## Reasoning and Problem Solving <br> Step 11: Round to the Nearest 1,000

## National Curriculum Objectives:

Mathematics Year 4: (4N4b) Round any number to the nearest 10, 100 or 1,000<br>Mathematics Year 4: (4N3a) Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)

Mathematics Year 4: (4N6) Solve number and practical problems that involve 4N1 - 4N5 and with increasingly large positive numbers

## Differentiation:


#### Abstract

Questions 1, 4 and 7 (Problem Solving) Developing Match the statements and numbers by rounding 4-digit numbers to the nearest thousand. Numbers are represented using numerals or pictorials, and digits or images which determine whether the number is rounded up or down are underlined. Expected Match the statements and numbers by rounding 4-digit numbers to the nearest thousand. Numbers are represented using numerals, pictorials and words. Greater Depth Match the statements and numbers by rounding 4-digit numbers to the nearest thousand. Numbers are represented using mixed pictorials and words. Unconventional partitioning is used for some numbers.


Questions 2, 5 and 8 (Reasoning)
Developing Find the odd one out when rounding 4-digit numbers to the nearest thousand.
Numbers are represented using numerals and pictorials, and digits or images which determine whether the number is rounded up or down are underlined.
Expected Find the odd one out when rounding 4-digit numbers to the nearest thousand. Numbers are represented using numerals, pictorials and words.
Greater Depth Find the odd one out when rounding 4-digit numbers to the nearest thousand. Numbers are represented using mixed pictorials and words. Unconventional partitioning is used for some numbers.

Questions 3, 6 and 9 (Reasoning)
Developing Explain if a statement rounding a given number to a given thousand is correct. Numbers are represented using numerals, and digits which determine whether the number is rounded up or down are underlined.
Expected Explain if a statement rounding a given number to a given thousand is correct. Numbers are represented using words.
Greater Depth Explain if a statement rounding a given number to a given thousand is correct. Numbers are represented using unconventional partitioning.

## More Year 4 Place Value resources.

## Did you like this resource? Don't forget to review it on our website.

1a．Match the descriptions to the numbers．

| A．Rounds up | 1,000 100 10 10 <br> 1,000 100 10 1 |
| :---: | :---: |
| B．Rounds up to 2，000 | 2，ㄲ14 |
| C．Rounds down to 2，000 | 1，875 |
| ） | PS |

2a．When rounded to the nearest thousand，which is the odd one out？

A． $\mathbf{5 , \underline { 2 } 6 4}$


C． $4, \underline{9} 85$

Explain your reasoning．
吅
3a．Max is thinking of a number．
He says，


My number is 3,148 and it rounds up to 4,000 to the nearest thousand．

Is he correct？
Explain your reasoning．

1b．Match the descriptions to the numbers．


2b．When rounded to the nearest thousand，which is the odd one out？

A． $4, \underline{5} 19$


C． 4,471

Explain your reasoning．

3b．Saskia is thinking of a number．
She says，


My number is $5, \underline{9} 62$ and it rounds up to 6，000 to the nearest thousand．

Is she correct？
Explain your reasoning．


5a. When rounded to the nearest thousand, which is the odd one out?
A. 4,620

|  | 1,000 | 1,000 | 100 | 10 | 10 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| B. | 1,000 | 1,000 | 100 | 10 | 10 | 1 |
|  | 1,000 | 100 | 10 | 10 | 10 | 1 |

C. Five thousand, five hundred and three

Explain your reasoning.

6a. Chuan is thinking of a number.
He says,


My number is eight thousand, five hundred and five and it rounds down to 8,000 to the nearest thousand.

Is he correct?
Explain your reasoning.

4b. Match the descriptions to the numbers.


5b. When rounded to the nearest thousand, which is the odd one out?
A. 4,209

C. Three thousand, six hundred and eighty-one

Explain your reasoning.

6b. Isabel is thinking of a number.
She says,


Is she correct?
Explain your reasoning.

7a. Match the descriptions to the numbers.

| A. Rounds down to 3,000 |  10 1,000 <br>  1,000 100 |
| :---: | :---: |
| B. Rounds up to 4,000 | Three thousand, $\begin{gathered}\text { six hundred and } \\ \text { eighteen }\end{gathered}$ |
| C. Rounds down to 4,000 | Three thousands and fourteen hundreds | thousand, which is the odd one out?

A.

Two thousand, nine hundred and seventy-six
B.

C. Thirty-five hundreds and forty ones

Explain your reasoning.

9a. Josh is thinking of a number.
He says,
My number has seven thousands, fifteen hundreds and eleven ones, and it rounds up to eight thousand.

Is he correct?
Explain your reasoning.

7b. Match the descriptions to the numbers.

| A. Rounds up to 3,000 | Three thousand, four hundred and ninety-nine |
| :---: | :---: |
| B. Rounds down to 3,000 | 1.000 10 $\square$ <br> $E$ 100  |
| C. Rounds down to 2,000 | $\begin{gathered} \text { Two thousands } \\ \text { and fifty-six } \\ \text { tens } \end{gathered}$ |

8b. When rounded to the nearest thousand, which is the odd one out?
A. Three thousand, two hundred and seventy-eight
B.

C. Twenty-nine

Explain your reasoning.

9b. Sophie is thinking of a number.
She says,
My number has twentyfour hundreds, twelve tens and thirteen ones, and it rounds down to two thousand.

Is she correct?
Explain your reasoning.

## Reasoning and Problem Solving Round to the Nearest 1,000

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## Developing

1a. A-2,714, B-1,875, C - counters $(2,231)$
2a. $B$ is the odd one out because it rounds to 4,000 . A and C round to 5,000.
3a. Max is incorrect because 3,148 rounds down to 3,000 as it has a hundreds value of less than 500 .

## Expected

4a. A - 6,524 , B - five thousand, six hundred and one, C - counters $(6,101)$
5 a . C is the odd one out because it rounds to 6,000 . A and B round to 5,000 .
6a. Chuan is incorrect, because eight thousand, five hundred and five rounds up to 9,000 as it has a hundreds value of 500 .

## Greater Depth

7a. A - base 10 and counters $(3,120)$, B - three thousand, six hundred and eighteen, C - three thousands and fourteen hundreds
8a. C is the odd one out because it rounds to 4,000 . A and B round to 3,000 .
9 a. Josh is incorrect because his number is 8,511 which rounds up to 9,000 as it has a hundreds value of 500 .

## Developing

1b. A - 2,961, B - 3,608, C - counters $(3,221)$
2b. C is the odd one out because it rounds to 4,000 . A and B round to 5,000 .
3b. Saskia is correct because 5,962 rounds up to 6,000 as it has a hundreds value of more than 500.

## Expected

4b. A - five thousand, six hundred and four, B-6,418, C - counters $(5,111)$
5 b . B is the odd one out because it rounds to 3,000 . A and C round to 4,000 .
6b. Isabel is correct, because six thousand, seven hundred and eleven rounds up to 7,000 as it has a hundreds value of more than 500.

## Greater Depth

7b. A - two thousands and fifty six tens,
B - three thousand, four hundred and ninety nine, C - base 10 and counters $(2,112)$
8b. B is the odd one out because it rounds to 4,000 . A and C round to 3,000 .
9 b . Sophie is incorrect because her number is 2,533 which rounds up to 3,000 as it has a hundreds value of 500 .

