

PRACTICE WORKSHEET + FULL ANSWER KEY

Number strategies and word problems

Primary school. Work through the sections in order, or choose the one that matches this week's topic.

QUESTIONS	SECTIONS	ANSWER KEY	WORKING SPACE
104	10	At the back	Ruled

Name _____ Class _____ Date _____

Before you start

Show what the quantities mean with a drawing or a number line. Then choose the operation. A correct calculation needs a sentence that answers the original question.

WORKED EXAMPLE

A library has 24 books on one shelf and 18 on another. How many books?

- 1 Add tens: $20 + 10 = 30$.
- 2 Add ones: $4 + 8 = 12$.
- 3 $30 + 12 = 42$ books.

Use this method as your model. Set out your own working the same way.

Common mistakes to avoid

- Choosing an operation from a single keyword
- Losing the value of a digit when regrouping

There are 104 questions across 10 sections. Write in the ruled space, then mark your work against the answer key at the back. Topics covered: Place value, Addition and subtraction, Equal groups.

SECTION A Place value

Say the value of each digit before you write anything down.

1

Write 56 as tens and ones.

3

What is the value of the 3 in 738?

2

Write 407 in words.

4

Write the number that is 10 more than 264.

5

Write the number that is 100 less than 512.

Order from smallest to largest: 308, 380, 83.

7

Round 47 to the nearest 10.

8

Round 362 to the nearest 100.

9

Write 3 hundreds, 0 tens and 9 ones as a number.

10

Which is larger: 4,050 or 4,500?

11

Continue counting in 25s: 25, 50, 75, __, __.

SECTION B Addition and subtraction*Add or subtract the tens first, then the ones. Estimate first so you can check.*

12

Calculate $37 + 25$.

Calculate $81 - 34$.

14

Calculate $128 + 46$.

15

Calculate $305 - 178$.

16

Estimate $298 + 401$ by rounding to the nearest 100.

17

Find the missing number: $64 + \underline{\quad} = 100$.

18

Find the missing number: $__ - 45 = 55$.

19

Add 199 to 246 using a friendly number.

20

Double 47.

21

Halve 86.

22

Check $72 - 39 = 33$ by adding. Show the check.

SECTION C Multiplication and division

Draw equal groups or an array whenever you are not sure which operation to use.

23

4 bags hold 3 apples each. How many apples altogether?

24

Share 20 counters equally among 5 children.

25

Calculate 6×7 .

26

Calculate $48 \div 6$.

27

Write two multiplication and two division facts using 3, 8 and 24.

28

Calculate 9×4 .

29

Calculate $35 \div 5$.

30

A tray holds 5 rows of 6 cakes. How many cakes?

31

27 pencils are put into groups of 4. How many full groups, and how many are left?

32

Is 7×6 the same as 6×7 ? Explain.

33

Find the missing factor: $8 \times __ = 56$.

SECTION D Word problems

Read the problem twice. Decide what is being asked before you choose an operation.

- 34 A library has 24 books on one shelf and 18 on another. How many books?

- 35 A class of 28 students travels in vans that hold 6 each. How many vans are needed?

- 36 Maya saves \$3 each week for 9 weeks. How much has she saved?

- 37 A ribbon is 45 cm long. You cut off 17 cm. What length is left?

- 38 A film starts at 3:15 pm and lasts 40 minutes. When does it end?

- 39 There are 96 seats in 8 equal rows. How many seats are in each row?

- 40 Sam has \$50. He buys a game for \$28 and a book for \$9. How much is left?

- 41 A recipe uses 250 g of flour. How much flour is needed for 4 batches?

- 42 A jug holds 2 L. You pour out 750 mL. How much is left?

- 43 Class 3A collected 137 cans and Class 3B collected 89. How many more did 3A collect?

- 44 A bus leaves every 15 minutes from 9:00 am. Write the first four departure times.

SECTION E Measures, money and reasoning

Show your working and always write the unit in your answer.

- 45 How many centimetres are there in 3 metres?

- 46 How many minutes are there in 2 hours?

- 47 A rectangle is 7 cm long and 4 cm wide. Find its perimeter.

48 Find the area of that 7 cm by 4 cm rectangle.

49 Write \$4.75 in cents.

50 You pay for a \$6.40 item with a \$10 note. What is the change?

51 Which is longer: 1,200 mm or 1.5 m? Explain.

52 A jar holds 5 red and 7 blue marbles. What fraction of them are red?

53 Explain one way to check a subtraction answer.

54 Write a word problem that needs 6×4 , then answer it.

SECTION F Times tables and factors

Learn the facts you find hardest first, then check with a related fact.

55 Calculate 7×8 .

56 Calculate 6×9 .

57 Calculate 12×4 .

58 Calculate $72 \div 8$.

59 Calculate $63 \div 7$.

60 List all the factors of 12.

61 List the first five multiples of 6.

62 Is 27 a multiple of 3? Explain.

63 Find the missing number: $5 \times 6 = 3 \times \underline{\quad}$.

64 Calculate 11×12 .

SECTION G Fractions of amounts

To find a fraction of an amount, divide by the bottom number first.

- 65 Find $\frac{1}{2}$ of 18.

- 66 Find $\frac{1}{4}$ of 20.

- 67 Find $\frac{1}{3}$ of 21.

- 68 Find $\frac{3}{4}$ of 16.

- 69 Find $\frac{2}{5}$ of 25.

- 70 Which is larger, $\frac{1}{2}$ or $\frac{1}{4}$? Draw a picture to show it.

- 71 Shade $\frac{3}{8}$ of a shape split into 8 equal parts. How many parts are shaded?

- 72 A pizza is cut into 8 equal slices and you eat 2. What fraction is left?

- 73 Write a fraction equal to $\frac{1}{2}$ with a denominator of 6.

- 74 There are 24 pencils and $\frac{1}{6}$ are red. How many are red?

SECTION H Time, calendars and timetables

Count on in whole hours first, then add the extra minutes.

- 75 How many minutes are there in $1\frac{1}{2}$ hours?

- 76 A lesson starts at 10:20 and lasts 45 minutes. When does it end?

- 77 How many days are there in April?

- 78 How many months have 31 days? Name them.

79 Write 4:45 pm using the 24-hour clock.

80 Write 07:30 using am or pm.

81 A train leaves at 09:15 and arrives at 10:50.
How long is the journey?

82 How many weeks are there in 56 days?

83 A film lasts 2 hours 20 minutes and starts at 6:50 pm. When does it end?

84 How many hours are there in 3 days?

SECTION I Data handling

Read the title and the labels before you read any numbers.

85 A bar chart shows 8, 5, 11 and 6 books read.
How many books in total?

86 For that chart, what is the difference between
the highest and lowest bar?

87 A tally shows two crossed groups of five and
three single strokes. How many is that?

88 5 children have 2 pets each. How many pets
is that?

89 A pictogram uses one symbol for 4 apples.
How many apples do 3 symbols show?

90 Find the most common value in 3, 5, 5, 7, 9.

91 Find the total of 12, 15 and 23.

92 A survey records 14 walkers, 9 cyclists and 7
in cars. How many people were asked?

93 For that survey, how many more walk than
cycle?

94 Name two things every graph needs so a
reader can understand it.

SECTION J Mixed review and multi-step problems

Work out the first step and write it down before starting the second.

95

Calculate $145 + 267$.

96

Calculate $500 - 236$.

97

A box holds 6 eggs. How many boxes are needed for 40 eggs?

98

Tickets cost \$7 each. How much do 8 tickets cost?

99

You buy 3 pens at \$2 each and a book at \$9. Find the total.

100

A shop sells 124 apples on Monday and 89 on Tuesday. How many altogether?

101

Estimate 61×9 by rounding, then work out the exact answer.

102

A rope 3 m long is cut into 4 equal pieces. How long is each piece in centimetres?

103

There are 5 rows of 8 chairs and 6 chairs are broken. How many can be used?

104

Write a two-step problem using 4×6 and then subtracting 10, and answer it.

Answer key

Work each section before you check it. These are model answers: an equivalent method, or a different well-supported interpretation, can be just as correct.

SECTION A - PLACE VALUE

1. 5 tens and 6 ones.
2. Four hundred and seven.
3. 30, because the 3 is in the tens place.
4. 274.
5. 412.
6. 83, 308, 380.
7. 50.
8. 400.
9. 309.
10. 4,500.
11. 100 and 125.

SECTION B - ADDITION AND SUBTRACTION

12. 62.
13. 47.
14. 174.
15. 127.
16. About 700, since $300 + 400 = 700$. The exact answer is 699.
17. 36.
18. 100.
19. 445. Add 200, then subtract 1.
20. 94.
21. 43.
22. $39 + 33 = 72$, so the answer is correct.

SECTION C - MULTIPLICATION AND DIVISION

23. 12 apples: 4×3 .
24. 4 counters each.
25. 42.
26. 8.
27. $3 \times 8 = 24$, $8 \times 3 = 24$, $24 \div 3 = 8$ and $24 \div 8 = 3$.
28. 36.
29. 7.
30. 30 cakes.
31. 6 full groups with 3 pencils left over.
32. Yes. Multiplication can be done in either order, and both equal 42.
33. 7.

SECTION D - WORD PROBLEMS

34. 42 books.
35. 5 vans, because 4 vans carry only 24 students.
36. \$27.
37. 28 cm.
38. 3:55 pm.
39. 12 seats.
40. \$13.
41. 1,000 g, which is 1 kg.
42. 1,250 mL, or 1.25 L.
43. 48 more cans.
44. 9:00, 9:15, 9:30 and 9:45 am.

SECTION E - MEASURES, MONEY AND REASONING

45. 300 cm.
46. 120 minutes.
47. 22 cm: $7 + 4 + 7 + 4$.
48. 28 cm^2 .
49. 475 cents.
50. \$3.60.
51. 1.5 m, because $1.5 \text{ m} = 1,500 \text{ mm}$.
52. $5/12$.
53. Add your answer to the number you subtracted; the total should be the starting number.
54. Any sensible equal-groups problem, for example 6 boxes of 4 pens, giving 24 pens.

SECTION F - TIMES TABLES AND FACTORS

55. 56.
56. 54.
57. 48.
58. 9.
59. 9.
60. 1, 2, 3, 4, 6 and 12.
61. 6, 12, 18, 24 and 30.
62. Yes, because $3 \times 9 = 27$.
63. 10.
64. 132.

SECTION G - FRACTIONS OF AMOUNTS

65. 9.
66. 5.
67. 7.

- 68. 12.
- 69. 10.
- 70. $\frac{1}{2}$, because halves are bigger parts than quarters.
- 71. 3 parts.
- 72. $\frac{6}{8}$, which simplifies to $\frac{3}{4}$.
- 73. $\frac{3}{6}$.
- 74. 4 pencils.

SECTION H - TIME, CALENDARS AND TIMETABLES

- 75. 90 minutes.
- 76. 11:05.
- 77. 30 days.
- 78. 7 months: January, March, May, July, August, October and December.
- 79. 16:45.
- 80. 7:30 am.
- 81. 1 hour 35 minutes.
- 82. 8 weeks.
- 83. 9:10 pm.
- 84. 72 hours.

SECTION I - DATA HANDLING

- 85. 30 books.
- 86. 6 books.
- 87. 13.
- 88. 10 pets.
- 89. 12 apples.
- 90. 5.
- 91. 50.
- 92. 30 people.
- 93. 5 more.
- 94. A title and labels on both axes.

SECTION J - MIXED REVIEW AND MULTI-STEP PROBLEMS

- 95. 412.
- 96. 264.
- 97. 7 boxes, because 6 boxes hold only 36.
- 98. \$56.
- 99. \$15.
- 100. 213 apples.
- 101. About 540; the exact answer is 549.
- 102. 75 cm.
- 103. 34 chairs.
- 104. Any sensible context; $4 \times 6 - 10 = 14$.

Review and next steps

Mark your work against the answer key, record your score for each section, then answer the three questions below. Bring this page to your next lesson so your tutor can start from what actually blocked you.

Which question did you find hardest, and what exactly stopped you?

Rewrite the corrected working for that question here.

Which section do you want to practise again before your next lesson?

Score record

SECTION	QUESTIONS	NUMBER CORRECT	PRACTISE AGAIN?
A. Place value	11		
B. Addition and subtraction	11		
C. Multiplication and division	11		
D. Word problems	11		
E. Measures, money and reasoning	10		
F. Times tables and factors	10		
G. Fractions of amounts	10		
H. Time, calendars and timetables	10		
I. Data handling	10		
J. Mixed review and multi-step problems	10		
Total	104		

Keep going with one-to-one support.

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