Y6 A1

Name: . . . . . .

Sheet 1 Number Sequences

To find the rule that links the numbers study the gaps.

Examples −5 −1 3 7 11 The rule is *add 4*.

0.8 0.7 0.6 0.5 0.4 The rule is *subtract 0.1*

Fill in the numbers in each sequence.

	Rule	Start at							
1	+0.4	0.6	1.0	1.4					
2	−20	255							
3	+10	−47							
4	−0.9	7.4							
5	+8	69							
6	−3	12							
7	+0.05	1.3							
8	−19	165							

Complete the sequences by filling the boxes.

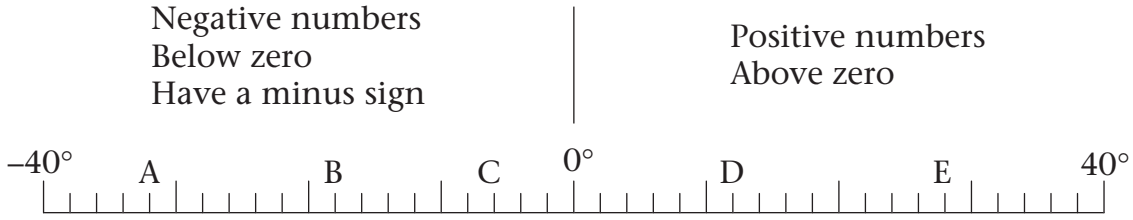
9	−22	−17	−12	−7				
10	17.5	16.4	15.3	14.2				
11					625	700	775	850
12					−2	−6	−10	−14
13			1.05	1.1	1.15	1.2		
14			148	127	106	85		
15	−30	−23	−16	−9				
16	31	28.5	26	23.5				

Y6 A1

Name: . . . . . .

Sheet 2 Negative Numbers

We often use negative numbers in the context of temperature



Write the temperature shown by each of the above letters.

1 A . . . . . **2** B . . . . . **3** C . . . . . **4** D . . . . . **5** E . . . . .

What is the difference in temperature between:

6 A and D . . . . . **8** B and D . . . . . **10** C and D . . . . .

7 A and C . . . . . **9** C and E . . . . . **11** B and E? . . . . .

What would the temperature be if it was:

12 at B and rose 36º . . . . . **15** at A and rose 58º . . . . . .

13 at D and rose 20º . . . . . **16** at E and rose 44º . . . . . .

14 at C and rose 22º . . . . . **17** at C and rose 40º? . . . . . .

Complete the tables showing changes in temperature.

18

OLD	CHANGE	NEW
–7º	+16º	
8º	–24º	
–21º	–17º	
–16º	+31º	
–43º	–29º	
15º	–27º	

19

OLD	CHANGE	NEW
	–29º	–18º
	–28º	–7º
	+22º	13º
	–55º	–32º
	+60º	3º
	–31º	–14º

20 At what temperature does water:

a) freeze . . . . . b) boil? . . . . . .

Y6 A1

Name: . . . . . .

Sheet 3 Multiplication of Decimals

The first problem has been completed as an example.

1
42.5 × 2
80.0 (40 × 2)
4.0 (2 × 2)
1.0 (0.5 × 2)
85.0

2
59.3 × 3
150.0 (50 × 3)
27.0 (9 × 3)
0.9 (0.3 × 3)

3
87.1 × 5
(80 × 5)
(7 × 5)
(0.1 × 5)

4
26.4 × 9
(20 × 9)
(6 × 9)
(0.4 × 9)

5
73.8 × 6
(70 × 6)
(3 × 6)
(0.8 × 6)

6
4.54 × 4
16.00 (4 × 4)
2.00 (0.5 × 4)
0.16 (0.04 × 4)

7
6.38 × 7
(6 × 7)
(0.3 × 7)
(0.08 × 7)

8
2.96 × 8
(2 × 8)
(0.9 × 8)
(0.06 × 8)

9
8.47 × 3
(8 × 3)
(0.4 × 3)
(0.07 × 3)

10
3.58 × 9
(3 × 9)
(0.5 × 9)
(0.08 × 9)

11
63.9 × 5
( )
( )
( )

12
3.57 × 8
( )
( )
( )

13
87.3 × 4
( )
( )
( )

14
5.64 × 6
( )
( )
( )

15
7.92 × 7
( )
( )
( )

Y6 A1

Name: . . . . . .

Sheet 4 Division of Decimals

Work out and write the answer in the box.
The first problem has been completed as an example.

1 28.5 ÷ 5 = 5.7

28.5
− 25.0 (5 × 5.0)
3.5
− 3.5 (5 × 0.7)
0

2 67.5 ÷ 9 = ☐

67.5
− ____ (9 × 7.0)
.....
− ____ (9 × 0.5)
.....

3 17.4 ÷ 6 = ☐

17.4
− ____ (6 × 2.0)
.....
− ____ (6 × 0.9)
.....

4 37.6 ÷ 8 = ☐

37.6
− ____ (8 × 4.0)
.....
− ____ (8 × 0.7)
.....

5 47.6 ÷ 7 = ☐

47.6
− ____
.....
− ____
.....

6 38.8 ÷ 4 = ☐

38.8
− ____
.....
− ____
.....

7 28.2 ÷ 6 = ☐

28.2
− ____
.....
− ____
.....

8 26.1 ÷ 3 = ☐

26.1
− ____
.....
− ____
.....

9 23.4 ÷ 9 = ☐

23.4
− ____
.....
− ____
.....

10 41.3 ÷ 7 = ☐

41.3
− ____
.....
− ____
.....

11 46.5 ÷ 5 = ☐

46.5
− ____
.....
− ____
.....

12 60.8 ÷ 8 = ☐

60.8
− ____
.....
− ____
.....

Y6 B1

Name: . . . . . .

Sheet 5 Multiplication Facts

1 Complete the multiplication square.

×	5	7	3	10	4	8	2	6	9
3									
8									
10									
2									
9									
5									
7									
4									
6									

Complete by writing the missing number in the box.

2 $8 \times 0.3 = \square$

3 $9 \times 0.4 = \square$

4 $8 \times 0.9 = \square$

5 $7 \times 0.7 = \square$

6 $\square \times 8 = 6.4$

7 $\square \times 5 = 3.5$

8 $\square \times 7 = 6.3$

9 $\square \times 6 = 4.2$

10 $\square \div 8 = 0.7$

11 $\square \div 3 = 0.9$

12 $\square \div 9 = 0.6$

13 $\square \div 5 = 0.8$

14 $0.8 \times 7 = \square$

15 $0.5 \times 6 = \square$

16 $0.4 \times 9 = \square$

17 $0.9 \times 8 = \square$

18 $\square \times 4 = 2.8$

19 $\square \times 7 = 2.1$

20 $\square \times 6 = 5.4$

21 $\square \times 5 = 4.5$

22 $6.3 \div 9 = \square$

23 $5.6 \div 7 = \square$

24 $4 \div 8 = \square$

25 $4.8 \div 6 = \square$

Y6 B1

Name: . . . . . .

Sheet 6 Prime Numbers

THE SEIVE OF ERASTOSTHENES

Erastosthenes was a famous mathematician in Ancient Greece. He discovered a way of finding prime numbers known as the "Seive of Erastosthenes". A prime number is a number which is divisible only by itself and one. Note that 1 is ***not*** a prime number.
Use five diffferent coloured pens or pencils.
Follow the directions to find the prime numbers to 100.

1. Cross out 1 with a pencil.
2. Draw a circle around 2, 3, 5 and 7 with the same pencil.
3. Use a different colour. Cross out all the multiples of 2, leaving 2 itself.
4. Use a third colour. Cross out all the multiples of 3, except for 3.
5. Use a fourth colour. Cross out all the multiples of 5, except for 5.
6. Use a fifth colour. Cross out all the multiples of 7, except for 7.
7. Use your first colour again. Draw circles around all the numbers that are left. These are the prime numbers to 100.
8.

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
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

How many prime numbers have you found? ☐

Write out the prime numbers. . . . . .

. . . . . .

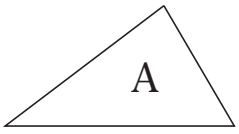
Y6 B1

Name: . . . . . .

Sheet 7 Two-dimensional Shapes

scalene	quadrilateral	kite	octagon
isosceles	parallelogram	trapezium	hexagon
equilateral	rhombus	pentagon	heptagon

1 Use the above names to label each shape.



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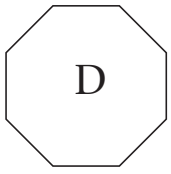
triangle

. . . . . .



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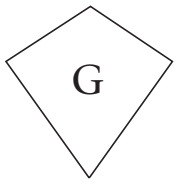

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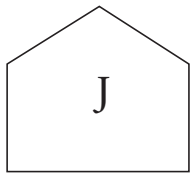

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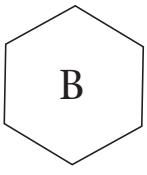

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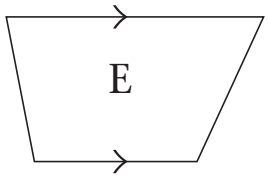

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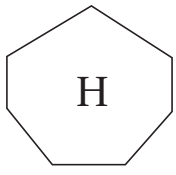

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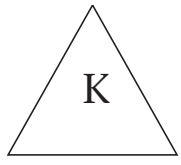
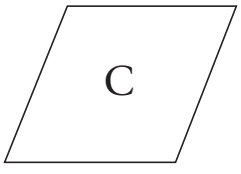


. . . . . .

triangle

. . . . . .



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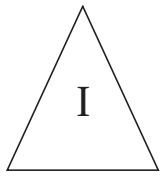
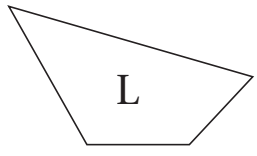


. . . . . .

triangle

. . . . . .



. . . . . .

2 Write the letters of the shapes which:

a) are irregular . . . . . .

b) have one or more pairs of parallel lines . . . . . .

c) have all equal opposite sides . . . . . .

d) have one or more pairs of equal sides . . . . . .

e) have one or more pairs of equal angles . . . . . .

f) have one or more pairs of equal adjacent angles . . . . . .

Y6 B1

Name: . . . . . .

Sheet 8 Making/Drawing Shapes

What is the minimum number of art straws needed to make each of these shapes?

1. triangular based prism .....
2. tetrahedron .....
3. pentagonal based prism .....
4. square based pyramid .....
5. octagonal based prism .....
6. cuboid .....
7. octahedron .....
8. hexagonal based prism .....

9. Make a net for a square based pyramid with a base of 4 cm^2 and a height of 3 cm.

10. Use a ruler and a set square. Draw a right-angled triangle with shorter sides of 5.2 cm and 3.9 cm. Write the length of the third side in the box.

3rd side ☐ cm

11. Use a ruler and a protractor. Draw an isosceles triangle with a 48º angle between equal sides of 6.3 cm. Fill in the boxes.

Angles 48 º ☐ º ☐ º

3rd side ☐ cm

Y6 C1

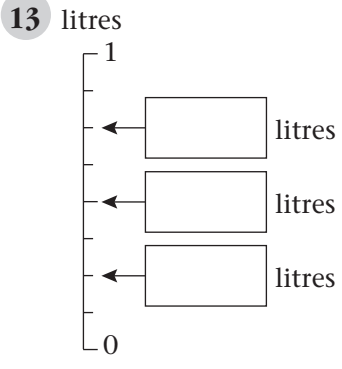
Name: . . . . . .

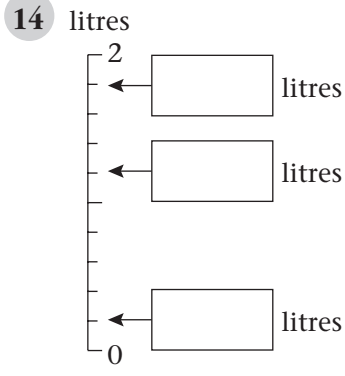
Sheet 9 Metric Units of Capacity

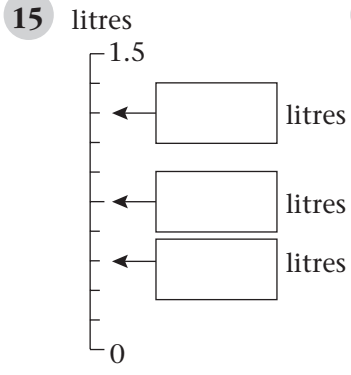
Write the missing number in the box.

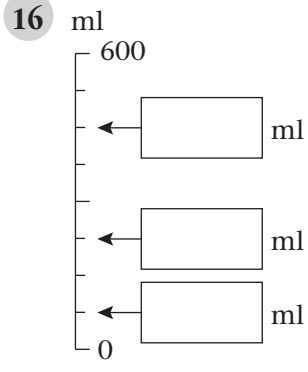
1. 2.6 litres = ☐ ml
2. 0.81 litres = ☐ ml
3. 1.05 litres = ☐ ml
4. 4720 ml = ☐ litres
5. 3900 ml = ☐ litres
6. 750 ml = ☐ litres
7. 0.93 litres = ☐ ml
8. 5.64 litres = ☐ ml
9. 0.01 litres = ☐ ml
10. 8150 ml = ☐ litres
11. 220 ml = ☐ litres
12. 7090 ml = ☐ litres

Write each measurement in the box.

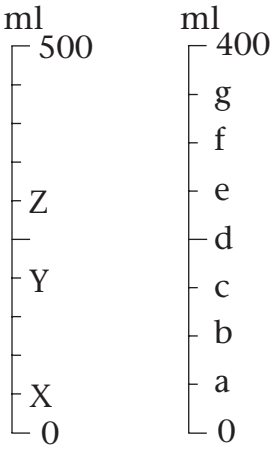
13. 

14. 

15. 

16. 

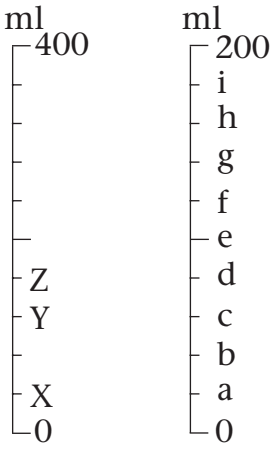
Match X, Y and Z to the letters on the second scale showing the equivalent measurements.

17. 

X = ☐

Y = ☐

Z = ☐

18. 

X = ☐

Y = ☐

Z = ☐

Y6 C1

Name: . . . . . .

Sheet 10 Presenting Data

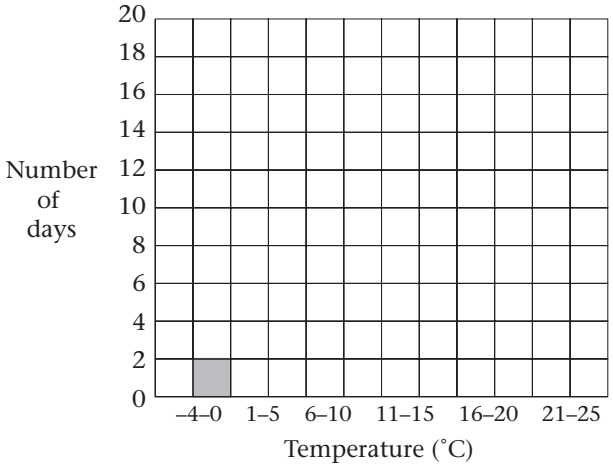
1 Year 6 recorded the daily maximum temperature throughout October and November. These are the results.

22	21	20	21	17	15	18	19	21	20
21	20	18	16	13	11	14	17	15	16
12	10	11	17	18	14	16	15	12	9
11	10	7	8	11	13	15	16	12	11
10	7	6	4	5	8	9	11	12	10
8	9	11	7	5	3	0	–1	4	8	5

Complete the tally chart.

Temp. (°C)	Tally	Total
–4 to 0	||	2
1 to 5		
6 to 10		
11 to 15		
16 to 20		
21 to 25		

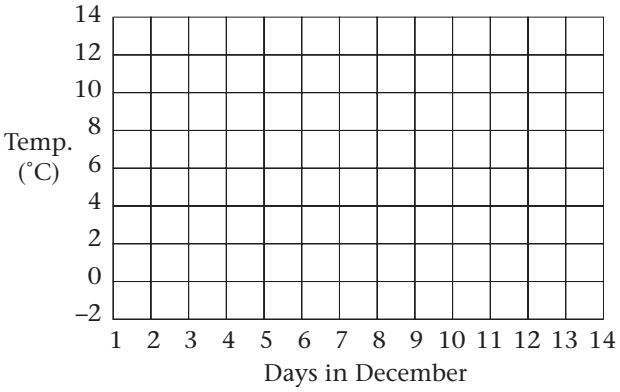
Complete the bar chart to show the results.



2 The temperatures recorded for the first two weeks of December were as follows:

Su	M	Tu	W	Th	F	Sa
		9	11	10	5	3
4	7	8	11	6	4	0
–1	2					

Draw a line graph to show the temperatures for the first two weeks of December.



Y6 C1

Name: . . . . . .

Sheet 11 Interpreting Data

Complete by writing the missing number in each box.

1 The marks achieved by 9 children in a test.

6 7 10 8 5 8 6 5 8

The *range* is the highest mark ☐ – the lowest mark ☐ = ☐.

The *mode* is the most common value, which is ☐.

The *median* is the middle value when the numbers are arranged in size order

— — — — ☐ — — — —

The *mean* is the total marks ☐ ÷ 9 (the number of children) = ☐.

2 The number of goals scored by a school football team in their 13 matches.

3 1 4 0 1 2 8 1 4 7 2 1 5

Range ☐ Mode ☐ Median ☐ Mean ☐

3 The ages of 11 dogs in a park.

3 8 13 4 2 1
8 4 10 5 8

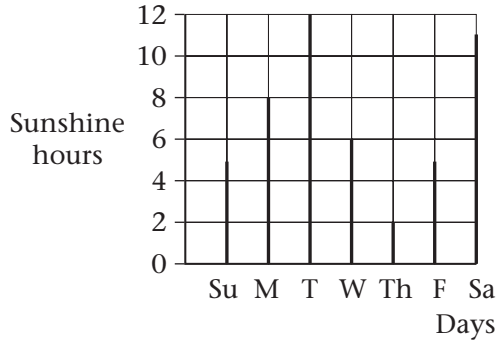
Range ☐ Median ☐

Mode ☐ Mean ☐

4 The daily hours of sunshine recorded in one week in June.

Range ☐ Median ☐

Mode ☐ Mean ☐



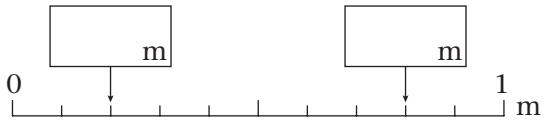
Y6 D1

Name: . . . . . .

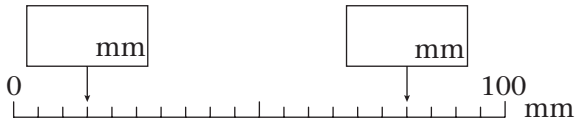
Sheet 12 Reading Scales

Write each measurement in the box.

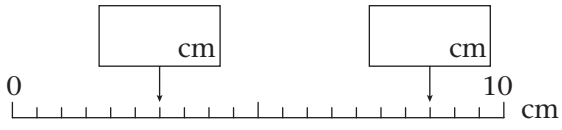
1



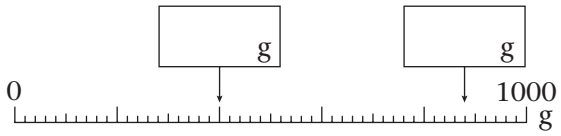
2



3



4



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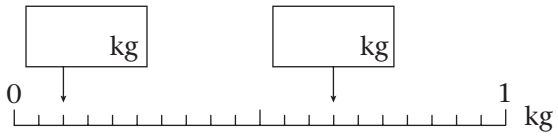

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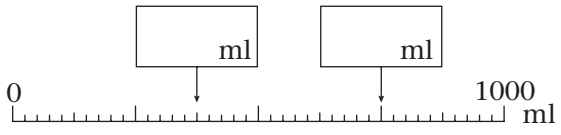

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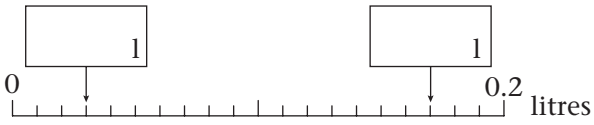

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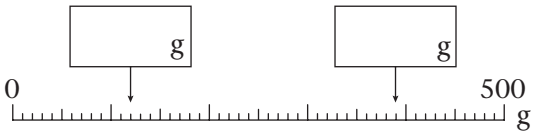

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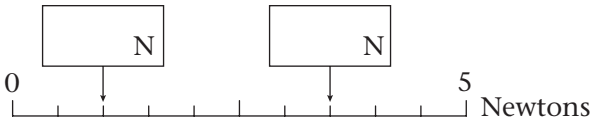
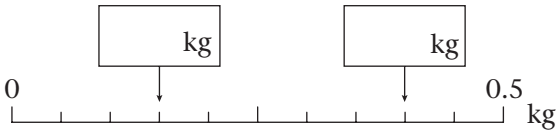
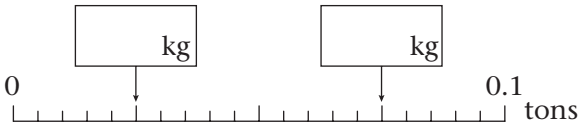


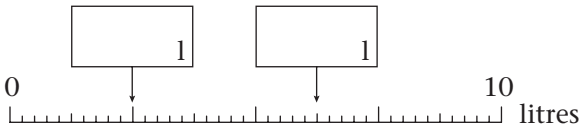
10



11



12

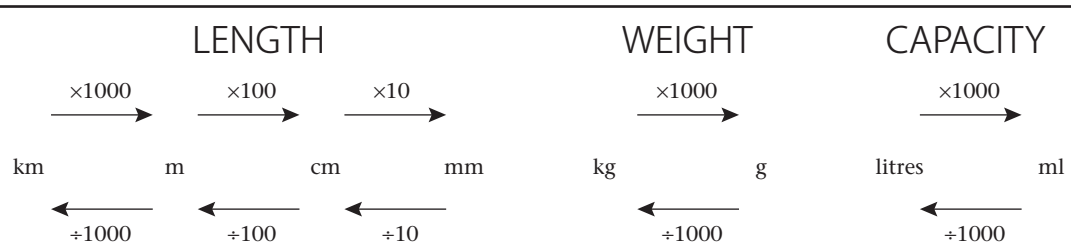


Y6 D1

Name: . . . . . .

Sheet 13 Converting Units

Examples



Write the missing number in the box.

1. 249 m = ☐ km
2. 6.51 km = ☐ m
3. 743 cm = ☐ m
4. 58 m = ☐ cm
5. 25 mm = ☐ cm
6. 25 mm = ☐ m
7. 0.9 cm = ☐ mm
8. 0.03 m = ☐ mm
9. 1.56 kg = ☐ g
10. 2368 g = ☐ kg
11. 0.37 kg = ☐ g
12. 86 g = ☐ kg
13. 4.36 litres = ☐ ml
14. 240 ml = ☐ litres
15. 0.7 litres = ☐ ml
16. 50 ml = ☐ litres

17. A pile of CDs is 40 centimetres high. Each CD is 8 mm thick. How many CDs are there in the pile? ☐
18. A plank of wood is 3.6 metres long. 85 cm is sawn off. How long is the remaining plank? ☐ m
19. A packet of biscuits weighs 125 g. What is the weight of 50 packets? ☐ kg
20. There is 3.75 litres of water in a bowl. 680 ml is added. How much water is in the bowl now. ☐ litres

Y6 D1

Name: . . . . . .

Sheet 14 Imperial Units

You need to know these imperial units and their approximate metric equivalents.

LENGTH	MASS	CAPACITY
1 inch ≈ 2.5 cm	1 ounce ≈ 30 g	1 pint ≈ 0.6 litres
1 foot ≈ 30 cm	1 kg ≈ 2.2 pounds (lb)	1 gallon ≈ 4.5 litres
1 yard ≈ 90 cm		
1 mile ≈ 1.6 km	The sign '≈' means is approximately equal to.	
8 km ≈ 5 miles		

Write down the imperial unit you would use to measure the following:

LENGTHS

1. a garden fence . . . . . .
2. a paperback book . . . . . .
3. the River Thames . . . . . .
4. a walking stick . . . . . .

MASSES

5. a tennis ball . . . . . .
6. a bag of potatoes . . . . . .

CAPACITIES

7. a water tank . . . . . .
8. a vacuum flask . . . . . .

Complete by putting > or < in the box.

9. 6 feet ☐ 1.5 metres
10. 10 pounds ☐ 5 kg
11. 8 miles ☐ 12 km
12. 5 gallons ☐ 22 litres
13. 6 inches ☐ 14 cm
14. 12 ounces ☐ 400 g
15. 9 yards ☐ 8 metres
16. 7 pints ☐ 4 litres
17. 20 miles ☐ 35 km
18. 12 gallons ☐ 60 litres
19. 50 pounds ☐ 20 kg
20. 20 yards ☐ 19 metres

Approximate to the nearest:

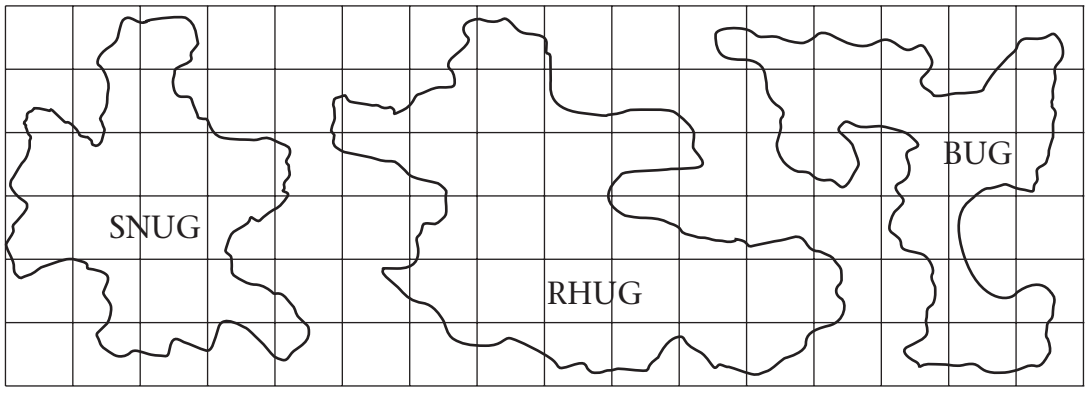
21. 10 inches …… cm
22. 4 inches …… cm
23. 12 inches …… cm
24. 30 inches …… cm
25. 6 kg …… lb
26. 10 kg …… lb
27. 25 kg …… lb
28. 4 kg …… lb
29. 10 pints …… litres
30. 8 pints …… litres
31. 3 pints …… litres
32. 15 pints …… litres

Y6 D1

Name: . . . . . .

Sheet 15 Area and Perimeter

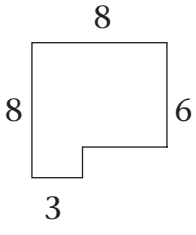
Each square on the map represents 1 square kilometre.
Estimate the area of each island.



1 SNUG = ☐ km² **2** RHUG = ☐ km² **3** BUG = ☐ km²

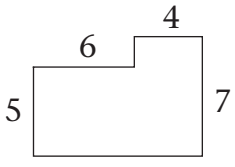
For each shape work out the area (A) and the perimeter (P). All lengths are in cm.

4



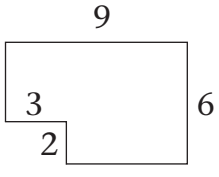
A = …… cm²
P = …… cm

5



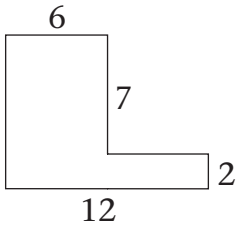
A = …… cm²
P = …… cm

6



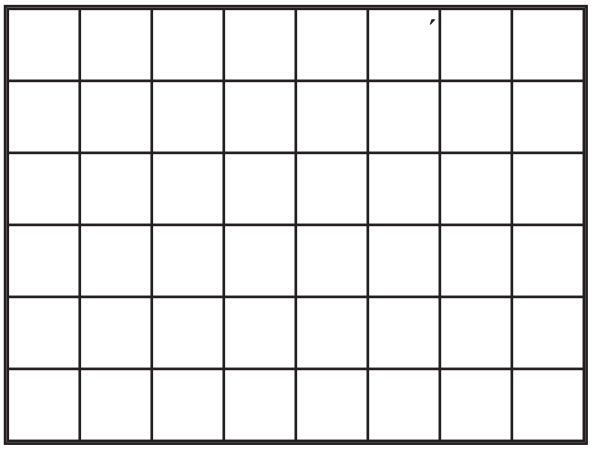
A = …… cm²
P = …… cm

7



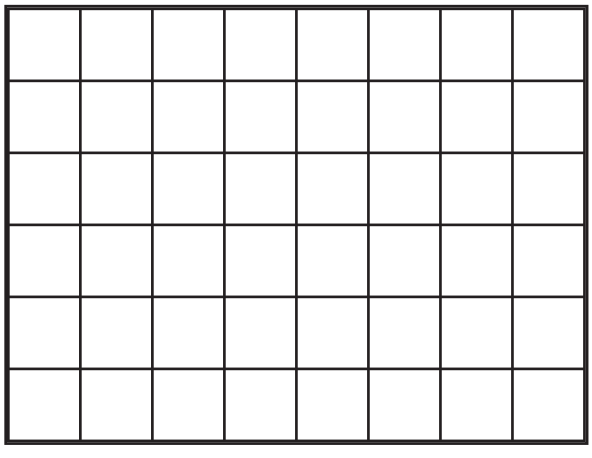
A = …… cm²
P = …… cm

8 Draw an L–shape with an area of 21 cm². Work out the perimeter.



Perimeter = ☐ cm

9 Draw a T–shape with a perimeter of 24 cm. Work out the area.



Area = ☐ cm²

Y6 D1

Name: . . . . . .

Sheet 16 Word Problems

Example	Cherries cost £3.60 for 1 kg. What will 225 g cost?	100 g costs 36p (£3.60 ÷ 10) 200 g costs 72p (36p × 2) 25 g costs 9p (36p ÷ 4) 225 g cost 81p (72p + 9p)

Show your calculations. Write the answer in the box.

1 A carton holds 2 litres of juice. 0.8 litres is poured into a jug. The rest is shared equally between 5 glasses. How much is in each glass?

Answer ☐ ml

2 A square field has a perimeter of 240 metres. What is the area of the field?

Answer ☐ m^2

3 The temperature in Aberdeen is –1.4°C. In Newcastle it is 2°C warmer. In London it is 2.8°C warmer than in Newcastle. What is the temperature in London?

Answer ☐ °C

4 One pill weighs 1.5 g. There are 40 pills in one packet and 64 packets in one box. What is the weight of the pills in the box?

Answer ☐ kg

5 Cheese costs £6.20 per kilogram. Malcolm buys 350 g. What does he pay?

Answer £ ☐

6 A 600 g can of dog food is shared between two dogs. Prince is given 120 g more than Harry. How much does each dog receive?

Prince ☐ g Harry ☐ g

Y6 E1

Name: . . . . . .

Sheet 17 Multiplication Facts

Work out

1	5×0.3	17	7×0.6	33	8×0.9 . . . . .
2	3×0.8	18	8×0.2	34	4×0.5 . . . . .
3	8×0.7	19	5×0.9	35	9×0.3 . . . . .
4	9×0.2	20	6×0.4	36	7×0.7 . . . . .
5	0.4×9	21	0.9×8	37	0.6×2 . . . . .
6	0.7×5	22	0.7×3	38	0.5×4 . . . . .
7	0.5×6	23	0.4×7	39	0.9×6 . . . . .
8	0.8×4	24	0.6×5	40	0.6×8 . . . . .
9	$1.4 \div 7$	25	$1.2 \div 4$	41	$1.8 \div 3$ . . . . .
10	$1.0 \div 2$	26	$8.1 \div 9$	42	$6.3 \div 7$ . . . . .
11	$5.4 \div 9$	27	$1.4 \div 2$	43	$1.6 \div 2$ . . . . .
12	$4.5 \div 5$	28	$6.4 \div 8$	44	$2.7 \div 9$ . . . . .
13	$4.0 \div 0.8$	29	$1.2 \div 0.3$	45	$3.6 \div 0.4$ . . . . .
14	$2.4 \div 0.3$	30	$2.5 \div 0.5$	46	$2.4 \div 0.6$ . . . . .
15	$3.6 \div 0.6$	31	$4.2 \div 0.7$	47	$4 \div 0.5$ . . . . .
16	$2.8 \div 0.4$	32	$4.8 \div 0.6$	48	$5.6 \div 0.8$ . . . . .

Y6 E1

Name: . . . . . .

Sheet 18 Written Method (HTU ÷ U, U.t ÷ U)

Work out to one decimal place. Write the answer in the box.

1 46.8 ÷ 6 = ☐

46.8
– ____ (6 × 7.0)
. . . .
____ (6 × 0.8)
. . . .

3 30.1 ÷ 7 = ☐

30.1
– ____ ( )
. . . .
– ____ ( )
. . . .

5 53.1 ÷ 9 = ☐

53.1
– ____ ( )
. . . .
– ____ ( )
. . . .

2 29 ÷ 2 = ☐

29.0
– ____ (2 × 14.0)
. . . .
____ (2 ×)
. . . .

4 43.0 ÷ 5 = ☐

43.0
– ____ ( )
. . . .
– ____ ( )
. . . .

6 26 ÷ 4 = ☐

26.0
– ____ ( )
. . . .
– ____ ( )
. . . .

Work out to two decimal places. Write the answer in the box.

7 8.6 ÷ 4 = ☐

8.6
– ____ (4 × 2.0)
. . . .
____ (4 × 0.1)
. . . .
____ (4 × 0.05)
. . . .

9 3.6 ÷ 8 = ☐

3.6
– ____ ( )
. . . .
– ____ ( )
. . . .
– ____ ( )
. . . .

11 6.4 ÷ 5 = ☐

6.4
– ____ ( )
. . . .
– ____ ( )
. . . .
– ____ ( )
. . . .

8 7.7 ÷ 5 = ☐

7.7
– ____ (7 × 1.0)
. . . .
– ____ ( )
. . . .
____ ( )
. . . .

10 9.3 ÷ 2 = ☐

9.3
– ____ ( )
. . . .
– ____ ( )
. . . .
– ____ ( )
. . . .

12 58 ÷ 8 = ☐

58
– ____ ( )
. . . .
– ____ ( )
. . . .
– ____ ( )
. . . .

Y6 E1

Name: . . . . . .

Sheet 19 Equivalent Fractions

Complete these equivalent fractions.

1 $\frac{1}{2} = \frac{\square}{16}$

2 $\frac{4}{5} = \frac{\square}{15}$

3 $\frac{7}{10} = \frac{\square}{50}$

4 $\frac{1}{6} = \frac{\square}{12}$

5 $\frac{1}{8} = \frac{5}{\square}$

6 $\frac{3}{4} = \frac{12}{\square}$

7 $\frac{1}{3} = \frac{7}{\square}$

8 $\frac{4}{7} = \frac{8}{\square}$

9 $\frac{3}{10} = \frac{\square}{100}$

10 $\frac{2}{9} = \frac{\square}{27}$

11 $\frac{1}{4} = \frac{\square}{20}$

12 $\frac{2}{5} = \frac{\square}{40}$

13 $\frac{1}{5} = \frac{20}{\square}$

14 $\frac{2}{3} = \frac{10}{\square}$

15 $\frac{7}{8} = \frac{14}{\square}$

16 $\frac{5}{7} = \frac{20}{\square}$

Cancel each fraction into its simplest form.

17 $\frac{\cancel{15}}{\cancel{25}} \; \frac{3}{5}$

18 $\frac{6}{8}$

19 $\frac{15}{24}$

20 $\frac{9}{18}$

21 $\frac{45}{50}$

22 $\frac{24}{36}$

23 $\frac{15}{18}$

24 $\frac{16}{36}$

25 $\frac{6}{21}$

26 $\frac{18}{24}$

27 $\frac{70}{100}$

28 $\frac{16}{20}$

29 $\frac{42}{48}$

30 $\frac{22}{55}$

31 $\frac{32}{48}$

Pick out the letters above the fractions equivalent to the fraction in the bracket. Rearrange these letters to make a word using clue.

32 $\left(\frac{2}{5}$, a girl's name$\right)$ . . . . . .

L	A	C	M	I	N	T	D	A	Y	E	B
$\frac{8}{25}$	$\frac{4}{10}$	$\frac{12}{50}$	$\frac{25}{60}$	$\frac{16}{40}$	$\frac{12}{30}$	$\frac{6}{10}$	$\frac{8}{20}$	$\frac{25}{35}$	$\frac{15}{40}$	$\frac{24}{60}$	$\frac{10}{20}$

33 $\left(\frac{1}{3}$, a boy's name$\right)$ . . . . . .

P	Y	R	O	N	G	H	A	R	N	L	E
$\frac{6}{15}$	$\frac{8}{24}$	$\frac{2}{6}$	$\frac{10}{25}$	$\frac{6}{9}$	$\frac{9}{18}$	$\frac{5}{15}$	$\frac{15}{50}$	$\frac{12}{30}$	$\frac{12}{36}$	$\frac{6}{20}$	$\frac{4}{12}$

Y6 E1

Name: . . . . . .

Sheet 20 Fractions/Percentages of Amounts

Examples	$\frac{5}{8}$ of 640	10% of 40	30% of 40
	$(\frac{1}{8}$ of 640) × 5	$\frac{1}{10}$ of 40	(10% of 40) × 3
	80 x 5	40 ÷ 10	4 x 3
	400	4	12

Work out

1. $\frac{9}{10}$ of 200 . . . . . .
2. $\frac{2}{5}$ of 300 . . . . . .
3. $\frac{3}{8}$ of 96 . . . . . .
4. $\frac{5}{7}$ of 49 . . . . . .
5. $\frac{37}{100}$ of 1 m . . . . . cm
6. $\frac{5}{6}$ of 180 m . . . . . m
7. $\frac{3}{1000}$ of 5 m . . . . . mm
8. $\frac{5}{9}$ of 180 g . . . . . g
9. $\frac{53}{100}$ of 1 kg . . . . . g
10. $\frac{7}{10}$ of 400 g . . . . . g
11. $\frac{3}{4}$ of 1 litre . . . . . ml
12. $\frac{4}{10}$ of 250 ml . . . . . ml

Work out

13. 10% of 39 . . . . . .
14. 20% of 75 . . . . . .
15. 50% of 11 . . . . . .
16. 75% of 480 . . . . . .
17. 1% of 260 . . . . . .
18. 5% of 30 . . . . . .
19. 40% of £1.20 . . . . . .
20. 70% of £20 . . . . . .
21. 25% of £3.60 . . . . . .
22. 2% of £45 . . . . . .
23. 60% of £1.50 . . . . . .
24. 1% of £5 . . . . . .

Fill in the boxes.

25. 240 patients in a hospital 20% are children.
    ☐ adults are in hospital
26. A roll of cloth is 15 m long. Three quarters is used.
    ☐ m is left.
27. Sourav's meal cost £4.50.
    Ainlee's meal cost 30% more.
    Ainlee's meal cost £ ☐.
28. 360 children in a school
    Four ninths are in lower school
    ☐ children are in upper school.

Y6 A2

Name: . . . . . .

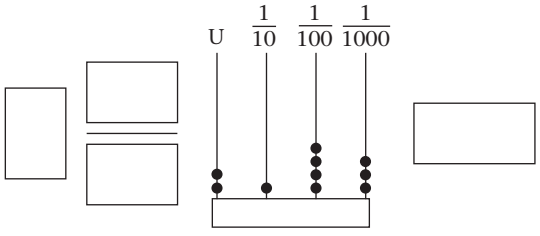
Sheet 21 Decimal Fractions

Example $4.238 = 4\frac{238}{1000} = 4 + \frac{2}{10} + \frac{3}{100} + \frac{8}{1000}$

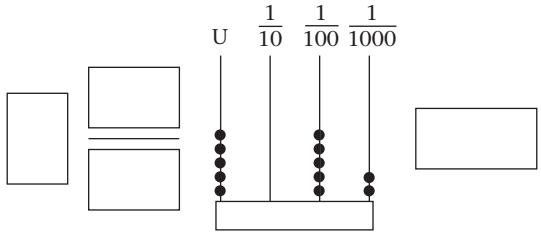
$2\frac{176}{1000} = 2.176 = 2 + 0.1 + 0.07 + 0.006$

Write the number shown on each abacus as a mixed number and as a decimal fraction.

1



2



Partition using fractions.

3 5.35 . . . . . .

4 1.872 . . . . . .

5 2.064 . . . . . .

6 4.308 . . . . . .

Partition using decimals.

7 $6\frac{56}{1000}$ . . . . . .

8 $\frac{125}{1000}$ . . . . . .

9 $3\frac{8}{100}$ . . . . . .

10 $9\frac{47}{1000}$ . . . . . .

Write the value of the underlined figure.

11 1.53<u>9</u> . . . . . $\frac{9}{1000}$

12 3.<u>6</u>4 . . . . . .

13 21.8<u>7</u> . . . . . .

14 4.<u>9</u>5 . . . . . .

15 7<u>4</u>.329 . . . . . .

16 0.61<u>8</u> . . . . . .

17 64.<u>7</u>1 . . . . . .

18 <u>2</u>9.534 . . . . . .

19 8.10<u>3</u> . . . . . .

Write the missing number in the box.

20 0.372 + ☐ = 0.572

21 1.914 + ☐ = 1.994

22 0.295 + ☐ = 0.3

23 4.386 – ☐ = 4.346

24 0.871 – ☐ = 0.371

25 1.525 – ☐ = 1.025

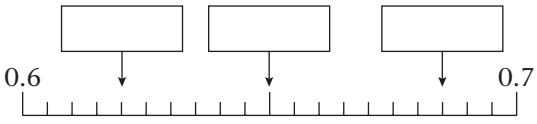
Y6 A2

Name: . . . . . .

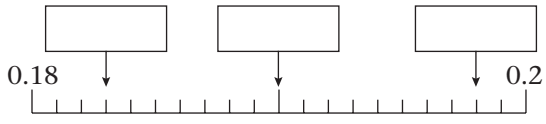
Sheet 22 Ordering/Rounding Decimals

Write the decimal fractions shown by each arrow in the box.

1



2



3 Locate the numbers on the line.

2.0 1.994 2.008 1.997 2.003

Arrange each group of decimals in ascending order.

4 4.336 3.346 4.36 4.63 3.46 . . . . . .

5 0.827 0.78 0.708 7.08 0.782 . . . . . .

6 5.44 5.434 5.343 3.455 3.54 . . . . . .

Round to the nearest:

a) whole number b) tenth.

7 6.43 a) . . . . . b) . . . . . **12** 9.293 a) . . . . . b) . . . . .

8 4.753 a) . . . . . b) . . . . . **13** 10.615 a) . . . . . b) . . . . .

9 7.381 a) . . . . . b) . . . . . **14** 95.94 a) . . . . . b) . . . . .

10 8.529 a) . . . . . b) . . . . . **15** 2.474 a) . . . . . b) . . . . .

11 23.16 a) . . . . . b) . . . . . **16** 8.551 a) . . . . . b) . . . . .

Y6 A2

Name: . . . . . .

Sheet 23 Addition of Decimals

Examples	75.9	24.83	6.15
	+43.8	+17.5	+5.377
	119.7	42.33	11.527
	1	1 1	1

Remember to add the carried figure.

Work out

1 67.5 + 21.9 = _____

2 9.28 + 4.7 = _____

3 5.9 + 5.38 = _____

4 83.6 + 32.7 = _____

5 118.7 + 63.8 = _____

6 134.6 + 81.9 = _____

7 2.28 + 0.597 = _____

8 17.5 + 7.25 = _____

9 3.568 + 1.266 = _____

10 24.92 + 17.3 = _____

11 593.7 + 76.5 = _____

12 2.885 + 2.57 = _____

13 36.5 + 12.66 = _____

14 4.94 + 1.297 = _____

15 53.76 + 26.28 = _____

16 6.758 + 3.442 = _____

17 752.7 + 464.9 = _____

18 84.89 + 55.8 = _____

19 6.762 + 4.96 = _____

20 96.74 + 5.46 = _____

Y6 A2

Name: . . . . . .

Sheet 24 Subtraction of Decimals

Examples	$5\cancel{8}^{\,7\,1}5.8 - 167.4 = 418.4$	$\cancel{5}^{\,4\,1}4.\cancel{7}^{\,6\,1}0 - 19.36 = 35.34$	$\cancel{6}^{\,5}.\cancel{3}^{\,12}\cancel{5}^{\,14\,1}1 - 2.483 = 3.868$

Work out

1	38.3 − 14.7 =	**6**	94.07 − 47.36 =	**11**	85.20 − 43.46 =	**16**	9.854 − 2.678 =
2	9.46 − 2.93 =	**7**	6.091 − 3.548 =	**12**	608.5 − 162.7 =	**17**	32.62 − 27.89 =
3	71.5 − 46.1 =	**8**	623.4 − 576.3 =	**13**	7.147 − 4.570 =	**18**	66.08 − 28.90 =
4	8.60 − 3.27 =	**9**	78.59 − 28.80 =	**14**	493.1 − 268.3 =	**19**	8.379 − 5.385 =
5	52.8 − 45.3 =	**10**	3.672 − 2.736 =	**15**	54.96 − 42.37 =	**20**	77.13 − 69.86 =

Y6 B2

Name: . . . . . .

Sheet 25 Multiplication Facts

1 Complete the multiplication square.

×	4	9	2	6	10	3	8	5	7
5									
7									
3									
4									
10									
2									
6									
9									
8									

Complete by writing the missing number in the box.

2 $4 \times 0.8 = \square$

3 $7 \times 0.06 = \square$

4 $0.6 \times 9 = \square$

5 $0.08 \times 3 = \square$

6 $\square \times 7 = 5.6$

7 $\square \times 6 = 0.36$

8 $\square \times 4 = 3.6$

9 $\square \times 8 = 0.56$

10 $\square \div 7 = 0.9$

11 $\square \div 9 = 0.8$

12 $\square \div 5 = 0.09$

13 $\square \div 8 = 0.06$

14 $0.9 \times 6 = \square$

15 $0.06 \times 7 = \square$

16 $0.6 \times 4 = \square$

17 $0.03 \times 9 = \square$

18 $\square \times 6 = 0.48$

19 $\square \times 10 = 0.5$

20 $\square \times 7 = 3.5$

21 $\square \times 9 = 0.81$

22 $\square \div 8 = 0.8$

23 $\square \div 7 = 0.07$

24 $\square \div 3 = 0.07$

25 $\square \div 9 = 0.7$

Y6 B2

Name: . . . . . .

Sheet 26 Word Problems

Example One inch is 2.5 cm.
A banana is 7.8 inches long.
What is its length in centimetres?

$$\begin{array}{r} 78 \\ \times\ 25 \\ \hline 1560 \\ 390 \\ \hline 1950 \end{array}$$

Answer 19.5 cm

Show your working. Write the answer in the box.

1 One inch is 2.5 cm. Karen's pencil is 5.6 inches long. How long is it in centimetres?

Answer ☐ cm

2 A square field has a perimeter of 1.76 km. What is its length?

Answer ☐ km

3 One sweet weighs 8.5 g.
What do 14 sweets weigh?

Answer ☐ g

4 A room is 4.3 m long. It has an area of 15.48 m^2. How wide is the room?

Answer ☐ m

5 One US dollar is worth £0.78.
What are 35 dollars worth?

Answer £ ☐

6 One wine glass holds 0.15 litres.
How many glasses can be filled from 3.75 litres?

Answer ☐

Y6 B2

Name: . . . . . .

Sheet 27 Square Numbers and Prime Factors

Work out

1 4^2 . . . . . .
2 8^2 . . . . . .
3 6^2 . . . . . .
4 3^2 . . . . . .
5 9^2 . . . . . .
6 20^2 . . . . . .
7 60^2 . . . . . .
8 50^2 . . . . . .
9 10^2 . . . . . .
10 90^2 . . . . . .
11 30^2 . . . . . .
12 70^2 . . . . . .
13 40^2 . . . . . .
14 80^2 . . . . . .
15 100^2 . . . . . .

Which number when multiplied by itself gives:

16 25 . . . . . .
17 81 . . . . . .
18 49 . . . . . .
19 16 . . . . . .
20 64 . . . . . .
21 900 . . . . . .
22 6400 . . . . . .
23 400 . . . . . .
24 3600 . . . . . .
25 8100 . . . . . .
26 2500 . . . . . .
27 100 . . . . . .
28 10 000 . . . . . .
29 1600 . . . . . .
30 4900 . . . . . .

Fill in the boxes showing the prime factors of these numbers.

31 18 2 × 3 × ☐
32 26 2 × ☐
33 28 ☐ × ☐ × ☐
34 50 ☐ × ☐ × ☐
35 63 ☐ × ☐ × ☐
36 44 ☐ × ☐ × ☐
37 60 ☐ × ☐ × ☐ × ☐
38 76 ☐ × ☐ × ☐

Explain why these numbers are not prime numbers.

39 85 is divisible by . . . 5 and . . .
40 141 is divisible by . . . . . .
41 111 is divisible by . . . . . .
42 133 is divisible by . . . . . .

Y6 B2

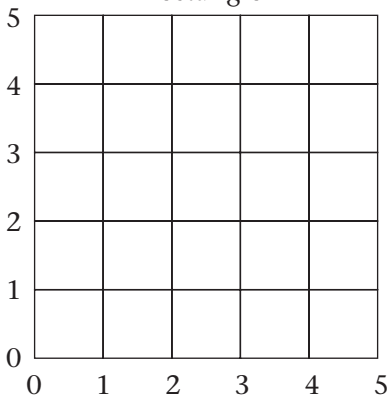
Name: . . . . . .

Sheet 28 Quadrilaterals

Plot the three co-ordinates. Join up in the given order.

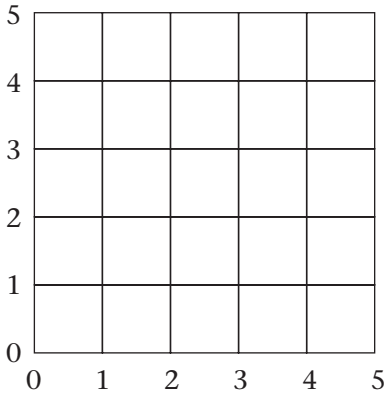
Find the fourth co-ordinate. Write it down and complete the shape.

1 rectangle



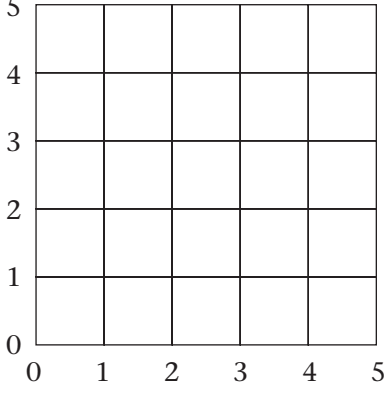
(0, 2)
(0, 4)
(4, 4)
(4, 2)

2 kite



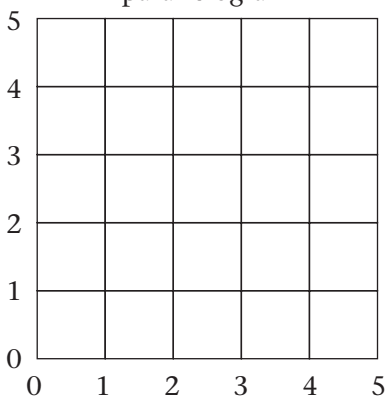
(2, 0)
(3, 3)
(2, 5)
( )

3 square



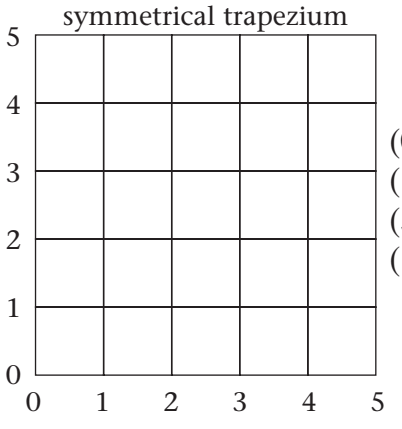
(5, 3)
(4, 0)
(1, 1)
( )

4 parallelogram



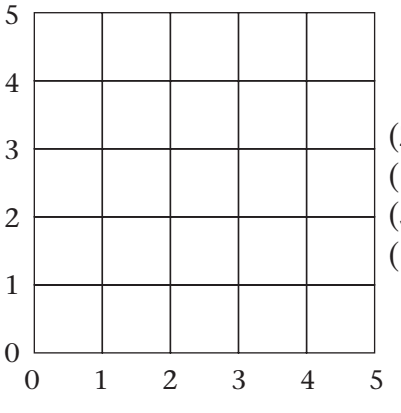
(1, 3)
(5, 4)
(4, 1)
( )

5 symmetrical trapezium



(0, 1)
(1, 3)
(3, 3)
( )

6 rhombus



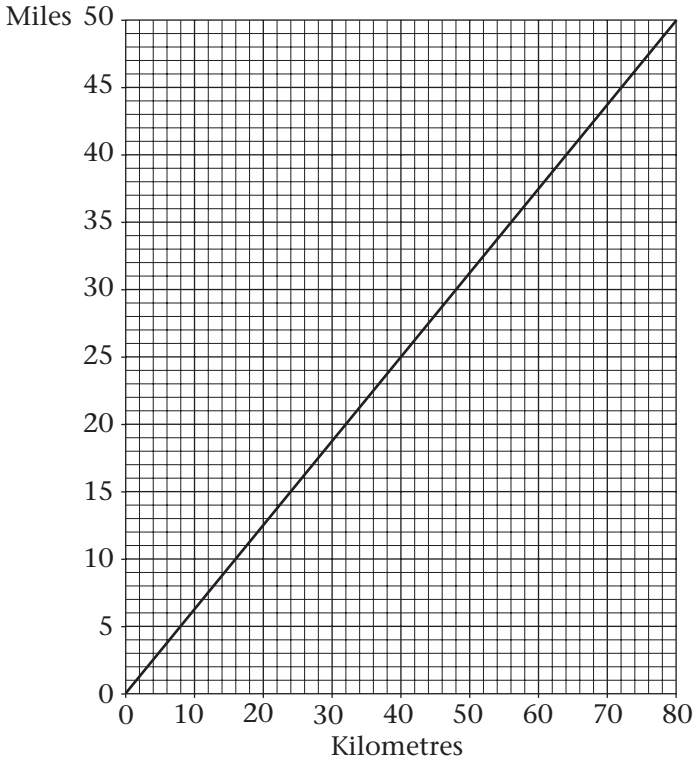
(2, 4)
(1, 2)
(3, 2)
( )

Y6 C2

Name: . . . . . .

Sheet 29 Conversion Graphs

This graph converts miles into kilometres.



1 Convert into kilometres:

a) 50 miles . . . . . km

b) 30 miles . . . . . km

c) 20 miles . . . . . km

d) 35 miles . . . . . km

e) 5 miles . . . . . km

2 Convert into miles:

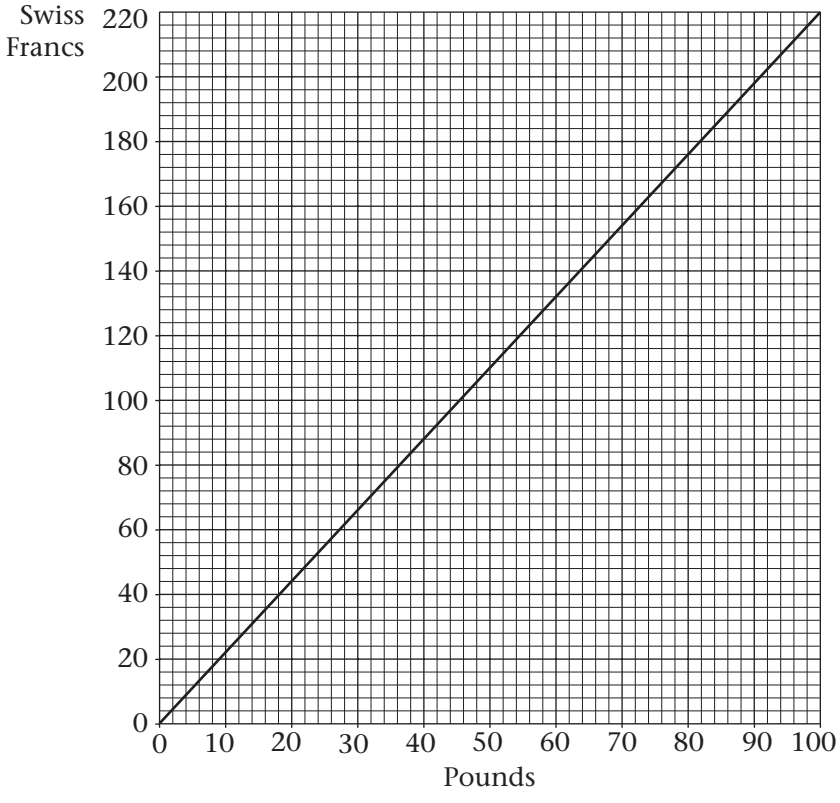
a) 40 km . . . . . miles

b) 16 km . . . . . miles

c) 64 km . . . . . miles

d) 24 km . . . . . miles

e) 72 km . . . . . miles



This graph converts Swiss francs into pounds.

3 Convert into Swiss francs:

a) £100 . . . . . Fr

b) £20 . . . . . Fr

c) £90 . . . . . Fr

d) £38 . . . . . Fr

e) £80 . . . . . Fr

4 Convert into pounds:

a) 100 Fr £ . . . . . .

b) 132 Fr £ . . . . . .

c) 40 Fr £ . . . . . .

d) 88 Fr £ . . . . . .

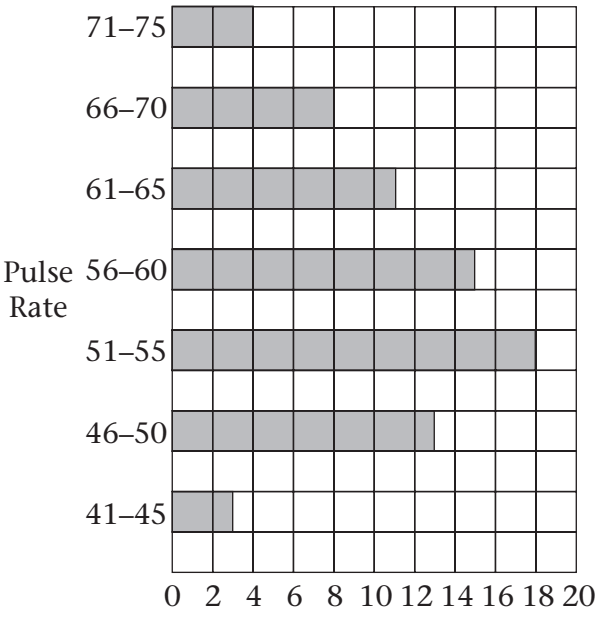
e) 200 Fr £ . . . . . .

Y6 C2

Name: . . . . . .

Sheet 30 Interpreting Charts

This bar chart shows the resting pulse rates of 72 marathon runners.



1 How many runners had a pulse rate below 51? ☐

2 How many runners had a pulse rate above 60? ☐

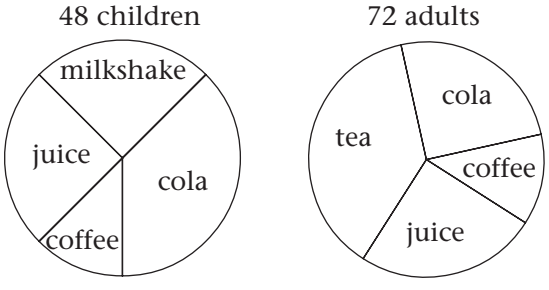
3 What proportion of the runners had a pulse rate of 51 – 55?

. . . . . .

4 What proportion of the runners had a pulse rate of over 65?

. . . . . .

5 The lowest pulse rate was 44 beats per minute. The range was 29 b.p.m. What was the highest pulse rate? ☐



The pie charts show the drinks chosen in a cafe by 48 children and 72 adults.

6 Estimate the number of children who chose coffee. ☐

7 Estimate the number of adults who chose tea. ☐

8 Mohammed says
The same number of children and adults chose fruit juice.
Do you agree? Yes ☐ No ☐
Explain your answer.

. . . . . .

. . . . . .

. . . . . .

9 Jasmin says
The same number of children and adults chose cola.
Do you agree? Yes ☐ No ☐
Explain your answer.

. . . . . .

. . . . . .

. . . . . .