

1

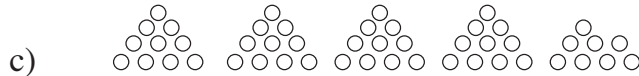
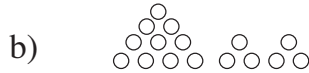
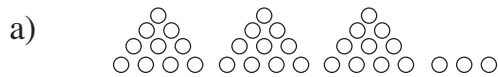
a) Complete the table.

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|
| 0 | 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 |

- b) Colour *red* the 2-digit numbers in the 2nd row.
- c) Colour *blue* the 2-digit **even** numbers in the 5th column from the left.
- d) Colour *yellow* the 1-digit **odd** numbers in the 4th column from the right.
- e) Colour *green* the numbers not less than 36.

2

Write the number of circles in the place-value table.



| | H | T | U |
|-------|---|---|---|
| a) | | 3 | 3 |
| b) | | 1 | 6 |
| c) | | 4 | 8 |
| Total | | 9 | 7 |

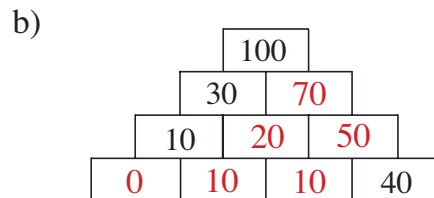
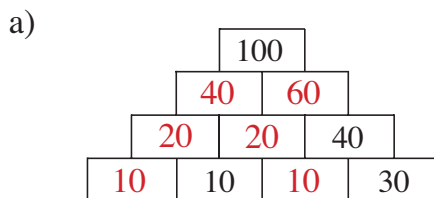
3

The same shape means the same number. Fill in the missing whole tens.

$$\begin{array}{l}
 \boxed{50} + \text{semicircle } 30 + \text{triangle } 20 = 100 \\
 \boxed{50} + \text{semicircle } 30 - \text{triangle } 20 = 60 \\
 \boxed{50} - \text{semicircle } 30 + \text{triangle } 20 = 40 \\
 \boxed{50} - \text{semicircle } 30 - \text{triangle } 20 = 0
 \end{array}$$

4

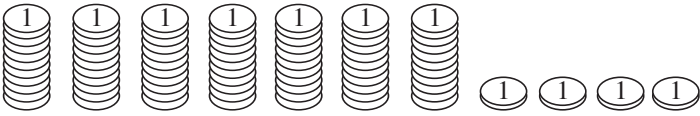
The sum of any two **adjacent** numbers is the number directly above them. Fill in the missing numbers.



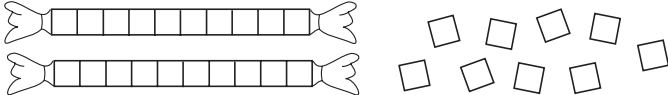
1

Fill in the amounts and mark the numbers on the number line.

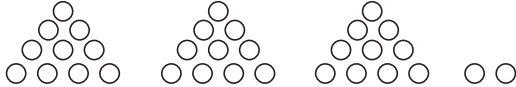


a) 

| | |
|---|---|
| 7 | 4 |
|---|---|

b) 

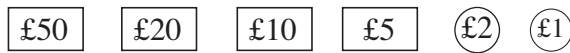
| | |
|---|---|
| 2 | 9 |
|---|---|

c) 

| | |
|---|---|
| 3 | 2 |
|---|---|

2

Draw and write down how you could pay £76 from these notes and coins:



a) with the exact amount

Drawing:

| |
|-----|
| £50 |
|-----|

| |
|-----|
| £20 |
|-----|

| |
|----|
| £5 |
|----|

| |
|----|
| £1 |
|----|

Calculation:

$$50 + 20 + 5 + 1 = 76$$

b) with change needed.

Drawing:

| |
|-----|
| £50 |
|-----|

| |
|-----|
| £20 |
|-----|

| |
|-----|
| £10 |
|-----|

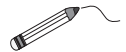
Calculation:

$$50 + 20 + 10 = 80$$

$$80 - 76 = 4$$

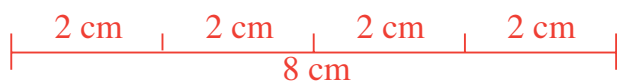
3

Fill in the total amounts. Compare them by drawing arrows towards the amount which is more.



4

Draw a line 8 cm long.
Divide it up into quarters.



1

Practise addition.

| | | |
|--|--|---|
| a) $40 + 50 =$ <input type="text" value="90"/> | b) $26 + 30 =$ <input type="text" value="56"/> | c) $17 + 5 =$ <input type="text" value="22"/> |
| $30 + 20 =$ <input type="text" value="50"/> | $42 + 50 =$ <input type="text" value="92"/> | $18 + 3 =$ <input type="text" value="21"/> |
| $50 + 10 =$ <input type="text" value="60"/> | $40 + 17 =$ <input type="text" value="57"/> | $29 + 6 =$ <input type="text" value="35"/> |
| $70 + 6 =$ <input type="text" value="76"/> | $32 + 4 =$ <input type="text" value="36"/> | $8 + 24 =$ <input type="text" value="32"/> |
| $20 + 8 =$ <input type="text" value="28"/> | $25 + 3 =$ <input type="text" value="28"/> | $9 + 23 =$ <input type="text" value="32"/> |
| $30 + 2 =$ <input type="text" value="32"/> | $52 + 6 =$ <input type="text" value="58"/> | $7 + 16 =$ <input type="text" value="23"/> |

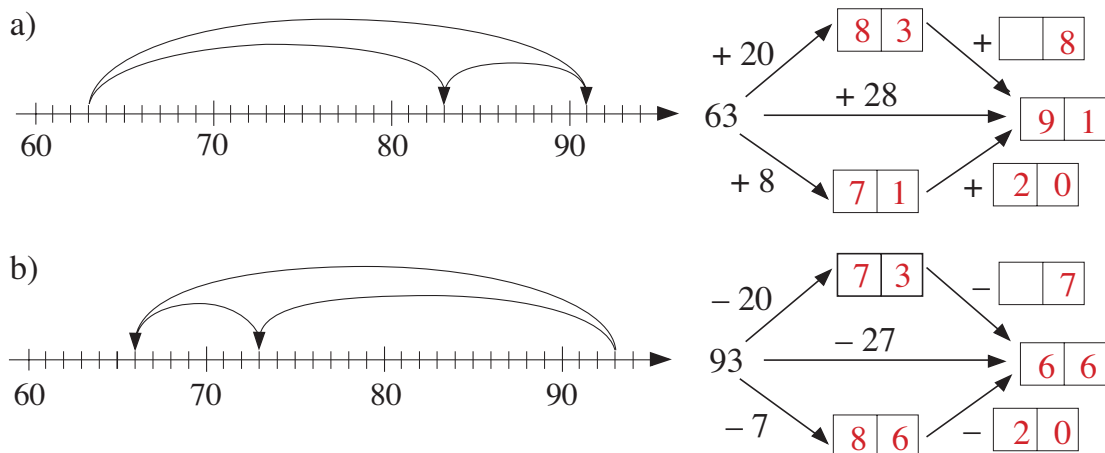
2

Practise subtraction.

| | | |
|--|--|---|
| a) $80 - 70 =$ <input type="text" value="10"/> | b) $43 - 20 =$ <input type="text" value="23"/> | c) $26 - 9 =$ <input type="text" value="17"/> |
| $50 - 10 =$ <input type="text" value="40"/> | $75 - 50 =$ <input type="text" value="25"/> | $27 - 8 =$ <input type="text" value="19"/> |
| $90 - 30 =$ <input type="text" value="60"/> | $68 - 30 =$ <input type="text" value="38"/> | $23 - 5 =$ <input type="text" value="18"/> |
| $38 - 8 =$ <input type="text" value="30"/> | $52 - 1 =$ <input type="text" value="51"/> | $24 - 12 =$ <input type="text" value="12"/> |
| $52 - 2 =$ <input type="text" value="50"/> | $98 - 6 =$ <input type="text" value="92"/> | $28 - 14 =$ <input type="text" value="14"/> |
| $76 - 6 =$ <input type="text" value="70"/> | $87 - 4 =$ <input type="text" value="83"/> | $25 - 17 =$ <input type="text" value="8"/> |

3

Do the additions in different ways. Fill in the missing numbers. Complete the diagrams.

**4**

Ann has 35 picture cards, 18 more than Lisa. How many picture cards do the two girls have altogether?

$$35 - 18 = 17$$

$$17 + 35 = 52$$

They have cards altogether.

1

Jane has £64. How many pounds could she spend and how many pounds would she have left? Complete the table.

| | | | | | | | | | | | | | | |
|--------------|----|----|----|----|----|----|----|----|----|----|----|----|----|------|
| Spends (£) | 18 | 52 | 36 | 30 | 25 | 29 | 49 | 16 | 27 | 41 | 50 | 59 | 13 | E.g: |
| Has left (£) | 46 | 12 | 28 | 34 | 39 | 35 | 15 | 48 | 37 | 23 | 14 | 5 | 51 | |

Rule: $64 = S + H$ $S = 64 - H$ $H = 64 - S$

2

Andrew has £46 more than Brian has. How much money could they each have? Complete the table.

| | | | | | | | | | | | | | | |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| A (£) | 49 | 61 | 68 | 70 | 95 | 63 | 80 | 64 | 85 | 81 | 73 | 83 | 95 | 55 |
| B (£) | 3 | 15 | 22 | 24 | 49 | 17 | 34 | 18 | 39 | 35 | 27 | 37 | 49 | 9 |

Rule: $A = B + 46$ $B = A - 46$ $46 = A - B$

3

A book case has 3 shelves. On the middle shelf there are 32 books, 9 less than there are on the top shelf and 9 more than there are on the bottom shelf.

- a) How many books are on the top shelf? 41 (32 + 9)
- b) How many books are on the bottom shelf? 23 (32 - 9)
- c) How many books are in the book case? 96 (41 + 32 + 23)

4

Fill in the missing numbers.

a) $30 + \boxed{50} = 80$ $33 + \boxed{5} = 38$ $3 + \boxed{80} = 83$

$33 + \boxed{50} = 83$ $38 + \boxed{42} = 80$ $38 + \boxed{45} = 83$

b) $\boxed{20} + 40 = 60$ $\boxed{62} + 4 = 66$ $\boxed{24} + 40 = 64$

$\boxed{16} + 44 = 60$ $\boxed{14} + 46 = 60$ $\boxed{18} + 46 = 64$

c) $90 - \boxed{60} = 30$ $93 - \boxed{60} = 33$ $99 - \boxed{60} = 39$

$90 - \boxed{57} = 33$ $90 - \boxed{51} = 39$ $93 - \boxed{54} = 39$

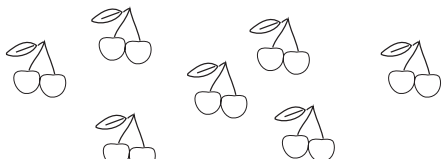
d) $\boxed{90} - 50 = 40$ $\boxed{45} - 5 = 40$ $\boxed{95} - 55 = 40$

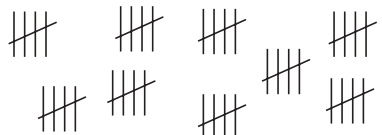
$\boxed{99} - 54 = 45$ $\boxed{54} - 4 = 50$ $\boxed{49} - 44 = 5$

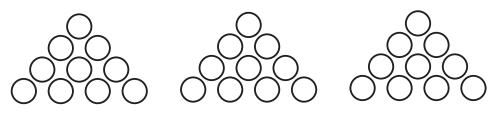
1

Write an addition and a multiplication about each picture.

E.g:

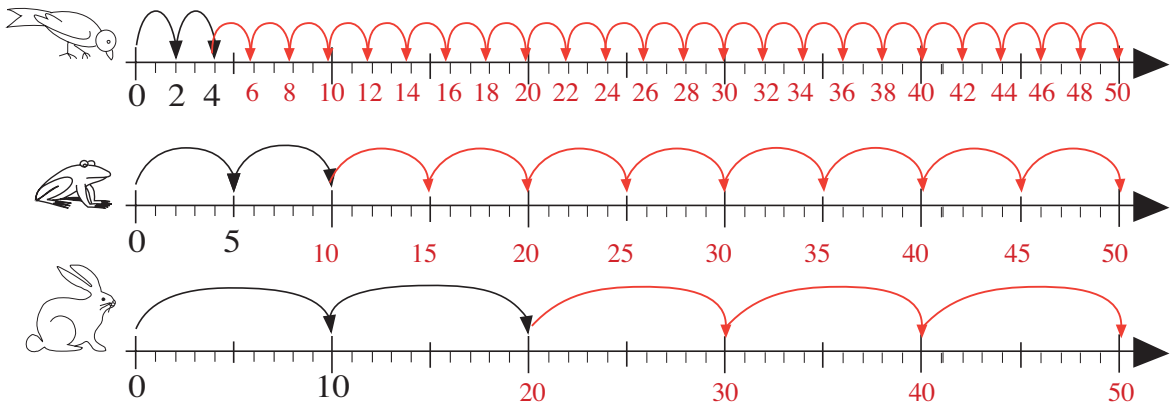
a)  $2 + 2 + 2 + 2 + 2 + 2 + 2 = 14$
 $7 \times 2 = 14$

b)  $5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = 45$
 $9 \times 5 = 45$

c)  $10 + 10 + 10 = 30$
 $3 \times 10 = 30$

2

The animals start at 0 and make jumps of equal length along the number line. Draw their jumps and write the numbers they land on below the number line.



3

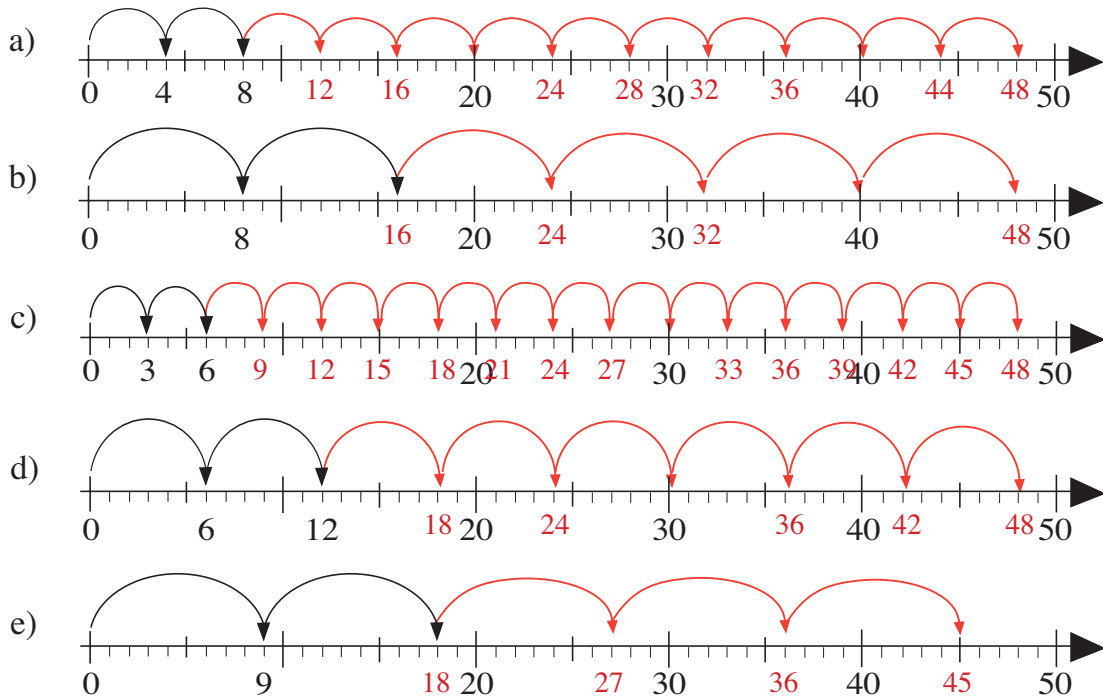
Fill in the rows and columns for 2, 5 and 10.

Make sure you know these multiplication facts by heart.

| x | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|---|----|----|----|----|----|----|----|----|----|-----|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 0 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 0 | 3 | 6 | | | 15 | | | | | 30 |
| 4 | 0 | 4 | 8 | | | 20 | | | | | 40 |
| 5 | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 0 | 6 | 12 | | | 30 | | | | | 60 |
| 7 | 0 | 7 | 14 | | | 35 | | | | | 70 |
| 8 | 0 | 8 | 16 | | | 40 | | | | | 80 |
| 9 | 0 | 9 | 18 | | | 45 | | | | | 90 |
| 10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

1

Starting from 0, draw jumps of equal length along the number line.
Write the numbers landed on below the number line.



2

Complete the table. Multiply the numbers in the top row by 3, 6 and 9.

| | | | | | | | | | | | | | | | | |
|---|---|---|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| x | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 3 | 0 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 | 45 |
| 6 | 0 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 |
| 9 | 0 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 | 99 | 108 | 117 | 126 | 135 |

3

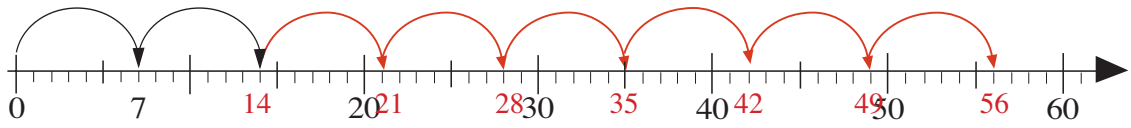
Fill in the rows and columns for 3, 4, 6, 8, and 9.

Make sure you know these multiplication facts by heart.

| | | | | | | | | | | | |
|----|---|----|----|----|----|----|----|----|----|----|-----|
| x | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 0 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 0 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 0 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 0 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 0 | 7 | 14 | 21 | 28 | 35 | 42 | | 56 | 63 | 70 |
| 8 | 0 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 0 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

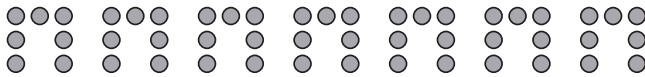
1

Starting from 0, draw jumps of equal length along the number line. Write the numbers landed on below the number line.



2

Write an addition and a multiplication about the picture.



$7 + 7 + 7 + 7 + 7 + 7 + 7 = 49$

$7 \times 7 = 49$

3

Complete the table. Write the rule in different ways.

Number of:



| | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 15 | 20 | 21 |
| Heads | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 15 | 20 | 21 |
| Legs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Rule: $S = H$ $H = S$ $L = 0$

4

Practise multiplication.

a) $3 \times 7 = 21$

b) $9 \times 9 = 81$

c) $8 \times 7 = 56$

$5 \times 6 = 30$

$4 \times 8 = 32$

$5 \times 5 = 25$

$9 \times 8 = 72$

$2 \times 6 = 12$

$9 \times 5 = 45$

5

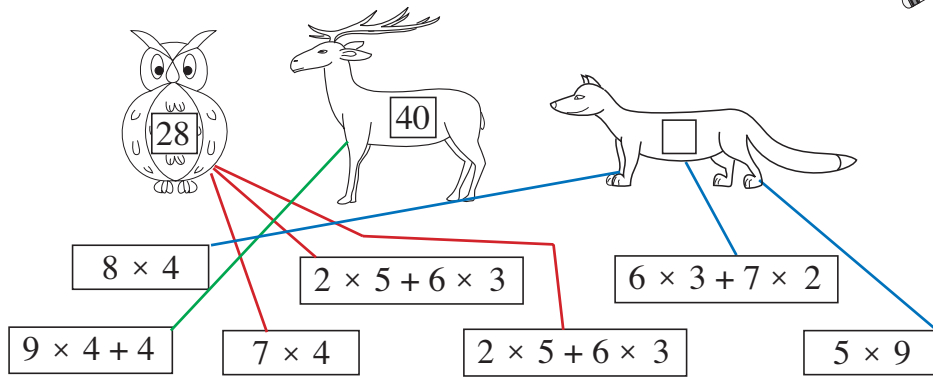
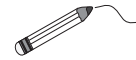
Complete the multiplication table for 0, 1 and 7.

Make sure you know all the multiplication facts by heart.

| | | | | | | | | | | | |
|----|---|----|----|----|----|----|----|----|----|----|-----|
| x | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 0 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 0 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 0 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 0 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 0 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 0 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 0 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

1

Ollie Owl collects operations which result in 28, Dennis Deer collects those which result in 40 and Freddy Fox collects the others. Join them up.



2

Colin had £48. He was given £15 for his birthday by each of his 3 aunts. How much money does he have now?

Calculation: $48 + 15 + 15 + 15 = 48 + 3 \times 15 = 93$

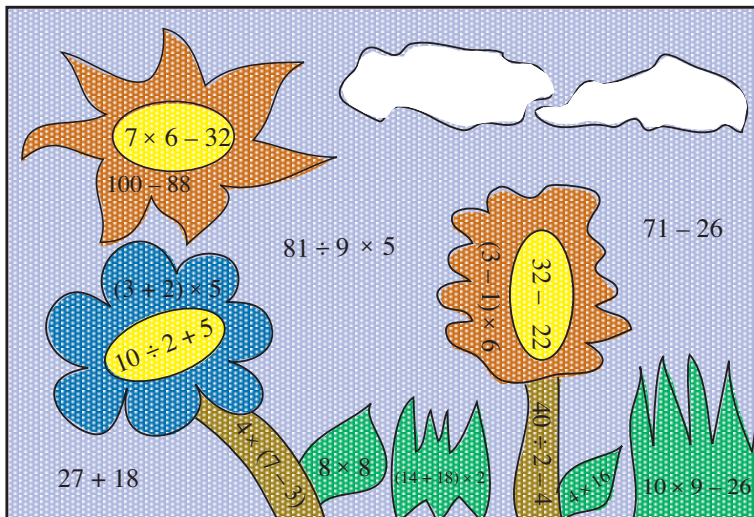
Answer: ... Colin now has £93.

3

Fill in the missing numbers.

- | | | |
|------------------------------|-----------------------------|-------------------------------|
| a) $7 \times \boxed{8} = 56$ | b) $\boxed{30} \div 3 = 10$ | c) $13 \times 7 = \boxed{91}$ |
| $9 \times \boxed{3} = 27$ | $\boxed{35} \div 7 = 5$ | $24 \times 4 = \boxed{96}$ |
| $6 \times \boxed{3} = 18$ | $\boxed{14} \div 2 = 7$ | $15 \times 6 = \boxed{90}$ |
| $4 \times \boxed{8} = 32$ | $\boxed{54} \div 6 = 9$ | $3 \times 16 = \boxed{48}$ |
| $5 \times \boxed{9} = 45$ | $\boxed{72} \div 8 = 9$ | $6 \times 16 = \boxed{96}$ |
| $3 \times \boxed{7} = 21$ | $\boxed{12} \div 4 = 3$ | $3 \times 17 = \boxed{51}$ |

4

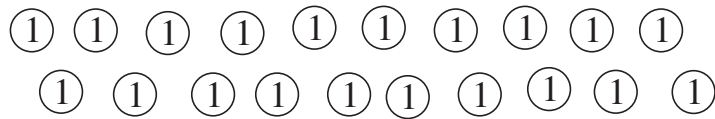


Do the calculation in each part and colour it according to the result.

- 25 Dark blue
- 12 Red
- 10 Yellow
- 16 Brown
- 64 Green
- 24 White
- 45 Light blue

1

Answer the questions with divisions. Check with multiplications.



a) For how many (2) s can you exchange these 20 (1) s?

Calculation: $20 \div 2 = 10$ Check: $10 \times 2 = 20$

b) For how many (5) s can you exchange these 20 (1) s?

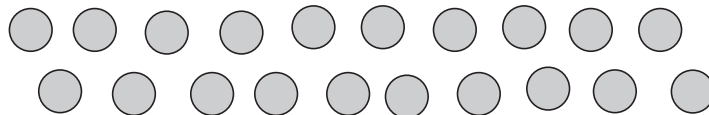
Calculation: $20 \div 5 = 4$ Check: $4 \times 5 = 20$

c) For how many (10) s can you exchange these 20 (1) s?

Calculation: $20 \div 10 = 2$ Check: $2 \times 10 = 20$

2

Answer the questions with divisions. Check with multiplications.



How many marbles would each child get if these marbles were shared equally among:

a) 2 children Calculation: $20 \div 2 = 10$ Check: $10 \times 2 = 20$

b) 5 children Calculation: $20 \div 5 = 4$ Check: $4 \times 5 = 20$

c) 10 children Calculation: $20 \div 10 = 2$ Check: $2 \times 10 = 20$

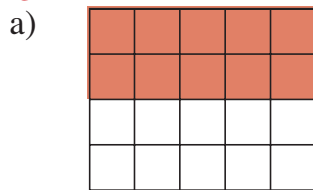
d) 20 children Calculation: $20 \div 20 = 1$ Check: $1 \times 20 = 20$

e) 1 child? Calculation: $20 \div 1 = 20$ Check: $20 \times 1 = 20$

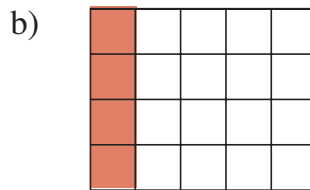
3

Colour different **fractions** of the shape.

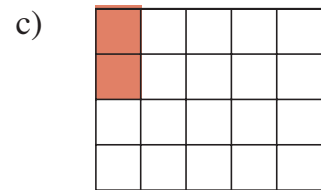
E.g:



1 half



1 fifth



1 tenth

4

Draw a line 9 cm long.
Divide it into thirds.

$9 \text{ cm} \div 3 = 3 \text{ cm}$



1

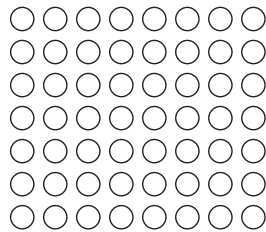
Write a division about each picture. Check with a multiplication.

a)



E.g: $28 \div 7 = 4$ Check: $7 \times 4 = 28$

b)



E.g: $56 \div 8 = 7$

Check: $8 \times 7 = 56$

2



Write a division to show how 32 marbles can be shared equally among :

a) 2 children $32 \div 2 = 16$

b) 4 children $32 \div 4 = 8$

c) 8 children $32 \div 8 = 4$

3

Complete the table.

Number of:

| | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|
| Legs | 0 | 2 | 4 | 6 | 8 | 12 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| People | 0 | 1 | 2 | 3 | 4 | 6 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| Chairs | 0 | - | 1 | - | 2 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| Spiders | 0 | - | - | - | 1 | - | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

4

Practise division.

a) $80 \div 8 = 10$ b) $32 \div 4 = 8$ c) $16 \div 8 = 2$

$40 \div 10 = 4$ $40 \div 4 = 10$ $160 \div 8 = 20$

$40 \div 5 = 8$ $64 \div 8 = 8$ $160 \div 80 = 2$

$24 \div 4 = 6$ $16 \div 8 = 2$ $12 \div 4 = 3$

$16 \div 2 = 8$ $14 \div 2 = 7$ $120 \div 4 = 30$

$72 \div 8 = 9$ $35 \div 5 = 7$ $0 \div 4 = 0$

1

Write a division about each picture. Check it with a multiplication.

E.g:

a)



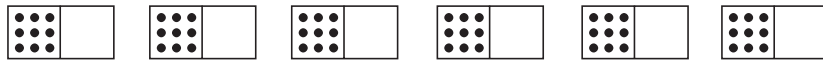
..... $21 \div 3 = 7$ Check: .. $3 \times 7 = 21$

b)



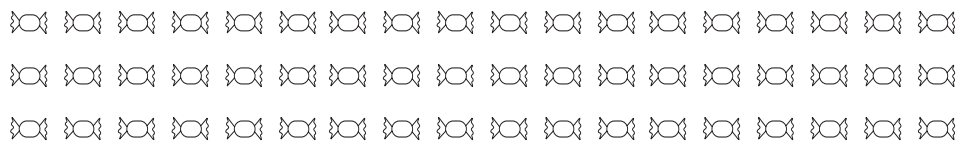
..... $48 \div 6 = 8$ Check: .. $6 \times 8 = 48$

c)



..... $54 \div 9 = 6$ Check: .. $9 \times 6 = 54$

2



Write a division to show how 54 sweets can be shared equally among :

a) 3 children .. $54 \div 3 = 18$

b) 6 children .. $54 \div 6 = 9$

c) 9 children .. $54 \div 9 = 6$

3

Complete the table.

Number of:

| Sticks | 0 | 1 | 2 | 3 | 6 | 8 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 54 | 90 |
|--------|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| | 0 | - | - | 1 | 2 | - | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 18 | 30 |
| | 0 | - | - | - | 1 | - | - | 2 | - | 3 | - | 4 | - | 5 | - | 6 | 9 | 15 |
| | 0 | - | - | - | - | - | 1 | - | - | 2 | - | - | 3 | - | - | 4 | 6 | 10 |

4

a) $60 \div 6 = 10$ b) $36 \div 9 = 4$ c) $18 \div 3 = 6$
 $60 \div 3 = 20$ $54 \div 9 = 6$ $180 \div 3 = 60$
 $42 \div 6 = 7$ $48 \div 8 = 6$ $180 \div 30 = 6$
 $25 \div 5 = 5$ $12 \div 3 = 4$ $36 \div 6 = 6$
 $81 \div 9 = 9$ $70 \div 10 = 7$ $9 \div 9 = 1$
 $72 \div 8 = 9$ $28 \div 4 = 7$ $0 \div 3 = 0$

1

Complete the table.

| | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|
| Days | 0 | 1 | 3 | 6 | 7 | 10 | 14 | 21 | 25 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 84 |
| Weeks | 0 | - | - | - | 1 | - | 2 | 3 | - | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 |

2

Divide the 35 sticks into 7 equal groups. Check your calculation in two ways.

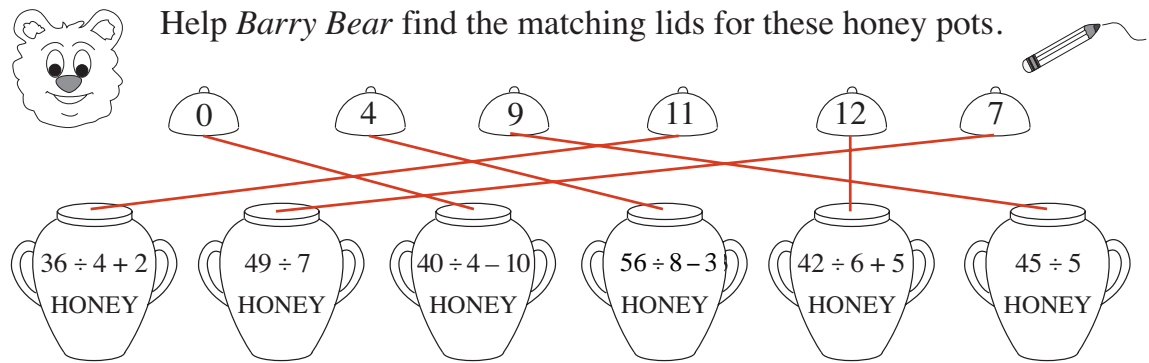


Calculation: $35 \div 7 = 5$

Check: $7 \times 5 = 35$ Check: $5 \times 7 = 35$

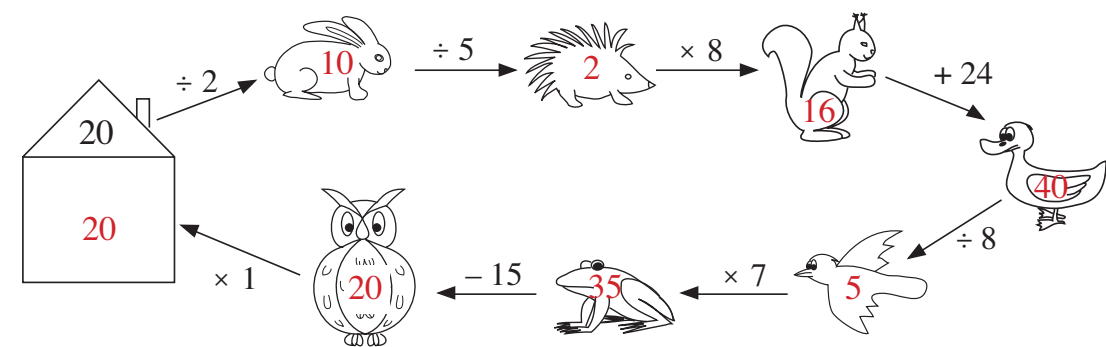
3

Help Barry Bear find the matching lids for these honey pots.



4

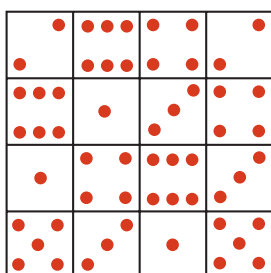
Follow the arrows, do what they tell you and write the final number in the house.



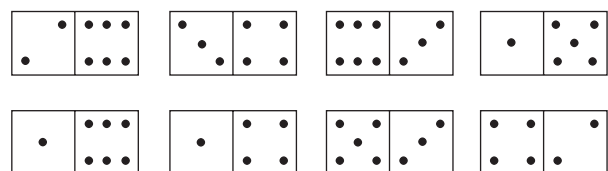
5

Try to solve this difficult puzzle!

E.g:

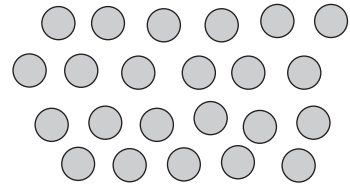


Draw the dominoes in the square so that each row, column and diagonal has the same number of dots.



1

Grandpa gave 23 marbles to his 3 grandchildren. They want to share out the marbles equally.



How many marbles will each grandchild get and how many marbles will remain?

Calculation: $23 \div 3 = 7$, remainder 2 *Check:* $2 + 7 \times 3 = 23$

Answer: They will get 7 marbles each. There will be 2 marbles remaining.

2

What are the secret numbers? Do the calculations, then check your answer.

- a) I thought of a number. I divided it by 9 and the result was 6, remainder 3. What is the number I was thinking of?

Calculation: $3 + 6 \times 9 = 57$

Check: $57 \div 9 = 6$, remainder 3 *Answer:*

- b) I divided 47 by a number and the remainder was 2. What was the number?

Calculation: $47 \div 5 = 9$, remainder 2. or $47 \div 9 = 5$, remainder 2, etc. . .

Check: $2 + 9 \times 5 = 2 + 45 = 47$, etc. *Answer:*
or 3 or 15

3



- a) Circle in *blue* the numbers which give a remainder of 1 when divided by 2.
 b) Circle in *green* the numbers which give a remainder of 2 when divided by 3.
 c) Circle in *red* the numbers which give a remainder of 3 when divided by 4.

4

Tom has 78 stamps in his collection. He has already filled 2 stamp albums.

How many stamps will go into a third album if each album can hold 30 stamps?

Calculation: $78 - 2 \times 30 = 18$

Check: $18 + 2 \times 30 = 78$

Answer: 18 stamps will go into a third album.

5

1 quarter of a line is 2 and a half cm long. 4×2 and a half cm = 10 cm

Draw the whole line. 10 cm

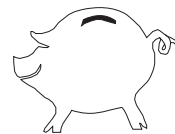
1

Practise division. What is the remainder? Check it with a multiplication.

| | | | |
|----|--|--|--|
| a) | $14 \div 3 = \boxed{4}$ remainder $\boxed{2}$ Check $2 + 4 \times 3 = 14$ | $19 \div 2 = \boxed{9}$ remainder $\boxed{1}$ Check $1 + 9 \times 2 = 19$ | $17 \div 6 = \boxed{2}$ remainder $\boxed{5}$ Check $5 + 2 \times 6 = 17$ |
| b) | $28 \div 9 = \boxed{3}$ remainder $\boxed{1}$ Check $1 + 3 \times 9 = 28$ | $33 \div 5 = \boxed{6}$ remainder $\boxed{3}$ Check $3 + 6 \times 5 = 33$ | $24 \div 6 = \boxed{4}$ remainder $\boxed{0}$ Check $4 \times 6 = 24$ |
| c) | $47 \div 5 = \boxed{9}$ remainder $\boxed{2}$ Check $2 + 9 \times 5 = 47$ | $54 \div 6 = \boxed{9}$ remainder $\boxed{0}$ Check $9 \times 6 = 54$ | $38 \div 9 = \boxed{4}$ remainder $\boxed{2}$ Check $2 + 4 \times 9 = 38$ |

2

During one week, Billy took 8 p out of his piggy bank every day. How much money was in Billy's piggy bank at the beginning of the week if 4 p remained at the end?



Calculation: $4 + 8 \times 7 = 60$ Check: $60 \div 7 = 8$, remainder 4
 Answer: 60 p was in the piggy bank at the beginning of the week.

3

Change £1 coins into £5 notes.

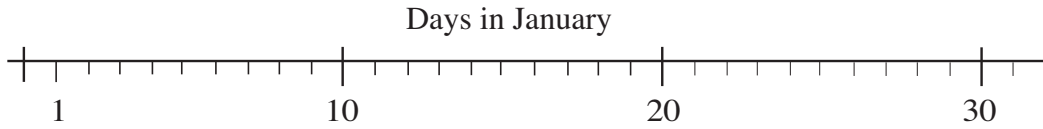
| | | | | | | | | | | | | |
|---------------------|---------------|----|----|----|----|----|----|----|----|----|----|-----|
| Number of: | | 10 | 16 | 24 | 43 | 18 | 35 | 52 | 61 | 77 | 99 | 100 |
| ⊕£1 | | | | | | | | | | | | |
| Complete the table. | ⊕£5 | 2 | 3 | 4 | 8 | 3 | 7 | 10 | 12 | 15 | 19 | 20 |
| | ⊕£1 remaining | 0 | 1 | 4 | 3 | 3 | 0 | 2 | 1 | 2 | 4 | 0 |

4

Which number does each letter represent? Fill in the missing numbers.

| | | | | |
|--|--|--|--|------------------------------------|
| $8 \times a = 16$ $a = \boxed{2}$ | $6 \times b = 24$ $b = \boxed{4}$ | $c \times 3 = 24$ $c = \boxed{8}$ | $d \times 7 = 42$ $d = \boxed{6}$ | $12 \div e = 3$ $e = \boxed{4}$ |
| $f \div 9 = 7$ $f = \boxed{63}$ | $g \div 8 = 7$ $g = \boxed{56}$ | $35 \div h = 5$ $h = \boxed{7}$ | $14 \div i = 3$, remainder 2 $i = \boxed{4}$ | |
| $36 \div j = 4$, remainder 4 $j = \boxed{8}$ | $k \div 9 = 9$, remainder 3 $k = \boxed{84}$ | $l \div 7 = 9$, remainder 1 $l = \boxed{64}$ | | |

1



If the 1st of January was a Saturday, which dates in January were:

- a) Saturdays . 1st, 8th, 15th, 22nd, 29th
- b) Tuesdays . 4th, 11th, 18th, 25th
- c) Fridays? . 7th, 14th, 21st, 28th

2

List the whole numbers which make the inequalities true.

- a) $8 \times 6 < a < 7 \times 8$ a: 49, 50, 51, 52, 53, 54, 55 ($48 < a < 56$)
- b) $40 \div 8 < b < 72 \div 9$ b: 6, 7 ($5 < b < 8$)
- c) $3 \times 9 - 19 \geq c$ c: 8, 7, 6, 5, 4, 3, 2, 1, 0 (-1, -2, ...) ($8 \geq c$) ..
- d) $16 - 36 \div 4 \leq d$ d: 7, 8, 9, 10, ($7 \leq d$) ..

3

Write the operations **without** brackets if possible so that the result is the same. Do the calculations as a check.

- a) $(2 + 8) \times 7 = 2 \times 7 + 8 \times 7 = 70$
- b) $(11 - 3) \times 9 = 11 \times 9 - 3 \times 9 = 72$
- c) $(21 + 14) \div 7 = 21 \div 7 + 14 \div 7 = 5$
- d) $(24 - 8) \div 4 = 24 \div 4 - 8 \div 4 = 4$
- e) $80 \div (12 - 4) = 80 \div 8 = 10$
- f) $72 \div (3 + 6) = 72 \div 9 = 8$

4

Do the calculations with and without brackets.

- a) Grandma has 3 grandsons and 5 granddaughters. On her birthday, each grandchild gave her 7 flowers. How many flowers was she given altogether?

Calculation: $(3 + 5) \times 7 = 8 \times 7 = 56$ or $3 \times 7 + 5 \times 7 = 21 + 35 = 56$

Answer: . Grandma was given 56 flowers altogether.

- b) The 3 children in a family were given 90 p by Dad and 60 p by Mum. They shared the money equally. How much money did they each get?

Calculation: $(90 + 60) \div 3 = 90 \div 3 + 60 \div 3 = 30 + 20 = 50$

Answer: . The children had 50 p each.

1

Do the calculations in the correct order.

- a) $54 + 5 \times 4 + 6 \div 2 = 54 + 20 + 3 = 77$
 b) $40 + 3 \times 8 + 18 \div 9 = 40 + 24 + 2 = 66$
 c) $76 - 7 \times 8 - 8 \div 4 = 76 - 56 - 2 = 18$
 d) $92 - 4 \times 3 - 72 \div 8 = 92 - 12 - 9 = 71$

2

Do the calculations in the correct order.

- a) $60 \div 6 + 4 \times 2 - 2 = 10 + 8 - 2 = 16$
 b) $60 \div 6 + 4 \times (2 - 2) = 60 \div 6 + 4 \times 0 = 10 + 0 = 10$
 c) $60 \div (6 + 4) \times 2 - 2 = 60 \div 10 \times 2 - 2 = 6 \times 2 - 2 = 12 - 2 = 10$
 d) $(60 \div 6 + 4) \times 2 - 2 = (10 + 4) \times 2 - 2 = 14 \times 2 - 2 = 28 - 2 = 26$
 e) $60 \div (6 + 4 \times 2 - 2) = 60 \div 12 = 5$
 f) $60 \div (6 + 4) \times (2 - 2) = 60 \div 10 \times 0 = 6 \times 0 = 0$

3

Four children were given £90. They spent £30 and then shared the remaining money equally. How much money did they each get?

Plan: No. of children is 4. Given £90. Spent £30.
 Had left £90 - £30

Calculation: $(90 - 30) \div 4 = 60 \div 4 = 15$
 or $£90 \div 4 - £30 \div 4 = £22\ 50\text{ p} - £7\ 50\text{ p} = £15$

Answer: They each got £15.

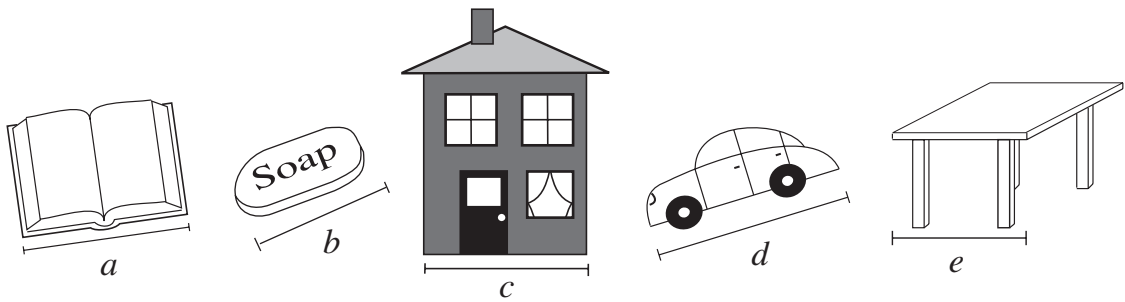
4

Fill in the missing numbers so that the equations are true, both horizontally and vertically. E.g:

| | | | | | |
|------|---|------|---|-----|------|
| 3 | × | 8 | ÷ | 6 | = 4 |
| × | | ÷ | | × | |
| 1 | × | 2 | × | 9 | = 18 |
| × | | × | | ÷ | |
| 9 | × | 4 | ÷ | 6 | = 6 |
| = 27 | | = 16 | | = 9 | |

1

Imagine the size of these things in real life. Estimate their real lengths. Which letter could be written in which box?



$1 \text{ m} < \boxed{e} < 2 \text{ m}$ $8 \text{ cm} < \boxed{b} < 10 \text{ cm}$ $20 \text{ cm} < \boxed{a} < 30 \text{ cm}$
 $4 \text{ m} < \boxed{d} < 5 \text{ m}$ $10 \text{ m} < \boxed{c} < 20 \text{ m}$

2

Estimate, then measure accurately, the total length of the lines.

| | | | | |
|----|----|----|----|----|
| a) | b) | c) | d) | e) |
| | | | | |

3

Fill in the missing numbers.

a) $1 \text{ m } 30 \text{ cm} = \boxed{130} \text{ cm}$ b) $1 \text{ m } 50 \text{ cm} = \boxed{150} \text{ cm}$
 c) $1 \text{ m } 100 \text{ cm} = \boxed{2} \text{ m} = \boxed{200} \text{ cm}$ d) $1 \text{ m } 26 \text{ cm} = \boxed{126} \text{ cm}$
 e) $1 \text{ m } 80 \text{ cm} = \boxed{180} \text{ cm}$ f) $1 \text{ m } 7 \text{ cm} = \boxed{107} \text{ cm}$

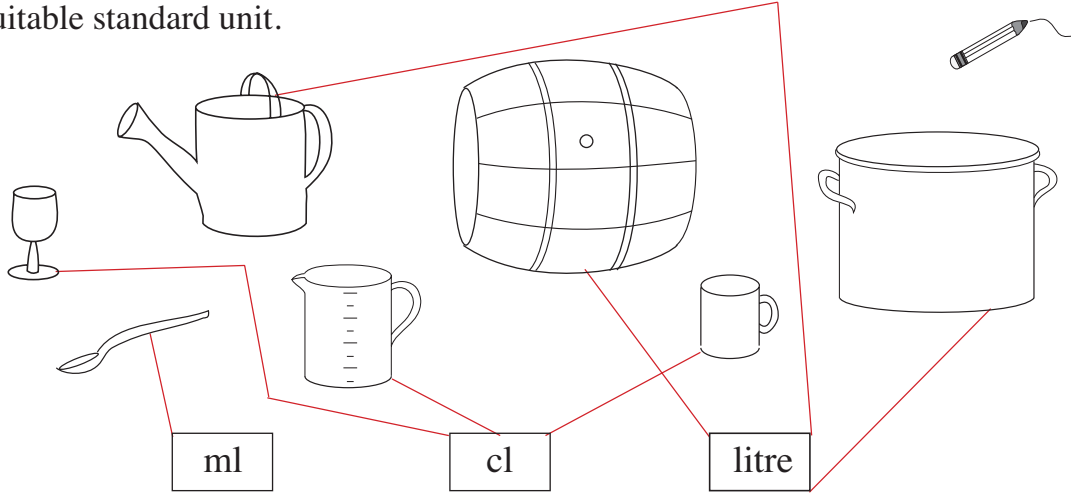
4

Mr. Silly estimated some quantities. If you agree with him, write a ✓. If you disagree, write a ✗ and correct his mistake.

- a) My friend Bob is about 135 m tall. ✗ 135 cm
 b) A matchbox is about 5 mm wide. ✗ 5 cm or 50 mm
 c) A pupil's desk is about 70 mm high. ✗ 70 cm
 d) My pencil is about 15 cm long. ✓
 e) My pet rabbit has ears about 120 mm long. ✓

1

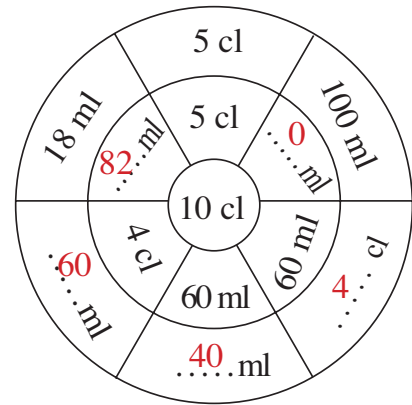
Which capacity would be measured by which unit? Join up the containers to a suitable standard unit.



2

What could the rule be? Fill in the missing numbers and complete the diagram.

- 10 cl = 100 ml, 100 ml + ml = 100 ml
- 50 ml = cl, 5 cl + cl = 10 cl
- 60 ml = cl, 60 ml + ml = 100 ml
- 4 cl = ml, 40 ml + ml = 100 ml
- 18 ml + ml = 100 ml



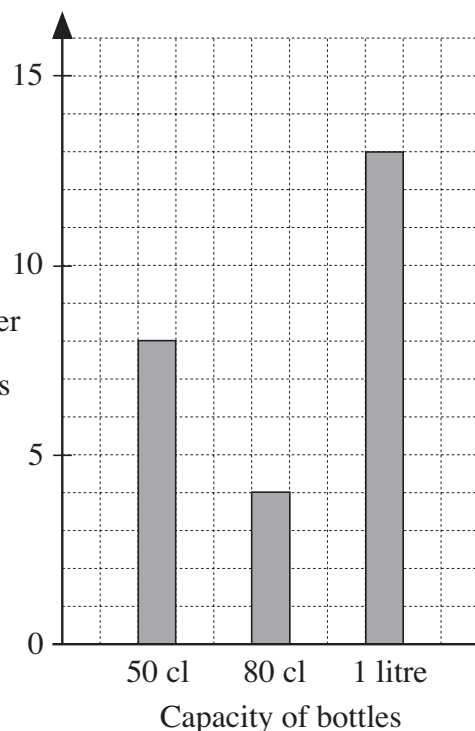
3

For a picnic, we made some lemonade and poured it into 50 cl, 80 cl and 1 litre bottles.

The graph shows the number of each size of bottle that we filled.

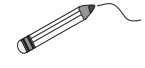
Do the calculations and answer the questions in your *Exercise Books*.

- a) How many of each size of bottle did we fill? $8 \times 50 \text{ cl}$; $4 \times 80 \text{ cl}$; $13 \times \text{litre}$
- b) How much lemonade did we pour into each size of bottle?
- c) How much lemonade did we make altogether? 2020 cl
- b) $50 \text{ cl bottles: } 400 \text{ cl}$; $80 \text{ cl bottles: } 320 \text{ cl}$; $1 \text{ litre bottles: } 13 \text{ litres}$



1

How much do you think they weigh in real life? Join up each picture to the suitable quantity.



25 g 16 kg 700 g 1 kg 1 tonne 60 kg

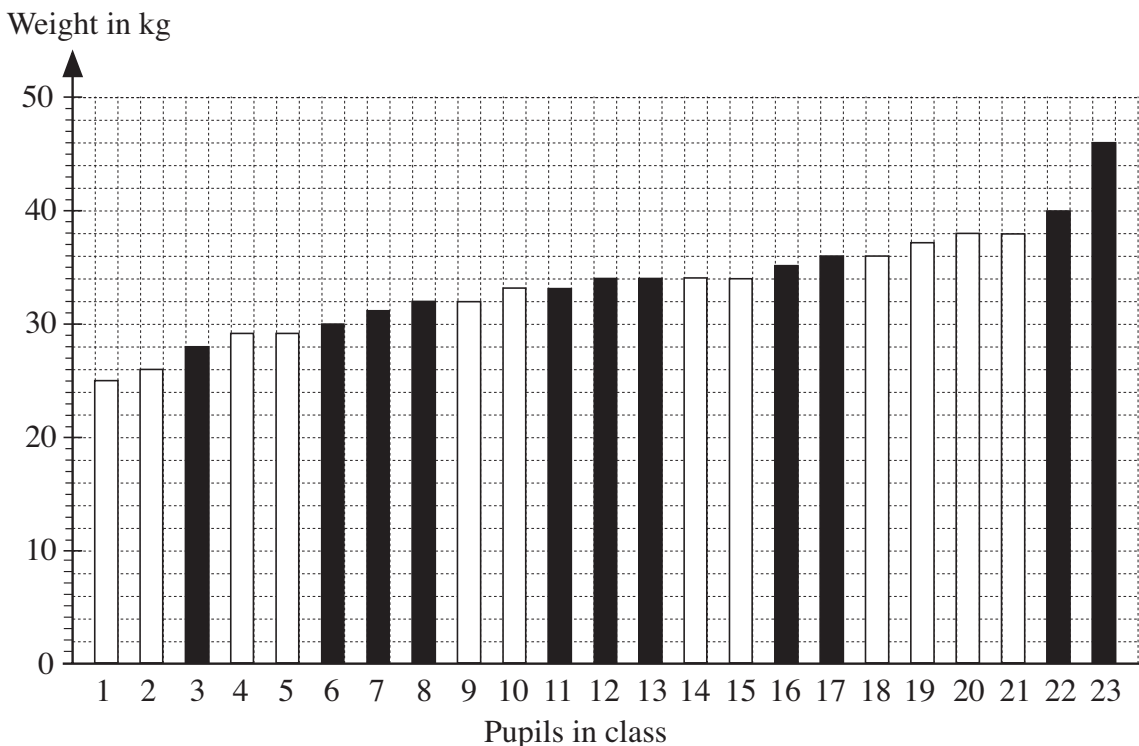
2

Fill in the missing numbers and units.

- a) 1 kg = 1000 d) quarter of a kg = 250 g
 b) half a kg = g e) 1 tonne = 1000
 c) one and a half kg = 1500 g f) half a tonne = kg

3

All the 23 pupils in a class were weighed. The results are arranged in increasing order. Boys are shown by *black* bars and girls by *white* bars.



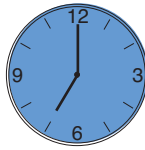
- a) Which weight is the most common? kg
 b) What is the weight of the 6th pupil from the left? kg
 c) What is the weight of the 6th pupil from the right? kg
 d) What is the weight of the pupil in the middle? kg

1

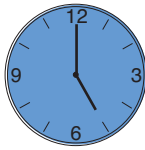
- a) Colour in the same colour the clocks where the hands are mirror images.
 b) Write below each clock the number of whole hours it shows.



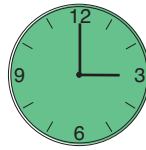
10 hours



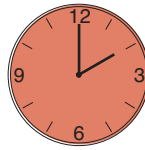
7 hours



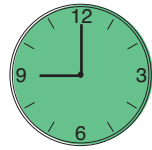
5 hours



3 hours



2 hours



9 hours

2

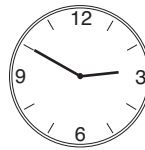
Write below each clock how many hours and minutes the hands show.



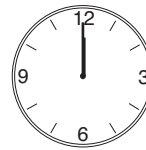
6 hours
15 minutes



9 hours
35 minutes



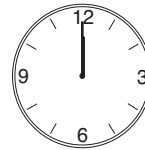
2 hours
50 minutes



12 hours
0 minutes

3

There are 24 hours in a day. The clock started at midnight as:



Draw where the hour and minute hands would be after:



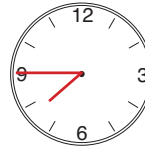
9 hours
45 minutes



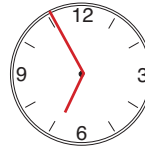
22 hours
15 minutes



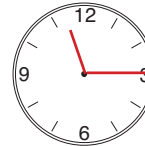
15 hours
30 minutes



7 hours
45 minutes



18 hours
55 minutes



23 hours
15 minutes

4

Change the measures of time. Write the calculations and fill in the results.

a) 8 weeks 6 days = $8 \times 7 + 6$ = 62 days

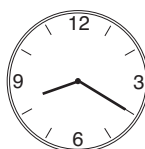
b) 3 days 8 hours = $3 \times 24 + 8$ = 80 hours

c) 2 hours 45 minutes = $2 \times 60 + 45$ = 165 minutes

d) 3 minutes 10 seconds = $3 \times 60 + 10$ = 190 seconds

5

How many hours and minutes have passed from:



to



1 hours
50 minutes

1

- a) Toss a coin 20 times with a partner so that you have 10 tosses each. Keep a *tally* of your results in this table. (A *tally* is |||| || etc.)



Pupil data

| | | |
|------------------------|--|--|
| Head | | |
| Tail | | |
| Total number of throws | | |

- b) Write the results for the whole class in this table.

Class data

| | | | | | | | | | | | | | | | | | | | | |
|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Heads | | | | | | | | | | | | | | | | | | | | |
| Tails | | | | | | | | | | | | | | | | | | | | |

| | |
|------------------------|--|
| Total number of Heads | |
| Total number of Tails | |
| Total number of Tosses | |

- c) Which result happened most often?

2

- a) Throw a dice 20 times with a partner so that you have 10 throws each. Keep a *tally* of the results in this table.



Pupil data

| | | |
|------------------------|--|--|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| Total number of throws | | |

- b) Write the results for the whole class in this table.

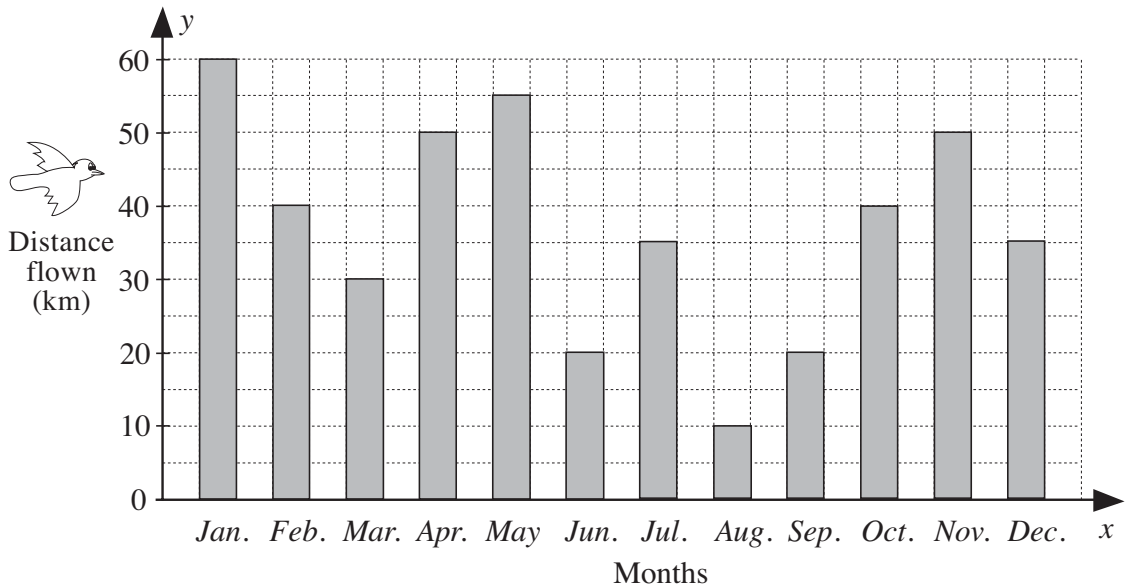
Class data

| | | | | | | |
|---|---|---|---|---|---|------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | Total number of throws |
| | | | | | | |

- c) Which number was thrown: i) most often
 ii) least often?

1

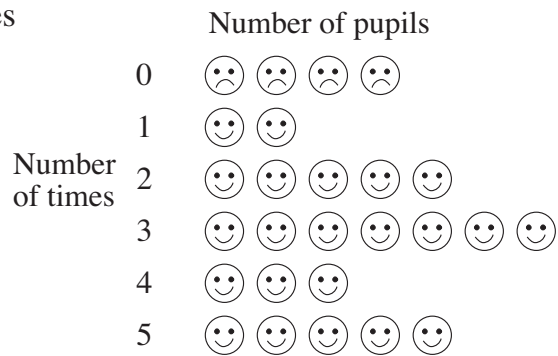
The graph shows how many km a bird flew each month during a year.



- a) How far did it fly in January? 60 km
- b) How far did it fly in March? 30 km
- c) In which month did it fly the furthest? January
- d) In which month did it fly the least distance? August
- e) In which months did it fly exactly 20 km? June and September
- f) In which months did it fly over 50 km? January and May

2

The pictogram shows how many times the pupils in a class went swimming during the month of July.



a) Complete the table.

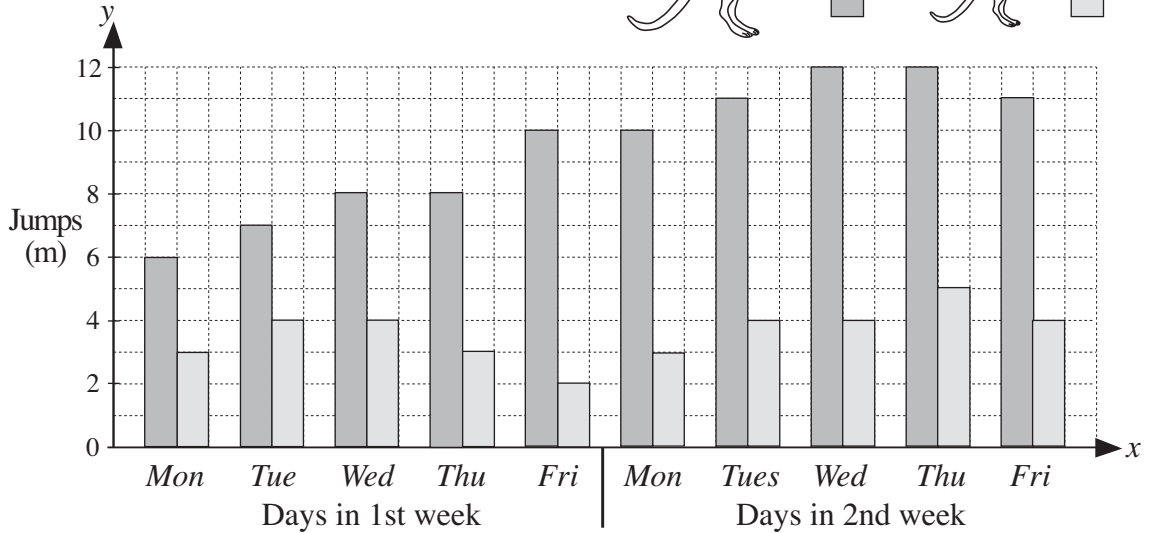
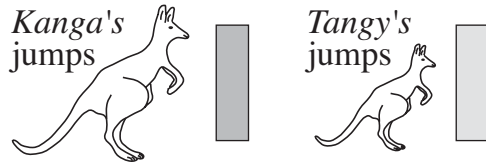
| Number of swims | 0 | 1 | 2 | 3 | 4 | 5 |
|------------------|---|---|---|---|---|---|
| Number of pupils | 4 | 2 | 5 | 7 | 3 | 5 |

- b) How many pupils went swimming at least once? 22
- c) How many pupils went swimming at least 3 times? 15
- d) Which number of times did exactly 5 pupils go swimming? 2 5
- e) Which number of times was the most common? 3

1

Kanga the kangaroo is teaching little *Tangy* to jump further. They practise jumping only on weekdays and have a rest at the weekend.

The graph shows the longest jumps they each made every weekday for 2 weeks.

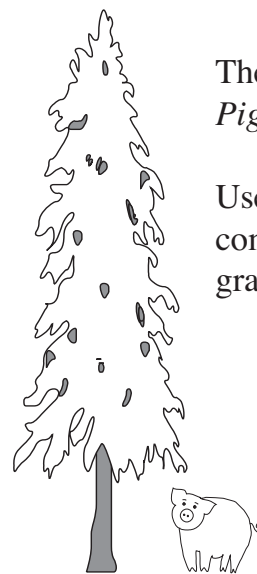
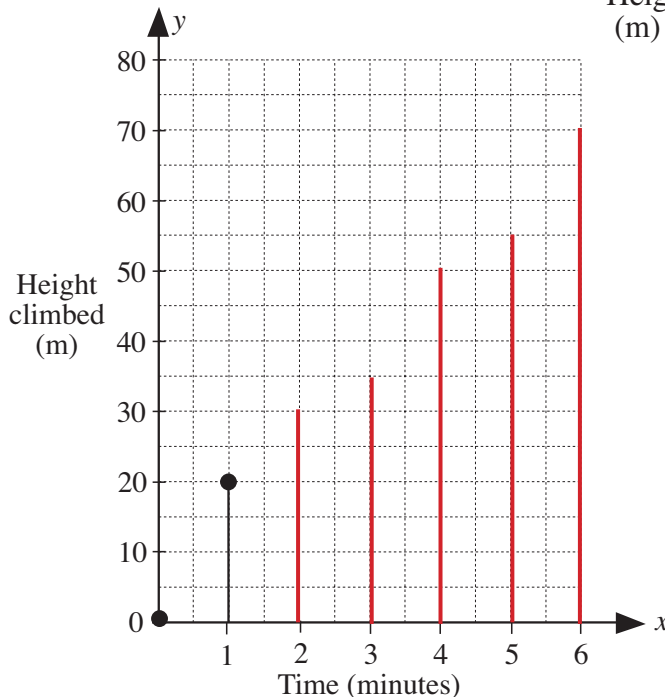


- a) What is the **range** of *Kanga's* jumps? From m to m
- b) On which day did *Tangy* jump furthest? .. **Thursday, 2nd week**
- c) On which day did *Tangy* get tired? .. **Friday, 1st week**
- d) In which week did *Tangy* try hardest? .. **2nd week**

2

One day, *Piggy* decided to climb the huge pine tree in Fairy-tale Forest.

| | | | | | | | |
|------------|---|----|----|----|----|----|----|
| Time (min) | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Height (m) | 0 | 20 | 30 | 35 | 50 | 55 | 70 |

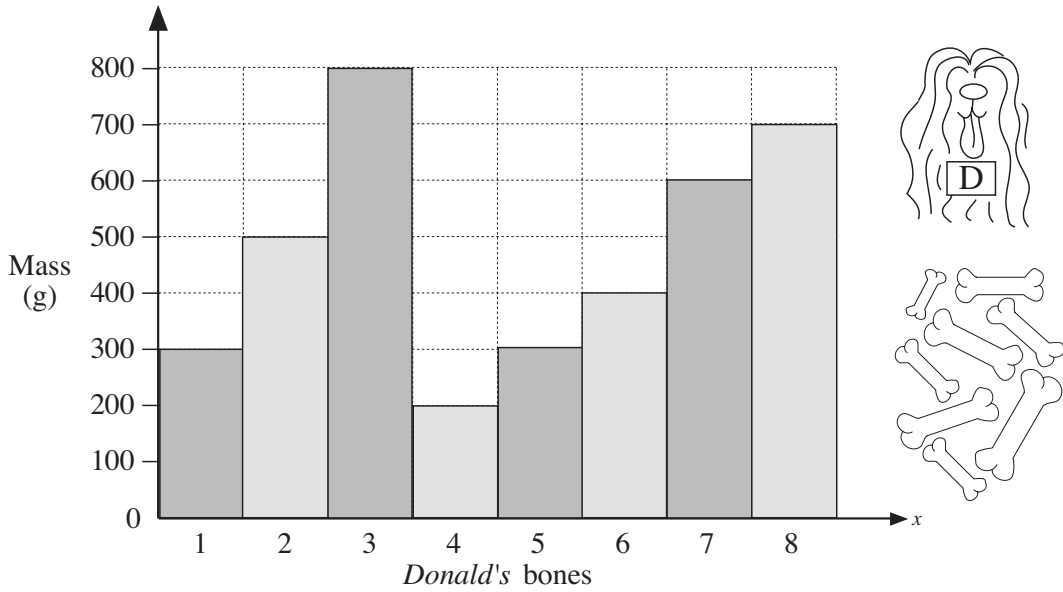


The table shows *Piggy's* progress.

Use the table to complete the graph.

1

Donald Dog was practising weighing. He numbered all his bones and weighed each one. Then he made this graph.

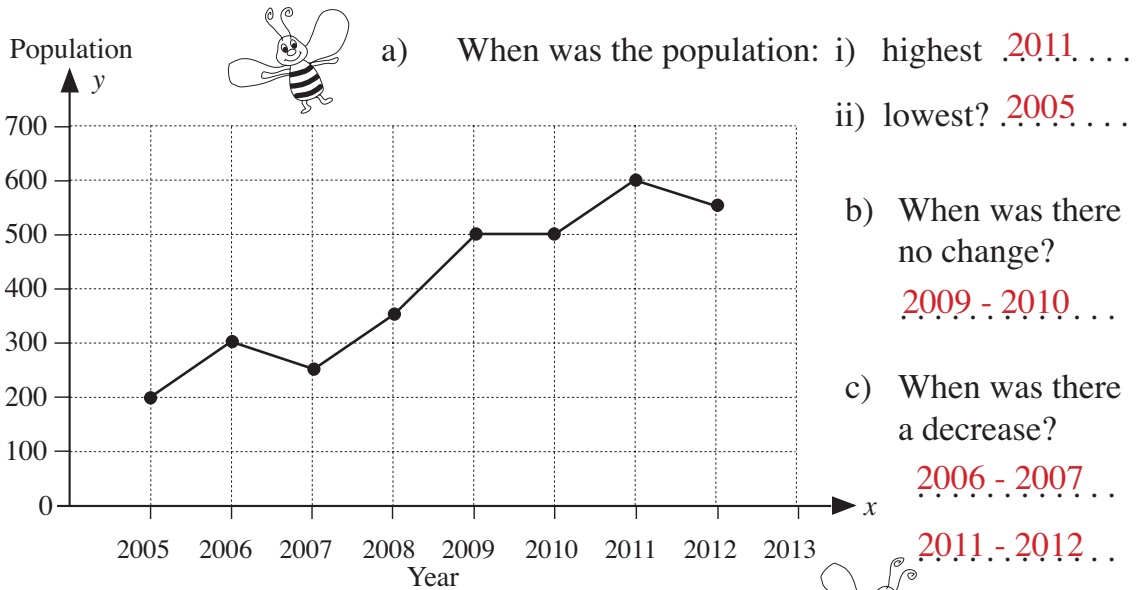


- a) Which bone was: i) heaviest **..3..** ii) lightest? **..4..**
 b) Which two bones weighed the same? **..1 and 5..**
 c) Write the data from the graph in this table.

| Bone number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Mass (g) | 300 | 500 | 800 | 200 | 300 | 400 | 600 | 700 |

2

The graph shows the number of inhabitants of *Domble Land*.



- a) When was the population: i) highest **..2011..** ...
 ii) lowest? **..2005..** ...
 b) When was there no change?
..2009 - 2010.. ...
 c) When was there a decrease?
..2006 - 2007.. ...
..2011 - 2012.. ...

d) Complete the table using data from the graph.

| Year | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | |
|------------|------|------------|------------|------------|------------|------------|------------|------------|--|
| Population | 200 | 300 | 250 | 350 | 500 | 500 | 600 | 550 | |