START HERE

MARK ✓ or ✗

Q. 1–5

addition and subtraction problems

1 Add together seven million, twelve million and two hundred thousand and four. _____ 1 ☐

2 What number is equal to the sum of four thousand and nineteen and seven thousand five hundred and ten? _____ 2 ☐

3 A number is as much above 6050 as 3402 is below it. What is that number? _____ 3 ☐

4 For a school concert, 390 tickets were sold at £1. A further 758 were sold at £2 and 428 at £3. How many people were at the concert? _____ 4 ☐

5 If I take 93 plums from a basket there are 125 left. How many were in the basket at first? _____ 5 ☐

Q. 6–10

timetables

This is Isha's timetable for each school day after morning assembly.

	0920 to 1000	1000 to 1040	1040 to 1100		1120 to 1200		1330 to 1400	1400 to 1515
Mon	Maths	French	English	B	History	L	P.E.	Science
Tues	Maths	Geography	English	R	Music	U	French	Games
Wed	English	French	Maths	E	Library	N	English	Swimming
Thurs	Science	Maths	French	A	English	C	I.C.T.	I.C.T
Fri	Maths	English	English	K	R.S.	H	P.E.	Drama

6 If Isha goes into assembly at 0855, how long is her school day? _____ h _____ min 6 ☐

7 How much time each week is spent in English classes? _____ h _____ min 7 ☐

8 How much time each week is devoted to Maths? _____ h _____ min 8 ☐

9 How much longer is the morning session (starting at 0855) than the afternoon session? _____ h _____ min 9 ☐

10 How much time each week is allowed for P.E., games and swimming? _____ h _____ min 10 ☐

Q. 11–15

writing large numbers

Write each of these numbers in figures.

11 four million and five _____ 11 ☐

12 five million five hundred and two _____ 12 ☐

13 eight million six hundred and two thousand and sixty-two _____ 13 ☐

14 nine and three-quarter million _____ 14 ☐

15 one hundred and thirty-six million four hundred thousand seven hundred and thirty-five _____ 15 ☐

MARK ☐

MARK ✓ or ✗

Q. 16–20
mass problems

16 How many tonnes are in 69 750 kg? _____ t

17 What must be added to 748 kg to make $3\frac{1}{8}$ tonnes? _____ t _____ kg

18 Four crates weigh $70\frac{1}{2}$ kg, $46\frac{3}{8}$ kg, $82\frac{3}{10}$ kg and 39.6 kg. What is their total mass? _____ kg _____ g

19 Subtract 0.9 kg from $3\frac{1}{4}$ kg and multiply your answer by three. _____ kg _____ g

20 At a summer camp $4\frac{1}{2}$ kg of casserole was cooked for 25 children. How much casserole did each child receive? _____ g

Q. 21–25
decimal problems

21 How many seconds are there in 0.75 of one minute? _____ s

22 How many centimetres are there in 0.01 of one metre? _____ cm

23 How many minutes are there in 0.3 of half an hour? _____ min

24 How many pence are there in £1.26? _____ p

25 How many minutes are there in 0.7 of $1\frac{1}{2}$ hours? _____ min

Q. 26–30
percentage problems

26 What is 50% of £45? £ _____

27 What is 15% of 2 tonnes? _____ kg

28 What is 30% of 30 kilograms? _____ kg

29 What is 90% of 80? _____

30 What is 30% of 70 metres? _____ m

Q. 31–35
long division

31 $28\overline{)21\ 168}$

32 $42\overline{)36\ 246}$

33 $55\overline{)21\ 120}$

34 $39\overline{)9399}$

35 $62\overline{)53\ 134}$

MARK

MARK ✓ or ✗

Q. 36–40
using money

Work out the total for each line of this receipt. Then check that they all add up to the total given.

Paint Pots and Power Tools

DIY Stores

		£ . p	
36	12 litres varnish at £2.47 per litre =		36 ☐
37	12 litres paint at £2.26 per litre =		37 ☐
38	18 bags of nails at £6.42 per bag =		38 ☐
39	7 dozen tubes of glue at 54p each =		39 ☐
40	6 packets of seeds at £2.39 each =		40 ☐
	Total =	232.02	

Q. 41–45
sequences

Write the next two terms in each of these sequences.

41	110	100	91	83	_____	_____	41 ☐
42	144	121	100	81	_____	_____	42 ☐
43	1	6	36	216	_____	_____	43 ☐
44	2036	1018	509	$254\frac{1}{2}$	_____	_____	44 ☐
45	7	$6\frac{1}{4}$	$5\frac{1}{2}$	$4\frac{3}{4}$	_____	_____	45 ☐

Q. 46–50
time problems

46 A lighthouse beam flashes every 12 seconds. How many times will it flash in a day? _____ 46 ☐

47 Adam leaves Leeds at 0815 and arrives in Birmingham $3\frac{2}{5}$ h later. At what time does he arrive? _____ 47 ☐

48 How many seconds are in $2\frac{1}{4}$ h? _____ s 48 ☐

49 A machine produces one pencil every 4 seconds. How many will it produce between 0900 and 1830? _____ 49 ☐

50 How many days are there in the first three months of a leap year? _____ d 50 ☐

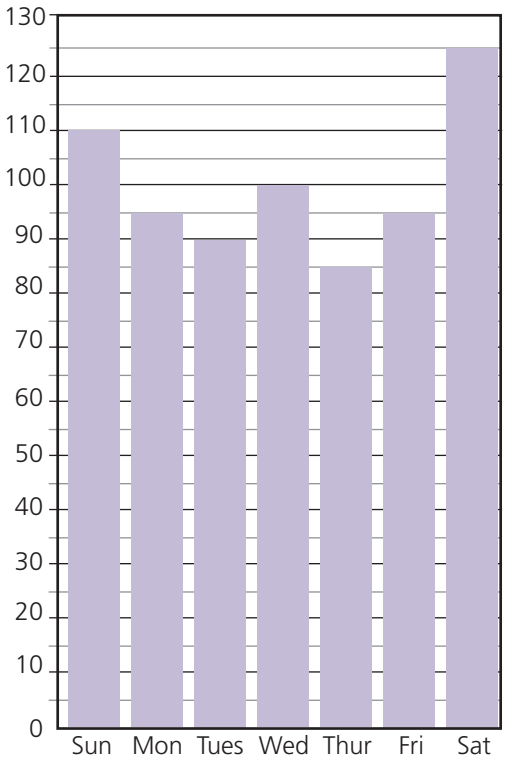
MARK ☐

MARK
✓ or ✗

Q. 51–55

bar charts

This chart shows the number of cans of lemonade sold by a corner shop in the course of a week.



51 How many more cans were sold on Saturday than on Thursday? _____ 51 ☐

52 How many cans altogether were sold on the two busiest days? _____ 52 ☐

53 How many cans were sold altogether in the week? _____ 53 ☐

54 What fraction of the week's total was sold on Wednesday? _____ 54 ☐

55 What was the average number of cans sold each day? _____ 55 ☐

Q. 56–60

money problems

56 My insurance costs £693 for 18 months. How much do I pay each month? £ _____ 56 ☐

57 A charity advertisement said that £100 could save the sight of eight people. How much is this per person? £ _____ 57 ☐

58 What is half the difference between £74.68 and £35.22? £ _____ 58 ☐

59 What sum of money added to itself is equal to half of £40? £ _____ 59 ☐

60 If you share £220.80 equally among twelve people, how much will each get? £ _____ 60 ☐

MARK ☐

MARK ✓ or ✗

Q. 61–65

24-hour clock

Change these a.m. and p.m. times to 24-hour times.

61 12.04 a.m. _____ **61** ☐

62 1.00 a.m. _____ **62** ☐

63 11.45 a.m. _____ **63** ☐

64 2 p.m. _____ **64** ☐

65 4.00 p.m. _____ **65** ☐

Q. 66–70

mean, median mode, and range

Look at the group of numbers below.

18 27 36 18 26

66 What is the mean of these numbers? _____ **66** ☐

67 What is the mode? _____ **67** ☐

68 What is the median? _____ **68** ☐

69 What is the range? _____ **69** ☐

70 Replace one of the 18s with 33. What is the new mean? _____ **70** ☐

Q. 71–75

measures addition and subtraction

71 £74.63 + £59.72 + £64.36 = £ _____ **71** ☐

72

kg	g
27	399
4	063
+ 143	746
_____	

72 ☐

73

l	ml
17	642
18	779
+ 3	847
_____	

73 ☐

74 Add together $2\frac{1}{2}$ km, $14\frac{1}{8}$ km, $7\frac{1}{5}$ km and 12.6 km. _____ km **74** ☐

75 Take 145 minutes from $4\frac{1}{5}$ hours. _____ h _____ min **75** ☐

Q. 76–80

ratio and proportion

Ruby is 6, Edward is 8, Claire is 9, David is 14 and Emma is 15. They are given birthday money in the ratio of their ages. In total they receive £156. How much do they each receive?

76 Ruby £ _____ **76** ☐

77 Edward £ _____ **77** ☐

78 Claire £ _____ **78** ☐

79 David £ _____ **79** ☐

80 Emma £ _____ **80** ☐

MARK ☐

MARK ✓ or ✗

Q. 81–85
algebra

Write each of these sentences in the form of an equation,

e.g. If 3 is added to *x*, the answer is 15. $3 + x = 15$

81 number *a* is 5 more than 6 _____ **81** ☐

82 6 less than *b* is 13 _____ **82** ☐

83 4 subtracted from *c* is equal to 9 _____ **83** ☐

84 *d* added to 3 gives 7 _____ **84** ☐

85 16 is the result of multiplying *e* by 2 _____ **85** ☐

Q. 86–90
measures multiplication and division

86

£ . p
372.86
× 9

87

l ml
678 507
× 11

86 ☐ **87** ☐

88 7 h 40 min 55 s × 5 = _____ h _____ min _____ s **88** ☐

89 22.5km ÷ 4 = _____ km **89** ☐

90 300.3kg ÷ 11 = _____ kg **90** ☐

Q. 91–95
perimeters

91 What is the perimeter of this shape? (36cm²) _____ cm **91** ☐

92 If the length of a rectangle is three times its 4 cm width, what is its perimeter? _____ cm **92** ☐

93 What is the perimeter of a field $\frac{3}{4}$ km long and 0.2 km wide? _____ m **93** ☐

94 If the perimeter of a rectangle is 54 cm and its length is 18 cm, what is its width? _____ cm **94** ☐

95 If the perimeter of a rectangle is 6 times its 6 cm width, what is its length? _____ cm **95** ☐

Q. 96–100
probability

There are 52 cards in a pack.

96 If I draw out one card, what is the probability that it will be an ace? ____ in ____ **96** ☐

97 What is the probability that it will be a red card? ____ in ____ **97** ☐

98 What is the probability that it will be a black card? ____ in ____ **98** ☐

99 What is the probability that it will be the three of clubs? ____ in ____ **99** ☐

100 What is the probability that it will be the three of any suit? ____ in ____ **100** ☐

END OF TEST

SAMPLE PAPER TOTAL MARK ☐

Sample Paper

1	19 200 004
2	11 529
3	8698
4	1576
5	218
6	6 h 20 min
7	3 h 30 min
8	3 h 0 min
9	1 h 20 min
10	3 h 30 min
11	4 000 005
12	5 000 502
13	8 602 062
14	9 750 000
15	136 400 735
16	$69\frac{3}{4}$ t
17	2 t 377 kg
18	238 kg 775 g
19	7 kg 50 g
20	180 g
21	45 s
22	1 cm
23	9 min
24	126p
25	63 min
26	£22.50
27	300 kg
28	9 kg
29	72
30	21 m
31	756
32	863
33	384
34	241
35	857
36	£29.64
37	£27.12
38	£115.56
39	£45.36
40	£14.34
41	76, 70
42	64, 49
43	1296, 7776
44	$127\frac{1}{4}$, $63\frac{5}{8}$
45	4, $3\frac{1}{4}$

Sample Paper – *continued*

46	7200
47	1139
48	8100 s
49	8550
50	91 d
51	40
52	235
53	700
54	$\frac{1}{7}$
55	100
56	£38.50
57	£12.50
58	£19.73
59	£10
60	£18.40
61	0004
62	0100
63	1145
64	1400
65	1600
66	25
67	18
68	26
69	18
70	28
71	£198.71
72	175 208 g
73	40 268 ml
74	36.425 km
75	1 h 47 min
76	£18
77	£24
78	£27
79	£42
80	£45
81	$a = 6 + 5$
82	$b - 6 = 13$
83	$c - 4 = 9$
84	$3 + d = 7$
85	$e \times 2 = 16$
86	£3355.74
87	7 463 577 ml
88	38 h 24 min 35 s
89	5.625 km
90	27.3 kg

Sample Paper – *continued*

91	24 cm
92	32 cm
93	1900 m
94	9 cm
95	12 cm
96	1 in 13
97	1 in 2
98	1 in 2
99	1 in 52
100	1 in 13