Maths Test Bank Year 5

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A FIVE SENSES PUBLICATION

SAMPLE

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SAMPLE

1A Place value (Part 1)

1 Shade one bubble

What is the largest number in this set?

- ◯ 3754
- ◯ 7435
- ◯ 7543
- ◯ 7534

2 Shade one bubble

What is the smallest number that can be made using each digit once?

5, 7, 4, 8, 2

- ◯ 24 785
- ◯ 24 758
- ◯ 24 578
- ◯ 24 587

3 Shade one bubble

The number that is one more than 59 989 is:

- ◯ 60 000
- ◯ 59 900
- ◯ 59 990
- ◯ 59 980

4 Write on the lines

Write 480 509 in words.

_____

_____

5 Shade one bubble

Rounded to the nearest ten thousand, 55 999 becomes:

- ◯ 60 000
- ◯ 65 000
- ◯ 55 000
- ◯ 56 000

6 Shade one bubble

700 000 + 4000 + 800 + 70 is the same as:

- ◯ 704 870
- ◯ 740 870
- ◯ 704 807
- ◯ 704 087

7 Write on the lines

Write **in words** the number that is **ten thousand** more than 643 042.

_____

_____

8 Write on the lines

Write **in words** the number that is **ten** less than 923 705.

_____

_____

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1 In a bank there is a box of $100 notes and a box of $10 notes. There are 1537 notes in each box.

a How much is in each box?

b Write the value of the box of $100 notes in words.

c If there were a box containing the same number of $1000 notes, what would be the value of the notes in the box?

2 The crowd for a football game at the Melbourne Cricket Ground in 1970 was 121 696. This number could be rounded to the nearest hundred. It could also be rounded in other ways.

a Write the various ways of rounding 121 696.

b Which rounded number would you use if you were writing a newspaper headline? Give a reason for your answer.

c Explain why it would not be appropriate to round the number to the nearest million.

3 Rounded to the nearest ten thousand, the population of Noosa in Queensland was 50 000 in 2006. The actual number can be made using each of the following digits once:

1, 2, 5, 6, 9

List all the numbers that could be the actual population.
(There are more than 10 possibilities.)

4 Sam and Tess were watching a game show on TV. The prize money was shown like this:

$	1	3	4	6	7	9

The winner could choose money to the value of **one** of the digits. Tess said she would choose the '9' because that is the biggest number. Is she right? Explain your answer.

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1B Mental strategies for addition and subtraction (Part 1)

1 Shade one bubble

Using rounding to the nearest ten, 189 + 72 becomes:

- ◯ 190 + 80
- ◯ 190 + 70
- ◯ 180 + 70
- ◯ 180 + 80

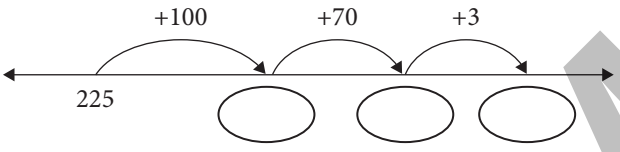
2 Shade one bubble

The rounded estimate for the answer to 181 – 48 is:

- ◯ 150
- ◯ 140
- ◯ 130
- ◯ 120

3 Fill in the gaps

Fill in the gaps to use the jump strategy for 225 + 173:



4 Shade one bubble

Which is the correct method of using the compensation strategy for 236 – 98?

- ◯ 236 – 100 – 2
- ◯ 236 – 100 – 8
- ◯ 236 – 100 + 8
- ◯ 236 – 100 + 2

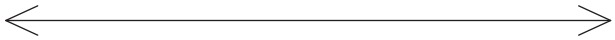
5 Write on the line

Use the number line to find the answer to 473 + 246:



6 Write on the line

Use the number line to find the answer to 7372 – 148:



7 Write on the lines

What is 2744 + 193? Show the strategy that you use.

8 Write on the lines

What is 4235 – 397? Show the strategy that you use.

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1B Mental strategies for addition and subtraction (Part 2)

1

If you add 1489 and 1511 the answer is 3000. Complete the three additions below to show numbers that could also be added to total 3000.

Follow these rules and make each addition correct:

- Each addend must be different.
- Each box must be filled.
- Use no more than one zero for each addend.

a 1 □ □ □ + 1 □ □ □ = 3 0 0 0

b 1 □ □ □ + 1 □ □ □ = 3 0 0 0

c 1 □ □ □ + 1 □ □ □ = 3 0 0 0

2

Petra used this strategy to find the difference between 138 and 743:

"I started at 138. I counted up 600 to 738. Then I went up 5 to 743. So, to get from 138 to 743 you add 600 + 5 = 605."

a Show another strategy that Petra could have used.

b Which strategy do you prefer? Explain why.

3

Fill the gaps to show **three** more ways to make the algorithm correct. The first one has been done for you.

a 6 1 3 − 5 3 5 = 7 8

b 6 □ 3 − □ □ 5 = 7 8

c 6 □ 3 − □ □ 5 = 7 8

d 6 □ 3 − □ □ 5 = 7 8

4

Bob, Jill and Ben buy the same model of car from different dealers.



Bob pays $7464 for his car. Jill pays $193 more than Bob, but Jill pays $193 less than Ben.

How much do Jill and Ben pay for their cars?

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ANSWERS

1A (PART 1)

1 7543 **2** 24 578 **3** 59 990

4 four hundred and eighty thousand, five hundred and nine

5 60 000 **6** 704 870

7 six hundred and fifty-three thousand and forty-two

8 nine hundred and twenty-three thousand, six hundred and ninety-five

1A (PART 2)

1 a $153 700 in $100 notes and $15 370 in $10 notes

1 b one hundred and fifty-three thousand, seven hundred dollars

1 c $1 537 000

2 a 121 700 (nearest 10), 121 700 (nearest 100), 122 000 (nearest 1000), 120 000 (nearest 10 000), 100 000 (nearest 100 000)

2 b Teacher to check, e.g. 120 000 because it gives a clear idea of the number and it is fairly close to the actual number

2 c Teacher to check, e.g. because the nearest is 1 million and yet the number is almost 900 000 away from 1 million

3 51 926, 51 962, 51 269, 51 296, 51 629, 51 692, 52 169, 52 196, 52 619, 52 691, 52 916, 52 961 (actual population was 51 962)

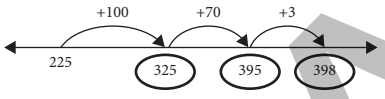
4 Teacher to check, e.g. because of the place value of the digits, the 9 is worth only $9 whereas the 1 is worth $100 000

1B (PART 1)

1 190 + 70

2 130

3



4 236 – 100 + 2 **5** 719

6 7224 **7** 2937 **8** 3838

1B (PART 2)

1 Teacher to check, e.g. 1488 + 1512. Look for students who see the pattern of increasing the 1st addend by one and decreasing the 2nd by one each time to give the answer of 3000.

2 a Teacher to check, e.g. start at 743 and take away 100. Then take 30. Finally, take away 8.

2 b Teacher to check, e.g. Petra's solution, because it is quicker.

3 Teacher to check, e.g. 623 – 545 = 78 and 633 – 555. Look for students who see the pattern of increasing each of the tens by one.

4 Jill: $7657, Ben: $7850

1C (PART 1)

1 469 **2** 412 **3** 380

4 251 **5** 5431 **6** 2869

7 29 224 **8** 12 667

1C (PART 2)

1 a 49 748

1 b Teacher to check, e.g. I subtracted 35 279 from 85 027

2 a Teacher to check, e.g. She did not line up the columns properly

2 b 38 480

3 82 962

4 a Is 2569 less than 56 387?

4 b (i) 53 818 (ii) 53 818 (iii) Yes (iv) 53 818

1D (PART 1)

1 28 **2** 45 **3** 7

4 1, 2, 5 and 10

5 4

6 1, 3, 4, 6, 12 and 24

7 80

8 36 (9 factors: 1, 36, 2, 18, 3, 12, 4, 9 & 6)

1D (PART 2)

1 a 1 × 60, 60 × 1, 2 × 30, 30 × 2, 3 × 20, 20 × 3, 4 × 15, 15 × 4, 5 × 12, 12 × 5, 6 × 10, 10 × 6

1 b Teacher to check, e.g. 10 teams of 6 because the groups would be reasonably small and there would be an even number in each group

2 Teacher to check, e.g.:

2 a Because the last two digits are a multiple of 4

2 b Because the last digit is even so it is an even number

2 c Because multiples of 5 end in 5 or 0

3 Teacher to check, e.g. No it is not true because 97 is a large number but it only has 2 factors. 12 is a fairly small number but it has 6 factors.

4 72 has 12 factors: 1, 72, 2, 36, 3, 24, 4, 18, 6, 12, 8 and 9

1E (PART 1)

1 3 × 5 tens

2 80 ÷ 4 and 80 ÷ 20

3 9 × 8 **4** 100 ÷ 2

5 20 × 7 then take away 7

6 180 ÷ 3 and 6 ÷ 3

7 12 996 **8** 776

1E (PART 2)

1 a (i) 720; (ii) 360; (iii) 4270; (iv) $52.50 (accept $52.5)

1 b Teacher to check, e.g. I moved each digit one place to the left.

2 a (7 × 2 tens) + (7 × 3) = 161

2 b 130

3 a Divide 12 by 3, divide 9 by 3 and then add the answers.

3 b Teacher to check, e.g. I divided 12 tens by 3 = 4 tens. I divided 9 ones by 3 = 3. So the answer is 4 tens + 3 = 43.

4 a 600 **b** 612 **c** 1200

1F (PART 1)

1 (80 × 9) + (7 × 9) **2** 90

3 7480 **4** 1458

5 (46 × 10) + (46 × 8)

6 555 **7** 616 **8** 864

1F (PART 2)

1 a 500 **b** 475

2 a Teacher to check, e.g. because 14 is made up of 1 ten and 4 ones so 23 × 14 is the same as 23 × 4 and 23 × 10

2 b 322

2 c Teacher to check

3 261 (Look for students who multiply 37 × 6 and add 39.)

4 Student chooses two from 704 × 2, 352 × 4 or 176 × 8

1G (PART 1)

1 2 **2** $3.50

3 16 tens ÷ 4 and 8 ones ÷ 4

4 93

5
$$6\overline{)\,384 = 360 + 24}\qquad 60 + 4 = 64$$

6 Answer: 63. Teacher to check strategy

7 73

8 237 r2, or 237 $\frac{1}{2}$ (accept 237 $\frac{2}{4}$), or 237.5

1G (PART 2)

1 a 23 marbles **b** 58 marbles

2 a divide the total by 8

2 b 33.5 runs per game

3 Teacher to check, e.g.:

3 a A problem involving $549, 549 metres, etc.

3 b A problem involving things that could be easily split into quarters, such as pizzas or apples

3 c A problem involving units that cannot be divided, such as people

4 a 670.75, or $670\frac{3}{4}$ (Teacher to decide whether to accept 670 r3)

4 b Teacher to check, e.g. I chose that strategy because it is easier for me / it's the only method I know / I am more confident in getting the answer right, etc.

1H (PART 1)

1 99 998 **2** 34

3 The sum of the digits is divisible by 3.

4 it is an odd number

5 9324 **6** 9

7 2592 **8** 63

1H (PART 2)

1 a It is only divisible by 1 and itself.

1 b 11, 13, 17, 19, 23, 29

SAMPLE

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