# Number and Place Value: Rounding 4-Digit Numbers to 10, 100 and 1000 

## Aim:

To round any number to the nearest 10,100 or 1000.

DfE Ready-to-Progress Criteria: Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100 , and rounding to the nearest of each. (4NPV-3)
To round 4-digit numbers to the nearest 10 , 100 and 1000.

## Success Criteria:

I can identify the multiples of 10,100 and 1000 that a 4-digit number is between.

I can identify which digit to focus on in order to round to either 10,100 or 1000.
I can identify which digits round up and which digits round down.

## Key/New Words:

Round, rounded to, digit, place value, ten thousands, thousands, hundreds, tens, ones, whole number.

| Resources: <br> Lesson Pack <br> Dice |
| :--- |
| Preparation: <br> Secret Agent Rounding Game - 1 per pair/ <br> group <br> Diving into Mastery Activity Sheets - as <br> required |

Prior Learning: Year 3 Conceptual Prerequisite: It will be helpful if children can reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 10 and 100 . Estimating on a Number Line is the perfect lesson to support this.

## Learning Sequence

Remember It: Using the corresponding slide on the Lesson Presentation, the children practise counting
forwards and backwards from any 4-digit number in steps of 10 and 100 crossing multiples of 1000 . Can the
children explain which digit always changes when counting in steps of 100 , and what happens to the digits in
a number when crossing a multiple of 1000 ?
Diving into Mastery: Schools using a mastery approach may prefer to use the following as an alternative activity.
These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section
and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are
applying this to show their depth of understanding.

## Exploreit

Learnit: Children will find this visually exciting Knowledge Organiser a useful tool to support their understanding of place value. Playit: Children play this exciting Numbers Game.
Throwit: Children throw a ball and measure the distance. They round the distance to the nearest 10 cm or 100 cm .
Makeit: Children create and play their own rounding game.

## Maths

## Number and Place Value

## Rownding troigit Numbers to 100, 100



## Aim

- To round 4-digit numbers to the nearest 10,100 and 1000.


## Success Criteria

- I can identify the multiples of 10,100 and 1000 that a 4-digit number is between.
- I can identify which digit to focus on in order to round to either 10, 100 or 1000.
- I can identify which digits round up and which digits round down.


## Remember It

These sequences count forwards or backwards in steps of 10, 100 or 1000.

What are the next 5 numbers in each sequence?


## Secret Agent Hideout

Welcome to Spy HQ! Today, our training will be on rounding numbers.


## Secret Agent Hideout



## Secret Agent Hideout



## Secret Agent Hideout



## Secret Agent Hideout



## Secret Agent Hideout



## Secret Agent Hideout



## Secret Agent Hideout



## Cut the Wire

Select the correct answer to defuse the device.


## Cut the Wire

Select the correct answer to defuse the device.


## Cut the Wire

Select the correct answer to defuse the device.


## Cut the Wire

Select the correct answer to defuse the device.


## Cut the Wire

Select the correct answer to defuse the device.


## Secret Agent Game



## Diving into Mastery

Dive in by completing your own activity!


## Training Room





## Aim

- To round any number to the nearest 10,100 or 1000.


## Success Criteria

- I can identify the values above and below a number.
- I can identify which digit to focus on when rounding to a given value.
- I can identify which digits to round up and which digits to round down.


Regent Studies| www.regentstudies.com

Aim: To round 4-digit numbers to the nearest 10, 100 and 1000.


## Next Steps

| T | Teacher | I | Independent |
| :--- | :--- | :--- | :--- |
| PPA | Planning, Preparation and Assessment | AL | Adult Led |
| S | Supply | GP | Guided Practice |


| Aim: To round 4-digit numbers to the nearest 10, 100 and 1000. |  |  |  | Date: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Delivered By: |  |  | Support: |  |  |
| Success Criteria | Me | Friend | Teacher | T | PPA | S | I | AL | GP |
| I can identify the multiples of 10,100 and 1000 that a 4-digit number is between. |  |  |  | Notes/Evidence |  |  |  |  |  |
| I can identify which digit to focus on in order to round to either 10, 100 or 1000. |  |  |  |  |  |  |  |  |  |
| I can identify which digits round up and which digits round down. |  |  |  |  |  |  |  |  |  |
| Next Steps |  |  |  |  |  |  |  |  |  |


| T | Teacher | I | Independent |
| :--- | :--- | :--- | :--- |
| PPA | Planning, Preparation and Assessment | AL | Adult Led |
| S | Supply | GP | Guided Practice |

1) 

|  | Which multiples of 100 <br> does the number lie between? | Which multiple of 100 <br> is it closer to? |
| :---: | :---: | :---: |
| 1286 | 1200 and 1300 | 1300 |
| 4852 | 4800 and 4900 | 4900 |
| 3348 | 3300 and 3400 | 3300 |
| 9178 | 9100 and 9200 | 9200 |

2) 



| Number | Rounded to the Nearest 10 |
| :---: | :---: |
|  | 4330 |
|  | 2350 |
| four thousand, five hundred and ninety-three | 4590 |

1) 

| 2700 | 2650 |
| :---: | :---: |
| 1560 | 1564 |
| 4000 | 3500 |
| 8400 | 8449 |

2) Agent $Q$ could be correct. If the number was between 4950 and 5049 , the number would round to 5000 to the nearest 100.
3) a) 8572
b) 2578
c) 5287,5278
d) 8257,8275
e) $2578,2587,2758,2785,2857,2875$
4) Children's answers will vary.
5) Complete the table below to round each number to the nearest 100.

|  | Which multiples of 100 <br> does the number lie between? | Which multiple of 100 <br> is it closer to? |
| :---: | :---: | :---: |
| $\mathbf{1 2 8 6}$ |  |  |
| $\mathbf{4 8 5 2}$ |  |  |
| $\mathbf{3 3 4 8}$ |  |  |
| 9178 |  |  |

2) Match each number to the nearest 1000 that it rounds to. Some numbers might match to the same 1000s number.

3) Round each number to the nearest 10 .

| Number | Rounded to the Nearest 10 |
| :---: | :---: |



1) Identify the smallest or largest number that can be rounded to the given multiple of 10, 100 or 1000 .

2) Who do you agree with? Explain your answer.

$\qquad$
$\qquad$
$\qquad$
3) Use the digit cards to make different 4-digit numbers that match the statements. Use each digit card once in each number.
a)

| To the nearest 100, <br> this number rounds to 8600. |  |
| :---: | :--- |
| To the nearest 10, <br> this number rounds to 2580. |  |
| To the nearest 1000, <br> this number rounds to 5000. |  |
| To the nearest 100, |  |
| this number rounds to 8300. |  |
| To the nearest 1000, |  |


2) Here is a different set of digit cards.

Create 4-digit numbers and write your own rounding statements to match them. Can your partner solve them?
6
4



1) Complete the table below to round each number to the nearest 100.

|  | Which multiples of <br> 100 does the number <br> lie between? | Which multiple of <br> 100 is it closer to? |
| :---: | :---: | :--- |
| 1286 |  |  |
| 4852 |  |  |
| $\mathbf{3 3 4 8}$ |  |  |
| 9178 |  |  |

2) Match each number to the nearest 1000 that it rounds to. Some numbers might match to the same 1000s number.

3) Round each number to the nearest 10.



4) Identify the smallest or largest number that can be rounded to the given multiple of 10,100 or 1000 .

5) Who do you agree with? Explain your answer.

6) Identify the smallest or largest number that can be rounded to the given multiple of 10,100 or 1000 .


Smallest number rounded to the 2700 nearest 100.
 rounded to the

2) Who do you agree with? Explain your answer.


1) Use the digit cards to make different 4-digit numbers that match the statements.

Use each digit card once in each number.

a)

2) Here is a different set of digit cards.

Create 4-digit numbers and write your own rounding statements to match them. Can your partner solve them?


1) Use the digit cards to make different 4-digit numbers that match the statements.

Use each digit card once in each number.

a)
b)
c)

d) this number rounds to 8300 .

To the nearest 1000,
e) this number rounds to 3000 .
2) Here is a different set of digit cards.

Create 4-digit numbers and write your own rounding statements to match them. Can your partner solve them?


Rounding to 10, $\mathbf{1 0 0}$ or 1000



| Previous multiple of 1000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Next multiple of 1000 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Next |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| Number <br> landed on: | Rounded to the <br> nearest 10: | Rounded to the <br> nearest 100: | Rounded to the <br> nearest 1000: |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| Number <br> landed on: | Rounded to the <br> nearest 10: | Rounded to the <br> nearest 100: | Rounded to the <br> nearest 1000: |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Number and Place Value | Rounding 4-Digit Numbers to 10, 100 and 1000

| To round 4-digit numbers to the nearest 10, 100 <br> and 1000. |  |  |
| :--- | :--- | :--- |
| I can identify the multiples of 10,100 and 1000 <br> that a 4-digit number is between. |  |  |
| I can identify which digit to focus on in order to <br> round to either 10,100 or 1000. |  |  |
| I can identify which digits round up and which <br> digits round down. |  |  |

Number and Place Value | Rounding 4-Digit Numbers to 10, 100 and 1000

| To round 4-digit numbers to the nearest 10, 100 <br> and 1000. |  |  |
| :--- | :--- | :--- |
| I can identify the multiples of 10, 100 and 1000 <br> that a 4-digit number is between. |  |  |
| I can identify which digit to focus on in order to <br> round to either 10, 100 or 1000. |  |  |
| I can identify which digits round up and which <br> digits round down. |  |  |

Number and Place Value | Rounding 4-Digit Numbers to 10, 100 and 1000

| To round 4-digit numbers to the nearest 10, 100 <br> and 1000. |  |  |
| :--- | :--- | :--- |
| I can identify the multiples of 10, 100 and 1000 <br> that a 4-digit number is between. |  |  |
| I can identify which digit to focus on in order to <br> round to either 10, 100 or 1000. |  |  |
| I can identify which digits round up and which <br> digits round down. |  |  |

Number and Place Value | Rounding 4-Digit Numbers to 10, 100 and 1000

| To round 4-digit numbers to the nearest 10, 100 <br> and 1000. |  |  |
| :--- | :--- | :--- |
| I can identify the multiples of 10,100 and 1000 <br> that a 4-digit number is between. |  |  |
| I can identify which digit to focus on in order to <br> round to either 10, 100 or 1000. |  |  |
| I can identify which digits round up and which <br> digits round down. |  |  |

Number and Place Value | Rounding 4-Digit Numbers to 10, 100 and 1000

To round 4-digit numbers to the nearest 10, 100 and 1000.

I can identify the multiples of 10,100 and 1000 that a 4-digit number is between.

I can identify which digit to focus on in order to round to either 10, 100 or 1000.

I can identify which digits round up and which digits round down.

Number and Place Value | Rounding 4-Digit Numbers to 10, 100 and 1000

| To round 4-digit numbers to the nearest 10, 100 <br> and 1000. |  |  |
| :--- | :--- | :--- |
| I can identify the multiples of 10, 100 and 1000 <br> that a 4-digit number is between. |  |  |
| I can identify which digit to focus on in order to <br> round to either 10, 100 or 1000. |  |  |
| I can identify which digits round up and which <br> digits round down. |  |  |

Number and Place Value | Rounding 4-Digit Numbers to 10, 100 and 1000

| To round 4-digit numbers to the nearest 10, 100 <br> and 1000. |  |  |
| :--- | :--- | :--- |
| I can identify the multiples of 10, 100 and 1000 <br> that a 4-digit number is between. |  |  |
| I can identify which digit to focus on in order to <br> round to either 10, 100 or 1000. |  |  |
| I can identify which digits round up and which <br> digits round down. |  |  |


| Number and Place Value \| Rounding 4-Digit Numbers to 10, 100 and 1000 |
| :--- |
| To round 4-digit numbers to the nearest 10, 100 <br> and 1000.   <br> I can identify the multiples of 10, 100 and 1000 <br> that a 4-digit number is between.   <br> I can identify which digit to focus on in order to <br> round to either 10, 100 or 1000.   <br> I can identify which digits round up and which <br> digits round down.   |

