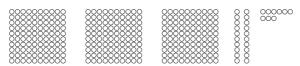
Write the numbers as digits in the place-value table.

How many circles are in the diagram? a)



What is the total am b)

nount?	10	
100	10	$\begin{array}{c} \textcircled{1} \textcircled{1} \textcircled{1} \\ \textcircled{1} \textcircled{1} \end{array}$

- c) Nine hundred and thirty seven
- $3 \times 100 + 1 \times 10 + 9 \times 1$ d)
- 6 hundreds + 8 tens + 3 unitse)

	Н	Т	U
a)	3	2	9
b)	2	5	8
c)	9	3	7

- 1 9 3 d)
- 8 3 e)

2

Write these numbers as digits and list them in increasing order.

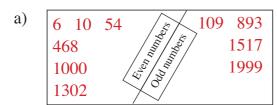
one thousand four hundred and eighteen, six hundred and five, ninety eight, five hundred and sixty, seven hundred and seventy seven

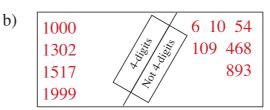
98, 560, 605, 777, 1418

3

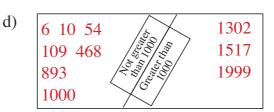
Write these numbers in the correct sets.

{ 6, 10, 54, 109, 468, 893, 1000, 1302, 1517, 1999 }









Study the numbers. Are the statements true or false? Write T or F in each box.

a) There is at least one number which is odd.

T 6 23 0 475 802 F 1240

All the numbers are even. b)

T

c) None of the numbers is more than 1500.

d) There are no whole tens.

e) Not every number is odd.

T

72

1499

Fill in the missing numbers, then list them in decreasing order.

$$8 \times 100 + 5 \times 10 = 850$$

$$3 \times 100 + 7 \times 1 = 307$$

$$8 \times 100 + 5 \times 1 = 805$$

$$3 \times 100 + 7 \times 10 = 370$$

$$1 \times 1000 + 6 \times 10 = 1060$$

$$1 \times 1000 + 8 \times 100 = 1800$$

$$1 \times 1000 + 6 \times 1 = 1006$$

$$1 \times 100 + 8 \times 10 = 180$$

1800 > 1060 > 1006 > 850 > 805 > 370 > 307 > 180

2

Fill in the missing numbers, then list them in increasing order.

$$600 + 30 = 630$$

$$1000 + 500 + 4 = \boxed{1504}$$

$$300 + 60 = 360$$

$$1000 + 40 + 5 = 1045$$

$$600 + 3 = 603$$

$$1000 + 900 + 1 = | 1901$$

$$300 + 6 = 306$$

$$1000 + 90 + 1 = 1091$$

306 < 360 < 603 < 630 < 1045 < 1091 < 1504 < 1901

3

Write the whole numbers up to 1000 which have the sum of their digits as 3.

3, 12, 21, 30, 102, 111, 120, 201, 210, 300

4

Write the Roman numerals as Arabic numbers.

a)
$$CV = 105$$

d) DCLX =
$$660$$

e)
$$CMIX = 909$$

5

Write the numbers which have:

- a) an even digit as their hundreds digit and 500 as their nearest ten. 495, 496, 497, 498, 499
- b) an odd digit as their hundreds digit and 500 as their nearest ten. 500, 501, 502, 503, 504
- c) the smallest even digit as their tens digit and 1010 as their nearest ten. 1005, 1006, 1007, 1008, 1009

The rule for the next term in the sequence is: 3 times the previous term plus 2.

- a) Write the first six terms of the sequence if the first term is 2.
 2, 8, 26, 80, 242, 728
- b) Write the first six terms of the sequence if the first term is 3.

3, 11, 35, 107, 323, 971

b)

2 Complete the tables.

a)	Number	Next	Next 10			
	Nullibei	smaller	greater	nearest 10		
	3	0	10	0		
	27	20	30	30		
	86	80	90	90		
	105	100	110	110		
	341	340	350	340		
	450	440	460	450		
	500	490	510	500		
	996	990	1000	1000		

Number	Next	Rounded to	
Nullibel	smaller	greater	nearest 100
3	0	100	0
27	0	100	0
86	0	100	100
105	100	200	100
341	300	400	300
450	400	500	500
500	400	600	500
996	900	1000	1000

Mark the numbers with a dot and a letter on a suitable number line.

1000

Write the numbers in the set diagram.

600

5, 100, 909,

0, 217, 1000,

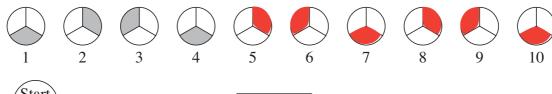
13, 352, 1215,

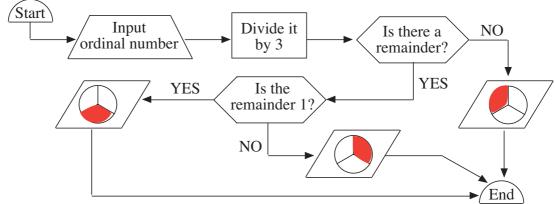
60, 834, 1605,

78, 900, 1780

The number is	even	odd		
divisible by 5	0 60 100 1000 900 1780	5 1215 1605		
not divisible by 5	352 834 78	909 217 13		

Continue the pattern. Colour the correct part of the circles in the **flow chart**.





- 2 Continue the sequence using Roman numerals.
 - XLVII, LXVII, LXXXVII, CVII, CXXVII, CXLVII, CLXVII (+20) a)
 - b)

3 Round the numbers. Complete the table.

Number	Rounded to the nearest:						
Number	ten	hundred	thousand				
4	0	0	0				
36	40	0	0				
50	50	100	0				
95	100	100	0				
172	170	200	0				
600	600	600	1000				
999	1000	1000	1000				
1050	1050	1100	1000				
1846	1850	1800	2000				

Write the meaning of each set label. Write another 3 numbers in each set. E.g.

	A	В			
С	420 368 246 716 100 888	6 78 1098 12 98 1600			
D	235 851 999 111 583 885	3 57 1003 67 9 1427			

A: 3-digit numbers

B: Not 3-digit numbers

C: Even numbers

D: Odd numbers

Write your estimation in detail. Calculate the exact sum.

a) 263 + 526

<i>E</i> :	2	6	0	+	5	3	0	≈ 7	9	0

C: 2 6 3 + 5 2 6 7 8 9

b) 354 + 419

E:
$$3 \ 5 \ 0 + 4 \ 2 \ 0 \approx 7 \ 7 \ 0$$

C: 4 4 1 9 7 7 3

c) 475 + 53 + 419

E:	4	8 () +	5	0	+	4	2	0	≈ !	9	5 ()
	- 1 · 1	0 , (J 1		•			:	•	1 1	- :	•	1

2

How much money do we have left? Estimate, calculate and check the result.

We had: 100 100 100 20 (1) (1) We bought:

	J				\smile
100		100	100	20	1)(1)



123

C: 6 4 5 - 2 3 2

Check:

	4	1	3
+	2	3	2
	6	4	5

3

What is the difference between 743 and 558? Estimate, calculate and check the result.

$$E: \quad 7 \quad 4 \quad 0 \quad - \quad 5 \quad 6 \quad 0 \quad \approx \quad 1 \quad 8 \quad 0$$

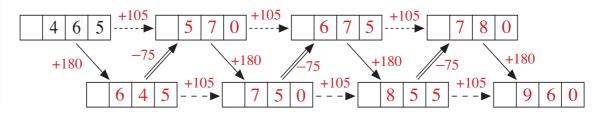
Check:

	1	8	5
+	5	5	8
	7	4	3

7 4 3 - 1 8 5 5 5 8

4

Fill in the missing numbers and write above the —→ and ---> arrows what they mean if —→ means + 180 and —→ means - 75



Practise addition. Estimate the sum first by rounding numbers to the nearest 100.

a) 263 + 526

E: 8 0 0

	2	6	3
+	5	2	6
	7	8	9

b) 493 + 174

E: 7 0 0

	4	9	3
+	1	7	4
	6	6	7

c) 278 + 426

E: 7 0 0

	2	7	8
+	4	2	6
	7	0	4

2

Practise subtraction. Estimate the difference first by rounding numbers to the nearest 100. Check your result in two ways.

a) 978 - 426

E: 6 0 0

- C: 9 7 8 - 4 2 6 5 5 2
- Check:

5 5 2 + 4 2 6 9 7 8 Check:

9 7 8

- 5 5 2

4 2 6

b) 803 - 576

E: 2 0 0

- *Check:* 2 2 7
- 2 2 7 + 5 7 6 8 0 3
- Check:
- 8 0 3 - 2 2 7 5 7 6

3

Complete the additions and subtractions.

a)

	6	3	8
+	4	3	6
1	0	7	4

b

	3	4	8
+	2	5	7
	6	0	5

c)

	9	1	5
_	7	4	2
	1	7	3

d)



4

I thought of a number, then added 900.

The result was a whole number less than 1000.

Write \checkmark if you think the statement is true and \times if you think it is false.

a) The number I first thought of must be less than 100.



b) The number I first thought of must be less than 99.



c) The number I first thought of could be equal to 99.

~

d) The number I first thought of cannot be more than 99.

~

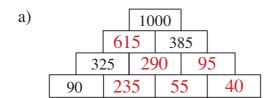
e) The number I first thought of could be equal to 10.

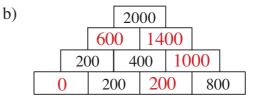
✓

f) The number I first thought of cannot be 100.

~

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





Fill in the missing numbers.

b)
$$260 - 120 + 50 = 190$$
 $- + + + 110 + 150 - 100 = 160$
 $+ - - +$
 $30 + 230 - 40 = 220$
 $= - = 180 - 40 + 110 = 250$

Do the additions and subtractions. Look for connections between them.

a)
$$25 + 40 = 65$$

$$725 + 40 = 765$$

$$725 + 140 = 865$$

b)
$$58 - 40 = 18$$

$$658 - 40 = 618$$

c)
$$60 + 17 = 77$$

$$60 + 317 = \boxed{377}$$

$$460 + 317 = \boxed{777}$$

d)
$$93 - 63 = 30$$

$$393 - 63 = \boxed{330}$$

Underline the important data. Write a plan, estimate, calculate and check your result. Write the answer in a sentence. Do the work in your exercise book.

- a) There were <u>348 boys</u> and <u>316 girls</u> at a summer camp. How many children were at the camp altogether? E: 350 + 320 = 670 348 + 316 = 664 There were 664 children at the camp.
- b) $\frac{417 \text{ children}}{\text{many boys were there?}}$ were taking part in a concert. If $\frac{188 \text{ of them were girls}}{E$; $\frac{420 190}{229 \text{ boys took part in the concert.}}$
- c) In an obstacle race, the <u>number of girls taking part was 43 less than the</u>
 number of boys. If 227 boys took part, how many girls were in the race?

 E: 230 40 = 190 227 43 = 184184 girls were in the race.
- d) 234 girls took part in a treasure hunt. Eve came second. The number of girls taking part was 109 less than the number of boys.

 How many boys took part? E: 230 + 110 = 340 234 + 109 = 343(boys took part)

 How many children took part altogether? E: 340 + 230 = 570

 234 + 234 + 109 = 577 (total)
- e) One morning, there were <u>664 children</u> on the beach. <u>385 of them went</u> home for lunch. How many children remained on the beach?

$$E: 660 - 390 = 270 \quad 664 - 385 = 279$$
(remained)

Complete the table using the rule given.

а	648	563	437	343	847	358	1345	734
b	342	204	548	285	51	561	284	814
a+b	990	767	985	628	898	919	1629	1548

2

Complete the table using the rule given.

X	674	452	548	343	847	919	1629	1548
у	261	309	437	285	51	561	1345	734
$\overline{x-y}$	413	143	111	58	796	358	284	814

3

Draw arrows pointing towards the multiples.

30 120 40 150) 60



(Positive whole numbers are multiples of themselves.)

4

b)

Underline the data. Write a plan, estimate, calculate and check your result. Write the answer in a sentence. Do the work in your exercise book.

- a) Ann has £716 and Barry has £285 less. How much money does Barry have? E: £700 - £300 = £400 £716 - £285 = £431 (Barry) How much money do Ann and Barry have altogether? E: £700 + £400 = £1100 £716 + £431 = £1147(altogether)
 - Ann has £716 and Sarah has £285 more. How much does Sarah have? (altogether) How much do Ann and Sarah have altogether?

E: £700 + £300 = £1000£716 + £285 = £1001 (Sarah)

E: £700 + £700 + £300 = £1700 £716 + £1001 = £1717 (altogether)

Ann has £716, which is £285 less than Tom has. How much does Tom c) have? How much do Ann and Tom have altogether?

E: £700 + £300 = £1000 £716 + £285 = £1001 (Tom) E: £700 + £700 + £300 = £1700 £716 + £1001 = £1717 (altogether)

Ann has £716, which is £285 more than Suzy has. How much does Suzy

d) have? How much do Ann and Suzy have altogether? E: £700 - £300 = £400 £716 - £285 = £431 (Suzy) E: £700 + £400 = £1100 £716 + £431 = £1147 (altogether)

<u>Ted has £761</u> and <u>Sam has £285</u>. How much money should Ted give to e) Sam so that they both have the same amount?

E: £800 + £300 = £1100; £1100 ÷ 2 = £550; £550 - £300 = £250£761 + £285 = £1046 (in total); £1046 \div 2 = £523 (final amount each) £761 – £523 = £238 (Ted gives Sam) (They now have £523 each)

5

Fill in the missing digits.

a)		1	4	3
	+	6	0	9
		7	5	2

b)

	1	5	6
+	8	6	7
1	0	2	3

c)

	9	7	3
_	5	6	1
	4	1	2

d)

)		8	0	7
	_	5	3	4
		2	7	3

Calculate the products. Look for relationships.

a)
$$4 \times 5 = 20$$
 $40 \times 5 = 200$ $4 \times 50 = 200$ $4 \times 500 = 2000$ $40 \times 50 = 2000$

b)
$$3 \times 6 = 18$$
 $30 \times 6 = 180$ $3 \times 60 = 180$ $3 \times 600 = 1800$ $30 \times 60 = 1800$

c)
$$4 \times 4 = 16$$
 $40 \times 4 = 160$ $4 \times 40 = 160$ $4 \times 400 = 1600$ $40 \times 40 = 1600$

2

Calculate the quotients. Look for relationships.

a)
$$12 \div 4 = 3$$

$$120 \div 40 = 3$$

b)
$$20 \div 5 = 4$$

$$200 \div 5 = 40$$

$$120 \div 4 = 30$$

$$120 \div 4 = 30$$
 $1200 \div 40 = 30$

$$200 \div 5 = 40$$

$$2000 \div 50 = 40$$

$$1200 \div 4 = 300 \ 1200 \div 400 = 3$$

$$2000 \div 5 = 400 \quad 2000 \div 500 = 4$$

$$2000 \div 500 = 4$$

3

Calculate the products. Look for relationships.

a)
$$3 \times 100 = 300$$

b)
$$100 \times 7 = 700$$

c)
$$200 \times 4 = 800$$

$$3 \times 40 = 120$$

$$30 \times 7 = 210$$

$$80 \times 4 = 320$$

$$3 \times 140 = 420$$

$$130 \times 7 = 910$$

$$280 \times 4 = 1120$$

d)
$$3 \times 12 = 36$$

e)
$$6 \times 13 = 78$$

f)
$$7 \times 14 = 98$$

$$3 \times 120 = 360$$

$$6 \times 130 = 780$$

$$7 \times 140 = 980$$

$$30 \times 12 = 360$$

$$60 \times 13 = 780$$

$$70 \times 14 = 980$$

Underline the data. Write a plan. Estimate, calculate and check the result in your exercise book. Write the answer as a sentence.

A box of apples weighs about 28 kg. How much do 30 boxes of apples weigh? a)

Answer: E: $30. \times 30 = 900... 28. \times 30 = 840...$ Ans: 30 boxes of apples weigh about 840 kg.

How much is the cost of 8 kg of pears if 1 kg costs £1.90? b)

 $Answer: E: 8 \times £2 = £16 \quad 8 \times £1.90 = £15.20$ Ans: 8 kg of pears cost £15.20.

5

Write a plan for each question.

 $120 \div 6 = 20$

6 children collected 120 kg of chestnuts. They share them a) equally. How many kg of chestnuts does each child get?

Each child gets 20 kg of chestnuts.

b) At the market, they are packing fruit into boxes, 30 kg per box. They have 900 kg of fruit. How many boxes will they need?

 $900 \div 30 = 30$ They will need 30 boxes.

Fill in the numbers which are missing from the multiplication table.

×	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	46	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

2 Do the calculations in the correct order.

a)
$$60 + 20 \times 2 = 100$$

 $(60 + 20) \times 2 = 160$
 $60 \times 2 + 20 = 140$

$$60 \times 2 + 20 \times 2 = \boxed{160}$$

b)
$$15 + 30 \div 3 = 25$$

$$(15+30) \div 3 = \boxed{15}$$

$$15 \div 3 + 30 = 35$$

$$15 \div 3 + 30 \div 3 = \boxed{15}$$

Complete the tables. Write the rules in different ways.

$$a = b - 350$$

$$b = a + 350$$

$$x = y \div 7$$

$$y = x \times 7$$

$$u = 1000 - v$$

$$v = 1000 - u$$

$$m = 800 \div n$$

$$n = 800 \div m$$

Do the calculations in the correct order.

a)
$$2 \times 400 - 258 = 542$$

b)
$$3 \times 140 - 130 = 290$$

c)
$$7 \times 80 + 258 = 818$$

d)
$$220 + 4 \times 90 = 580$$

e)
$$912 - 5 \times 50 = 662$$

f)
$$595 - 6 \times 70 = \boxed{175}$$

2

Do the calculations in the correct order.

a)
$$640 \div 8 + 379 = 459$$

b)
$$580 + 420 \div 6 = 650$$

c)
$$910 - 480 \div 8 = 850$$

d)
$$(1052 - 492) \div 7 = 80$$

e)
$$810 \div 9 - 34 = 56$$

f)
$$1200 \div (9-5) = 300$$

3

Underline the data. Make a plan. Estimate, calculate and write the answer.

George has 324 stamps and Rita has 3 times as many as George. a)

How many stamps does Rita have? *Plan*: 324 x 3

$$E: 320 \times 3 = 960$$

$$324 \times 3 = 972$$

Rita has 972 stamps.

Helen has 324 postcards, which is 3 times as many as Mary has. b)

How many postcards does Mary have? *Plan*: 324 ÷ 3

$$E: 300 \div 3 = 100$$

$$324 \div 3 = 108$$

Mary has 108 postcards.

c) Steve has 324 marbles, which is a quarter of the number of marbles that

Jack has. How many marbles does Jack have? *Plan*: 324 x 4

$$E: 320 \times 4 = 1280$$

$$324 \times 4 = 1296$$

Jack has 1296 marbles.

d) Johnny has 324 football cards and Mike has 1 quarter of that number.

How many football cards does Mike have?

How many football cards do the two boys have altogether?

Plan: Find one quarter of 324 (Mike) and then add this to 324 to find total number.

$$E: 320 \div 4 = 80$$

$$324 \div 4 = 81$$

Mike has 81 football cards.

324 + 81 = 405. They have 405 football cards altogether.

Charlie has ± 324 . How many matchbox cars can he buy with this money e) if each car costs £9? How much money would he have left?

Plan: £324 ÷ £9 gives number of cars. The remainder is the money Charlie has left.

E:
$$320 \div 10 = 32$$

$$324 \div 9 = 36$$

Charlie can buy 36 matchbox cars. There is no money left.

Estimate the product first, then do the multiplication.

- a) E: 4 2 0
- E: 4 5 0
- E: 7 5 0
- *E*: 1 0 5 0

- 7 3 × 6 4 3 8
- 1 4 6 × 3 4 3 8
- 2 4 6 × 3 7 3 8
- 3 4 6 × 3 1 0 3 8

- b) E: 4 0 0
- *E*: 4 5 0
- *E*: 9 0 0
- E: 7 5 0

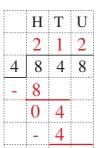
- 4 7 × 8 3 7 6
- 1 4 7 × 3 4 4 1
- 1 4 7 × 6 8 8 2
- 2 4 7 × 3 7 4 1

2

Estimate the quotient first, then do the division. Check with multiplication.

a)

E: 200



- b)
- E: 140
- c) E: 125

	Н	T	U
	1	3	4
5	6	7	0
-	5		
	1	7	
-	1	5	
		2	0
	-	2	0
			0

,	,	·	,,
	Η	T	U
	1	2	2
8	9	7	6
-	8		
	1	7	
-	1	6	
		1	6
	-	1	6
			0

Check:

Н	Т	U		
2	1	2	×	4
8	4	8		

Check:

Н	Т	U		
1	3	4	×	5
6	7	0		

Check:

Н	Т	U		
1	2	2	×	8
9	7	6		

3

Underline the data. Make a plan. Estimate, calculate and write the answer.

a) Lisa had collected <u>516 shells</u>. She gave <u>1 quarter</u> of the shells to Alice and 1 third of them to Julie. How many shells did Lisa have left?

Plan: $516 \div 4 \rightarrow \text{shells for Alice}$. $516 \div 3 \rightarrow \text{shells for Julie}$.

 $516 - (Alice + Julie) \rightarrow number of shells Lisa had left.$

E: $500 \div 4 = 125$; $500 \div 3 \approx 167$; $500 - (125 + 167) \approx 200$

516 ÷ 4 = 129

 $516 \div 3 = 172$

516 - (129 + 172) = 215

Lisa had 215 shells left.

b) Darren bought <u>5 pairs</u> of sports socks for £7.75. Jamie bought <u>6 pairs</u> of the same kind of socks. How much did Jamie pay?

Plan: One pair of socks cost £7.75 \div 5

Jamie paid 6 x cost of one pair.

 $E: 10 \div 5 = 2; 6 \times 2 = 12$

£7.75 \div 5 = £1.55

 $6 \times £1.55 = £9.30$

Jamie paid £9.30.

Calculate the quotient and the remainder. Check with multiplication.

a)

	Н	Τ	U
	1	0	7
6	6	4	7
-	6		
	0	4	7
	_	4	2
			5

b)

r 5

	Н	T	U
	1	2	4
7	8	7	2
-]	7		
	1	7	
-	1	4	
		3	2
	-	2	8
			4

c)

r 4

	Н	T	U	
	2	3	7	r
4	9	4	9	
-	8			
	1	4		
-	1	2		
		2	9	
	-	2	8	
			1	

1

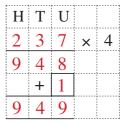
Check:

Н	Т	U		
1	0	7	×	6
6		2		
	+	5		
6	4	7		

Check:

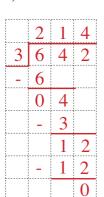
Н	Т	U		
1	2	4	×	7
8	6	8		
	+	4		
8	7	2		

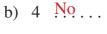
Check:



Is 642 divisible by these numbers? Do the calculations, then write YES or NO.

a) 3 <u>Yes</u>...





4	6	4	2
-	4		
	2	4	
_	2	4	
		0	2



c) 6 Yes... d) 9 No...

		7	1	r	3
9	6	4	2		
	6				
		1	2		
	-		9		
			3		

3

Do the calculations in your exercise book. Write the answers in the boxes.

Which number is three times as much as 264? a)

792

Three times a number is 264. What is the number? b)

88

Which number is 1 third of 426? c)

142

d) One third of a number is 426. What is the number? 1278

Write 2-digit numbers which have a remainder of 6 after dividing by 7.

The area of a rectangle is 360 unit squares. How long is the other side if one side is:

- a) 5 units
- 12 units b)
- 8 units?

30 units.

45 units

Calculate the perimeter of each rectangle.

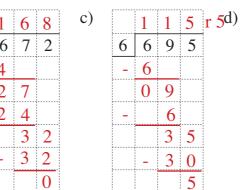
- $P = 2 \times (5 + 72) = 2 \times 77 = 154$ (units) a)
- $P = .2 \times (12 + 30) = 2 \times 42 = 84 \text{ (units)}$ b)
- $P = 2 \times (8 + 45) = 2 \times 53 = 106 \text{ (units)}$ c)

1b)

Practise division.

a)

	1	6	8
4	6	7	2
-	4		
	2	7	
-	2	4	
		3	2
	-	3	2
			0



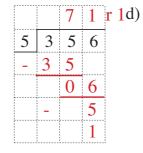
	1			r 2
3	3	9	5	
-	3			
	0	9		
-		9		
		0	5	
	-		3	
			2	

3

Practise division.

a)			8	2	r
	8	6	5	7	
	-	6	4		
			1	7	
		-	1	6	
				1	

		8	3	r 5c
9	7	5	2	
_	7	2		
		3	2	
	_	2	7	
			5	





Do the calculations and write the answers in your exercise book.

A floor tile is 205 mm wide. How wide is the utility room if 9 tiles laid end a) to end are needed for each row? $9 \times 205 \text{ mm} = 1845 \text{ mm}$

The utility room is 1 m 84 cm 5 mm wide.

b) 4 sacks of wheat weigh 304 kg alogether. How much wheat, on average, is in each sack?

 $304 \div 4 = 76$ On average, there is 76 kg of wheat in each sack.

c) Study the diagram. Make up a question about it.

1 min

7 min. 420 m

E.g. If Sam walks at a steady speed and takes 7 minutes to cover 420 m, how far did Sam walk in the first minute?

7 minutes to cover 420 m 1 minute to cover 420 m \div 7 = 60 m

Which numbers can be written instead of the letters?

$$157 \times 3 + a = 196 + 285$$

$$a = 10$$

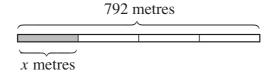
$$b + 136 \times 2 = 640 \div 8 + 292$$

$$b = 100$$

$$376 + 287 \le c - 126 \le 134 \times 5$$

$$364 \div 7 + 100 < 160 - d < 55 \times 3 - 8$$

One quarter of a path has already been paved. How much has been done if the whole path is 792 m long?



Calculation:

C	h	e	ci	k:	
	 1	1	q)	

i	P	l_{α}	n	•

Estimation:
$$800 \text{ m} \div 4 = 200 \text{ m}$$

Answer: 198 m has been paved.

	1	9	8
4	7	9	2
-	4		
	3	9	
-	3	6	
		3	2
	_	3	2

1	9	8	Χ	4
7	9	2		

Pete can cycle 4 m in one second. How long will it take Pete to cycle:

$$760 \div 4$$

= $400 \div 4 + 360 \div 4$
= $100 + 90$

$$380 \div 4$$

$$= 360 \div 4 + 20 \div 4$$

0

$$= 90 + 5$$

$$= 95$$

Pete will cycle 760 m in 190 seconds. Pete will cycle 380 m in 95 seconds.

1520 m c)

$$1520 \div 4$$

= 190

$$= 1200 \div 4 + 320 \div 4$$

$$= 300 + 80$$

$$= 380$$

Pete will cycle 1520 m in 380 seconds.

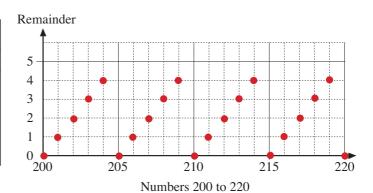
Fill in the missing numbers and signs.

a)
$$708 \xrightarrow{\div 2}$$
 3 5 4 $\xrightarrow{\div 3}$ 1 1 8

$$1 \ 8$$
 b) $698 = 1 \ 3 \ 9 \times 5 + 3$

Write the numbers from 200 to 220 in the correct column in the table. Draw dots on the graph to show the remainders.

Remainder after dividing by 5					
0	1	2	3	4	
200 205 210 215 220	201 206 211 216	202 207 212 217	203 208 213 218	204 209 214 219	



2

Helen had 952 stamps. She gave 278 stamps to Sam.

a) How many stamps did Helen have left? Complete the calculation.

7 5 2	<u>√ - 200</u>	9 5	2 + 100	1	0	5	2
- 2 7 8		- 2 7	8	-	2	7	8
4 7 4	→ -200	6 7	4 +100		7	7	4

- b) How many stamps would she have left if she had at first
 - i) 200 stamps less
- ii) 100 stamps more? Fill in the numbers.

3

Fill in the missing numbers.

$$1400 = 233 \times \boxed{6} + \boxed{2}$$

$$511 = \boxed{127} \times 4 + \boxed{3}$$

4

3 pupils can do 108 multiplications in 3 hours. If all the pupils calculate at the same speed, how many calculations can be done by:

a) 6 pupils in 3 hours

216

b) 3 pupils in 6 hours

216

c) 6 pupils in 6 hours

432

d) 6 pupils in 9 hours

648

e) 9 pupils in 9 hours

972

f) 3 pupils in 90 minutes

54

g) 6 pupils in 90 minutes

108

h) 9 pupils in 90 minutes

162

- i) 1 pupil in 3 hours
- 36
- j) 1 pupil in 1 hour?

Fill in the missing numbers and units.

a) $3 \text{ m } 35 \text{ cm} = \boxed{335} \text{ cm}$

b) 5 m 70 cm = 570 cm

c) 198 cm = 1 m 98 cm

d) 609 cm = 6 m 9 cm

e) 8 cm 4 mm = 84 mm

f) 1 m 32 cm 5 mm = 1325 mm

g) 1273 mm = 1 m 27 cm 3 mm

h) 1905 mm = 1 m 90 cm 5 mm

2

Fill in the missing numbers and units.

a) $3 \text{ litres } 42 \text{ cl} = \begin{vmatrix} 342 & c \end{vmatrix}$

b) 6 litres 58 cl = 658 cl

c) $824 \text{ cl} = \boxed{8} \text{ litres} \boxed{24} \text{ cl}$

d) $703 \text{ cl} = 7 \left| \text{litres} \right| 3 \left| \text{cl} \right|$

e) 1 litre 63 cl 5 ml = 1635 ml

f) 1 litre 4 cl 8 ml = 1048 ml

g) $1546 \text{ ml} = \boxed{1} \text{ litre} \boxed{54} \text{ cl} \boxed{6} \text{ ml}$

h) $1038 \text{ ml} = \boxed{1} \text{ litre} \boxed{3} \text{ cl} \boxed{8} \text{ ml}$

3

Fill in the missing numbers and units.

a) $1 \text{ kg } 806 \text{ g} = \boxed{1806} \text{ g}$

- b) 1 kg 257 g = 1257 g
- c) $1300 \text{ g} = \boxed{1} \text{ kg} \boxed{300} \text{ g}$
- d) 1604 g = 1 | kg | | 604 | g
- e) 1320 g = 1 kg 320 g
- f) $1001 \text{ g} = \boxed{1} \text{ kg } 1 \boxed{\text{g}}$
- g) $1624 \text{ g} = \boxed{1} \text{ kg} \boxed{624} \text{ g}$
- h) 1479 g = 1 kg 479 g

4

Write plans and do the calculations in your exercise book. Fill in the answers.

a) Freddy Frog jumped 120 cm 5 mm, then another 1 m 14 cm 3 mm. How far did he jump altogether?

2 m 34 cm 8 mm

b) Peter Pelican drank 1 litre 143 ml of water and his son drank 210 ml less. How much water did his son drink?

93 cl 3 ml

c) If one egg weighs 60 g, what is the weight of 31 eggs?

1 kg 860 g

d) Sammy Snail takes 5 minutes to move 1950 mm. How far can he move in 1 minute?

39 cm

Join up the quantities to the tools you would use to measure them. 3 kg 480 g 5 hours 15 minutes 1 m 52 cm 34 cl 2 Join up the measures to the matching units. - centilitre metre . capacity kilogram. time minute litre length gram centimetre mass day 3 Fill in the missing numbers and units. a) 439 cm =39 cm 12 m 6 cm =1206 cm cm 1 mm 1831 mm = 11 m 67 mm = 1067b) 83 mm 1210 g =1 kg 340 g = 1340c) kg 210 d) 1942 ml =litre 942 ml 1 litre 86 ml = 1086 ml 11 minutes = seconds 4 hrs 27 min = 267min e) 660 $10 \min 40 \sec = 640$ 372 seconds =f) min 12 sec sec June = 4 weeks January = weeks 3 days days g) Write in the missing numbers. (They need only be approximate.) Today's date: (day) / (month) / (year) My height: \dots cm = \dots cm My weight: Length of my step: My age: years months I go to bed at: Length of my foot: I sleep for: per day

Fill in the missing numbers. 1500 m =km 500 1 km 480 m = |1480| ma) m 1 kg 290 g = |1290|1300 g =b) kg 300 g 1640 mm =1 m 517 mm = |1517| mm640 mm c) m 1 litre 804 ml = |1804|1240 ml =240 d) litres ml ml 640 minutes = e) 10 hrs 40 min 10 hrs 56 min = | 656 min 90 days = |12| weeks6 days 50 weeks 6 days = 356days f) 340 m + 460 m = .740 m + 60 m = 800 ma) $950 \text{ m} + 320 \text{ m} = \frac{1270 \text{ m}}{1270 \text{ m}} = 1 \text{ km } 270 \text{ m}$ 1 km 50 m + 406 m = 1 km 456 m1 km 240 m - 1040 m = 1240 m - 1040 m = 200 m810 ml + 190 ml = .1000 ml = 1 litreb) 450 ml + 870 ml = .1320 ml = 1 litre 320 ml1 litre 310 ml + 440 ml = $\frac{1}{1}$ litre 750 ml 1 litre 50 ml - 200 ml = 1050 ml - 200 ml = 850 ml 157 g + 243 g = .400 g...c) 630 g + 510 g = .1140 g = 1 kg 140 g1 kg 40 g + 350 g = .1 kg. 390 g...1 kg 210 g - 430 g = 1210 g - 430 g = 780 g.3 Fill in the missing numbers to show how much time has passed. 7 hours 45 min 12 hours 15 min : a) to 4 hours 30 min 15 hours 30 min 17 hours 50 min : b) to 2 hours min 20 6.30 am 2.40 pm: hours c) min to 8 10 08:40:0015:10:00: hours min d) to 6 30 10:25:00 4 hours 15 minutes e) to 14:40:00

1 hour 10 minutes

3:20:00:

to

f)

2:10:00

Write a plan. Do the calculation in your exercise book. Write the answer.

a) A ball bearing weighs 30 g. What is the weight of 451 ball bearings?

b) A snail moves at a speed of 6 cm per minute. How far will it have gone after 3 hours 7 minutes?

 $Plan: (3 \times 60 + 7) \times 6 \text{ cm} \dots Answer: 11 \text{ m} 22 \text{ cm} \dots$

c) Grandma made 17 litres of tomato sauce and poured it into 70 cl bottles. How many bottles did she fill?

Plan: (17 x 100) cl÷70...... *Answer*: ...24 bottles (20 cl of sauce was left.)

d) Mum bought 14 m 36 cm of material and made 4 tablecloths, all the same size. How much material did she use for each tablecloth?

Plan: 14. m. 36 cm ÷ 4...... *Answer*: 3. m. 59 cm......

2

Write a plan. Do the calculations in your exercise book. Write the answer.

Mary had a length of ribbon which measured 9 m 24 cm.

She cut 4 pieces from it, each 124 cm long. What length of ribbon was left?

0 04 4 104

3

A train travels at a speed of 20 m per second on average. Complete the tables.

a)



00000 0000 0000 0000			
Journey time	Distance		
30 seconds	600 m		
1 minute	1200 m		
1 and a half minutes	1800 m		
50 seconds	1000 m		
45 seconds	900 m		

b)



Distance	Journey time
120 metres	6 seconds
200 metres	10 seconds
600 metres	30 seconds
1200 metres	60 seconds
2000 metres	100 seconds

4

One litre of oil has mass 900 g. Complete the table.

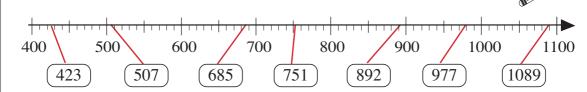
Capacity	10 cl	30 cl	1150 cl	2 litres	200 ml	10 litres	1000 ml
Mass	90 g	270 g	10350 g	1800 g	180 g	9 kg	900 g

Complete the table. Follow the example.

Number	1978				1083				1803			
Digit value	1	9	7	8	1	0	8	3	1	8	0	3
Place value	1Th	9 H	7 T	8 U	1 Th	0 H	8 T	3 U	1 Th	8 H	0 T	3 U
Real value	1000	900	70	8	1000	0	80	3	1000	800	0	3

2

a) Join up the numbers to their approximate position on the number line.



b) Write the next smaller and greater whole tens and hundreds in the boxes.

3

Continue the sequence. E.g:

- a) 1024, 512, 256, ...128, .64, .32, .16, .8, .4.
- b) 10, 5, 20, 10, 40, 20, ...80, 40, 160, 80, 320, 160.....
- c) 520, 640, 760, ...880, 1000, 1120, 1240, 1360, 1480.....
- d) 900, 789, 678 . 567, 456, 345, 234, 123, 12.....
- e) 1, 4, 16, 64, ... 256, 1024, 4096

4

Compare the quantities. Write in the missing signs.

- a) 18 m 32 cm < 19 m
- b) 1 litre 320 ml
- < 1720 ml

- c) 4 kg 460 g
- > 894 g
- d) 1 m 8 cm 1 mm < 176 cm

- e) 48 days
- >
- 5 weeks 3 days
- f) 420 minutes
- < 7 hrs 31 min

Practise addition.

a)
$$56 + 18 = \boxed{74}$$
 $556 + 18 = \boxed{574}$ $556 + 418 = \boxed{974}$

b)
$$43 + 29 = \boxed{72}$$
 $243 + 29 = \boxed{272}$ $243 + 929 = \boxed{1172}$

c)
$$37 + 48 = \boxed{85}$$
 $937 + 48 = \boxed{985}$ $937 + 548 = \boxed{1485}$

2

Practise subtraction.

a)
$$92 - 16 = \boxed{76}$$
 $392 - 16 = \boxed{376}$ $492 - 216 = \boxed{276}$

c)
$$56 - 49 = 7$$
 $556 - 49 = 507$ $556 - 449 = 107$

3

In each sequence the difference between any term and the next term is the same. Write the missing terms.

e) <u>263</u>, <u>275</u>, 287, <u>299</u>, 311, <u>323</u>, <u>335</u>, <u>347</u>, <u>359</u>,

4

Solve the problems in your exercise book.

- a) 60 swallows are resting on the wire between two telegraph poles.

 What weight is on the wire if each swallow weighs about 30 grams?

 There is about 1 kg 800 g on the wire.
- b) Every time we breathe in, we take about half a litre of air into our lungs. We take a breath about 20 times every minute. How much air do we breathe in during 30 minutes?

We breathe in about 300 litres of air in 30 minutes.

c) A hare weighs about 8 kg and a brown bear can weigh 40 times as much. What could be the weight of a brown bear?

A brown bear could weigh about 320 kg.

5

Work out a rule and complete the table. Rule: ... $c = 3. \times a + b$

a	1	80	15	100	32	140	90	100	28	20
b	4	2	20	0	4	580	200	200	320	10
С	7	242	65	300	100	1000	470	500	404	70

Solve the problems in your exercise book.

- a) An athlete won a high jump competition with a jump of 236 cm.
 A dolphin can leap out of the water and into the air to a height which is 374 cm above that reached by the high jumper.
 How high can this dolphin jump? This dolphin can jump to a height of 6 m 10 cm.
- A milk churn contained 7 litres 5 cl of milk. The farmer's wife used 2 litres 18 cl of the milk to feed some newborn lambs.
 How much milk was left in the churn? There was 4 litres 87 cl of milk left in the churn.

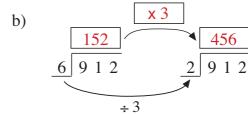
2

Look at how the factors and products change. Fill in the missing numbers and signs.

3

Look at how the dividends, divisors and quotients change. Fill in the missing numbers and signs.

x 2



4

Solve the problems in your exercise book.

Flora has collected 1200 (1p) coins and she wants to put them in two piggy banks. How many coins should she put in each piggy bank so that there is:

		PB1	PB2
a)	twice as much money in one piggy bank as in the other?	400 coins	800 coins
b)	half as much money in one piggy bank as in the other?	800 coins	400 coins
c)	three times as much money in one piggy bank as in the other	2300 coins	900 coins
d)	1 third as much money in one piggy bank as in the other?	900 coins	300 coins
e)	five times as much money in one piggy as in the other?	200 coins	1000 coins
f)	1 fifth as much money in one piggy bank as in the other?	1000 coins	200 coins
g)	1 seventh as much money in one piggy bank as in the other?	1050 coins	150 coins

Are the statements true or false? Write T for true and F for false in each box.

- a) Every number which is a whole hundred is divisible by 2.
- T
- b) There is an even number which has 5 as its units digit.
- F
- c) Every number which is divisible by 5 is a whole ten.
- F

d) 217 is divisible by neither 5 nor 2.

- T
- e) Every number which is a whole ten is divisible by 2 and by 5.
- Т

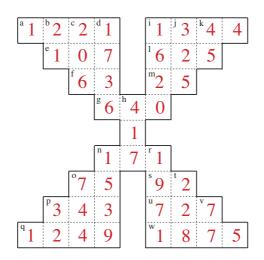
2

Write the answers in the number puzzle.

Horizontal clues

- **a** Sum of 642 and 579
- e Quotient of 642 divided by 6
- **f** Difference between 642 and 579
- **g** Sum of 423 and 217
- i Product of 168 and 8
- l Product of 125 and 5
- m 125 divided by 5

- **n** 513 divided by 3
- o 375 divided by 5
- **p** Difference between 796 and 453
- **q** Sum of 796 and 453
- s Difference between 217 and 125
- **u** Sum of 402 and 325
- w Product of 375 and 5



Vertical clues

- **b** Quotient of 168 divided by 8
- c Difference between 423 and 217
- **d** This number has factors 217 and 8
- **h** Sum of 371 and 46
- i Dividend if divisor is 6, quotient is 270
- j Difference between 371 and 46
- **k** 270 divided by 6

- **n** Dividend if divisor is 3, quotient is 513
- **o** Sum of 388 and 356
- **p** 356 plus this number equals 388
- r This number has factors 219 and 9
- t This number minus 219 equals 9
- v Subtrahend if difference is 325 and reductant is 402.