

Name:



## Maths Assessment Year 5 Term 3: Number and Place Value

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1. Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.
2. Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
4. Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000.
5. Solve number problems and practical problems.
6. Read Roman numerals to 1000 and recognise years written in Roman numerals.

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1. Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.

a) Fill in the missing boxes:

| Number in digits | Number in words                            |
|------------------|--|
| 98 002           |  |
|                  | Six hundred and sixteen thousand and sixty |
| 772 111          |  |
| 699 247          |  |
|                  | Three thousand and ten                     |

b) Circle the largest number:

|         |         |        |         |         |
|---------|---------|--------|---------|---------|
| 799 097 | 797 979 | 99 977 | 779 797 | 799 709 |
|---------|---------|--------|---------|---------|

c) Place < or > in the following number sentences:

|         | < or > |         |
|---------|--------|---------|
| 452 190 |        | 425 190 |
| 69 010  |        | 69 100  |

d) Write a whole number to complete this number sentence:

$$45\,909 < \underline{\hspace{2cm}} < 45\,912$$

e) Draw lines to match the numbers on the left to a number on the right that has a digit of that value. **Note some numbers may have more than one line drawn to or from it.**

|         |   |   |         |
|---------|---|---|---------|
| 4000    | — | → | 484 485 |
| 30      |   |   | 456 856 |
| 500 000 |   |   | 885 538 |
| 60 000  |   |   | 534 543 |
| 800     |   |   | 363 803 |



2. Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.

a) Continue these sequences which count forwards or backwards in powers of 10:

|         |         |  |  |  |  |
|---------|---------|--|--|--|--|
| 34 789  | 34 799  |  |  |  |  |
| 124 365 | 123 365 |  |  |  |  |
| 459 701 | 559 701 |  |  |  |  |
| 63 016  | 62 016  |  |  |  |  |
| 901 280 | 901 180 |  |  |  |  |
| 97 612  | 98 612  |  |  |  |  |



6 marks

3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.

a) Count forward from -9:



1 mark

b) Some children measured the temperature in different locations around school at 9am.  
Order the locations from warmest to coldest:

| Month       | Maximum temperature |
|-------------|---------------------|
| Office      | 20°C                |
| Boiler room | 29°C                |
| Freezer     | -8°C                |
| Fridge      | 2°C                 |
| Classroom   | 19°C                |
| Cellar      | 8°C                 |



|         |  |
|---------|--|
| Warmest |  |
|         |  |
|         |  |
|         |  |
|         |  |
|         |  |
| Coldest |  |



1 mark

c) What is the difference between the warmest location and the coldest?



1 mark



Total for this page

4. Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000.

a) Draw a line from the numbers in the rectangles to the circle, if, when rounded to the nearest ten thousand, they round to 340 000. One has been done for you:

|         |                              |         |
|---------|------------------------------|---------|
| 334 901 | 341 901<br>↓<br>○<br>340 000 | 345 201 |
| 338 021 |                              | 343 729 |
| 345 000 | 329 812                      | 335 000 |

b) Draw a line from the numbers in the rectangles to the circle, if, when rounded to the nearest one hundred, they round to 7800. One has been done for you:

|      |                        |      |
|------|------------------------|------|
| 7840 | 7792<br>↓<br>○<br>7800 | 7777 |
| 7850 |                        | 7900 |
| 7099 | 7750                   | 7877 |

c) The numbers on the right are rounded to the nearest one thousand. Draw lines to match the number to which it is rounded:

|         |  |         |
|---------|--|---------|
| 500 505 |  | 498 000 |
| 497 500 |  | 499 000 |
| 500 017 |  | 500 000 |
| 499 474 |  | 501 000 |

3 marks

3 marks

4 marks

Total for this page

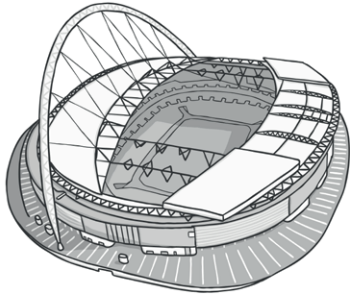
5. Solve number problems and practical problems.

a) Calculate the following:

$$-4 + 15 = \boxed{\phantom{000}}$$

1 mark

b) The capacity of a football stadium is 69 345. Another 1000 seats are added with a new stand. What is the new capacity?



Answer:

1 mark

c) The football pitch at the stadium has an area of  $7140\text{m}^2$ . Explain why, when the turf is to be replaced, rounding the area to the nearest 100 or 1000 would not be a good idea.

3 marks

Total for this page

6. Read Roman numerals to 1000 and recognise years written in Roman numerals.

a) Complete following table so the numbers match the Roman numeral equivalent



|     |       |
|-----|-------|
| 476 |       |
|     | DCCII |
|     | XCIX  |
| 818 |       |
| 261 |       |

b) The following buildings have the dates they were built in Roman Numerals engraved on them. Write the dates represented by the Roman Numerals in the table below.

| Building               | Roman Date  | Date |
|------------------------|-------------|------|
| Schiebekammer (Vienna) | MDCCCLXXIII |      |
| Capitol Building (USA) | MCMLXXXVII  |      |
| Cornerstone (USA)      | MMVIII      |      |

5 marks

3 marks

Total for this page

# Answer Sheet: Maths Assessment Year 5 Term 3: Number and Place Value



| question  | answer   | marks            | notes  |                |                |               |   |
|---|--|------------------|--|----------------|----------------|---------------|---|
| <b>1. Read, write, order and compare numbers to at least 1,000,000 and determine the value of each.</b> |  |                  |  |                |                |               |   |
| a   | Number in words  | Number in digits | up to 5 marks<br><br>When writing numbers in words, accept incorrect spellings as long as it can be decoded but don't accept just the digits written eg three seven nine |                |                |               |   |
|   | Ninety eight thousand and two  | 98 002           |  |                |                |               |   |
|   | Six hundred and sixteen thousand and sixty                               | 616 060          |  |                |                |               |   |
|   | <b>Seven hundred and seventy-two thousand, one hundred and eleven</b>    | 772 111          |  |                |                |               |   |
|   | <b>Six hundred and ninety-nine thousand, two hundred and forty-seven</b> | 699 247          |  |                |                |               |   |
|   | Three thousand and ten   | 3010             |  |                |                |               |   |
| b   | 799 709  | 1                |  |                |                |               |   |
| c   | 452 190  | >                | 425 190  |                |                |               |   |
|   | 69 010   | <                | 69 100   |                |                |               |   |
| d   | 45 910 or 45 911   | 1                |  |                |                |               |   |
| e   | 4000   |                  | 484 485  |                |                |               |   |
|   | 30   |                  | 456 856  |                |                |               |   |
|   | 500 000  | →                | 885 538  |                |                |               |   |
|   | 60 000   | →                | 534 543  |                |                |               |   |
|   | 800  | →                | 363 803  |                |                |               |   |
| <b>2. Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.</b>    |  |                  |  |                |                |               |   |
| a   | 34 789   | 34 799           | <b>34 809</b>  | <b>34 819</b>  | <b>34 829</b>  | <b>34 839</b> | 6<br><br>Each row must be correct for 1 mark. |
|   | 124  | 123              | <b>122</b>   | <b>121</b>     | <b>120</b>     | <b>119</b>    |   |
|   | 365  | 365              | <b>365</b>   | <b>365</b>     | <b>365</b>     | <b>365</b>    |   |
|   | 459  | 559              | <b>659</b>   | <b>759</b>     | <b>859</b>     | <b>959</b>    |   |
|   | 701  | 701              | <b>701</b>   | <b>701</b>     | <b>701</b>     | <b>701</b>    |   |
|   | 63 016   | 62 016           | <b>61 016</b>  | <b>60 016</b>  | <b>59 016</b>  | <b>58 016</b> |   |
| 901   | 901  | <b>901</b>       | <b>900</b>   | <b>900</b>     | <b>900</b>     |               |   |
| 280   | 180  | <b>080</b>       | <b>980</b>   | <b>880</b>     | <b>780</b>     |               |   |
| 97 612  | 98 612   | <b>99 612</b>    | <b>100 612</b>   | <b>101 612</b> | <b>102 612</b> |               |   |

# Answer Sheet: Maths Assessment Year 5 Term 3: Number and Place Value



| question  | answer  | marks          | notes  |                |         |        |                |         |  |                |         |       |                |      |       |
|---|---|----------------|--------|----------------|---------|--------|----------------|---------|--|----------------|---------|-------|----------------|------|-------|
| <b>3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.</b> |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| a   |   | 1              |        |                |         |        |                |         |  |                |         |       |                |      |       |
| b   | <table border="1"> <tr><td>boiler room</td></tr> <tr><td>office</td></tr> <tr><td>classroom</td></tr> <tr><td>cellar</td></tr> <tr><td>fridge</td></tr> <tr><td>freezer</td></tr> </table>  | boiler room    | office | classroom      | cellar  | fridge | freezer        | 1       | Allow numbers to be written: <table border="1"> <tr><td>29° C</td></tr> <tr><td>20° C</td></tr> <tr><td>19° C</td></tr> <tr><td>8° C</td></tr> <tr><td>2° C</td></tr> <tr><td>-8° C</td></tr> </table> | 29° C          | 20° C   | 19° C | 8° C           | 2° C | -8° C |
| boiler room   |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| office  |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| classroom   |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| cellar  |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| fridge  |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| freezer   |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| 29° C   |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| 20° C   |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| 19° C   |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| 8° C  |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| 2° C  |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| -8° C   |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| c   | 37 °  | 1              |        |                |         |        |                |         |  |                |         |       |                |      |       |
| <b>4. Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000.</b>  |   |                |        |                |         |        |                |         |  |                |         |       |                |      |       |
| a   |   | 3              |        |                |         |        |                |         |  |                |         |       |                |      |       |
| b   |   | 3              |        |                |         |        |                |         |  |                |         |       |                |      |       |
| c   | <table border="1"> <tr> <td>500 505</td> <td>→</td> <td><b>498 000</b></td> </tr> <tr> <td>497 500</td> <td>→</td> <td><b>499 000</b></td> </tr> <tr> <td>500 017</td> <td>→</td> <td><b>500 000</b></td> </tr> <tr> <td>499 474</td> <td>→</td> <td><b>501 000</b></td> </tr> </table> | 500 505        | →      | <b>498 000</b> | 497 500 | →      | <b>499 000</b> | 500 017 | →  | <b>500 000</b> | 499 474 | →     | <b>501 000</b> | 4    |       |
| 500 505   | →   | <b>498 000</b> |        |                |         |        |                |         |  |                |         |       |                |      |       |
| 497 500   | →   | <b>499 000</b> |        |                |         |        |                |         |  |                |         |       |                |      |       |
| 500 017   | →   | <b>500 000</b> |        |                |         |        |                |         |  |                |         |       |                |      |       |
| 499 474   | →   | <b>501 000</b> |        |                |         |        |                |         |  |                |         |       |                |      |       |

| question   | answer   | marks             | notes       |                               |
|--|--|-------------------|-------------|-------------------------------|
| <b>5. Solve number problems and practical problems that involve all of the above.</b>    |  |                   |             |                               |
| a  | 11   | 1                 |             |                               |
| b  | 70 345   | 1                 |             |                               |
| c  | The numbers would round down so there would not be enough.<br>1 mark for rounding 7140m <sup>2</sup> to 7100m <sup>2</sup><br>1 mark for rounding 7140m <sup>2</sup> to 7000m <sup>2</sup><br>1 mark for explaining if only 7100m <sup>2</sup> or 7000m <sup>2</sup> of turf was ordered, it wouldn't be enough. | 3                 |             |                               |
| <b>6. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</b> |  |                   |             |                               |
| a  | 476  | <b>CDLXXVI</b>    | 5           |                               |
|  | <b>702</b>   | DCCII             |             |                               |
|  | <b>99</b>  | XCIX              |             |                               |
|  | 818  | <b>DCCCXVIII</b>  |             |                               |
|  | 261  | <b>CCLXI</b>      |             |                               |
| b  | <b>Building</b>  | <b>Roman date</b> | <b>Date</b> | 3<br>1 mark for each correct. |
|  | Schiebekammer (Vienna)   | MDCCCLXXIII       | 1873        |                               |
|  | Capitol Building (USA)   | MCMLXXXVII        | 1987        |                               |
|  | Cornerstone (USA)  | MMVIII            | 2008        |                               |
|  |  | Total<br>45       |             |                               |