THE NEW LOOK ARITHMETIC

FOR JUNIOR SCHOOLS

BOOK TWO

BY

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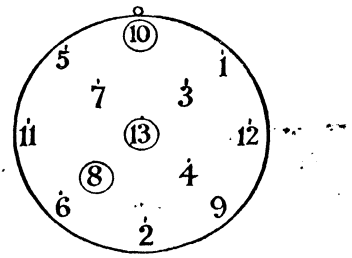

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FIRST HALF YEAR

SECOND HALF YEAR

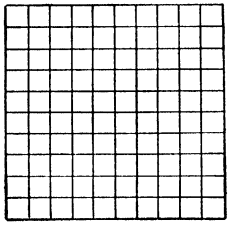
Exercise 1

Revision

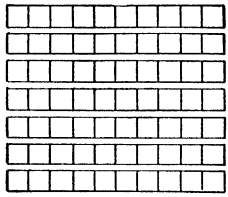
	A			B		
	(*a*)	(*b*)	(*c*)	(*a*)	(*b*)	(*c*)
1.	26 + 24	58 + 22	47 + 44	55 + 45	71 + 19	63 + 28
2.	80 − 37	91 − 44	87 − 29	65 − 29	90 − 11	81 − 37
3.	27 × 2	26 × 3	18 × 5	29 × 2	32 × 3	17 × 5
4.	3 | 58	4 | 94	6 | 99	2 | 55	3 | 76	5 | 89
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
5.	2 7 + 1 9	2 6 + 2 6	3 6 + 11	3 4 + 11	3 5 + 1 7	2 9 + 1 10
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
6.	1 7 × 3	1 11 × 2	1 3 × 4	1 10 × 2	1 8 × 3	11 × 5
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
7.	5 0 − 3 7	3 7 − 1 8	4 3 − 11	5 0 − 1 1	3 6 − 2 6	4 8 − 1 9
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
8.	4 | 5 0	2 | 3 10	3 | 4 9	3 | 5 0	2 | 3 6	5 | 4 7
9.	(4 × 3) + (7 × 2) + (6 × 5).			(5 × 3) + (3 × 6) + (4 × 6).		
10.	(12 × 6) − 30.			(9 × 6) − 50.		
11.	(*a*) 37*d.* = .. *s.* .. *d.*; (*b*) 45 ins. = .. ft. .. in.			(*a*) 53*d.* = .. *s.* .. *d.*; (*b*) 31 ins. = .. ft. .. in.		
12.	$\frac{1}{2}$ hour = .. minutes.			$\frac{3}{4}$ hour = .. minutes.		
13.	7 quarts = .. pints.			13 quarts = .. pints.		
14.	8 ounces = .. lb.			4 ounces = .. lb.		
15.	35 days = .. weeks.			42 days = .. weeks.		
16.	2 dozen + 2 score =			$1\frac{1}{2}$ dozen + $1\frac{1}{2}$ score =		
17.	3 years = .. months.			$\frac{1}{2}$ year = .. months.		
18.	3 eggs at 2*s.* a dozen.			7 balls at 5*s.* a dozen.		

Exercise 2

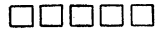
Number to 200



1 hundred (100)

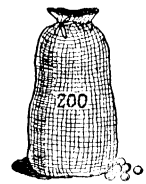


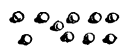
7 tens (70)



5 units (5)

1. Count by tens from 0 to 100; then from 0 to 200.
2. How many are 3 tens; 12 tens; 15 tens; 20 tens?
3. How many tens in 70; 100; 130; 190?
4. Look at the picture squares. How many are there altogether?
5. If we add 5 more single squares, how many will there be altogether?
6. If we take away 5 single squares, how many will there be then?
7. First read, then write, in figures, the following numbers: thirty-one; seventy-six; one hundred and three; one hundred and seventy; one hundred and ninety-five.
8. An odd number ends in 1, 3, 5, 7, or 9. Write, in figures, all the odd numbers between 170 and 200.
9. An even number ends in 0, 2, 4, 6, or 8. Write, in figures, all the even numbers between 120 and 200.
10. Read the following numbers in 3 ways, as shown in (*a*), (*b*), and (*c*) below: 129; 131; 106; 170; 191.
    (*a*) 175 = 1 hundred, 7 tens and 5 units.
    (*b*) 175 = 17 tens and 5 units.
    (*c*) 175 = 175 units.





Exercise 3

Number. Addition and Subtraction

	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)
	h.t.u.	*h.t.u.*	*h.t.u.*	*h.t.u.*	*h.t.u.*
1.	72	46	41	33	41
	+ 13	+ 23	+ 32	+ 52	+ 61
	+ 6	+ 19	+ 53	+ 64	+ 55
2.	36	36	68	59	26
	+ 43	+ 75	+ 7	+ 46	+ 33
	+ 52	+ 8	+ 35	+ 19	+ 104
3.	102	37	146	30	25
	+ 33	+ 123	+ 17	+ 127	+ 9
	+ 29	+ 19	+ 6	+ 26	+ 146
4.	32	72	63	115	11
	+ 41	+ 36	+ 27	+ 32	+ 19
	+ 106	+ 47	+ 92	+ 46	+ 156
	h.t.u.	*h.t.u.*	*h.t.u.*	*h.t.u.*	*h.t.u.*
5.	156	173	186	192	163
	− 27	− 39	− 59	− 33	− 25
6.	179	156	139	148	137
	− 93	− 62	− 73	− 56	− 42
7.	173	168	194	139	148
	− 24	− 73	− 35	− 47	− 53
8.	153	176	182	175	193
	− 129	− 139	− 127	− 126	− 136
9.	From 200	176	166	193	164
	Take 100	175	78	186	47
10.	20 × 3	30 × 3	40 × 4	30 × 5	40 × 5
11.	40 ÷ 10	70 ÷ 10	100 ÷ 10	120 ÷ 10	140 ÷ 10

12. (*a*) Test the "magic" square A. (*b*) Supply the missing numbers in "magic" square B.

A

70	50	30
20	90	40
60	10	80

B

	80	30
20	60	
90	40	

Exercise 4

Number. Multiplication and Division

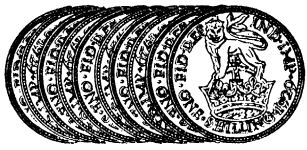
	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)	(*f*)
1.	27 × 2	40 × 2	28 × 3	25 × 4	19 × 5	15 × 6
2.	39 × 3	29 × 6	25 × 6	72 × 2	57 × 3	49 × 4
3.	43 × 4	35 × 3	26 × 6	33 × 4	35 × 5	43 × 4
4.	41 × 4	52 × 3	38 × 4	33 × 5	46 × 3	93 × 2
5.	50 × 4	49 × 3	48 × 4	37 × 5	29 × 6	100 × 2
6.	3 ⟌ 34	5 ⟌ 56	6 ⟌ 64	4 ⟌ 49	2 ⟌ 19	5 ⟌ 57
7.	2 ⟌ 78	4 ⟌ 98	6 ⟌ 39	5 ⟌ 1	3 ⟌ 72	6 ⟌ 1
8.	2 ⟌ 100	3 ⟌ 120	4 ⟌ 160	5 ⟌ 155	6 ⟌ 126	2 ⟌ 124
9.	4 ⟌ 100	4 ⟌ 132	5 ⟌ 165	5 ⟌ 185	6 ⟌ 192	6 ⟌ 156
10.	5 ⟌ 121	4 ⟌ 173	6 ⟌ 138	2 ⟌ 175	3 ⟌ 195	4 ⟌ 126
11.	6 ⟌ 181	4 ⟌ 122	5 ⟌ 153	6 ⟌ 184	4 ⟌ 163	5 ⟌ 154
12.	5 ⟌ 193	6 ⟌ 167	3 ⟌ 193	4 ⟌ 139	5 ⟌ 129	6 ⟌ 199

WORD SUMS

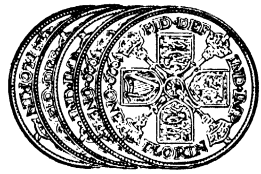
13. Divide one hundred and seventy-eight by 5.
14. What is one-half of one hundred and thirty-six?
15. Four times a number is one hundred and sixty. What is the number?
16. How many times does one hundred and thirty-eight contain six?
17. The milkman left 198 bottles of milk for the school. Three bottles of school milk make 1 pint. How many pints did he leave?
18. How many half-dozens in one hundred and twenty-six?

Exercise 5

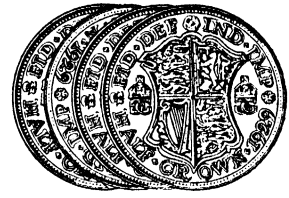
Money to 10*s.*



10 shillings



5 florins (10 shillings)



4 half-crowns (10 shillings)

How many pence in?

	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
1.	5 0	5 4	6 0	6 10	7 5
2.	5 9	6 3	4 5	7 8	9 0
3.	6 2	5 7	7 3	8 0	8 9

4. How many sixpences in 4*s.*; 8*s.*; 7*s.* 6*d.*; 9*s.* 6*d.*?
5. How many florins in 4*s.*; 10*s.*; 8*s.*; 6*s.*?
6. How many half-crowns in 5*s.*; 7*s.* 6*d.*; 10*s.*?
7. How many threepences in 3*s.*; 7*s.*; 9*s.*; 10*s.*?
8. Change to *s.* *d.*: 30*d.*; 70*d.*; 84*d.*; 96*d.*; 90*d.*
9. (*a*) 9*d.* × 6 = ?; (*b*) 10*d.* × 5 = ?; (*c*) 11*d.* × 4 = ?.
10. (*a*) 11*d.* × 6 = ?; (*b*) 9*d.* × 3 = ?; (*c*) 10*d.* × 6*d.* = ?.
11. (*a*) 1*s.* 9*d.* ÷ 3 = ?; (*b*) 1*s.* 6*d.* ÷ 6 = ?; (*c*) 1*s.* 8*d.* ÷ 5 = ?.
12. (*a*) 2*s.* 6*d.* ÷ 5 = ?; (*b*) 3*s.* 4*d.* ÷ 4 = ?; (*c*) 4*s.* 6*d.* ÷ 6 = ?.

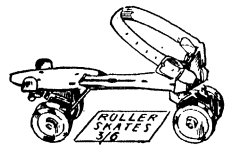
SHOPPING SUMS

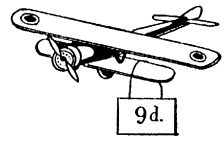
(*a*)	*s.* *d.*	(*b*)	*s.* *d.*
13. 12 books at 6*d.* each	=	4 books at 1*s.* 8*d.* each	=
14. 8 yards at 1½*d.* a yd.	=	5 peaches at 2½*d.* each	=
15. 3 toys at 1*s.* 10*d.* each	=	3 lb. at 1*s.* 9*d.* a lb.	=
16. 5 balls at 3½*d.* each	=	6 yards at 1*s* 4*d.* a yd.	=

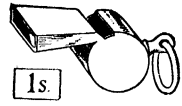
Exercise 6

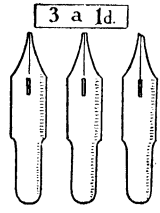
Money. The Four Rules

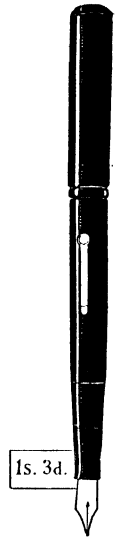
	(*a*)	(*b*)	(*c*)	(*d*)
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
1.	3 5	4 8	5 7	3 $9\frac{1}{2}$
	+ 4 7	+ 5 4	+ 3 7	+ 4 7
2.	1 3	2 $7\frac{1}{2}$	2 5	3 6
	+ 1 9	+ 2 3	+ 3 $7\frac{1}{2}$	+ 11
	+ 2 6	+ 3 7	+ 1 10	+ 2 $4\frac{1}{2}$
3.	1 10	1 8	3 10	4 6
	+ 3 $8\frac{1}{2}$	+ 2 8	+ 1 10	+ 1 $11\frac{1}{2}$
	+ 2 9	+ 3 $9\frac{1}{2}$	+ 2 $9\frac{1}{2}$	+ 2 $11\frac{1}{2}$
4.	4 7	3 $7\frac{1}{2}$	1 $9\frac{1}{2}$	1 $3\frac{1}{2}$
	+ 1 $9\frac{1}{2}$	+ $10\frac{1}{2}$	+ $7\frac{1}{2}$	+ 1 $2\frac{1}{2}$
	+ $10\frac{1}{2}$	+ 1 $5\frac{1}{2}$	+ $4\frac{1}{2}$	+ 1 $6\frac{1}{2}$
	+ 1 2	+ 6	+ 3 6	+ 2 $9\frac{1}{2}$
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
5.	3 5	6 9	7 $3\frac{1}{2}$	10 $0\frac{1}{2}$
	− 10	− 1 8	− 1 6	− 2 9
6.	5 $7\frac{1}{2}$	9 $0\frac{1}{2}$	10 0	8 $3\frac{1}{2}$
	− 4 9	− 3 6	− 9 6	− 2 7
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
7.	2 6	1 10	1 8	1 10
	× 3	× 5	× 6	× 4
8.	1 5	1 11	1 3	2 3
	× 6	× 4	× 6	× 4
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
9.	4 | 4 8	3 | 7 6	4 | 5 8	6 | 9 6
10.	4 | 10 0	6 | 10 0	5 | 8 4	3 | 10 0











11. Share 7*s.* 6*d.* equally among 6 children.

12. Mother gave 10*d.* to each of 3 girls and 2 boys. How much money did she give away?

13. How much change should we receive out of 10*s.* after buying $\frac{1}{4}$ lb. of tea at 3*s.* a lb.?

14. What would 3 dozen oranges cost at 3 for 4*d.*?

Exercise 7

Number and Money (Revision)

A. NUMBER

	(*a*)	(*b*)	(*c*)
1.	9×4	7×3	8×6
2.	5×6	12×2	9×3
3.	7×6	9×6	12×4
4.	5×5	4×6	8×4
5.	9×5	12×5	7×5

First add; then take away

6.	59	78	120
	27	39	65
7.	73	91	66
	57	84	39
8.	121	156	173
	37	9	25
9.	133	127	120
	56	32	20

Multiply

10.	36	75	96
	2	2	2
11.	57	48	40
	3	4	5
12.	49	37	28
	4	5	6

13.	$3\overline{)48}$	$4\overline{)85}$	$5\overline{)125}$
14.	$4\overline{)98}$	$5\overline{)100}$	$6\overline{)186}$
15.	$5\overline{)200}$	$4\overline{)180}$	$3\overline{)198}$
16.	$3\overline{)168}$	$2\overline{)170}$	$6\overline{)180}$

B. MONEY

	(*a*)	(*b*)	(*c*)
1.	$8d.\times3=$	$4d.\times9=$	$6d.\times6=$
2.	$6d.\times9=$	$7d.\times4=$	$5d.\times5=$
3.	$7d.\times5=$	$9d.\times5=$	$8d.\times4=$
4.	$8d.\times6=$	$10d.\times6=$	$5d.\times10=$
5.	$9d.\times3=$	$10d.\times4=$	$3d.\times11=$

First add; then take away

	s. *d.*	*s.* *d.*	*s.* *d.*
6.	4 5	8 2	5 3
	1 7	1 6	3 7
7.	8 6	3 9	7 6
	1 6	2 3	2 6
8.	3 $6\frac{1}{2}$	7 $6\frac{1}{2}$	4 $5\frac{1}{2}$
	1 9	2 0	2 10
9.	5 3	3 $7\frac{1}{2}$	5 $6\frac{1}{2}$
	4 9	1 8	3 6

Multiply

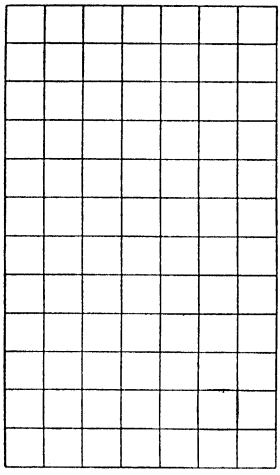
	s. *d.*	*s.* *d.*	*s.* *d.*
10.	1 3	1 9	1 3
	2	3	4
11.	2 7	1 8	1 6
	3	5	6
12.	3 6	1 8	2 3
	2	6	4

	s. *d.*	*s.* *d.*	*s.* *d.*
13.	$3\overline{)3\ 6}$	$4\overline{)5\ 0}$	$3\overline{)4\ 6}$
14.	$5\overline{)7\ 1}$	$6\overline{)8\ 6}$	$2\overline{)9\ 8}$
15.	$3\overline{)8\ 3}$	$5\overline{)9\ 2}$	$6\overline{)10\ 0}$
16.	$2\overline{)9\ 0}$	$4\overline{)7\ 8}$	$6\overline{)9\ 6}$

17. Add together the even numbers between 95 and 101.
18. How many minutes are there between half-past three and a quarter to 4?
19. How much would 200 marbles cost at 10 for 1*d.*?
20. How much would $1\frac{1}{2}$ lb. of bacon cost at 1*s.* 6*d.* a lb.?

Exercise 8

Seven Times Table and Table Work

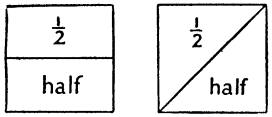


1. How many squares are there in the picture?
2. (*a*) How many squares are there in each row?
   (*b*) How many rows are there? $12 \times 7 = ?$.
3. (*a*) Three rows of 7 squares = ?; (*b*) 7 rows of 7 squares = ?.
4. Count by sevens from 7 to 84, as: 7, 14, 21, etc.; then back again, as: 84, 77, 70, etc.
5. Count by twelves from 12 to 84; then back again.
6. Using squared paper, show that:
   (*a*) $6 \times 7 = 7 \times 6 = 21 \times 2 = 2 \times 21$.
   (*b*) $4 \times 7 = 7 \times 4 = 14 \times 2 = 2 \times 14$.

7. (*a*) $6 \times 7 = ?$; $7 \times 6 = ?$; $42 \div 6 = ?$; $42 \div 7 = ?$.
   (*b*) $4 \times 7 = ?$; $7 \times 4 = ?$; $28 \div 4 = ?$; $28 \div 7 = ?$.
8. (*a*) $7 \times 7 = ?$; $8 \times 7 = ?$; $9 \times 7 = ?$; $10 \times 7 = ?$.
   (*b*) $49 \div 7 = ?$; $56 \div 7 = ?$; $63 \div 7 = ?$; $70 \div 7 = ?$.
9. (*a*) $3 \times 7 = ?$; $4 \times 7 = ?$; $5 \times 7 = ?$; $6 \times 7 = ?$.
   (*b*) $21 \div 7 = ?$; $28 \div 7 = ?$; $35 \div 7 = ?$; $42 \div 7 = ?$.
10. (*a*) 21×7; 15×7; 18×7; 17×7.
    (*b*) $140 \div 7$; $147 \div 7$; $105 \div 7$; $133 \div 7$.
11. (*a*) $9d. \times 7$; $11d. \times 7$; $8d. \times 7$; $7d. \times 7$.
    (*b*) $3s.\ 6d. \div 7$; $5s.\ 3d. \div 7$; $6s.\ 5d. \div 7$; $4s.\ 1d. \div 7$.
12. (*a*) 8 weeks = .. days; 9 weeks 5 days = .. days.
13. 7 pairs of gloves at 11*d.* a pair = .. *s.* .. *d.*
14. 6*s.* 5*d.* for 7 hours work. How much is that for 1 hour?
15. How many ounces in 7 lb.?
16. Share 9*s.* 4*d.* equally among 7 boys. How much is there for each one?

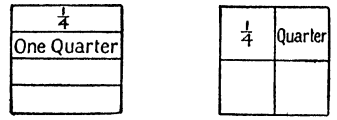
Exercise 9

Halves and Quarters



Halves

$\frac{1}{2} + \frac{1}{2} = 1$



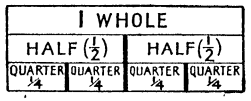
Quarters

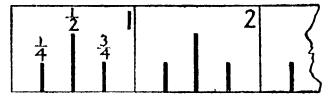
$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 1$

$1d.$

$\frac{1}{2}d. + \frac{1}{2}d. = 1d.$

$\frac{1}{4}d. + \frac{1}{4}d. + \frac{1}{4}d. + \frac{1}{4}d. = 1d.$



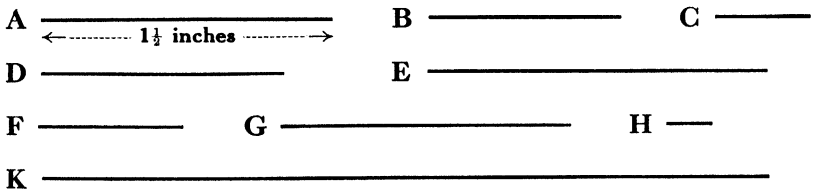


1. Draw, on squared paper, a square with sides four squares long. Cut it out and fold it in two. Tear off one half ($\frac{1}{2}$). What part is left? $1 - \frac{1}{2} = \frac{1}{2}$.
2. $\frac{1}{2}d. + \frac{1}{2}d. = ?$; $\frac{1}{2}$ inch + $\frac{1}{2}$ inch = ? ; $\frac{1}{2}$ lb. + $\frac{1}{2}$ lb. = ? ; $\frac{1}{2}$ hour + $\frac{1}{2}$ hour = ? .
3. $2d.$ = .. halfpence; $3\frac{1}{2}d.$ = .. halfpence; $5\frac{1}{2}d.$ = .. halfpence.
4. $1d. - \frac{1}{2}d. = ?$; $3d. - \frac{1}{2}d. = ?$; $2\frac{1}{2}d. - \frac{1}{2}d. = ?$; $6d. - \frac{1}{2}d. = ?$; $4\frac{1}{2}d. - \frac{1}{2}d. = ?$.
5. Draw, on squared paper, a square with sides four squares long. Cut it out and fold it into 4 equal squares. Tear off one quarter ($\frac{1}{4}$). What part is left? $1 - \frac{1}{4} = ?$.
6. Tear off another quarter. What part is left now? $\frac{3}{4} - \frac{1}{4} = ?$; $1 - \frac{1}{4} - \frac{1}{4} = ?$.
7. Tear off another quarter. What part is left now? $\frac{1}{2} - \frac{1}{4} = ?$; $1 - \frac{1}{4} - \frac{1}{4} - \frac{1}{4} = ?$; $1 - \frac{3}{4} = ?$.
8. $\frac{1}{4}d. + \frac{1}{4}d. + \frac{1}{4}d. + \frac{1}{4}d. = ?$; $\frac{1}{4}$ inch + $\frac{1}{4}$ inch + $\frac{1}{4}$ inch + $\frac{1}{4}$ inch = ? .
9. $\frac{1}{4}$ lb. + $\frac{1}{4}$ lb. + $\frac{1}{4}$ lb. + $\frac{1}{4}$ lb. = ? ; $\frac{1}{4}$ hour + $\frac{1}{4}$ hour + $\frac{1}{4}$ hour + $\frac{1}{4}$ hour = ? .
10. $\frac{1}{4}d. + \frac{1}{4}d. = ?$; $\frac{1}{4}$ inch + $\frac{1}{4}$ inch = ? ; $\frac{1}{4}$ lb. + $\frac{1}{4}$ lb. = ? ; $\frac{1}{4}$ hour + $\frac{1}{4}$ hour = ? .

Exercise 10

Halves and Quarters; Halfpennies and Farthings

1. What length is each of the following lines? Line A has been done for you.



2. Draw lines as long as the following: (*a*) $2\frac{1}{2}$ inches + $1\frac{1}{4}$ inches; (*b*) $\frac{1}{2}$ inch + $\frac{3}{4}$ inch; (*c*) $1\frac{3}{4}$ inches − $\frac{1}{2}$ inch; (*d*) $\frac{1}{2}$ inch + $\frac{1}{4}$ inch; (*e*) 2 inches − $\frac{1}{2}$ inch.

	(*a*)	(*b*)	(*c*)
3.	$\frac{1}{2}$ of 16 oz. = ?	$\frac{1}{4}$ of 1 lb. = .. oz.	$\frac{1}{4}$ of 1 score = ?
	$\frac{1}{2}$ of 30 min. = ?	$\frac{1}{4}$ of 20 min. = ?	$\frac{1}{2}$ of 1 dozen = ?
	$\frac{1}{2}$ of 1 foot = ?	$\frac{1}{4}$ of 1 foot = ?	$\frac{1}{4}$ of 1 hour = .. min.
	$\frac{1}{2}$ of 1 quart = ?	$\frac{1}{4}$ of 1 dozen = ?	$\frac{1}{4}$ of 1 florin = .. *d.*
	$\frac{1}{2}$ of 1 shilling = ?	$\frac{1}{4}$ of 1 shilling = ?	$\frac{1}{2}$ of 1 half-crown = ?
	$\frac{1}{2}$ of 1 yard = ?	$\frac{1}{4}$ of 1 yard = .. in.	$\frac{1}{4}$ of 10*s.* = ?

4. How many pennies in: 7; 15; 19; 23; 11; 5; 21; 13 halfpennies?

5. How many halfpennies in: $3\frac{1}{2}d.$; $8\frac{1}{2}d.$; $10\frac{1}{2}d.$; $7\frac{1}{2}d.$; $11\frac{1}{2}d.$; $5\frac{1}{2}d.$?

6. How many pennies in: 4; 9; 23; 11; 7; 5; 12; 15; 13 farthings?

7. How many farthings in: $3d.$; $5d.$; $4\frac{1}{4}d.$; $3\frac{3}{4}d.$; $2\frac{1}{4}d.$; $8\frac{3}{4}d.$?

8. Look at this sum. $\frac{1}{4}d. + \frac{1}{4}d. + \frac{3}{4}d. = 5$ farthings $= 1\frac{1}{4}d.$

   Now work these. (*a*) $\frac{3}{4}d. + \frac{1}{4}d. + \frac{3}{4}d. = ?$; (*b*) $\frac{1}{4}d. + \frac{3}{4}d. + \frac{1}{4}d. + \frac{3}{4}d. = ?$; (*c*) $\frac{1}{4}d. + \frac{1}{4}d. + \frac{3}{4}d. + \frac{3}{4}d. + \frac{1}{4}d. = ?$; (*d*) $\frac{3}{4}d. + \frac{3}{4}d. + \frac{3}{4}d. = ?$.

9. Look at this sum. Each halfpenny has been counted as two farthings.
   $\frac{1}{2}d. + \frac{1}{4}d. + \frac{1}{2}d. + \frac{3}{4}d. = 8$ farthings $= 2d.$

   Now work these. (*a*) $\frac{1}{4}d. + \frac{1}{2}d. + \frac{3}{4}d. = ?$; (*b*) $\frac{1}{2}d. + \frac{1}{2}d. + \frac{3}{4}d. = ?$; (*c*) $\frac{1}{4}d. + \frac{1}{2}d. + \frac{1}{4}d. = ?$; (*d*) $\frac{3}{4}d. + \frac{3}{4}d. + \frac{1}{2}d. + \frac{1}{2}d. = ?$.

Exercise 11

Money. Halfpence and Farthings. (Addition and Subtraction)

ADDITION

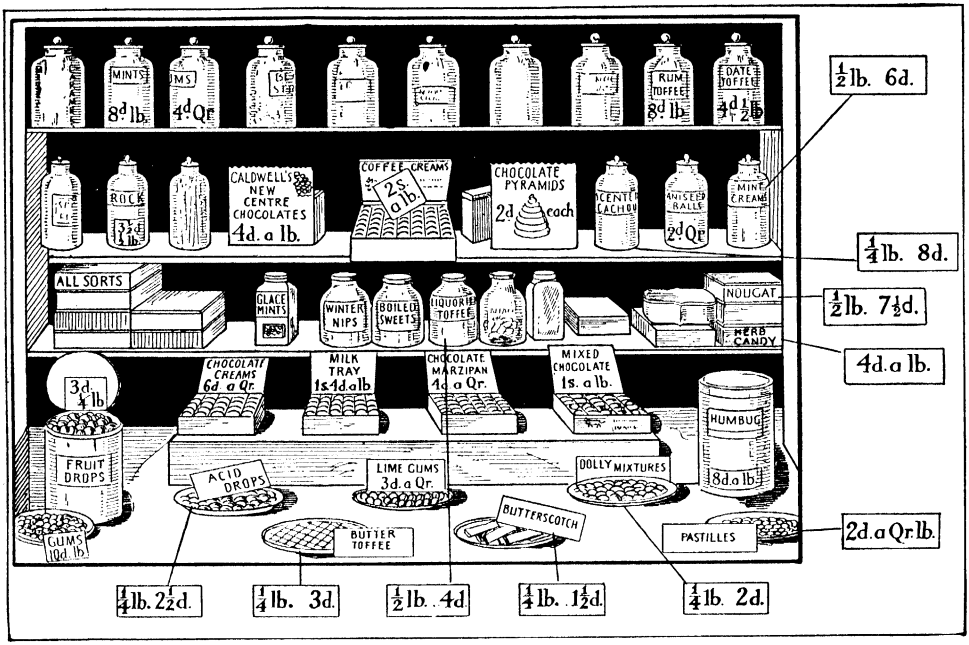
	(a)		(b)		(c)		(d)		(e)	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
1.		$1\frac{1}{2}$		$2\frac{1}{2}$	1	$2\frac{1}{2}$		$5\frac{1}{2}$	1	$1\frac{1}{2}$
		$1\frac{1}{2}$		$3\frac{1}{2}$		$4\frac{1}{2}$	1	$4\frac{1}{2}$		$7\frac{1}{2}$
2.		$3\frac{1}{2}$		$4\frac{1}{4}$	1	$3\frac{1}{2}$	1	$6\frac{1}{4}$	3	$9\frac{1}{4}$
		$2\frac{1}{4}$		$3\frac{1}{2}$		$3\frac{1}{4}$		$6\frac{1}{2}$	1	$5\frac{1}{2}$
3.		$5\frac{1}{4}$		$2\frac{1}{4}$		$8\frac{1}{4}$	1	$9\frac{1}{4}$	3	$7\frac{1}{4}$
		$3\frac{1}{4}$		$7\frac{1}{4}$	1	$4\frac{1}{4}$	2	$4\frac{1}{4}$	4	$8\frac{1}{4}$
4.		$2\frac{3}{4}$		$5\frac{1}{4}$		$7\frac{1}{4}$	1	$8\frac{3}{4}$	2	$9\frac{3}{4}$
		$1\frac{1}{4}$		$3\frac{3}{4}$		$6\frac{3}{4}$		$7\frac{1}{4}$		$7\frac{1}{4}$
5.		$3\frac{1}{2}$		$7\frac{3}{4}$		$8\frac{1}{2}$	1	$5\frac{3}{4}$	1	$8\frac{1}{2}$
		$2\frac{3}{4}$		$3\frac{1}{2}$		$6\frac{3}{4}$		$7\frac{1}{2}$		$9\frac{3}{4}$
6.		$5\frac{1}{4}$		$7\frac{1}{2}$		$4\frac{1}{4}$	1	$5\frac{1}{2}$	1	$9\frac{1}{4}$
		$7\frac{3}{4}$		$3\frac{3}{4}$		$3\frac{1}{4}$		$6\frac{1}{2}$		$4\frac{3}{4}$
		$6\frac{1}{2}$		$2\frac{1}{2}$		$9\frac{1}{4}$		$7\frac{1}{2}$		$3\frac{1}{2}$
7.	1	$2\frac{1}{2}$	1	$5\frac{1}{2}$	1	$6\frac{1}{2}$	2	$9\frac{3}{4}$	1	$8\frac{3}{4}$
		$7\frac{3}{4}$	1	$7\frac{1}{4}$	1	$3\frac{1}{2}$	1	$6\frac{1}{4}$	1	$7\frac{3}{4}$
	1	$9\frac{1}{2}$		$8\frac{1}{2}$		$4\frac{3}{4}$	1	$7\frac{1}{2}$	2	$10\frac{3}{4}$

SUBTRACTION

	(a)		(b)		(c)		(d)		(e)	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
1.		$4\frac{1}{2}$		$7\frac{1}{2}$	1	$5\frac{1}{2}$	2	$9\frac{1}{2}$	1	$7\frac{3}{4}$
		$2\frac{1}{2}$		$3\frac{1}{4}$		$2\frac{1}{4}$	1	$6\frac{1}{4}$	1	$5\frac{1}{4}$
2.		$7\frac{1}{2}$		$8\frac{1}{2}$	1	$6\frac{1}{2}$	2	$7\frac{1}{2}$	3	$9\frac{3}{4}$
		$3\frac{1}{4}$		$5\frac{1}{2}$		$4\frac{1}{2}$	1	$5\frac{1}{4}$	1	$6\frac{1}{2}$
3.		$5\frac{1}{4}$		$6\frac{1}{4}$	1	$9\frac{1}{4}$	3	$7\frac{1}{4}$	6	$7\frac{1}{4}$
		$3\frac{1}{2}$		$4\frac{1}{2}$		$4\frac{1}{2}$	2	$1\frac{1}{2}$	1	$5\frac{1}{2}$
4.		$7\frac{1}{2}$		$9\frac{1}{2}$	1	$8\frac{1}{2}$	3	$9\frac{1}{4}$	4	$8\frac{1}{2}$
		$3\frac{3}{4}$		$4\frac{3}{4}$		$5\frac{3}{4}$	1	$7\frac{3}{4}$	3	$6\frac{3}{4}$
5.	3	$4\frac{3}{4}$	4	$6\frac{1}{2}$	5	$8\frac{3}{4}$	6	$2\frac{1}{2}$	8	$5\frac{3}{4}$
	1	$8\frac{1}{2}$	3	$7\frac{1}{4}$	1	$9\frac{1}{2}$	3	9	3	6
6.	5	$3\frac{1}{4}$	4	$7\frac{1}{2}$	8	$3\frac{1}{4}$	9	$6\frac{1}{2}$	4	$9\frac{1}{4}$
	1	$6\frac{1}{2}$	2	$9\frac{3}{4}$	3	$5\frac{3}{4}$	7	$8\frac{3}{4}$	2	$10\frac{1}{2}$

Exercise 12

The Sweet Shop



1. How much will 1 lb. of chocolate creams cost; 1 lb. of butter-scotch; 1 lb of nougat?
2. Buy ½ lb. of gums (on the plate), ¼ lb. of mints, and 1 lb. of mint creams. How much change will there be out of half a crown?
3. Buy 1 lb. of chocolate marzipans, ½ lb. scented cachous, and 1 lb. of liquorice toffee. How much change will there be out of 4*s.*?
4. How much per lb. are the following: fruit drops; herb-candy; dolly-mixtures; Caldwell's new centre chocolates; rock; and pastilles?
5. How much per ½ lb. are the following: milk tray; mixed chocolate; fruit drops; scented cachous; acid drops; and butter-scotch?
6. What weight of the following sweets can be bought for 1*d.*; herb-candy; liquorice toffee; humbugs; milk tray; dolly-mixtures; chocolate marzipans?
7. Teacher bought the following to give out at a party: 1½ lb. chocolate creams, 4½ lb. butter-scotch, 12 lb. dolly-mixtures, 3½ lb. humbugs, and 40 chocolate pyramids. How much did they cost her?
8. Spend (*a*) 6*d.*; (*b*) 1*s.*, buying sweets at the shop.
9. Make up story sums about spending: (*a*) 1*s.*; (*b*) 2*s.* 6*d.* at the sweet shop.

Exercise 13

Eight Times Tables and Table Work

1. Turn back to p. 8. There you will find a picture showing 12 rows of squares with 7 squares in each row. Now draw, on squared paper, a picture showing 12 rows of squares with 8 squares in a row.

   12 rows of squares with 8 in a row = .. squares

2. Count by eights from 8 to 96, and back again.
3. Count by twelves from 12 to 96, and back again.
4. (*a*) 3 rows of 8 squares = ? ; (*b*) 7 rows of 8 squares = ? ; (*c*) 9 rows of 8 squares = ? .

	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)
5.	$6 \times 8 =$;	$8 \times 6 =$;	$12 \times 4 =$;	$4 \times 12 =$;	$24 \times 2 =$.
6.	$48 \div 8 =$;	$48 \div 6 =$;	$48 \div 4 =$;	$48 \div 12 =$;	$48 \div 2 =$.
7.	$5 \times 8 =$;	$8 \times 5 =$;	$10 \times 4 =$;	$4 \times 10 =$;	$20 \times 2 =$.
8.	$40 \div 8 =$;	$40 \div 5 =$;	$40 \div 4 =$;	$40 \div 10 +$;	$40 \div 2 =$.

9. (*a*) $7 \times 8 =$? ; $8 \times 8 =$? ; $9 \times 8 =$? ; $10 \times 8 =$? ; $11 \times 8 =$? .
   (*b*) $56 \div 8 =$? ; $64 \div 8 =$? ; $72 \div 8 =$? ; $80 \div 8 =$? ; $88 \div 8 =$? .
10. (*a*) $2 \times 8 =$? ; $3 \times 8 =$? ; $4 \times 8 =$? ; $5 \times 8 =$? ; $6 \times 8 =$? .
    (*b*) $16 \div 8 =$? ; $24 \div 8 =$? ; $32 \div 8 =$? ; $40 \div 8 =$? ; $48 \div 8 =$? .
11. $9d. \times 8 =$? ; $11d. \times 8 =$? ; $8d. \times 8 =$? ; $8d. \times 7 =$? ; $8d. \times 10 =$? .
12. $3s.\ 4d. \div 8 =$? ; $6s.\ 8d. \div 8 =$? ; $4s.\ 8d. \div 8 =$? ; $8s.\ 8d. \div 8 =$? ; $10s.\ 0d. \div 8 =$? .

	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)
13.	15×8	17×8	23×8	19×8	24×8
14.	14×8	21×8	13×8	18×8	25×8
15.	$94 \div 8$	$75 \div 8$	$100 \div 8$	$57 \div 8$	$91 \div 8$
16.	$8 \overline{)172}$	$8 \overline{)193}$	$8 \overline{)133}$	$8 \overline{)157}$	$8 \overline{)163}$

17. 8 pairs of gloves at 1*s.* 3*d.* a pair. Find the total cost.
18. Teacher paid 9*s.* 4*d.* for 8 books. How much is that for one?
19. Each of 8 bags held 2 dozen sweets. How many sweets were there altogether?
20. Eight score years and one. How many years is that altogether?
21. I gave 2 dozen sweets to each of 8 boys and had 3 left over. How many sweets had I?
22. I gave the grocer a 10*s.* note for 8 lb. of cheese at 11*d.* a lb. What change did I get?

Exercise 14

A. Number to 500; B. Shopping Sums

A

1. Count by hundreds from 100 to 500; then back again.
2. Count by tens from 190 to 250; then by tens from 197 to 237.
3. Count by fifties from 50 to 500; then back again.
4. How many tens in 170; 230; 340; 450?
5. First read; then write in figures, the following numbers: one hundred and seventy; two hundred and thirty-seven; three hundred and nine; four hundred and ninety-two.
6. Write all the odd numbers between 330 and 378; all the even numbers between 437 and 459.
7. Read the following numbers in 3 ways (turn to Exercise 2, No. 10, before you begin): 372, 406, 431.
8. What does the figure 5 stand for in each of these numbers: 50, 105, 500?

	(*a*)	(*b*)	(*c*)	(*d*)
9.	100 + 200 + 200	120 + 130 + 140	106 + 101 + 202	107 + 108 + 209
10.	500 − 200	460 − 320	447 − 325	476 − 330
11.	Multiply: 100 by 5	120 by 3	110 by 4	223 by 2
12.	Divide: 400 by 2	480 by 4	420 by 6	120 by 6

13. Add 50 to each number: 120, 330, 210, 350, 240, 370, 230, 180, 260.
14. Take 50 from each number: 200, 150, 300, 250, 400, 350, 460, 340, 470.
15. (*a*) Add 100 to each number in sum 13; (*b*) Take 100 from each number in sum 14.

B. SHOPPING SUMS

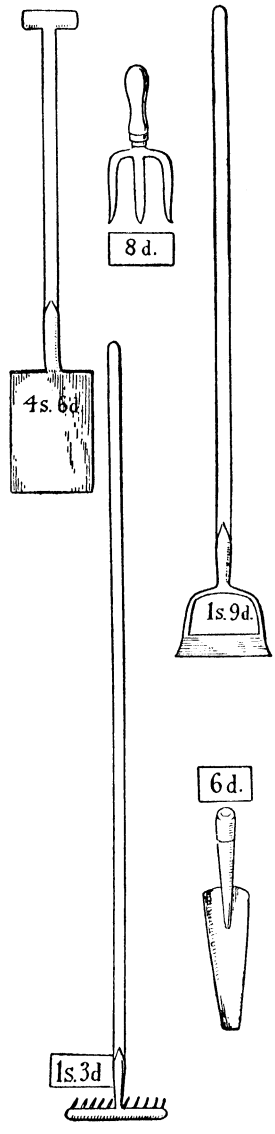
16. (*a*) 3 dozen eggs at 2d. each = ? (*b*) Change from 10s.
17. (*a*) 1 dozen books at 9d. each = ? (*b*) Change from 10s.
18. Buy with a ten-shilling note, and find the change each time:

(*a*)	*s.*	*d.*	(*b*)	*s.*	*d.*
1 doll's house	3	11½	1 pair football boots	2	11½
1 doll's bed	2	6½	1 football jersey	1	11½
1 doll's bath	1	9½	1 pair of shorts	1	6½
1 doll's tea-set	1	3	1 football	3	6
Total			Total		

Exercise 15

Number. The Four Rules

	(a)	(b)	(c)	(d)	(e)
1.	227 + 192	145 + 263	227 + 192	253 + 164	155 + 264
2.	63 + 34 + 95	84 + 95 + 86	94 + 95 + 38	87 + 88 + 79	79 + 88 + 96
3.	104 + 43 + 125	105 + 127 + 119	204 + 103 + 176	116 + 129 + 145	207 + 38 + 129
4.	237 + 169	245 + 186	258 + 176	283 + 192	173 + 249
5.	368 − 234	479 − 316	486 − 224	448 − 326	498 − 365
6.	269 − 176	358 − 75	439 − 146	427 − 236	309 − 273
7.	273 − 59	368 − 49	337 − 119	453 − 226	461 − 319
8.	353 − 176	427 − 138	415 − 136	423 − 247	434 − 378
9.	37 × 2	35 × 4	29 × 7	34 × 8	52 × 8
10.	63 × 4	75 × 5	43 × 7	55 × 6	84 × 5
11.	77 × 6	96 × 5	56 × 8	69 × 7	48 × 8
12.	95 × 4	78 × 3	47 × 7	85 × 5	56 × 8
13.	5 | 150	6 | 210	6 | 300	7 | 420	8 | 440
14.	4 | 352	6 | 399	7 | 421	8 | 456	5 | 500
15.	8 | 416	7 | 375	4 | 323	8 | 321	6 | 476
16.	7 | 433	6 | 388	5 | 287	8 | 413	5 | 499

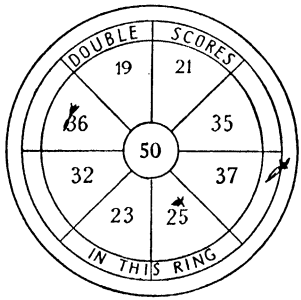


17. Find $\frac{1}{4}$ of: 320, 470, 219, 416, 334.

18. How many minutes are there in 7 hours; in 6 hours; in 8 hours; in 5 hours?

Exercise 16

Scoring Game. Darts



SCORE BOARD			
REDS	BLUES	GREENS	YELLOWS
106	163	186	87
137	132	111	154
105	85	112	91

1. (*a*) Look at the dart board. How many has the player scored? $36 + 25 + (37 \times 2) = ?$ (Note: 37×2 is a double 37).
   (*b*) Look at the score board. How many has each team scored?
2. (*a*) Score $50 + 36 + 37 = ?$. (*b*) Score 3 fifties $= ?$. (*c*) Score $19 + 36 + (25 \times 2) = ?$
3. Score 50 + a double 23 + a double 36 = ?.

	Score: 1st dart	2nd dart	3rd dart	Total	
4.	Double 37	50	36	?	How many short of 200?
5.	36	double 37	19	?	How many short of 200?
6.	Double 19	double 25	37	?	How many short of 200?

7. What is the biggest number that can be scored with 3 darts?
8. What is the smallest number that can be scored with 3 darts?

9. TEAM SCORES

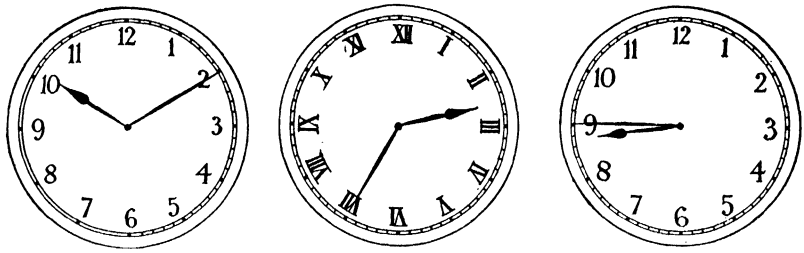
Reds		Blues	
1st boy: 50 + 0 + double 37	= ?	36 + 37 + 50	= ?
2nd boy: 37 + double 21 + 35	= ?	50 + 0 + double 19	= ?
3rd boy: 0 + double 36 + double 23	= ?	50 + 50 + double 23	= ?
Total	___	Total	___

Greens		Yellows	
1st boy: 37 + double 21 + double 25	= ?	23 + 37 + 36	= ?
2nd boy: 50 + 0 + double 32	= ?	0 + 50 + double 37	= ?
3rd boy: 0 + double 25 + double 35	= ?	35 + double 35 + 50	= ?
Total	___	Total	___

Which team wins? By how many does the top team beat the bottom team?

Exercise 17

The Clock. Telling the Time



1. Look at the clock faces. What time does each show?
2. (*a*) What time did each clock show half an hour earlier? (*b*) What time will each clock show a quarter of an hour later?
3. Another way of saying half-past three is 3.30; another way of saying quarter-past three is 3.15. Say and write these times another way: (*a*) 15 minutes to 9; (*b*) 20 minutes past 12; (*c*) 4.20; (*d*) 2.15; (*e*) 10 minutes to five; (*f*) 3.50; (*g*) 10.00.
4. Reading lesson commences at a quarter past ten and lasts 20 minutes. Write the time it ends.
5. School commences at nine o'clock in the morning and we go home at 12 o'clock. How many hours are we at school in the morning?
6. Write the time school begins and ends in the afternoon. How many hours are we at school in the afternoon?
7. Play-time commences at 25 minutes to eleven and lasts 15 minutes. Write the time it ends.
8. School commences at 1.30. John was 10 minutes late. At what time did he arrive?
9. Mary left home at 8.45 and arrived at school at 9.5. How many minutes did she spend on the way?
10. The quarter-past 2 bus was 20 minutes late. At what time did it arrive?
11. Father starts work at 7.30 and finishes at 12 o'clock. How many hours does he work?
12. What time will the clocks (above) show twenty-five minutes later?
13. What time did the clocks (above) show forty-five minutes earlier?

Exercise 18

Shopping

(*a*)

	s.	d.
1. $\frac{1}{2}$ lb. bacon at 1*s.* 6*d.* a lb.		
$\frac{1}{4}$ lb. tea at 3*s.* a lb.		
$1\frac{1}{2}$ lb. cheese at 1*s.* 4*d.* a lb.		
Total		
Change from 10*s.*		

	s.	d.
2. 5 quarts of milk at 7*d.* a quart		
$\frac{1}{2}$ lb. butter at 1*s.* 6*d.* a lb.		
2 dozen eggs at 2*d.* each		
Total		
Change from 10*s.*		

	s.	d.
3. 1 set of wickets	1	$11\frac{1}{2}$
1 cricket ball		$8\frac{1}{2}$
2 bats at 2*s.* 6*d.* each		?
Total		
Change from 10*s.*		

	s.	d.
4. 8 twopenny stamps		
9 threepenny stamps		
1 postal order	1	$6\frac{1}{2}$
Total		
Change from 10*s.*		

	s.	d.
5. 3 drawing books $2\frac{1}{2}$*d.* each		
$\frac{1}{2}$ dozen coloured pencils at 3*d.* each		
1 box of paints		$7\frac{1}{2}$
Total		
Change from 4*s.* 6*d.*		

(*b*)

	s.	d.
$\frac{1}{4}$ lb. of sweets at 1*s.* a lb.		
$\frac{1}{2}$ lb. chocolate at 3*s.* 4*d.* a lb.		
10 twopenny packets of chocolate		
Total		
Change from 10*s.*		

	s.	d.
Butcher	3	$3\frac{1}{2}$
Grocer	2	$9\frac{1}{2}$
Baker	1	11
Total		
Left out of 10*s.*		

	s.	d.
1 doll	2	$11\frac{1}{2}$
1 set of doll's clothes	1	$9\frac{1}{2}$
1 bed for doll	3	$5\frac{1}{2}$
Total		
Change from 10*s.*		

	s.	d.
2 skipping ropes at $4\frac{1}{2}$*d.* each		
5 balls at 7*d.* each		
1 toy		$11\frac{1}{2}$
Total		
Change from 5*s.*		

	s.	d.
1 pencil box	1	$5\frac{1}{2}$
1 rubber		$1\frac{1}{2}$
1 writing book		$2\frac{1}{2}$
Total		
Change from 2*s.*		

Exercise 19

Revision. Number and Money. The Four Rules. Table Work

A

NUMBER

	(a)	(b)	(c)
1.	76	54	76
	+ 39	+ 65	+ 89
	+ 27	+ 76	+ 93
2.	59	73	84
	+ 73	+ 18	+ 37
	+ 36	+ 39	+ 45
	+ 42	+ 96	+ 99
3.	89	95	92
	− 76	− 39	− 76
4.	231	376	419
	− 119	− 299	− 326
5.	96	85	73
	× 5	× 4	× 6
6.	64	56	123
	× 7	× 8	× 2
7.	7 | 154	8 | 236	6 | 360
8.	8 | 452	5 | 500	4 | 315

B

MONEY

	(a)	(b)	(c)
1.	s. d.	s. d.	s. d.
	3 $7\frac{1}{2}$	4 $5\frac{1}{2}$	6 $3\frac{1}{2}$
	+ 2 9	+ 3 $7\frac{1}{2}$	+ 1 $11\frac{1}{2}$
2.	1 $7\frac{1}{4}$	3 $5\frac{3}{4}$	2 $9\frac{1}{2}$
	+ 3 $0\frac{1}{2}$	+ $11\frac{1}{2}$	+ 3 $4\frac{1}{2}$
	+ 2 6	+ 1 $0\frac{1}{4}$	+ 2 $7\frac{1}{2}$
3.	7 $3\frac{1}{2}$	8 $6\frac{3}{4}$	9 $6\frac{1}{2}$
	− 2 4	− 2 $7\frac{1}{2}$	− 3 $5\frac{3}{4}$
4.	10 0	4 $2\frac{1}{2}$	6 $9\frac{1}{4}$
	− 9 $9\frac{3}{4}$	− 3 $7\frac{1}{4}$	− 3 $10\frac{1}{2}$
5.	3 4	2 9	1 8
	× 3	× 3	× 5
6.	1 9	1 3	1 2
	× 4	× 7	× 8
7.	7 | 9 4	6 | 10 0	8 | 9 4
8.	3 | 5 3	5 | 8 4	7 | 8 2

C

	(a)	(b)	(c)
9.	8×7	9×6	5×5
10.	7×9	5×7	8×8
11.	11×4	10×8	11×7
12.	72÷8	42÷7	63÷7
13.	35÷7	30÷6	64÷8
14.	56÷8	84÷7	49÷7

D

	(a) s. d.	(b) pence	(c) s. d.
9.	57*d.* =	3*s.* 6*d.* =	17 farthings =
10.	63*d.* =	4*s.* 3*d.* =	13 halfpence =
11.	39*d.* =	7*s.* 9*d.* =	9 threepences =
12.	96*d.* =	5*s.* 2*d.* =	4 florins =
13.	52*d.* =	4*s.* 11*d.* =	3 half-crowns =
14.	73*d.* =	2*s.* 9*d.* =	9 sixpences =

E

15. 52 inches = .. feet .. inches.
16. $1\frac{1}{4}$ lb. = .. ounces.
17. 13 quarts = .. pints.
18. 120 minutes = .. hours.

F

15. 7 yards = .. feet.
16. 3 ft. 9 inches = .. inches.
17. 20 ounces = .. lb.
18. 33 pints = .. quarts.

Exercise 20

Money to £1

COINS IN EVERY-DAY USE








1. How many pence are needed to make each amount into the next shilling higher: 3*s.* 10*d.*; 4*s.* 9½*d.*; 11*s.* 9*d.*; 12*s.* 1½*d.*; 14*s.* 7½*d.*; 15*s.* 11*d.*; 19*s.* 4½*d.*; 13*s.* 6½*d.*?
2. How many pence in: 7*s.*; 9*s.*; 3*s.* 5*d.*; 6*s.* 8*d.*; 7*s.* 4*d.*?
3. Change to shillings and pence: 70*d.*; 52*d.*; 95*d.*; 100*d.*; 110*d.*?
4. Change to sixpences: 2*s.* 6*d.*; 4*s.* 6*d.*; 5*s.*; 10*s.*; 18*s.* 6*d.*; £1.
5. Change to florins: 4*s.*; 8*s.*; 10*s.*; 16*s.*; £1.
6. Change to half-crowns: 5*s.*; 7*s.* 6*d.*; 10*s.*; 15*s.*; £1.
7. How much is needed to make each amount into a shilling: 7½*d.*; 8¼*d.*; 4¾*d.*; 9½*d.*; 11¼*d.*; 10¾*d.*?
8. What part of £1 is 10*s.*; 5*s.*; 15*s.*?
9. (*a*) 11*d.* × 6 = ; (*b*) 10*d.* × 8 = ; (*c*) 9*d.* × 7 = ; (*d*) 8*d.* × 8 = .
10. (*a*) 7*s.* 4*d.* ÷ 8; (*b*) 5*s.* 3*d.* ÷ 7; (*c*) 5*s.* 6*d.* ÷ 6; (*d*) 6*s.* 8*d.* ÷ 8.

Exercise 21

Money. The Four Rules.

	(a)	(b)	(c)	(d)
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
1.	6 3	7 5	9 9	8 $7\frac{1}{2}$
	+ 5 9	+ 8 7	+ 9 9	+ 3 10
2.	2 $6\frac{1}{2}$	3 $7\frac{1}{2}$	5 $0\frac{1}{4}$	3 $6\frac{1}{2}$
	+ 3 9	+ 2 $11\frac{1}{2}$	+ 3 $2\frac{1}{2}$	+ 2 $7\frac{1}{2}$
	+ 1 7	+ 3 $5\frac{1}{2}$	+ 4 $9\frac{3}{4}$	+ 9 $9\frac{1}{2}$
	+ 5 11	+ 4 9	+ 2 $1\frac{1}{2}$	+ 1 $10\frac{1}{2}$
3.	15 10	17 4	18 7	15 $5\frac{1}{2}$
	− 12 9	− 3 $2\frac{1}{2}$	− $9\frac{1}{2}$	− 3 $4\frac{3}{4}$
4.	13 $7\frac{1}{4}$	11 $9\frac{1}{4}$	15 $3\frac{1}{2}$	17 8
	− 9 $6\frac{1}{2}$	− 7 $10\frac{3}{4}$	− 2 $9\frac{1}{2}$	− 1 $11\frac{1}{2}$

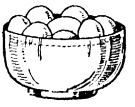
5.	(a)	(b)	(c)	(d)
	Farthings	*Farthings*	*Farthings*	*Farthings*
	5	9	8	5
	× 6	× 3	2	5
	30 = $7\frac{1}{2}$*d.*	_ = . . *d.*	_ = . . *d.*	_ = . . *d.*

	d.	*d.*	*d.*	*d.*
6.	$\frac{1}{2}$ × 3	$\frac{1}{4}$ × 6	$\frac{3}{4}$ × 8	$\frac{1}{2}$ × 6
7.	$1\frac{1}{2}$ × 3	$1\frac{1}{4}$ × 4	$1\frac{3}{4}$ × 2	$2\frac{1}{2}$ × 4
8.	$3\frac{1}{2}$ × 6	$4\frac{1}{4}$ × 7	$9\frac{1}{4}$ × 5	$2\frac{3}{4}$ × 6
	1 9			

	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
9.	1 $1\frac{1}{2}$	1 $2\frac{1}{4}$	1 $3\frac{3}{4}$	1 $7\frac{3}{4}$
	× 6	× 5	× 3	× 2
10.	1 $3\frac{1}{2}$	1 $6\frac{1}{4}$	1 $7\frac{3}{4}$	1 $4\frac{1}{4}$
	× 3	× 2	× 3	× 6
11.	7 | 15 9	8 | 17 4	6 | 19 6	5 | 16 8
12.	7 | 16 4	4 | 19 0	5 | 18 4	6 | 13 6
13.	3 | 8 0	6 | 15 0	8 | 19 4	7 | 18 8

MUTTON LEG 1s.3d. a lb.

BEST SALMON 1s.$1\frac{1}{2}$d. a tin



EGGS 2 for $2\frac{1}{2}$d.

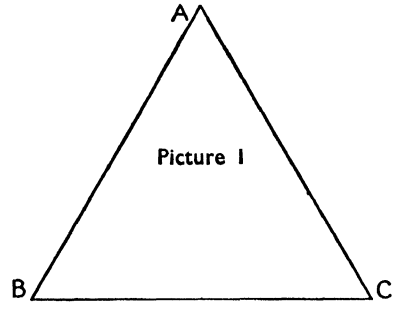
KIPPERS $2\frac{1}{2}$d. a pair

YARMOUTH BLOATERS $3\frac{1}{2}$d. a pair

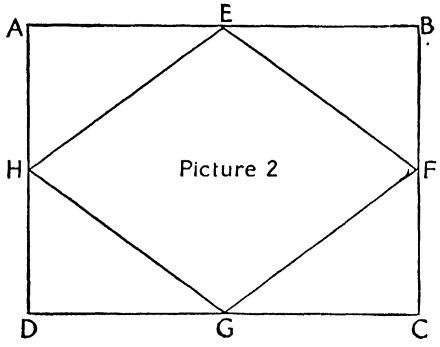
Exercise 22
Measuring and Drawing

1. Measure and then copy the following lines in your book:

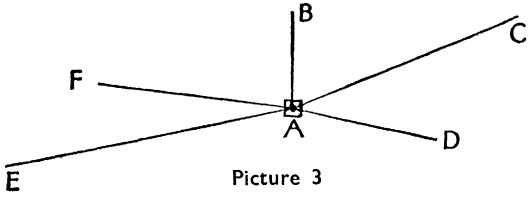
2. (*a*) How far is it round the triangle? (*b*) Draw a line as long as the distance round the triangle. (*c*) If every $\frac{1}{4}$ inch stands for 1 mile, how far is it from B to C in a straight line? from B to C going through A?



3. Look at picture 2. How long is AE; AH? How far is it round the oblong, picture 2?
4. Measure HE. How far is it round the figure EFGH?
5. How many triangles are there in picture 2?
6. Copy picture 2 on squared paper.



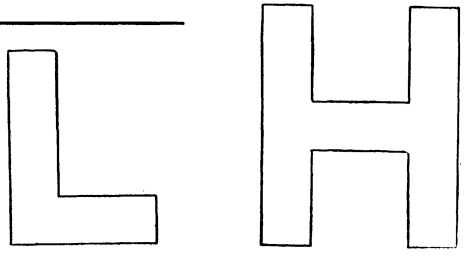
7. Draw lines of the following lengths: $2\frac{1}{4}$ inches, $1\frac{3}{4}$ inches, $3\frac{1}{2}$ inches, $2\frac{3}{4}$ inches.
8. Look at picture 3. A is a town and B, C, D, E, F are villages near to it. Every $\frac{1}{4}$ inch stands for 1 mile, in the picture. How far is each village from town A?
9. How far is it from F to D, through A? How far is it from C to B, through A?
10. If line A stands for 1 shilling, draw lines to stand for (*a*) 6*d.*; (*b*) 3*d.*; (*c*) 9*d.*



Picture 3

A

11. Copy the letters on the right on squared paper.



Exercise 23

Nine Times Table and Table Work

1. Turn back to p. 8. There you have a picture showing 12 rows of squares with 7 squares in each row. Now draw, on squared paper, a picture showing 12 rows of squares with 9 squares in a row.

2. How many squares altogether are there in your picture? 12 rows of nines = ? .

3. Count by nines from 9 to 99, and back again.

4. Count by twelves from 12 to 96, and back again.

5. $12 \times 9 = ?$; $9 \times 12 = ?$; $108 \div 9 = ?$; $108 \div 12 = ?$.

6. 7 rows of 9 squares = ? ; 4 rows of 9 squares = ? ; 8 rows of 9 squares = ?

	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)	(*f*)
7.	8×9	9×8	12×6	6×12	24×3	36×2
8.	$72 \div 9$	$72 \div 8$	$72 \div 6$	$72 \div 12$	$72 \div 3$	$72 \div 2$
9.	4×9	9×4	12×3	3×12	6×6	18×2
10.	$36 \div 9$	$36 \div 4$	$36 \div 3$	$36 \div 12$	$36 \div 6$	$36 \div 2$
11.	3×9	6×9	5×9	2×9	7×9	9×9
12.	$27 \div 9$	$54 \div 9$	$45 \div 9$	$18 \div 2$	$63 \div 9$	$81 \div 9$

13. Divide each of the following numbers by 9.
28, 37, 56, 73, 86, 100, 33, 47, 93.

	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)	(*f*)
14.	$7d. \times 9$	$5d. \times 9$	$9d. \times 9$	$10d. \times 9$	$4d. \times 9$	$3d. \times 9$
15.	$4s.\ 6d. \div 9$	$2s.\ 3d. \div 9$	$8s.\ 3d. \div 9$	$7s.\ 6d. \div 9$	$3s.\ 9d. \div 9$	$5s.\ 3d. \div 9$
16.	20×9	40×9	30×9	50×9	12×9	21×9
17.	14×9	15×9	16×9	17×9	18×9	19×9
18.	$9 \overline{)180}$	$9 \overline{)360}$	$9 \overline{)450}$	$9 \overline{)137}$	$9 \overline{)215}$	$9 \overline{)326}$
19.	$9 \overline{)363}$	$9 \overline{)117}$	$9 \overline{)411}$	$9 \overline{)500}$	$9 \overline{)819}$	$9 \overline{)999}$

20. 9 pairs of stockings at 1*s.* 11*d.* a pair. Change from £1.

21. 9 dozen and 4 eggs at 1*d.* each. Change from £1.

22. How many ounces are there in 9 lb.?

Exercise 24

Tests

	A	B
1.	Add 236, 53, 119, 18.	Add 227, 19, 86, 118.
2.	From 416 take 319.	From 713 take 426.
3.	57×8.	68×7.
4.	$7 \overline{)923}$	$9 \overline{)373}$
5.	Add 2*s.* $11\frac{1}{2}d.$, 1*s.* $9\frac{1}{2}d.$, 12*s.* $5\frac{1}{2}d.$	Add 1*s.* $9\frac{1}{4}d.$, 2*s.* $4\frac{1}{2}d.$, 9*s.* $7\frac{3}{4}d.$
6.	17*s.* $3\frac{1}{2}d.$ — 12*s.* $6\frac{3}{4}d.$	16*s.* $7\frac{1}{2}d.$ — 11*s.* $9\frac{1}{2}d.$
7.	2*s.* $4\frac{1}{4}d.$ × 7.	1*s.* $9\frac{1}{2}d.$ × 9.
8.	$6 \overline{)19s.\ 6d.}$	$8 \overline{)18s.\ 8d.}$
9.	What must be added to one hundred and thirty-seven to make eight hundred and thirteen?	How many times is 6 contained in nine hundred and thirty-six?
10.	Share £1 equally among 6 boys and 2 girls. How much does each get?	After spending 1*s.* 6*d.* and 3*s.* $4\frac{1}{2}d.$, I have 7*s.* $3\frac{1}{2}d.$ left. How much had I at first?

	C	D
1.	Add 327, 92, 84, 56.	Add 127, 35, 159, 116.
2.	Take 117 from 500.	Take 129 from 735.
3.	75×6.	68×5.
4.	$8 \overline{)752}$	$4 \overline{)993}$
5.	Add 1*s.* $7\frac{1}{2}d.$, 3*s.* $4\frac{1}{4}d.$, 8*s.* $9\frac{3}{4}d.$	Add 2*s.* $3\frac{1}{2}d.$, 3*s.* $5\frac{1}{4}d.$, 9*s.* $7\frac{3}{4}d.$
6.	15*s.* $6\frac{1}{4}d.$ — 9*s.* $5\frac{3}{4}d.$	16*s.* 0*d.* — 13*s.* $7\frac{1}{2}d.$
7.	1*s.* $8\frac{1}{2}d.$ × 9.	2*s.* $6\frac{1}{2}d.$ × 7.
8.	$7 \overline{)17s.\ 6d.}$	$6 \overline{)15s.\ 6d.}$
9.	How many sixpenny balls can I buy for 12*s.* 6*d.*?	What number multiplied by 9 gives eight hundred and thirty-seven?
10.	12 score — 10 dozen.	How many days in 14 weeks and 6 days?

Exercise 25

Revision

NUMBER

	(a)	(b)	(c)
1.	79 + 84 + 93 + 87	81 + 39 + 77 + 99	33 + 96 + 47 + 88
2.	124 + 125 + 121	125 + 126 + 127	39 + 216 + 158
3.	273 − 196	357 − 148	439 − 139
4.	137 − 98	423 − 196	500 − 250
5.	91 × 2	93 × 4	78 × 5
6.	65 × 7	47 × 8	39 × 9
7.	8 | 960	9 | 819	8 | 500
8.	7 | 351	6 | 427	9 | 937
9.	8 × 7	6 × 9	7 × 6
10.	5 × 6	8 × 8	11 × 5
11.	5 × 7	12 × 7	6 × 6
12.	72 ÷ 8	42 ÷ 6	35 ÷ 7
13.	54 ÷ 9	108 ÷ 12	72 ÷ 6
14.	27 ÷ 3	96 ÷ 12	49 ÷ 7
15.	(a) (8 × 8) + 6;	(b) (9 × 9) − 10.	
16.	(a) (9 × 7) + 31;	(b) (7 × 5) − 20.	

MONEY

	(a)	(b)	(c)
	s. d.	s. d.	s. d.
	3 9 + 4 6 + 5 2	2 $11\frac{1}{2}$ + 3 $6\frac{1}{2}$ + 4 $7\frac{1}{2}$	7 11 + 3 $9\frac{3}{4}$ + 2 $6\frac{1}{4}$
	4 $3\frac{1}{4}$ + 2 $7\frac{1}{4}$ + 3 $9\frac{3}{4}$	5 $2\frac{1}{2}$ + 1 $11\frac{1}{4}$ + 4 $6\frac{3}{4}$	1 $9\frac{3}{4}$ + 2 $7\frac{3}{4}$ + 8 $5\frac{3}{4}$
	12 $7\frac{1}{2}$ − 11 6	11 $9\frac{1}{2}$ − 3 $6\frac{3}{4}$	13 3 − 2 $11\frac{1}{2}$
	19 $0\frac{1}{2}$ − 7 $1\frac{1}{2}$	15 $6\frac{1}{4}$ − 12 $5\frac{3}{4}$	13 $1\frac{1}{4}$ − 7 $6\frac{1}{2}$
	1 $1\frac{1}{2}$ × 5	2 $3\frac{1}{2}$ × 4	3 $9\frac{1}{4}$ × 5
	2 $1\frac{1}{2}$ × 8	2 $4\frac{1}{4}$ × 7	1 $8\frac{1}{4}$ × 9
	7 | 15 2	8 | 11 4	9 | 13 6
	5 | 19 0	5 | 18 4	4 | 17 8
	52*d.* =	41*d.* =	78*d.* =
	66*d.* =	99*d.* =	104*d.* =
	75*d.* =	50*d.* =	59*d.* =
	3*s.* 9*d.* =	4*s.* 9*d.* =	6*s.* 6*d.* =
	7*s.* 6*d.* =	8*s.* 4*d.* =	9*s.* 3*d.* =
	5*s.* 7*d.* =	7*s.* 10*d.* =	4*s.* 11*d.* =
	(3*s.* 9*d.* × 3) + 2*s.* $3\frac{1}{2}$*d.*		
	(2*s.* 6*d.* × 7) − 11*s.* $9\frac{1}{2}$*d.*		

MISCELLANEOUS

	(a)	(b)
17.	59 inches = .. feet .. inches.	5 feet 11 inches = .. inches.
18.	$1\frac{1}{2}$ lb. = .. ounces.	90 minutes = .. hours.
19.	$2\frac{1}{2}$ hours = .. minutes.	154 days = .. weeks.
20.	17 yards = .. feet.	6 half-crowns = .. *s.*
21.	8 years = .. months.	39 halfpence = .. *s.* .. *d.*
22.	17 weeks = .. days.	56 threepences = .. *s.* .. *d.*

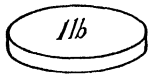
Exercise 26

Word Sums

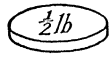
1. There are 8 rows of children with 32 children in a row. How many children are there?
2. How much is needed to make 7*s.* 11½*d.* into £1?
3. What must be added to 157 to make 413?
4. When playing darts a boy scores 37 with his first dart, and a *double* 34 with his second dart. How many must he score with his third dart to make 120 exactly?
5. A small doll is marked 2*s.* 11½*d.*; the next size is 1*s.* 1½*d.* more. How much must be paid for the two dolls?
6. A brick weighs 7 lb. Find the weight of 3 heaps with 9 bricks in each heap.
7. Take ¼ of 136 from 3 times 39.
8. How much is left out of £1 after buying a pair of boots for 8*s.* 11*d.* and a pair of stockings for 1*s.* 11½*d.*?
9. Mother bought 5 lb. of beef at 1*s.* 9*d.* per lb. She gave the butcher 2 half-crowns, 2 florins, and a sixpence. How much change should she receive?
10. John had 2*s.* 6*d.* and Mary had 6 times as much. How much had they together?
11. If I had another 125 marbles I should have 352 altogether. How many marbles have I?
12. There are 350 oranges in a box. 1 out of every 10 is bad. How many are good?
13. A motor-bus seats 22 people inside and 24 outside. How many people would be needed to fill 5 such buses?
14. The first number is 159. The second number is twice as big. Find their sum.
15. Potatoes are 7 lb. for 6*d.* How much would 91 lb. cost?
16. A rabbit costs 1*s.* 9*d.* What would 3 *couples* cost at that rate?
17. How many must be added to the sum of 39, 57, 96, to make 500?
18. Flour costs 4*s.* 2*d.* a score (20 lb.) and is sold at 3*d.* a lb. Find the gain on a score.
19. A train, due to arrive at 10 o'clock, was 3½ hours late. At what time did it arrive?
20. Sweets are bought at 1*s.* 8*d.* a lb. and sold at 7½*d.* a ¼ lb. How much is gained on 1 lb. of sweets?

Exercise 27

Pounds and Ounces



16 ounces



8 ounces

4 ounces

2 oz.

1 oz.

1. Which weights does the grocer use for weighing butter?
2. Which weights does the shop-keeper use for weighing sweets?
3. Which weights will be needed to weigh 3 oz. of sweets; 7 oz. of cake?
4. Tea is sold in 1-lb. packets, $\frac{1}{2}$-lb. packets, and $\frac{1}{4}$-lb. packets. What is the weight of tea in 7 half-lb. packets; in 9 quarter-lb. packets; in 2 one-lb. packets + 3 half-lb. packets + 5 quarter-lb. packets?
5. How many $\frac{1}{4}$-lb. packets can be made up from 7 lb. of tea; 4 lb. of tea; $5\frac{1}{2}$ lb. of tea; $3\frac{1}{4}$ lb. of tea?
6. How many $\frac{1}{2}$-lb. tins of sweets can be filled from 6 lb. of sweets; $3\frac{1}{2}$ lb. of sweets; $5\frac{1}{2}$ lb. of sweets?
7. How many 2-oz. packets of pepper can be made up from 1 lb.; $\frac{1}{2}$ lb.; $\frac{1}{4}$ lb.; 3 lb.; $5\frac{1}{2}$ lb.; $4\frac{3}{4}$ lb.?
8. How many ounces are there in $\frac{1}{2}$ lb.; in $\frac{1}{4}$ lb.; in $\frac{3}{4}$ lb.; in $1\frac{1}{2}$ lb.; in $2\frac{1}{4}$ lb.; in $3\frac{3}{4}$ lb.?
9. Sweets are $\frac{1}{2}d.$ an ounce. Find the cost of $\frac{1}{4}$ lb.; $\frac{1}{2}$ lb.; 1 lb.
10. Chocolates are $2d.$ an oz. How much per lb. is that?

11. Which weights does the grocer use for weighing sugar?
12. Which weights are used for weighing potatoes?
13. Choose from the pictures the weights needed to make 6 lb.; 5 lb.; $3\frac{1}{2}$ lb.; $5\frac{3}{4}$ lb.; 2 lb. 10 oz.; 1 lb. 12 oz.; 1 lb. 9 oz.
14. (*a*) 5 oz. + 6 oz. + 7 oz. = ? ; (*b*) 2 lb. − 1 lb. 3 oz. ? ; (*c*) 3 oz. × 8 = ? ; (*d*) 1 lb. 8 oz. ÷ 6.
15. Cheese is $8d.$ a lb. How much would 1 oz. cost; 1 lb. 3 oz.; 1 lb. 10 oz.?
16. Pepper is sold at $4\frac{1}{2}d.$ for 2 oz. How much is that per lb.?
17. Mother uses 2 lb. 7 oz. of flour out of 7 lb. How much is left?
18. What will $\frac{1}{2}$ lb. of sweets cost at $1\frac{1}{2}d.$ an oz.?

Exercise 28

Shopping

TO-DAY'S PRICES

	per lb.		*per lb.*
Fresh butter,	1*s.* 6*d.*	Bacon (back),	1*s.* 4*d.*
Danish butter,	1*s.* 5*d.*	Bacon (Empire),	1*s.* 2*d.*
Margarine,	8*d.*	Sugar,	$2\frac{1}{2}$*d.*
Tea,	2*s.* 8*d.*	Currants,	10*d.*
	per doz.	Flour,	$3\frac{1}{2}$*d.*
New-laid eggs,	1*s.* 8*d.*		*per packet*
Danish eggs,	1*s.* 6*d.*	Peas,	$3\frac{1}{2}$*d.*

How much would the following cost? (See list for prices.) Give the totals:

1. $\frac{1}{2}$ lb. of fresh butter.
   $\frac{1}{4}$ lb. of currants.
   4 lb. of sugar.
   $\frac{1}{4}$ lb. of tea.

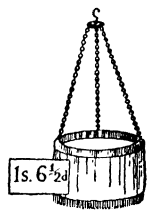
2. $\frac{1}{2}$ dozen Danish eggs.
   $\frac{1}{2}$ lb. of Danish butter.
   $\frac{1}{4}$ lb. of bacon (back).
   2 oz. of tea.

3. $1\frac{1}{2}$ lb. of currants.
   $1\frac{1}{4}$ lb. of margarine.
   3 packets of peas.

4. $2\frac{1}{2}$ dozen new-laid eggs.
   $\frac{3}{4}$ lb. of tea.
   $1\frac{1}{2}$ lb. of margarine.
   3 lb. of sugar.

5. 7 lb. of flour.
   2 lb. of currants.
   2 lb. of margarine.
   $\frac{1}{2}$ lb. of tea.

6. $1\frac{1}{2}$ lb. of bacon (Empire).
   $\frac{3}{4}$ lb. of tea.
   3 lb. of currants.
   $1\frac{1}{2}$ lb. Danish butter.



7. $\frac{3}{4}$ lb. of fresh butter.
   6 packets of peas.
   $1\frac{1}{4}$ lb. of tea.

8. $1\frac{1}{2}$ lb. of Danish butter.
   $\frac{1}{2}$ lb. of currants.
   3 lb. of flour.
   5 lb. of sugar.

Exercise 29

Number to 1000. The Four Rules

1. First read; then write in figures, the following numbers: five hundred and seven; seven hundred and ninety-two; nine hundred and nine; eight hundred and sixty-three.

2. Read the following numbers in 3 ways: 736, 891, 473. (If you need help, turn to Exercise 2, No. 10.)

	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)	(*f*)	(*g*)
3.	37	126	96	113	327	327	119
	+ 26	+ 231	+ 89	+ 217	+ 199	+ 119	+ 231
	+ 98	+ 119	+ 136	+ 301	+ 278	+ 206	+ 317
	+ 210	+ 337	+ 279	+ 239	+ 107	+ 315	+ 197
4.	217	702	330	39	286	397	176
	+ 46	+ 8	+ 301	+ 279	+ 520	+ 188	+ 367
	+ 470	+ 47	+ 53	+ 194	+ 21	+ 253	+ 209
	+ 126	+ 210	+ 123	+ 347	+ 99	+ 156	+ 157
5.	700	506	681	877	850	961	810
	− 236	− 307	− 342	− 379	− 531	− 399	− 309
6.	919	876	751	237	876	900	473
	− 233	− 199	− 178	− 19	− 793	− 111	− 386
7.	73	87	94	79	89	78	99
	× 9	× 7	× 6	× 8	× 4	× 9	× 8
8.	123	123	122	136	124	125	106
	× 2	× 3	× 4	× 3	× 4	× 5	× 5
9.	221	335	326	156	178	129	131
	× 4	× 2	× 3	× 2	× 5	× 6	× 7
10.	6 | 660	9 | 999	9 | 720	8 | 448	6 | 576	5 | 719	9 | 324
11.	4 | 821	7 | 856	8 | 990	5 | 720	3 | 957	4 | 802	7 | 520

12. Find the sum of all the odd numbers between 222 and 230.

13. What is the difference between $\frac{1}{4}$ of 992 and $\frac{1}{2}$ of 900?

14. Add: Two hundred and eleven, one hundred and fifteen, three hundred and seventy, and two hundred and seventeen.

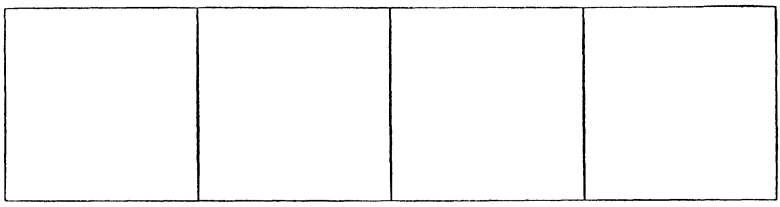
15. In the number 936, how many more does the 9 stand for than the 6?

16. Fill in the missing numbers: (*a*) 249, 255, 261, ?, ?,; (*b*) 917, 939, 961, ?.

Exercise 30

The Square Inch

1. Take a piece of coloured paper and cut out a square with sides 1 inch long. This square has a surface or AREA of 1 square inch.
2. Use your square inch to measure the area of the oblong shown. How many square inches are there in the oblong?



3. Draw an oblong making the long side 6 inches and the short side 1 inch. Then draw lines to show how many square inches there are in it. Test your answer by using your square inch.
4. Draw a square with sides 2 inches long. Then draw lines to show how many square inches there are in it. Check by using your square inch.
5. Draw an oblong 8 inches long and 2 inches wide. Find its area by drawing lines.
6. Cut out the square inches (oblong, sum 5) and arrange them in the form of a square. How long is the side of this square?
7. How many square inches are there in each row of your square, number 6? How many rows of square inches are there?
   4 rows of 4 square inches = 16 square inches.
8. Draw an oblong showing 2 rows of square inches with 3 square inches in each row.
   2 rows of 3 square inches = ? square inches.
9. An oblong with 4 rows of square inches with 2 square inches in each row has an area of ? square inches.
10. How many square inches will the following contain?
    (*a*) An oblong 4 inches by 3 inches.
    (*b*) A square with sides of 5 inches.
    (*c*) An oblong 5 inches by 4 inches.

Exercise 31

Money. The Four Rules. Division to Farthings

	(*a*)	(*b*)	(*c*)	(*d*)	(*e*)	(*f*)
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
1.	3 6	3 $11\frac{1}{2}$	5 10	4 $5\frac{1}{4}$	2 $5\frac{1}{2}$	9 $1\frac{3}{4}$
	+ 4 9	+ 2 $7\frac{1}{2}$	+ 2 $8\frac{3}{4}$	+ 3 $9\frac{1}{4}$	+ 11 $1\frac{1}{4}$	+ 1 $7\frac{3}{4}$
	+ 5 3	+ 5 $9\frac{1}{2}$	+ 3 $1\frac{1}{4}$	+ 4 $3\frac{3}{4}$	+ 6 $4\frac{3}{4}$	+ 3 $4\frac{3}{4}$
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
2.	17 $9\frac{1}{2}$	13 $8\frac{1}{4}$	14 6	19 $0\frac{1}{2}$	15 $9\frac{1}{4}$	17 $3\frac{1}{2}$
	− 12 $7\frac{1}{4}$	− 4 $7\frac{1}{2}$	− 12 $9\frac{1}{2}$	− 8 $11\frac{1}{2}$	− 11 $8\frac{3}{4}$	− 12 $6\frac{3}{4}$
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
3.	1 $6\frac{1}{2}$	2 $4\frac{1}{2}$	3 $4\frac{1}{4}$	2 $2\frac{1}{2}$	1 $10\frac{1}{4}$	2 $3\frac{3}{4}$
	× 5	× 4	× 5	× 8	× 9	× 7

DIVISION OF MONEY
(introducing farthings)

	d.	*d.*	*d.*	*d.*	*d.*	*d.*
4.	2) 5	4) 6	6) 9	2) 9	4) 9	4) 10
	$2\frac{1}{2}$					
5.	3) $4\frac{1}{2}$	5) $7\frac{1}{2}$	5) $6\frac{1}{4}$	3) $5\frac{1}{4}$	3) $8\frac{1}{4}$	3) $7\frac{1}{2}$
6.	3) $9\frac{3}{4}$	3) $6\frac{3}{4}$	5) $8\frac{3}{4}$	5) $13\frac{3}{4}$	7) $8\frac{3}{4}$	5) $11\frac{1}{4}$
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
7.	2) 2 3	3) 3 $4\frac{1}{2}$	4) 4 5	5) 5 $11\frac{1}{4}$	5) 10 $6\frac{1}{4}$	6) 12 9
	1 $1\frac{1}{2}$					
8.	3) 6 $4\frac{1}{2}$	4) 8 9	5) 5 $7\frac{1}{2}$	6) 6 9	7) 7 $10\frac{1}{2}$	8) 8 10
9.	3) 10 $4\frac{1}{2}$	3) 11 $5\frac{1}{4}$	5) 7 $2\frac{1}{4}$	5) 8 $6\frac{1}{2}$	9) 13 $8\frac{1}{4}$	7) 15 $10\frac{3}{4}$
10.	9) 2 3	6) 8 6	9) 5 $7\frac{1}{2}$	9) 11 $5\frac{1}{4}$	9) 13 6	9) 9 $6\frac{3}{4}$
11.	10) 15 0	8) 15 0	8) 3 0	7) 6 5	3) 4 $7\frac{1}{2}$	5) 6 $0\frac{1}{2}$
12.	7) 16 11	6) 15 9	5) 17 $8\frac{1}{2}$	4) 11 5	6) 13 9	4) 15 2
13.	4) 9 6	3) 12 $10\frac{1}{2}$	6) 4 9	7) 15 $3\frac{3}{4}$	8) 18 4	3) 18 $8\frac{1}{4}$
14.	4) 19 2	4) 18 1	8) 19 10	5) 8 $1\frac{1}{2}$	7) 14 $3\frac{1}{2}$	8) 11 6

Exercise 32

The Eleven Times Table and Table Work

1. Write the following numbers in table form. Number 1 has been done for you:
   66, 99, 121, 55, 22, 77, 44, 110.
   Example: $66 = 6 \times 11$.
2. Multiply each of the following numbers by 11: 7, 70, 17, 9, 90, 19, 13, 23, 37, 46.
3. Divide each of the following numbers by 11: 110, 330, 550, 770, 220, 176, 198, 451, 209.
4. Carry on with the eleven times table from $12 \times 11 = 132$ to $16 \times 11 = ?$.

	(*a*)	(*b*)	(*c*)
5.	$11 \times ? = 143$	$11 \times ? = 209$	$154 \div 11 =$
6.	$7 \times ? = 77$	$? \times 11 = 132$	$121 \div 11 =$
7.	$5d. \times 11 =$	$7d. \times 11 =$	$9d. \times 11 =$
8.	$8d. \times 11 =$	$11d. \times 11 =$	$6d. \times 11 =$
9.	$3s.\ 8d. \div 11 =$	$7s.\ 4d. \div 11 =$	$5s.\ 6d. \div 11 =$
10.	$9s.\ 2d. \div 11 =$	$8s.\ 3d. \div 11 =$	$4s.\ 7d. \div 11 =$
11.	$3\frac{1}{2}d. \times 11 =$	$4\frac{1}{2}d. \times 11 =$	$5\frac{1}{2}d. \times 11 =$
12.	$6\frac{1}{2}d. \times 11 =$	$7\frac{1}{2}d. \times 11 =$	$8\frac{1}{2}d. \times 11 =$

The following are division sums. Work them. (Numbers 13 and 14.)

13. $\frac{165}{11}$; $\frac{253}{11}$; $\frac{319}{11}$; $\frac{297}{11}$; $\frac{209}{11}$; $\frac{420}{11}$.

14. $\frac{6s.\ 5d.}{11}$; $\frac{10s.\ 1d.}{11}$; $\frac{2s.\ 9d.}{11}$; $\frac{5\frac{1}{2}d.}{11}$; $\frac{8\frac{1}{4}d.}{11}$; $\frac{3s.\ 5\frac{1}{4}d.}{11}$.

15. How many square inches will an oblong 22 inches long and 11 inches wide cover?
16. How much change shall I get from 2*s.* after buying 11 three-half-penny stamps?
17. Share $3s.\ 2\frac{1}{2}d.$ equally among 11 girls.
18. A man works 11 hours a day; how many hours does he work in $5\frac{1}{2}$ days?
19. Buy 11 pints of milk at $3\frac{1}{2}d.$ a pint. Find the change from 4*s.*
20. (*a*) How many minutes are there in 11 hours? (*b*) How many ounces are there in 11 lb.?
21. (*a*) Buy 11 yards at $6\frac{3}{4}d.$ a yard; (*b*) Find the change from 10*s.*

Exercise 33

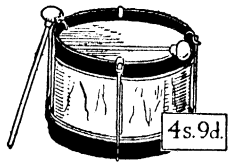
Money and Number. The Four Rules

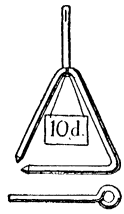
A. ADDITION

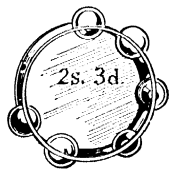
1. 17 + 8.
2. 56 + 34.
3. 106 + 37 + 109.
4. 324 + 127 + 236 + 129.
5. $1\frac{1}{2}d.$ + $2\frac{3}{4}d.$ + $4\frac{1}{4}d.$ + $2\frac{1}{2}d.$
6. 3*s.* 6*d.* + 2*s.* 9*d.* + 4*s.* 5*d.* + 11*d.*
7. $9\frac{3}{4}d.$ + $4\frac{1}{2}d.$ + $7\frac{3}{4}d.$ + $2\frac{3}{4}d.$
8. 2*s.* $0\frac{1}{2}d.$ + 3*s.* $1\frac{1}{2}d.$ + 4*s.* $7\frac{3}{4}d.$ + 5*s.* $6\frac{3}{4}d.$
9. 7 inches + 9 inches + 20 inches.
10. 12 oz. + 13 oz. + 4 oz.

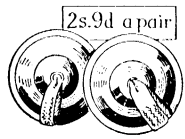
C. MULTIPLICATION

1. 27 × 3.
2. 49 × 5.
3. 123 × 4.
4. 156 × 6.
5. $3\frac{1}{2}d.$ × 11.
6. 1*s.* 9*d.* × 8.
7. 2*s.* $1\frac{1}{4}d.$ × 9.
8. 1*s.* $11\frac{3}{4}d.$ × 10.
9. 7 ins. × 9.
10. 4 oz. × 7.









B. SUBTRACTION

16 — 9.
73 — 23.
312 — 208.
716 — 399.
$8\frac{1}{2}d.$ — $5\frac{1}{4}d.$
7*s.* $6\frac{1}{2}d.$ — 3*s.* $10\frac{1}{2}d.$

15*s.* 9*d.* — 13*s.* $6\frac{1}{4}d.$

17*s.* $3\frac{1}{2}d.$ — 11*s.* $4\frac{3}{4}d.$

2 feet 3 inches — 9 inches.
2 lb. — 1 lb. 7 oz.

D. DIVISION

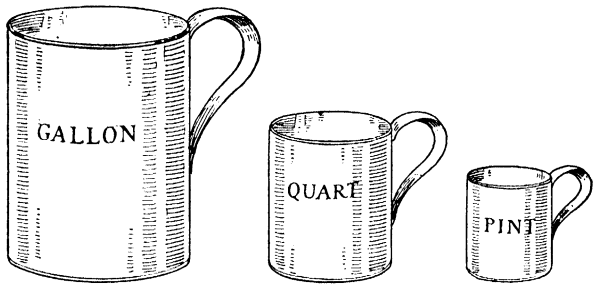
52 ÷ 4.
97 ÷ 5.
126 ÷ 7.
856 ÷ 6.
$3\frac{3}{4}d.$ ÷ 5.
3*s.* 9*d.* ÷ 9.
7*s.* $7\frac{1}{2}d.$ ÷ 6.
17*s.* 10*d.* ÷ 8.
4 ft. 6 in. ÷ 9.
2 lb. 8 oz. ÷ 10.

E

1. A dozen boxes of matches cost $9\frac{1}{2}d.$ What must I pay for 9 dozen boxes?
2. John is paid at the rate of $3\frac{1}{2}d.$ an hour. How much will he earn in 7 hours?
3. How many times is 7*d.* contained in 5*s.* 3*d.*?
4. Find the total of: 3*s.* $7\frac{1}{2}d.$, 1*s.* $9\frac{1}{4}d.$, $11\frac{1}{2}d.$, 1*s.* $7\frac{1}{2}d.$, 2*s.* $9\frac{3}{4}d.$ How much more is needed to make £1?

Exercise 34

Gallons, Quarts, and Pints



2 pints make 1 quart; 4 quarts make 1 gallon

1. Name some things which are sold by (*a*) the pint; (*b*) the quart; (*c*) the gallon.
2. How many pints are there in 1 gallon; in 2 gallons; in $3\frac{1}{2}$ gallons; in $2\frac{1}{4}$ gallons?
3. How many quarts are there in 1 gallon; in 4 gallons; in $3\frac{1}{2}$ gallons; in $2\frac{1}{4}$ gallons?
4. How many pints are there in 1 quart 1 pint; in 1 gallon 1 pint; in 1 gallon 1 quart?
5. How many gallons are there in 20 quarts; in 14 quarts; in 24 pints; in 36 pints?
6. A boy uses 1 pint of water out of a gallon. How much is left?
7. Mother takes 3 pints of milk daily. How many quarts and pints is that for 1 week?
8. Milk is $3\frac{1}{2}d.$ a pint. How much is that for (*a*) 1 quart; (*b*) 1 gallon?
9. Vinegar is $3d.$ a pint. How much will 2 gallons cost?
10. Oil is $5\frac{1}{2}d.$ for $\frac{1}{2}$ pint. How much is that (*a*) per quart; (*b*) per gallon?
11. Cream is sold at $2s.$ $8d.$ per pint. How much is that for $\frac{1}{4}$ pint?

SHOPPING

12. Buy $2\frac{1}{2}$ pints of cream at $3s.$ a pint. Find the change from $10s.$
13. Buy $\frac{1}{2}$ gallon of vinegar at $3d.$ a pint. Find the change from $2s.$ $6d.$
14. Buy $1\frac{1}{2}$ pints of oil at $2s.$ a quart. Find the change from $2s.$
15. Buy 5 gallons of paraffin oil at $2\frac{1}{2}d.$ a quart. Find the change from $10s.$
16. Buy $1\frac{1}{2}$ quarts of spirit at $10d.$ a pint. Find the change from $4s.$

Exercise 35

The Twelves Table and Table Work

1. Draw, on squared paper, a picture showing 12 rows of squares with 12 squares in a row.
2. How many squares altogether are there in your picture? 12 rows of twelves = ? .
3. Count by twelves from 12 to 144, and back again.
4. 6 rows of 12 squares = ? ; 9 rows of 12 squares = ? ; 11 rows of 12 squares = ? .
5. Write the following numbers in table form. Number 1 has been done for you. Set yours out as shown. 48, 108, 72, 96, 36, 60, 120, 24, 144.

   Example: $48 = 4 \times 12$.
6. Carry on with the 12 times table from $12 \times 12 = 144$ to $16 \times 12 = ?$.
7. How near can you get to the following numbers, using the twelves table: 27, 38, 50, 73, 59?

	(*a*)	(*b*)	(*c*)
8.	7×12	9×12	5×12
9.	$8 \times ? = 96$	$9 \times ? = 108$	$? \times 12 = 120$
10.	$144 \div 12 = ?$	$72 \div 12 = ?$	$132 \div 12 = ?$

11. Multiply each of the following numbers by 12: 7, 70, 3, 30, 8, 80, 5, 50, 39, 37.
12. Divide each of the following numbers by 12: 120, 72, 60, 36, 132, 96, 301, 427.
13. The following are division sums. Work them.

$$\frac{192}{12}; \quad \frac{264}{12}; \quad \frac{396}{12}; \quad \frac{996}{12}; \quad \frac{324}{12}; \quad \frac{500}{12}.$$

	(*a*)	(*b*)	(*c*)
14.	$1\frac{1}{2}d. \times 12$	$1\frac{1}{4}d. \times 12$	$2\frac{3}{4}d. \times 12$
15.	$3\frac{1}{2}d. \times 12$	$3\frac{1}{4}d. \times 12$	$5\frac{3}{4}d. \times 12$
16.	$5s.\ 0d. \div 12$	$10s.\ 0d. \div 12$	$6s.\ 6d. \div 12$
17.	$8s.\ 3d. \div 12$	$9s.\ 9d. \div 12$	$7s.\ 6d. \div 12$

18. How many square inches are there in an oblong 27 inches long and 12 inches wide?
19. How many minutes are there in (*a*) 12 hours; (*b*) $12\frac{1}{4}$ hours?
20. Buy 12 pints of milk at $3\frac{1}{2}d.$ a pint. How much change should you get from $4s.\ 6d.$?
21. How many ounces are there in 12 lb.?

Exercise 36

The Twelves Table in Use

Change to pence:

	(*a*)		(*b*)		(*c*)		(*d*)		(*e*)	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
1.	4	1	3	11	1	9	8	7	6	8
2.	7	3	10	2	9	7	3	6	6	10
3.	11	11	12	0	10	6	9	9	12	9
4.	2	9	3	5	8	9	4	11	5	6
5.	7	0	6	11	7	7	5	10	8	11

Change to inches:

	ft.	*in.*	*ft.*	*in.*	*ft.*	*in.*	*ft.*	*in.*	*ft.*	*in.*
6.	1	9	2	7	3	11	4	5	7	6
7.	3	5	4	9	5	6	6	5	7	9
8.	9	4	10	3	11	9	12	1	4	8
9.	4	6	5	9	6	11	7	4	8	5

Change to shillings and pence:

10.	120*d.*	117*d.*	125*d.*	73*d.*	89*d.*
11.	75*d.*	124*d.*	89*d.*	59*d.*	81*d.*
12.	49*d.*	131*d.*	45*d.*	71*d.*	112*d.*

Change to months:

	(*a*)		(*b*)		(*c*)	
	years	*months*	*years*	*months*	*years*	*months*
13.	1	7	2	9	3	5
14.	4	3	5	6	7	10
15.	2	11	4	9	5	5

Find the cost of a dozen, if 1 costs:

16. 1½*d.*; 2*d.*; 3½*d.*; 4¼*d.*; 6½*d.*; 7¼*d.*; 9½*d.*
17. 3*d.*; 8½*d.*; 5¾*d.*; 5*d.*; 4¾*d.*; 8¼*d.*; 10¾*d.*

Find the cost of 1, if a dozen cost:

18. 3*s.*; 1*s.*; 11*s.*; 5*s.*; 9*s.*; 12*s.*; 8*s.*
19. 2*s.* 6*d.*; 3*s.* 3*d.*; 4*s.* 6*d.*; 5*s.* 9*d.*; 3*s.* 6*d.*; 7*s.* 3*d.*
20. How many pens are there in 12 dozen; 2 gross; 15 dozen; 4 gross?
21. (*a*) Find the cost of a gross of pencils at 1*d.* each; (*b*) the cost of ¼ gross at 3*d.* each.

Exercise 37

Money to £5. (Addition)

1. How many 10*s.* notes can I get for 20*s.*; 30*s.*; 70*s.*; 50*s.*; 40*s.*; 90*s.*; 100*s.*?

Change to pounds and shillings:

2. 20*s.*; 70*s.*; 90*s.*; 40*s.*; 100*s.*; 50*s.*; 30*s.*; 60*s.*

3. 26*s.*; 45*s.*; 53*s.*; 37*s.*; 85*s.*; 49*s.*; 96*s.*; 33*s.*

Change to shillings:

4. £2; £5; £3; £4; £2. 5*s.*; £3. 12*s.*; £4. 19*s.*

5. £1. 15*s.*; £2. 7*s.*; £3. 3*s.*; £4. 12*s.*; £2. 13*s.*; £3. 7*s.*; £2. 18*s.*

	(*a*)			(*b*)			(*c*)			(*d*)		
	£	*shillings*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
6.		13	0		15	0		16	0		10	0
	+	14	0	+	16	0	+	17	0	+	12	0
	+	15	0	+	17	0	+	18	0	+	17	0
	2	2	0									
7.		17	3		16	4		13	3		18	9
	+	13	5	+	19	7	+	17	7	+	17	2
8.		14	9		15	7		19	8		17	8
	+	13	3	+	17	5	+	13	5	+	15	10

9. How much money have I altogether if I have a £1 note, three 10*s.* notes, and 6 half-crowns?

10. How much money is there altogether in: *Two* £1 notes, 2 half-crowns, 4 florins, and 1 shilling?

	(*a*)			(*b*)			(*c*)			(*d*)		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
11.		16	3		17	5		15	3		19	11
	+	17	6	+	14	8	+	6	8	+	4	7
	+	15	9	+	13	9	+	17	10	+	15	5
12.	1	2	3	1	3	1	2	13	5	1	12	6
	+	13	4		14	6	+	14	2	+ 1	13	3
	+	15	2	+	15	4	+	13	3	+	15	2
13.	1	12	3	1	13	4	2	13	9	3	13	9
	+ 1	13	9	+ 1	15	8	+	15	7	+	7	6
14.	1	12	7	1	7	6		13	5	1	12	9
	+	13	9	+	13	9	+ 1	2	6	+	13	8
	+	14	6	+ 1	12	5	+ 1	17	9	+ 1	17	4

Exercise 38
Money. The Four Rules

ADDITION

	(a) £ s. d.	(b) £ s. d.	(c) £ s. d.	(d) £ s. d.
1.	1 11 4	1 11 6	13 9	3 $11\frac{1}{4}$
	+ 13 5	1 17 9	2 11 5	5 $9\frac{1}{2}$
	+ 1 8 9	19 11	14 10	6 $8\frac{3}{4}$

SUBTRACTION

	£ s. d.	£ s. d.	£ s. d.	£ s. d.
2.	11 $9\frac{1}{4}$	8 $2\frac{1}{2}$	10 0	13 $4\frac{1}{4}$
	− 7 $10\frac{1}{2}$	2 $3\frac{3}{4}$	7 $8\frac{1}{4}$	12 $5\frac{3}{4}$
3.	1 4 7	1 5 8	1 7 10	14 $7\frac{1}{2}$
	− 18 5	13 9	15 8	9 $8\frac{3}{4}$
4.	1 7 0	1 10 3	1 13 4	13 $11\frac{1}{4}$
	− 13 2	13 4	14 8	9 $10\frac{1}{2}$
5.	1 17 8	1 16 4	1 15 9	12 7
	− 18 9	19 5	18 11	3 $9\frac{1}{2}$
6.	2 13 3	2 15 2	3 12 4	17 $3\frac{1}{4}$
	− 15 4	17 8	13 7	9 $4\frac{3}{4}$

MULTIPLICATION

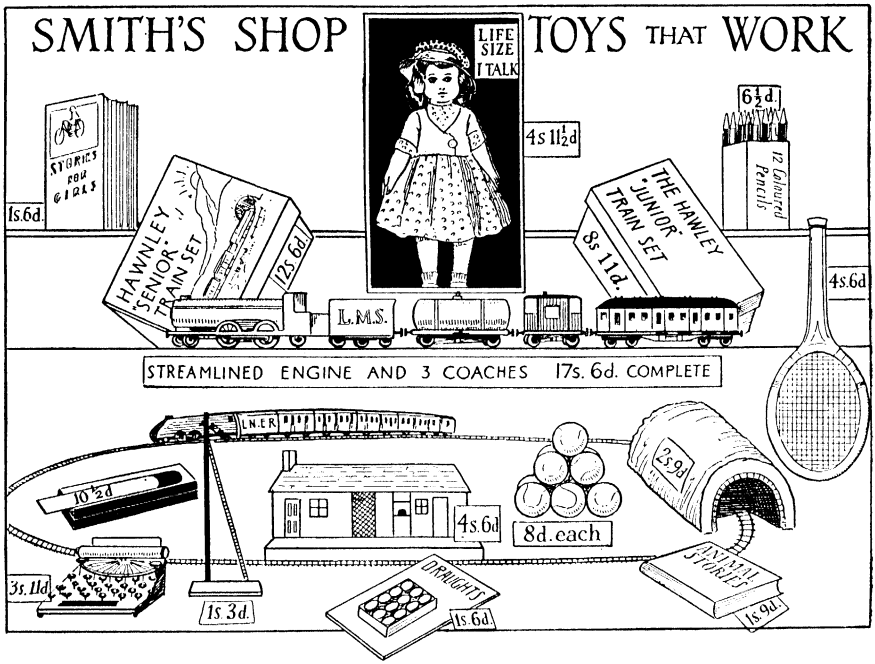
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
7.	4 9	3 6	2 8	2 $10\frac{1}{4}$
	× 6	× 7	× 8	× 9
8.	4 $0\frac{1}{2}$	6 $5\frac{1}{2}$	2 $3\frac{1}{2}$	2 $3\frac{3}{4}$
	× 6	× 4	× 11	× 10
9.	11 9	13 7	15 $5\frac{1}{2}$	12 $6\frac{1}{2}$
	× 3	× 2	× 3	× 4
10.	14 $3\frac{1}{2}$	15 $4\frac{1}{4}$	12 $8\frac{1}{4}$	5 $8\frac{3}{4}$
	× 7	× 6	× 7	× 12
11.	1 2 $3\frac{1}{2}$	1 2 $5\frac{1}{4}$	1 3 $7\frac{1}{2}$	6 $7\frac{1}{2}$
	× 3	× 4	× 4	× 11

DIVISION

	£ s. d.	£ s. d.	£ s. d.	s. d.
12.	3 | 3 4 6	2 | 4 7 4	3 | 3 5 3	9 | 19 $8\frac{1}{4}$
13.	2 | 4 17 10	3 | 3 15 9	4 | 4 13 8	8 | 17 6

Exercise 39

The Toy Shop



How much should be paid for:

1. A box of coloured pencils + a pencil box?
2. A typewriter + a game (draughts)?
3. A signal + a tunnel + a station?
4. 3 books (animal stories)? 5. 5 tennis balls? 6. 2 dolls?

How much *more* must be paid for

7. The doll than the tennis racquet?
8. The typewriter than the pencil box?
9. The station than the tunnel?
10. The senior train-set than the junior?
11. If the streamlined engine costs 7*s.* 6*d.*, how much would that be for (*a*) the 3 coaches; (*b*) each coach, if they were all of equal value?
12. How much change should I receive from £1 after paying for (*a*) the senior train set; (*b*) the junior?
13. How much should I have left out of £5 after paying for the streamlined engine and 3 coaches + 2 signals + a station + 2 tunnels?
14. Make up a story sum about spending £1 at the toy shop.
15. Spend £1. 10*s.* at the toy shop.

Exercise 40

Problems

1. A box contained a gross of pen-nibs. $3\frac{1}{2}$ dozen were given out on Monday to Class I, and 4 dozen were given out to Class II on Tuesday. The remainder were given out to Class III on Wednesday. How many were given out to Class III?

2. A milkman had $9\frac{1}{2}$ gallons of milk in a can. In one street he served 8 customers with a quart each, and in another he served 56 customers with a pint each. What quantity of milk was then left?

3. 6 chairs and a stool cost £5. 2*s*. 6*d*. The stool cost 2*s*. 6*d*. How much did each chair cost, if each chair cost the same?

4. A 2-foot ruler was broken into 2 pieces, one of which was 8 inches longer than the other. How long was each part?

5. Exercise books are on sale at 2 for $3\frac{1}{2}d$. How much must be paid for 2 dozen?

6. 4 gross of eggs were packed in boxes of 12. How many boxes were needed?

7. I buy 7 boxes of notepaper at $9\frac{1}{2}d$. a box and pay for them with a 10*s*. note. How much change do I receive?

8. The single fare for a bus journey is $9\frac{1}{2}d$., and the return fare is double this. How much should 9 return fares cost?

9. A bag of silver contains £5. $\frac{1}{2}$ of the money is in half-crowns and the remainder in shillings. How many of each kind of coin did the bag contain?

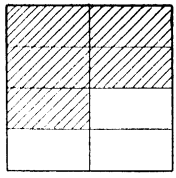
10. What must be added to 547 to make a number that will divide exactly (that is, without remainder) by 9?

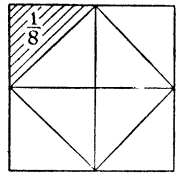
11. The train fare between two towns is 3*s*. 6*d*. for a return journey. The return journey by bus costs 4*s*. How much is saved in 11 days, if the train journey is taken each day?

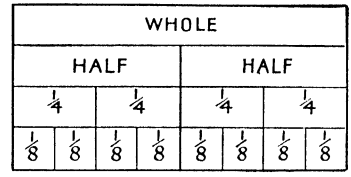
12. One farmer had 237 sheep and another had twice as many. How many sheep had they together?

Exercise 41

Eighths







1. Into how many equal parts has the first picture been divided? What is each part called? How many of these parts make a whole?

2. If I cut away the shaded part of the first picture, what part is left? $1 - \frac{5}{8} = ?$.

3. (*a*) $1 - \frac{1}{8} = ?$; (*b*) $1 - \frac{7}{8} = ?$; (*c*) $1 - \frac{3}{8} = ?$.

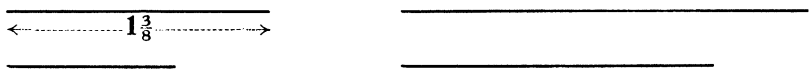
4. Draw on squared paper a square with sides eight squares long.
   (*a*) Shade $\frac{1}{8}$ red. $\frac{1}{8}$ of 64 squares = ? squares.
   (*b*) Shade $\frac{3}{8}$ blue. $\frac{3}{8}$ of 64 squares = ? squares.

5. Find (*a*) $\frac{1}{8}$ of 32; (*b*) $\frac{3}{8}$ of 32; (*c*) $\frac{5}{8}$ of 32; (*d*) $\frac{7}{8}$ of 32.

6. Find (*a*) $\frac{1}{8}$ of 16*s.* 8*d.*; (*b*) $\frac{3}{8}$ of 16*s.* 8*d.*; (*c*) $\frac{5}{8}$ of 16*s.* 8*d.*

7. Find $\frac{1}{8}$ of £1. Now find $\frac{5}{8}$ of £1.

8. Measure these lines and write the length of each below the line. Number 1 has been done for you. (Use eighths.)



9. How many eighths are there in (*a*) $\frac{1}{2}$ of picture 2; (*b*) $\frac{1}{4}$ of picture 2?
   $\frac{1}{2} = \frac{4}{8}$; $\frac{1}{4} = \frac{2}{8}$; $\frac{3}{4} = \frac{?}{8}$.

10. (*a*) $\frac{1}{2}$ inch + $\frac{1}{8}$ inch = ? ; (*b*) $\frac{1}{4}$ inch + $\frac{3}{8}$ inch = ? ;
    (*c*) $\frac{3}{4}$ inch − $\frac{1}{8}$ inch = ? .

11. (*a*) $\frac{7}{8}$ inch − $\frac{1}{2}$ inch = ? ; (*b*) $\frac{1}{2}$ inch + $\frac{1}{4}$ inch = ? ;
    (*c*) $\frac{1}{2}$ inch − $\frac{3}{8}$ inch = ? .

12. Use your ruler, or picture 3, when working these sums:
    (*a*) $\frac{1}{4} + \frac{1}{8}$; (*b*) $\frac{1}{2} + \frac{3}{8}$; (*c*) $\frac{3}{4} - \frac{3}{8}$; (*d*) $\frac{1}{2} - \frac{1}{8}$; $\frac{1}{8} + \frac{7}{8}$.

13. Find (*a*) $\frac{1}{4}$ of 6*s.* 0*d.*; (*b*) $\frac{3}{4}$ of 6*s.* 0*d.*; (*c*) $\frac{1}{8}$ of 1*s.* 0*d.*; (*d*) $\frac{7}{8}$ of 1*s.* 0*d.*

Exercise 42

Money. The Four Rules

ADDITION

	(a) £ s. d.	(b) £ s. d.	(c) £ s. d.	(d) £ s. d.	(e) £ s. d.
1.	2 13 9	15 $10\frac{1}{2}$	14 $8\frac{1}{4}$	14 $5\frac{3}{4}$	18 $2\frac{1}{2}$
	1 11 7	9 $8\frac{1}{4}$	19 $5\frac{1}{2}$	13 $6\frac{3}{4}$	17 $5\frac{1}{2}$
	3 15 8	11 $7\frac{1}{2}$	17 $6\frac{1}{2}$	19 $7\frac{3}{4}$	19 $11\frac{1}{2}$
2.	3 11 9	4 12 $8\frac{1}{2}$	3 12 6	1 13 $9\frac{1}{4}$	2 17 $9\frac{1}{2}$
	15 6	1 17 $7\frac{1}{2}$	2 19 $3\frac{1}{4}$	2 11 $7\frac{1}{2}$	1 16 $4\frac{3}{4}$
	1 17 $11\frac{1}{2}$	2 13 9	2 11 $7\frac{3}{4}$	2 15 $8\frac{3}{4}$	2 9 $8\frac{1}{2}$

SUBTRACTION

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
3.	2 15 7	3 12 9	4 7 $6\frac{1}{2}$	3 12 $4\frac{3}{4}$	4 9 $5\frac{1}{2}$
	17 9	13 10	13 9	17 $6\frac{1}{2}$	17 $7\frac{1}{4}$
4.	3 12 3	4 15 7	2 7 9	4 3 8	3 17 6
	13 $4\frac{1}{2}$	16 $8\frac{1}{4}$	17 $11\frac{3}{4}$	15 $10\frac{1}{2}$	19 $10\frac{3}{4}$
5.	2 11 $6\frac{1}{4}$	3 9 $5\frac{1}{2}$	3 12 $4\frac{1}{4}$	2 12 $9\frac{1}{4}$	4 11 $10\frac{1}{2}$
	13 $9\frac{1}{2}$	17 $6\frac{3}{4}$	14 $3\frac{1}{2}$	1 13 $8\frac{1}{2}$	1 13 $7\frac{3}{4}$

MULTIPLICATION

	£ s. d. ×	£ s. d. ×	£ s. d. ×	£ s. d. ×	£ s. d. ×
6.	1 1 $4\frac{1}{4}$ × 4	1 9 $7\frac{3}{4}$ × 2	1 1 $10\frac{1}{2}$ × 9	1 1 $4\frac{1}{4}$ × 8	6 $4\frac{1}{2}$ × 12
7.	1 7 $2\frac{1}{2}$ × 3	1 10 $2\frac{1}{4}$ × 2	17 $7\frac{1}{2}$ × 4	9 $7\frac{1}{4}$ × 10	7 $6\frac{3}{4}$ × 11
8.	19 $5\frac{1}{4}$ × 4	17 $8\frac{1}{2}$ × 3	15 $3\frac{3}{4}$ × 6	12 $4\frac{1}{2}$ × 7	9 $4\frac{3}{4}$ × 9

DIVISION

	s. d.	s. d.	s. d.	s. d.	s. d.
9.	5 | 13 $6\frac{1}{2}$	7 | 7 $8\frac{3}{4}$	11 | 19 $8\frac{1}{2}$	9 | 15 $2\frac{1}{4}$	10 | 14 7
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
10.	6 | 1 18 0	4 | 5 0 0	5 | 6 10 0	7 | 7 16 11	9 | 10 $8\frac{1}{4}$
11.	5 | 7 10 0	6 | 8 8 0	9 | 9 19 6	7 | 2 6 1	12 | 16 6
12.	5 | 5 18 9	3 | 6 14 6	3 | 9 14 6	8 | 9 0 0	11 | 13 $0\frac{3}{4}$
13.	7 | 8 18 6	9 | 5 3 6	8 | 4 16 8	6 | 4 16 0	7 | 17 $7\frac{3}{4}$

Exercise 43

Money and Number. The Four Rules; Table Work

A. ADDITION

1. 35 + 47.
2. 73 + 56 + 92.
3. 57 + 109 + 46 + 34.
4. 112 + 337 + 355 + 119.
5. 13*s.* 7*d.* + 2*s.* 11½*d.*
6. 9¾*d.* + 8¾*d.* + 10½*d.* + 11¼*d.*
7. 13*s.* 7½*d.* + 4*s.* 5¾*d.* + 9*s.* 11*d.* + 5*s.* 3¼*d.*
8. £3. 11*s.* 7*d.* + £2. 5*s.* 7¾*d.* + £3. 12*s.* 9¾*d.*

B. SUBTRACTION

207 − 9.
193 − 27.
301 − 202.
913 − 727.
7*s.* 6½*d.* − 3*s.* 9*d.*
17*s.* 9*d.* − 14*s.* 10¼*d.*
£1. 18*s.* 3½*d.* − 13*s.* 11¾*d.*
£7. 12*s.* 9*d.* − £3. 13*s.* 10½*d.*

C. MULTIPLICATION

1. 27 × 6.
2. 69 × 12.
3. 113 × 7.
4. 196 × 5.
5. 1*s.* 7¼*d.* × 9.
6. 11*s.* 6½*d.* × 10.
7. £1. 2*s.* 4¾*d.* × 8.
8. £1. 11*s.* 4¼*d.* × 6.

D. DIVISION

133 ÷ 7.
321 ÷ 9.
725 ÷ 12.
856 ÷ 8.
4*s.* 6*d.* ÷ 9.
13*s.* 7½*d.* ÷ 6.
£2. 4*s.* 0*d.* ÷ 12.
£8. 11*s.* 6*d.* ÷ 7.

MONEY

E

1. 100*d.* = .. *s.* .. *d.*
2. 83*d.* = .. *s.* .. *d.*
3. 66*d.* = .. *s.* .. *d.*
4. 71*d.* = .. *s.* .. *d.*
5. 11*d.* × 8 = .. *s.* .. *d.*
6. 10*d.* × 9 = .. *s.* .. *d.*
7. 8*d.* × 8 = .. *s.* .. *d.*
8. 9*d.* × 6 = .. *s.* .. *d.*

F

2*s.* 9*d.* = .. *d.*
8*s.* 8*d.* = .. *d.*
5*s.* 9*d.* = .. *d.*
6*s.* 7*d.* = .. *d.*
3*s.* 9*d.* ÷ 9 = .. *d.*
8¾*d.* ÷ 5 = .. *d.*
3*s.* 2½*d.* ÷ 7 = .. *d.*
1*s.* 10½*d.* ÷ 3 = .. *d.*

Exercise 44

Measuring and Drawing; Area and Scale

1. (*a*) Guess the length of your pen. Write it down, as: Length = ?
   (*b*) Now measure the length. Write it down, as: Length = ? inches.
2. (*a*) Guess a *yard* on the floor. Mark it out with two crosses, one at the start and one at the end. (*b*) Now measure the distance between the two crosses and write it down, as: Distance = ? .
3. Draw on the floor a line, 1 yard in length. Guess the *feet* and mark them. Now measure the feet. 1st foot = ? inches; 2nd foot = ? inches.

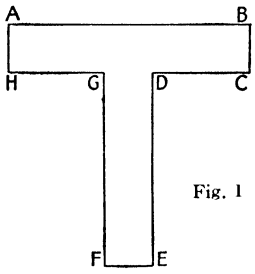


Fig. 1

4. Which lines in the picture T are equal in length? First guess; then measure.
5. Copy the letter T the same size. Then draw one 3 times the size.
6. If every $\frac{1}{4}$ inch in the picture T stands for 1 foot, how far is it all round the letter T in (*a*) feet; (*b*) in yards and feet?
7. Let 1 inch stand for 1 foot and draw lines to stand for (*a*) 3 feet; (*b*) 1 yard 2 feet; (*c*) 1 foot 6 inches; (*d*) 1 foot 9 inches.
8. In figure 2, A stands for a town and B, C, D, E, F, G, H are villages near to A. If $\frac{1}{2}$ an inch stands for 1 mile, how far, in a straight line, is each village from A? Measure from the centre of town A.

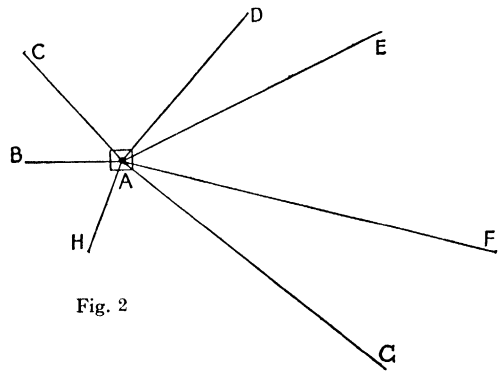


Fig. 2

9. An aeroplane flies from G to A and then on to E. Then it flies back to A and on to B. How far altogether does it fly?
10. Cut out a square inch. Fold down the middle. What is the length of the oblong formed? What is its width? What is its area?
11. Draw an oblong 3 inches long and $\frac{1}{2}$ an inch wide. Draw lines to show how many square inches it covers.
12. Draw an oblong that will cover 12 square inches.
13. The distance round a square is 12 inches. What is the length of each side? Draw the square and write down its area.

Exercise 45

Shopping

PRICE LIST

Lead pencils, dozen,	2*s.* 6*d.*	Best ink (large bottle),	8½*d.*
Post cards, packet of 10,	1*d.*	Fountain pen (gold-filled nib),	2*s.* 9*d.*
Envelopes, packet of 20,	4½*d.*	Tie-on labels, packet of 10,	1½*d.*
Pencil box (filled),	9*d.*	Ink-stand (2 holders),	12*s.* 6*d.*
Writing pads,	11½*d.*	Electric table-lamp,	15*s.* 3*d.*
Post card album,	3*s.* 6*d.*	Pen nibs, dozen,	9*d.*

How much would the following cost? (See price list.) Give the *totals.*

1. 6 lead pencils.
   1 packet of envelopes.
   2 large bottles of ink.
   3 packets, tie-on labels.

2. 2½ dozen pen nibs.
   1 large bottle of ink.
   1 post card album.
   2 writing pads.
   3 packets of envelopes.

3. 1 electric table-lamp.
   1 fountain pen.
   1 gross of pencils.
   ½ dozen large bottles of ink.
   3 writing pads.

4. 2 pencil boxes.
   ½ dozen lead pencils.
   2 writing pads.
   1 gross of pen nibs.
   6 packets, tie-on labels.
   100 envelopes.

5. ½ gross of pen nibs.
   1 ink-stand.
   3 large bottles of ink.
   5 writing pads.

6. 4½ dozen lead pencils.
   1 fountain pen.
   1 post card album.
   5 dozen envelopes.
   ½ gross of pen nibs.

7. 3 fountain pens.
   1 electric table-lamp.
   3 post card albums.
   200 post cards.
   2 writing pads.

8. 3 pencil boxes.
   ½ dozen writing pads.
   ¼ gross of pen nibs.
   2 ink-stands.
   5 packets, tie-on labels.
   1 post card album.

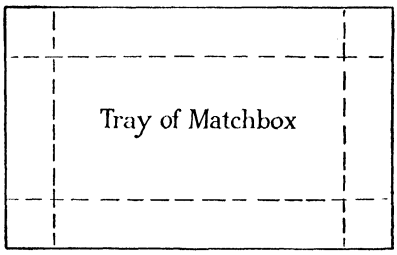
9. Find the change from a £1 after buying an electric table-lamp.

10. Find the change from £2 after buying a table-lamp, an ink-stand, and a fountain pen.

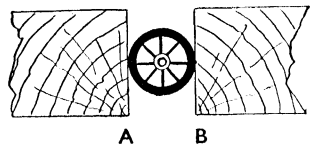
Exercise 46

Things to Do

1. Ask your friend to measure (*a*) your height; (*b*) round your neck. Do this every month; keep the measurements and compare them.
2. Cut off a piece of string a yard long. Tie knots in the string to mark the feet. Use your yard measure to find the height of a table, the height of the seat of a chair, etc. Write down the name of the thing measured and its measurement.
3. Examine the tray of a match box to see how it is made. Then open it out as shown in the drawing below. Measure it and make one in cardboard.



4. Repeat number 3 for an envelope.
5. Draw an oblong $5\frac{3}{4}$ inches long and $2\frac{1}{2}$ inches wide. Then cut from it the biggest possible square.
6. Weigh 5 halfpennies. Then take off the weight and put pennies in the scale to balance the halfpennies.
7. Weigh an ordinary brick and write down its weight. Soak the brick in water and weigh again. What do you notice? Why is this?
8. Guess the weight of your reading book. Test by weighing.
9. Place a small wheel or hoop between two blocks of wood as shown in the picture. Measure the distance AB. This tells you the distance across the hoop or wheel.



10. Put the hands of the clock to show 5 minutes to 10. Look in a bus or train time-table and find out how 5 minutes to 10 is written.
11. Look at the classroom time-table. How long do the following lessons last?: (*a*) Arithmetic; (*b*) Singing; (*c*) Physical Training.
12. Write down (in shortened form, as 2.40) the time morning playtime begins and ends.
13. How much water will the caretaker's bucket hold? Test it with the measures.
14. How much water will the school ink-jar hold? Test it with the measures.
15. Take 3 paper circles. Fold the first to show halves, the second to show quarters, and the third to show eighths.

Exercise 47

Revision

NUMBER

	(a)	(b)
1.	97 + 48 + 93 + 78	18 + 93 + 77 + 99
2.	223 + 325 + 231	325 + 237 + 176
3.	173 − 94	468 − 259
4.	637 − 139	715 − 399
5.	92 × 3	97 × 6
6.	116 × 7	187 × 5
7.	7 | 840	9 | 729
8.	8 | 931	11 | 779
9.	7 × 8	9 × 9
10.	6 × 6	12 × 9
11.	6 × 9	8 × 9
12.	96 ÷ 8	72 ÷ 12
13.	54 ÷ 9	35 ÷ 7
14.	96 ÷ 12	99 ÷ 11
15.	(9 × 9) + 100	
16.	(12 × 12) − 120	

MONEY

	(a)	(b)	(c)
	s. d.	£ s. d.	£ s. d.
1.	3 7 + 6 4 + 9 5	1 11 $2\frac{1}{2}$ + 6 $3\frac{1}{2}$ + 7 $4\frac{1}{2}$	1 11 7 + 9 $3\frac{3}{4}$ + 6 $2\frac{3}{4}$
	£ s. d.	£ s. d.	£ s. d.
2.	3 11 7 + 4 19 5	7 11 3 + 1 9 $11\frac{1}{2}$	7 2 $5\frac{3}{4}$ + 1 18 $7\frac{1}{4}$
3.	13 10 − 2 $11\frac{1}{2}$	15 5 − 2 $7\frac{3}{4}$	13 $8\frac{1}{4}$ − 11 $10\frac{1}{2}$
4.	1 13 6 − 17 9	2 13 $4\frac{1}{2}$ − 1 17 $1\frac{3}{4}$	5 2 $7\frac{1}{4}$ − 2 12 $9\frac{1}{2}$
5.	1 $9\frac{1}{2}$ × 9	11 $3\frac{1}{4}$ × 5	19 $7\frac{3}{4}$ × 9
6.	16 $5\frac{1}{2}$ × 12	1 3 $5\frac{3}{4}$ × 7	1 13 $4\frac{1}{2}$ × 6
7.	7 | 15 9	8 | 19 4	9 | 1 2 6
8.	6 | 6 19 0	12 | 2 16 0	6 | 9 13 $7\frac{1}{2}$
9.	55*d.* =	14*d.* =	87*d.* =
10.	76*d.* =	97*d.* =	109*d.* =
11.	95*d.* =	31*d.* =	93*d.* =
12.	4*s.* 9*d.* = .. *d.*	3*s.* 1*d.* = .. *d.*	6*s.* 3*d.* = .. *d.*
13.	9*s.* 6*d.* = .. *d.*	7*s.* 5*d.* = .. *d.*	3*s.* 9*d.* = .. *d.*
14.	10*s.* 7*d.* = .. *d.*	1*s.* 11*d.* = .. *d.*	11*s.* 4*d.* = .. *d.*
15.	(4*s.* $3\frac{1}{2}$*d.* × 3) − 2*s.* 6*d.*		
16.	(1*s.* $9\frac{1}{2}$*d.* × 4) − 5*s.*		

MISCELLANEOUS

	(a)	(b)
17.	48 inches = .. ft.	6 feet 10 inches = .. inches.
18.	$2\frac{1}{2}$ lb. = .. oz.	120 minutes = .. hours.
19.	$3\frac{1}{4}$ hours = .. min.	161 days = .. weeks.
20.	19 yards = .. ft.	9 half-crowns = £ .. *s.* .. *d.*
21.	16 weeks = .. days.	43 halfpence = .. *s.* .. *d.*
22.	$7\frac{1}{2}$ years = .. months.	22 pints = .. gall. .. quarts.
23.	2 gall. 1 pint = .. pints.	40 oz. = .. lb. .. oz.

Exercise 48

Tests

	A	B
1.	297 + 85 + 209 + 8.	258 + 197 + 113 + 12.
2.	927 − 798.	758 − 349.
3.	78 × 12.	87 × 9.
4	935 ÷ 8.	871 ÷ 6.
5.	£1. 6*s.* 3*d.* + 3*s.* 9½*d.* + £3. 14*s.* 9½*d.* + 19*s.* 8*d.*	£1. 3*s.* 6¼*d.* + 17*s.* 11½*d.* + 19*s.* 6*d.* + 8¾*d.*
6.	£3. 12*s.* 8½*d.* − £1. 7*s.* 9¼*d.*	£5. 0*s.* 1*d.* − £1. 17*s.* 9*d.*
7.	17*s.* 10½*d.* × 7.	19*s.* 8½*d.* × 10.
8.	£3. 8*s.* 1½*d.* ÷ 5.	£3. 7*s.* 6*d.* ÷ 12.
9.	How many postcards at 10 for 1*d.* can we buy with 2*s.* 9*d.*?	Tom has 34 marbles and John has twice as many. How many more has John than Tom?
10.	Seven boxes of sweets cost 17*s.* 6*d.* How much is that for one box?	Find the change out of 10*s.* after paying for 1 dozen eggs at 1½*d.* each and 1½ lb. of bacon at 1*s.* 4*d.* a lb.?

	C	D
1.	379 + 58 + 290 + 17.	119 + 278 + 105 + 39.
2.	872 − 395.	711 − 321.
3.	89 × 11.	136 × 6.
4.	953 ÷ 7	857 ÷ 12.
5.	£1. 9*s.* 3½*d.* + 7*s.* 10¾*d.* + 19*s.* 5¼*d.* + £2. 19*s.* 1*d.*	£1. 17*s.* 3½*d.* + 9*s.* 8¼*d.* + 17*s.* 11¾*d.* + £1. 1*s.* 0*d.*
6.	£7. 11*s.* 3½*d.* − £2. 7*s.* 11¾*d.*	£1. 13*s.* 9*d.* − 19*s.* 11½*d.*
7.	£1. 12*s.* 6*d.* × 5.	19*s.* 11¾*d.* × 9.
8.	£4. 3*s.* 4*d.* ÷ 8.	£7. 15*s.* 4*d.* ÷ 8.
9.	¼ lb. of butter cost 4½*d.* What will 2 lb cost?	A farmer had 11 score sheep. He sold 6¼ dozen. How many had he left?
10.	How many 1½*d.* stamps can I buy for 3*s.* 3*d.*?	John played cricket from 4.15 to 5.10. For how many minutes did he play?

Tables

MONEY

4 farthings = 1 penny (*d.*)
12 pence = 1 shilling (*s.*)
20 shillings = 1 pound (£)
21 shillings = 1 guinea

LENGTH

12 inches = 1 foot (ft.)
3 feet = 1 yard (yd.)

WEIGHT

16 ounces = 1 pound (lb.)
14 pounds = 1 stone (st.)
112 pounds = 1 hundredweight (cwt.)
20 cwt. = 1 ton
8 oz. = $\frac{1}{2}$ lb.
4 oz. = $\frac{1}{4}$ lb.
2 oz. = $\frac{1}{8}$ lb.

TIME

15 minutes = $\frac{1}{4}$ hour (hr.)
30 minutes = $\frac{1}{2}$ hour (hr.)
60 minutes = 1 hour (hr.)
24 hours = 1 day
7 days = 1 week

CAPACITY

2 pints = 1 quart (qt.)
4 quarts = 1 gallon (gall.)
8 pints = 1 gallon (gall).

AREA

144 sq. in. = 1 sq. ft.

TABLE SQUARE

1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	22	24
3	6	9	12	15	18	21	24	27	30	33	36
4	8	12	16	20	24	28	32	36	40	44	48
5	10	15	20	25	30	35	40	45	50	55	60
6	12	18	24	30	36	42	48	54	60	66	72
7	14	21	28	35	42	49	56	63	70	77	84
8	16	24	32	40	48	56	64	72	80	88	96
9	18	27	36	45	54	63	72	81	90	99	108
10	20	30	40	50	60	70	80	90	100	110	120
11	22	33	44	55	66	77	88	99	110	121	132
12	24	36	48	60	72	84	96	108	120	132	144

THE TWELVES TABLE

Shillings and pence to **12** shillings. Feet and inches to **12** feet

												SHILLINGS OR FEET
1	2	3	4	5	6	7	8	9	10	11	12	1
13	14	15	16	17	18	19	20	21	22	23	24	2
25	26	27	28	29	30	31	32	33	34	35	36	3
37	38	39	40	41	42	43	44	45	46	47	48	4
49	50	51	52	53	54	55	56	57	58	59	60	5
61	62	63	64	65	66	67	68	69	70	71	72	6
73	74	75	76	77	78	79	80	81	82	83	84	7
85	86	87	88	89	90	91	92	93	94	95	96	8
97	98	99	100	101	102	103	104	105	106	107	108	9
109	110	111	112	113	114	115	116	117	118	119	120	10
121	122	123	124	125	126	127	128	129	130	131	132	11
133	134	135	136	137	138	139	140	141	142	143	144	12