2/4	2/11 or 2/9
3/8 or 3/7	3/4 or 3/5	3/6 or 3/9	3/11 or 3/12
4/7 or 4/6	4/8 or 4/10	4/5 or 4/10	4/12 or 4/15
5/8 or 5/6	5/10 or 5/7	5/11 or 5/12	5/20 or 5/100

2. This number line is from 0 to 1. Show where ¼ and ¾ would be placed.

3. This number line is from 0 to 2. Show where ½ and ¾ would be placed.

4. This number line is from 1 to 2. Show where ⅓ and ⅔ would be placed.

5. This number line is from 0 to 2. Show where ¼ and 1¼ would be placed.

6. This number line is from 0 to 1. Show where ⅕ and ⅘ would be placed.

7. This number line is from 1 to 3. Show where ¼ and ½ would be placed.

8. This number line is from 1 to 2. Show where 1⅕ and 1⅘ would be placed.

Content description: Compare and order common unit fractions and locate and represent them on a number line (ACMNA102)

MY FAVOURITE FRACTION FLAVOURS

1. **Using the letters C, L, O, R and P, 'tag' the 36-can box of soft drinks the following way:**

½ cola ⅙ lime ⅓ orange

What fraction will be either pineapple or raspberry?

_____

2. **Using the letters C, L, O, R and P, 'tag' the 36-can box of soft drinks the following way:**

1/12 cola ⅙ lime ¼ orange ⅙ pine

What fraction will be raspberry?

_____

3. **Using the letters C, L, O, R and P, 'tag' the 36-can box of soft drinks the following way:**

½ cola ⅙ raspberry ⅙ lime

What fraction will be either pineapple or orange?

_____

4. **Using the letters C, L, O, R and P, 'tag' the 36-can box of soft drinks the following way:**

⅙ cola ⅙ lime ⅙ orange ⅙ pine

What fraction will be raspberry? How many cans will that be?

_____

5. **Using the letters C, L, O, R and P, 'tag' the 36-can box of soft drinks the following way:**

3 cola 6 lime
9 orange 9 pineapple

How many cans will be raspberry? _____

What fraction is that? _____

Content description: Compare and order common unit fractions and locate and represent them on a number line (ACMNA102) AC

FOLLOW THE PATTERN

Rule	Start at	Next 10 numbers
+6	3	
-3	101	
+5, -1	16	
+4	23	
-6	144	
-3, +7	12	
+12	6	
-9, +2	114	
+8	11	
+10, -2	210	
+3, -5	125	
-6, +3	117	
+12, -6	28	
+9, -7	34	
-4, +8	12	

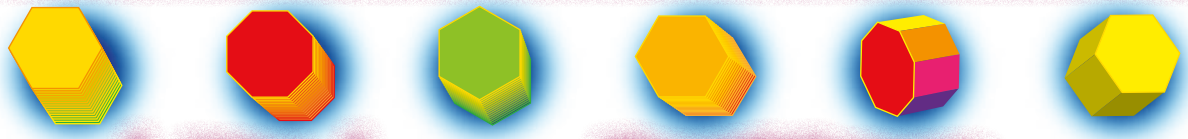
Pattern	Description of rule/pattern
11, 12, 15, 20, 27, 36	
39, 44, 43, 48, 47, 52, 51	
17, 24, 29, 36, 41, 48	
65, 55, 60, 50, 55, 45, 50	
66, 68, 64, 66, 62, 64, 60	
88, 85, 91, 88, 94, 91, 97	
112, 121, 130, 139, 148	
22, 30, 26, 34, 30, 38, 34	
33, 40, 34, 41, 35	
67, 76, 85, 84, 93, 102, 101	
14, 21, 18, 25, 22, 29	
133, 144, 154, 165, 175	
39, 44, 55, 60, 71, 76, 87	

Content description: Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction (ACMNA107)

NUMBER SEQUENCES TO SOLVE

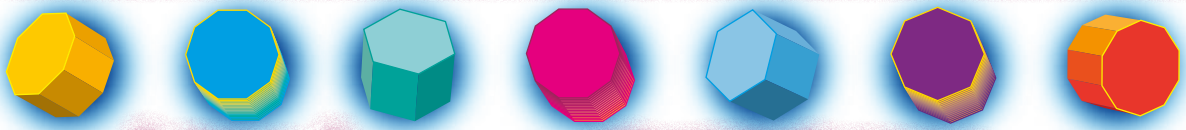
1.

	Pattern	The next 8 in the sequence							
17	+6, -2								
	+9, -3								
	-12, +14								
	+5, +7								
	-3, +5								



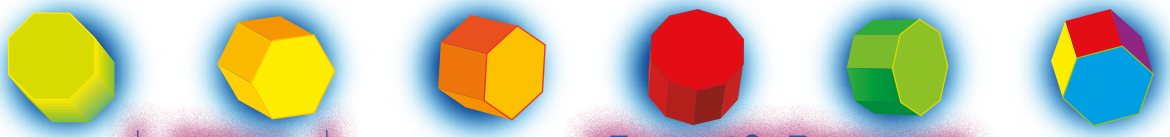
2.

	Pattern	The next 8 in the sequence							
6.5	+1.5, -0.5								
	+1.5, +3								
	+0.75, -0.25								
	+1.1, +2.2								
	+3.5, -2								



3.

	Pattern	The next 8 in the sequence							
23	+11, -3								
	+5, +10								
	-5, +9								
	+6, +9								
	-3, +15								



4.

	Pattern	The next 8 in the sequence							
32	+7, -8								
	+9, -11								
	-11, +15								
	+8, +2								
	+13, -6								

Content description: Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction (ACMNA107) AC

MORE EQUIVALENT NUMBER SENTENCES

Write down and solve these number sentences. Don't slip up!

Nine times what number equals the product of three and twelve?

When 54 is divided by six, the answer is three times what number?

When 72 is divided by twelve, the answer is three times what number?

Eight times what number equals the product of two and 32?

Nine times what number equals the product of three and 24?

When 108 is divided by twelve, the answer is three times what number?

When 52 is divided by thirteen, the answer is four times what number?

Four times what number equals the product of ten and twelve?

Four times what number equals the product of eight and 16?

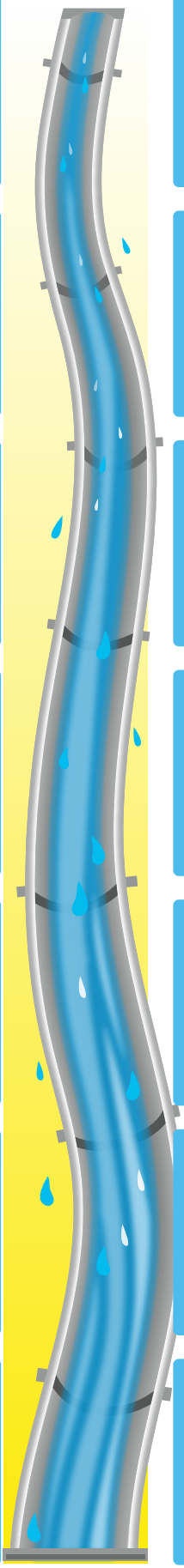
When 144 is divided by twelve, the answer is three times what number?

When 108 is divided by six, the answer is three times what number?

Five times what number equals the product of ten and fourteen?

Four times what number equals the product of three and twelve?

When 168 is divided by two, the answer is four times what number?



Content description: Use equivalent number sentences involving multiplication and division to find unknown quantities (ACMNA121)

SUBTRACTION

NUMBER

TEACHER INFORMATION

Objectives

Understands the role of place value when subtracting numbers.

Calculates subtraction problems with numbers up to five digits.

Concepts required

Place value

Trading

Problem solving

Answers

1. (a) 32 (b) 33 (c) 211
   (d) 301 (e) 2122

2. (a) 47 (b) 26 (c) 58
   (d) 47 (e) 44 (f) 23

3. (a) 124 (b) 323 (c) 314
   (d) 504 (e) 368 (f) 746

4. (a) 368 (b) 256 (c) 263
   (d) 267 (e) 253 (f) 205

5. (a) 2027 (b) 2252 (c) 3218
   (d) 4341 (e) 3189

6. (a) 118 (b) 635 (c) 1542
   (d) 1264 (e) 1424

7. (a) 65 (b) 78 (c) 81
   − 23 − 49 − 35
   42 29 46

   (d) 740 (e) 535 (f) 4284
   − 336 − 145 − 1162
   404 390 3122

   (g) 5240 (h) 8000
   −2039 − 2999
   3201 5001

SUBTRACTION

NUMBER

PUPIL NAME .....

1. (a) 78 − 46 = ☐ (b) 69 − 36 = ☐ (c) 425 − 214 = ☐ (d) 509 − 208 = ☐ (e) 4685 − 2563 = ☐

2. (a) 72 − 25 = ☐ (b) 63 − 37 = ☐ (c) 86 − 28 = ☐ (d) 95 − 48 = ☐ (e) 80 − 36 = ☐ (f) 70 − 47 = ☐

3. (a) 251 − 127 = ☐ (b) 732 − 409 = ☐ (c) 542 − 228 = ☐ (d) 840 − 336 = ☐ (e) 777 − 409 = ☐ (f) 953 − 207 = ☐

4. (a) 624 − 256 = ☐ (b) 534 − 278 = ☐ (c) 861 − 598 = ☐ (d) 744 − 477 = ☐ (e) 631 − 378 = ☐ (f) 704 − 499 = ☐

5. (a) 3156 − 1129 = ☐ (b) 4841 − 2589 = ☐ (c) 5703 − 2485 = ☐ (d) 7430 − 3089 = ☐ (e) 6041 − 2852 = ☐

6. (a) 600 − 482 = ☐ (b) 1200 − 565 = ☐ (c) 3000 − 1458 = ☐ (d) 4000 − 2736 = ☐ (e) 10 000 − 8576 = ☐

7. Find the missing numbers to complete each problem.

(a)
$$\begin{array}{r} 6\ 5 \\ -\ 2\ \square \\ \hline 4\ 2 \end{array}$$

(b)
$$\begin{array}{r} \square\ 8 \\ -\ 4\ 9 \\ \hline 2\ 9 \end{array}$$

(c)
$$\begin{array}{r} 8\ 1 \\ -\ 3\ \square \\ \hline 4\ 6 \end{array}$$

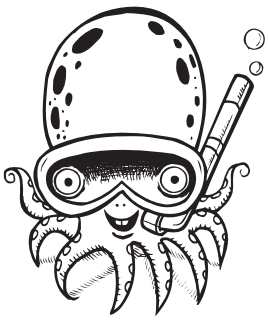
(d)
$$\begin{array}{r} 7\ \square\ 0 \\ -\ 3\ 3\ 6 \\ \hline \square\ 0\ 4 \end{array}$$

(e)
$$\begin{array}{r} \square\ 3\ 5 \\ -\ 1\ 4\ \square \\ \hline 3\ 9\ 0 \end{array}$$

(f)
$$\begin{array}{r} 4\ 2\ 8\ 4 \\ -\ \square\ 1\ \square\ 2 \\ \hline 3\ 1\ 2\ \square \end{array}$$

(g)
$$\begin{array}{r} \square\ 2\ \square\ 0 \\ -\ 2\ 0\ 3\ 9 \\ \hline 3\ 2\ 0\ \square \end{array}$$

(h)
$$\begin{array}{r} 8\ \square\ 0\ \square \\ -\ 2\ 9\ \square\ 9 \\ \hline \square\ 0\ 0\ 1 \end{array}$$



DIRECTIONS

SHAPE

TEACHER INFORMATION

Objectives

Describes direction using conventional locational language.

Describes location using compass point directions.

Concepts required

Compass directions

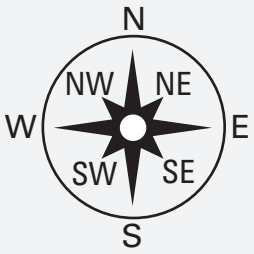
Locating information on a map

Materials needed

Atlas

Answers

1.



2. (a) east (b) west

3. (a) Seattle (b) Boston, New York
   (c) Houston (d) north-east
   (e) Los Angeles (f) St Louis
   (g) east (h) Boston

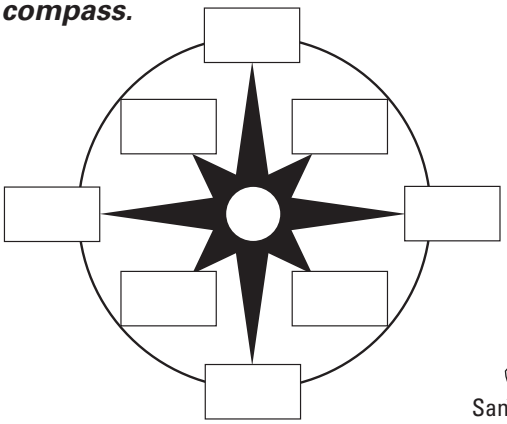
4. Answers will vary

DIRECTIONS

SHAPE

PUPIL NAME .....

1. Add the direction abbreviations to the compass.



2. (a) From which direction does the sun rise?

(b) In which direction does the sun set?

3. Answer the questions about this map of the United States of America.

(a) What city is directly located in the far north-west?

(b) What two cities are located on the east coast?

(c) What city is directly west of New Orleans?

(d) In which direction is Chicago from Houston?

(e) What city is south-west of Las Vegas?

(f) What city is south-west of New York?

(g) In which direction is Salt Lake City from San Francisco?

(h) What is the most eastern city marked on the map?

4. Use the map of the United Kingdom, an atlas and compass directions to answer the questions.

(a) Label the city, town or area where you live.

(b) I live _____ of Birmingham.

(c) I am located closest to the _____ coast.

(d) The Lake District is to the _____ of where I live.

(e) The Isle of Skye is located to the _____ of where I live.

(f) The Irish Sea is located to the _____ of where I live.