

Year 5

Number and Place Value Rounding Maths Mastery Challenge Cards



Maths Mastery Number and Place Value Rounding

1

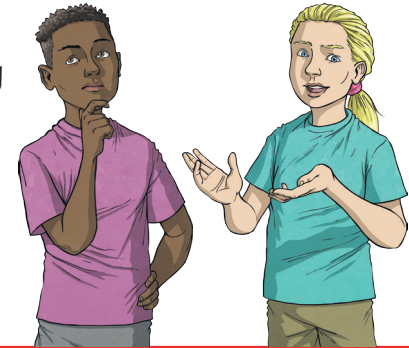
Lily and Adam decided to play a game.

Lily starts by writing a number (up to six digits) on a small whiteboard. She reads the number to Adam, who must round it to the nearest 100.

If Adam answers correctly, he gets to write the next number.

If he gets it wrong, Lily gets a point and writes another number. They play until one of them has five points.

Play the game with a partner. If your partner needs help, show them the number or ask them to write it down.



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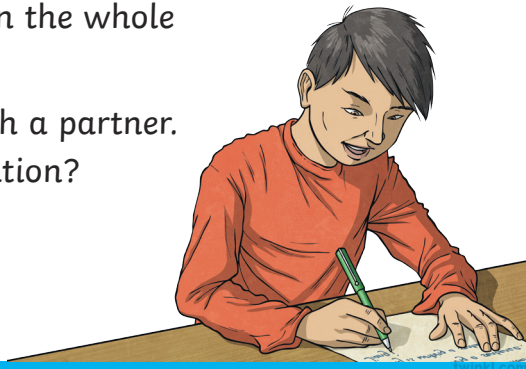
Jiang writes these four numbers:

6000 12 000 34 000 200 000

For each of these numbers, write five numbers that can be rounded to the number when rounded to the nearest 1000.

For one of the numbers, explain the whole range of possible answers.

Compare your explanation with a partner.
Can you improve your explanation?



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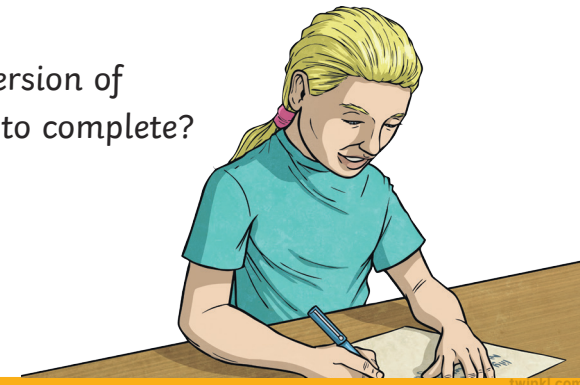
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Lily writes down some numbers:

406 345, 412 902, 403 672, 417 782, 405 000, 404 499

Which numbers are rounded to 410 000 when rounded to the nearest ten thousand?

Can you make your own version of this question for a partner to complete?



Adam writes two 6-digit numbers. He rounds the numbers to the nearest 100 000.

He adds the rounded numbers together. Then, he adds the original numbers together and rounds the answer to the nearest 100 000.

Will he get the same answer?

Does it depend on the numbers?



Lily says, "When you round a number to the nearest 1000, the important digit is the thousands digit."

Explain why Lily is not correct and write a better statement to explain how to round to the nearest 1000.

Share your explanation with a partner and make any improvements to your own explanation as a result.



Jiang and Adam work together.

Jiang has a number. He writes down 34 700 and says that this is the result when his number is rounded to the nearest 10. What is the largest possible number that Jiang could have chosen?

Adam has a number. He writes down 580 000 and says that this is the result when his number is rounded to the nearest 100. What is the smallest possible number that Adam could have chosen?

Work with a partner and set each other similar challenges.

Adam uses a standard dice. He rolls the dice 5 times to create a 5-digit number. He rounds the number to the nearest 1000.

He repeats this 30 times and finds that more of the numbers round down than round up. He expected half of the numbers to round up and half to round down.

Can you help Adam explain why this is the case?

