

Summer Test 5

Teacher guidance

Skills and knowledge covered in this test:

4N4b Round any number to the nearest 10, 100 or 1,000

4C7 Multiply two-digit and three-digit numbers by a one-digit number using formal written layout

4F9 Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths

4P3b Plot specified points and draw sides to complete a given polygon

5N3a Determine the value of each digit in numbers up to 1,000,000

5C5b Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers

5C6a Multiply and divide numbers mentally drawing upon known facts

5F2a Recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements >1 as a mixed number [e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]

5F8 Read, write and order and compare numbers with up to three decimal places

5F12 Solve problems that require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25

5M7a Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres

5S1 Complete, read and interpret information in tables, including timetables



Focus activity: Tables – completing a table

This table is used to record the number and type of lunches at a school one day.

	Year 3	Year 4	Year 5	Year 6
Hot meal				
Salad				
Sandwich				

There are 64 children in Year 3.

20 Year 3 children have a hot meal for lunch.

$\frac{1}{4}$ of the Year 3 children have salad.

The remainder have sandwiches.

Write the number of children in Year 3 who have sandwiches in the correct cell.

Step 1

Display the question. Establish with the pupils that this style of question is a 'filling in the missing parts on a table' question. *How can we complete the missing parts on the table?*

Step 2

Ask the pupils to look carefully at the table. *What information is the table displaying? What are the key parts of the table to look at?* Emphasise the importance of looking at the headings in the top row and in the left-hand column of the table to help understand what the table is showing. Establish that the table records how many children in Years 3, 4 and 5 have a hot meal, salad or sandwiches for lunch.

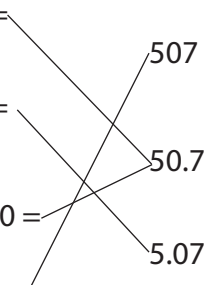
Step 3 How many missing parts do we need to complete on the table? Agree that that the problem asks us to fill in the correct information for one cell. Establish that we need to find out how many children in Year 3 have sandwiches for lunch. Highlight the part of the problem that shows us this.

Step 4 Model how to systematically complete the problem. Establish we know there are 64 children in Year 3, 20 children have a hot meal, a quarter have salad and the rest have sandwiches. Calculate $\frac{1}{4}$ of 64 to find how many children have salads. Then add the number of children who have a hot meal to the number of children who have salad ($20 + 16 = 36$). Now model that to find how many children have sandwiches; you must subtract 36 from 64. Therefore, 28 children have sandwiches.

Step 5 Establish that we now have to use this information and complete only one cell on the table. Model how to pinpoint the correct cell using the row and column headings to help.

	Year 3	Year 4	Year 5	Year 6
Hot meal				
Salad				
Sandwich	28			

Step 6 Model how to check the answer. *Have we completed the correct missing part in the table?*

Question number	Answer	Mark	Domain reference	Related focus activity	Additional guidance
1	No, Harry is incorrect. Accept an explanation that shows an understanding that when counting in tens 14,996 comes between 14,990 and 15,000 and is closer to 15,000 or 15,000 is a tens number as well as being a thousands number.	1	4N4b	Summer Test 3	
2	0 7	1	4C7	Summer Test 1	Award 1 mark for both correct.
3	$5.07 \times 10 =$ $50.7 \div 10 =$ $5,070 \div 100 =$ $5.07 \times 100 =$ 	2	4F9	Spring Test 5	Lines need not touch the numbers exactly, provided the intention is clear. Award 2 marks for all four correct. Award 1 mark for two or three correct.
4	a) Vertex correctly plotted at (9, 5) b) (5, 1)	a) 1 b) 1	4P3b	Out of context	a) Allow vertex to be drawn within 2 mm of the correct position.
5	Circles 149,730 and 943,716	1	5N3a	Spring Test 6	Accept any other way of indicating the correct numbers. Award 1 mark for both correct. Do not award mark if any incorrect numbers are indicated.

YEAR 5 REASONING PRACTICE TESTS

6	Ticks $2 \times 2 \times 2 \times 5$					1	5C5b	Spring Test 6																	
7	72.298, 72.829, 72.928, 72,982					1	5F8	Spring Test 1	Allow one incorrect number if the other three numbers are correct and correctly placed.																
8	<table><tr><td></td><td>Year 3</td><td>Year 4</td><td>Year 5</td><td>Year 6</td></tr><tr><td>Hot dinner</td><td></td><td></td><td>19</td><td></td></tr><tr><td>Salad</td><td></td><td></td><td></td><td></td></tr><tr><td>Sandwiches</td><td></td><td></td><td></td><td></td></tr></table>		Year 3	Year 4	Year 5	Year 6	Hot dinner			19		Salad					Sandwiches					1	5S1	Summer Test 5	
	Year 3	Year 4	Year 5	Year 6																					
Hot dinner			19																						
Salad																									
Sandwiches																									
9	<div>✓</div> <div>✗</div> <div>✗</div> <div>✓</div>					2	5C6a	Summer Test 2	Accept any other clear positive way of indicating Correct, e.g. yes or y, and negative way for Incorrect, e.g. no or n. Award 2 marks for answers as shown. Award 2 marks for ticks in the correct boxes and the other boxes left blank. Award 1 mark for two or three correct answers.																
10	$\frac{13}{8}$ OR $1\frac{5}{8}$					2	5F2a	Summer Test 4	Award 2 marks for the correct answer of $\frac{13}{8} / 1\frac{5}{8}$. If the answer is incorrect, award 1 mark for a correct method, e.g. $5 \times \frac{5}{8} = \frac{40}{8}$ $\frac{40}{8} - \frac{27}{8} = \frac{13}{8}$ $(\frac{13}{8} = 1\frac{5}{8})$																
11	Circles $\frac{3}{5}$ and $\frac{15}{25}$					2	5F12	Spring Test 6	Accept any other clear way of indicating the correct fractions. Award 1 mark for each correct indication with no incorrect indications. <i>Or</i> Award 1 mark for two correct indications and no more than one incorrect indication.																
12	36					2	5M7a	Summer Test 4	Award 2 marks for the correct answer of 36 pieces. If the answer is incorrect, award 1 mark for a correct method, e.g. $25 \div 2.5 = 10$ $20 \div 2.5 = 8$ $10 + 10 + 8 + 8 =$																

Summer Test 5

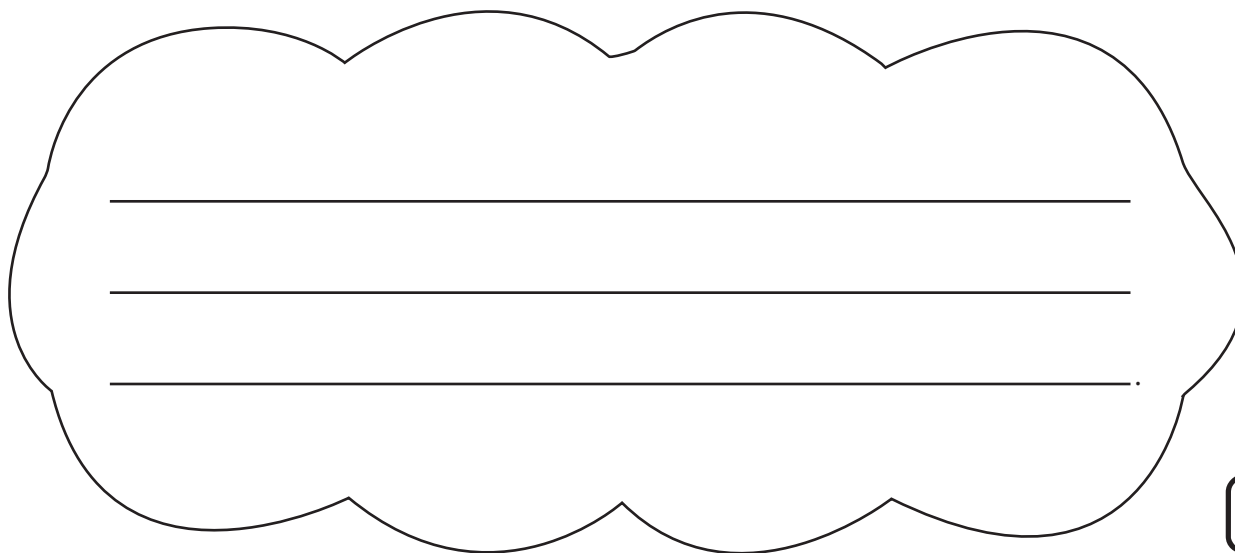
Name: Class: Date:

- 1 14,996 rounded to the nearest ten is 15,000.

Harry says, 'This cannot be correct. 15,000 is a thousands number.'

Is Harry correct?

Write **Yes** or **No** and explain how you know.



1 mark

- 2 Write the missing numbers in this calculation.

$$\begin{array}{r} 3 \boxed{} 6 \\ \times \boxed{} \\ \hline 2 1 4 2 \end{array}$$



1 mark

Summer Test 5 (continued)

3 Match the calculation to the answer.

$$5.07 \times 10 =$$

507

$$50.7 \div 10 =$$

50.7

$$5070 \div 100 =$$

5.07

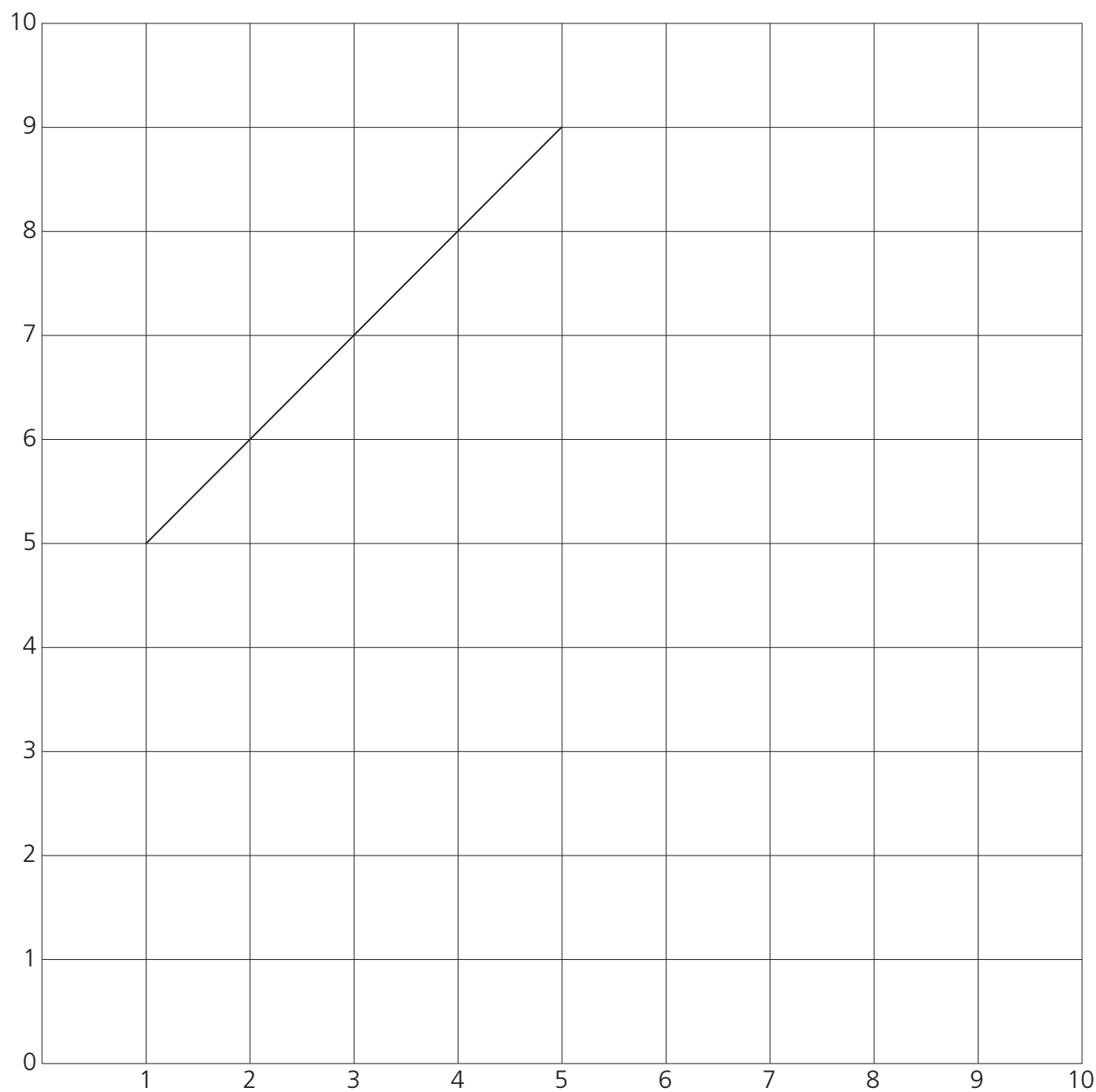
$$5.07 \times 100 =$$



2 marks

Summer Test 5 (continued)

4 Max begins to draw a square on a grid.



a) Max draws a third vertex at (9, 5).

Plot the third vertex.



1 mark

b) Complete the square.

Write the co-ordinates of the fourth vertex.

,

1 mark

Summer Test 5 (continued)

5

7
hundreds

4
**tens of
thousands**

Javid uses these place value cards to write a number.

Circle the numbers that Javid could have written.

149,730

723,249

943,716

741,325

☐

1 mark

6 Tick (✓) the **prime** factors of 40.

5×8

☐

$2 \times 2 \times 10$

☐

2×20

☐

$2 \times 2 \times 2 \times 5$

☐☐

1 mark

7 Write these decimals in order, starting with the **smallest**.

72.982

72.298

72.829

72.928

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smallest

largest

☐

1 mark

Summer Test 5 (continued)

8 This table is used to record the number and type of dinners at a school one day.

	Year 3	Year 4	Year 5	Year 6
Hot dinner				
Salad				
Sandwiches				

There are 60 children in Year 5.

21 Year 5 children have sandwiches for lunch.

$\frac{1}{3}$ of the Year 5 children have salad.

The remainder have a hot dinner.

Write in the correct cell the number of children in Year 5 who have a hot dinner.

1 mark

9 Tick (✓) if the statement is **correct**.

Cross (✗) if the statement is **incorrect**.

Correct or Incorrect?

$34 \times 7 = 210 + 28 = 238$

☐

$56 \times 6 = 360 + 30 = 390$

☐

$47 \times 8 = 320 + 54 = 374$

☐

$62 \times 9 = 540 + 18 = 558$

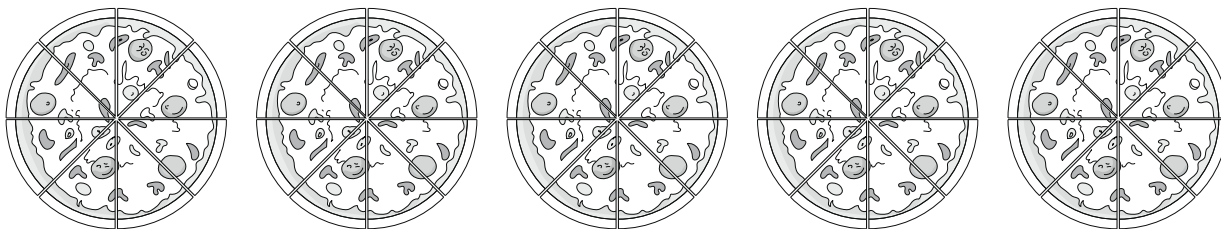
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2 marks

Summer Test 5 (continued)

10 Sally buys five pizzas for a party.

She cuts each pizza into eighths.



$\frac{27}{8}$ are eaten at the party.

How much pizza is left?

Show your method



2 marks

11 Circle **two** fractions equivalent to 60%.

$$\frac{3}{5}$$

$$\frac{6}{100}$$

$$\frac{60}{10}$$

$$\frac{15}{25}$$

$$\frac{15}{20}$$



2 marks

Summer Test 5 (continued)

12 Mia’s rectangular lawn is 25 metres long and 20 metres wide.
She wants to put some border fencing around the edge of the lawn.
A piece of border fencing is 2.5 metres long.
How many pieces of border fencing will Mia need?

Show your method

pieces

2 marks

Total marks	/18
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How well did you do?
Colour the numbers of the questions you got correct.

Round any number to the nearest 10, 100 or 1,000.	1
Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.	2
Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.	3
Plot specified points and draw sides to complete a given polygon.	4
Determine the value of each digit in numbers up to 1,000,000.	5
Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.	6
Read, write, order and compare numbers with up to three decimal places.	7
Complete, read and interpret information in tables, including timetables.	8
Multiply and divide numbers mentally drawing upon known facts.	9
Recognise mixed numbers and improper fractions and convert from one form to the other; write mathematical statements >1 as a mixed number [e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$].	10
Solve problems that require knowing percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.	11
Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.	12