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## Maths Assessment Year 5: Number and Place Value

1. Read, write, order and compare numbers to at least 1000000 and determine the value of each digit.
a. Fill in the missing boxes:

| Number in digits | Number in words |
| :---: | :---: |
|  | Thirty thousand, three hundred and five |
| 370350 |  |
| 12009 | Sixty-two thousand, five hundred and eleven |
|  |  |
| 101220 |  |

b. Order these numbers from largest to smallest:

| 23004 | 16210 | 10050 | 42901 | 42781 | 18656 |
| :--- | :--- | :--- | :--- | :--- | :--- |


c. Compare the numbers below using < or > .

|  | < or > |  |
| :---: | :---: | :---: |
| 12451 |  | 12541 |
| 45007 |  | 43091 |
| 123432 |  | 121445 |

d. In each number say the value of the underlined digit:

| number | value of the underlined digit |
| :---: | :---: |
| $123 \underline{4} 53$ |  |
| $\underline{540238}$ |  |
| $548 \underline{9} 1$ |  |
| $7 \underline{4} 3211$ |  |

2. Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.
a. Count forwards in the steps shown from each number:

| count on in <br> steps of | starting <br> number |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 12458 |  |  |  |  |
| 100 | 123434 |  |  |  |  |
| 1000 | 321212 |  |  |  |  |

b. Count backwards in the steps shown from each number:

| count back <br> in steps of | starting <br> number |  |  |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- |
| 10 | 21482 |  |  |  |  |
| 100 | 451671 |  |  |  |  |
| 1000 | 219398 |  |  |  |  |

3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
a. Fill in the missing numbers on this number line:

b. This chart shows the temperatures of different cities around the world. Order the cities from coldest to warmest:

| City | maximum <br> temperature |
| :---: | :---: |
| Palma | $21^{\circ} \mathrm{C}$ |
| London | $13^{\circ} \mathrm{C}$ |
| Vostok | $-3^{\circ} \mathrm{C}$ |
| Mumbai | $30^{\circ} \mathrm{C}$ |
| Calgary | $-11^{\circ} \mathrm{C}$ |
| Moscow | $5^{\circ} \mathrm{C}$ |


| coldest |  |
| :---: | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
| warmest |  |

c. How much colder is it in Calgary than London? $\square$
4. Round any number up to 1000000 to the nearest $10,100,1000,10000$ and 100000.
a. Round these numbers to the nearest 10

| 41236 |  |
| :--- | :--- |
| 876212 |  |

b. Round these numbers to the nearest 100 :

| 32134 |  |
| :--- | :--- |
| 174865 |  |

c. Round these numbers to the nearest 1000:

| 42379 |  |
| :--- | :--- |
| 812532 |  |

d. Round these numbers to the nearest 10000 :

| 78890 |  |
| :--- | :--- |
| 321432 |  |

e. Round these numbers to the nearest 100000 :

| 524100 |  |
| :--- | :--- |
| 669210 |  |

5. Solve number problems and practical problems.

This table shows information about some of the planets:

| Planet | Diameter | Time taken to <br> orbit the Sun | Time taken to <br> rotate on its axis |
| :---: | :---: | :---: | :---: |
| Mercury | 4876 km | 88 days | 33408 minutes |
| Venus | 12107 km | 225 days | 349920 minutes |
| Earth | 12755 km | 365 days | 1440 minutes |
| Mars | 6794 km | 687 days | 1440 minutes |
| Saturn | 120536 km | 10759 days | 240 minutes |
| Neptune | 49527 km | 60190 days | 384 minutes |

Look at the table above.
Answer these problems about the planets:
a. Order the planets by diameter size, starting with the smallest:


| Mercury: 100 days | True or False |
| :---: | :--- |
| Venus: 220 days | True or False |
| Earth: 360 days | True or False |
| Mars: 700 days | True or False |
| Saturn: 10700 days | True or False |
| Neptune: 60200 days | True or False |

c. Jassi says that it takes Venus 31512 more minutes to rotate on its axis than Mercury. Do you think this seems a sensible answer? Don't do the actual calculation but show an approximation to show whether this is a sensible answer or not.
Sensible answer:
Yes / No (Circle)
Approximation to show why you think this:
6. Read Roman numerals to 1000 and recognise years written in Roman numerals.
a. Fill in missing numbers

| 350 | DLV |
| :---: | :---: |
|  |  |
| 212 | CCLIII |
|  |  |
| 419 |  |


b. The years these films were released are written in Roman numerals. Write the years how you would usually write them in digits:

| Jetsons: the Movie | MCMXC |  |
| :---: | :---: | :--- |
| Shrek | MMI |  |
| Frozen | MMXIII |  |



