# M@ths M@stery <br> Rownding to the Powers of 10 

## Rounding to 10

## seventeen

Write a number (up to 6 digits) on a small whiteboard (hidden).
Say the number to your partner who must round it to the nearest 10. If they get the answer correct, then it is their turn to write a number.
If your partner guesses an incorrect answer, then you will get a point.
Play to 10 points and then swap partners.
If your partner is finding it difficult, perhaps show them the numbers for a few seconds.
twenty


## Rounding to 100

For each of these numbers, write five numbers that can be rounded to the number when rounded to the nearest 100.

## 300

$\begin{array}{cc}\text { Between } 250 & \text { Between } 1450 \\ \text { and } 349 & \text { and } 1549\end{array}$

## 32900

Between
32850 and
32949

782000

Between 781950 and<br>782049

Explain the range of answers for 10000.

Any number between 9950 and 10049

## Rounding to 1000

Write down the numbers which, when rounded to the nearest thousand, are rounded to 34 000:

| 33672 |  | 34829 |  | 30999 |
| :--- | :--- | :--- | :--- | :--- |
|  | 34002 |  | 30903 |  |
| 32919 |  | 34500 |  | 34499 |
|  | 33501 |  | 34201 |  |

Create your own set of numbers for a partner.

## Rounding to 10000

Write an explanation, with examples, of how to round any number to the nearest ten thousand.


Share your explanation with a partner. Can you improve your answer with any ideas from your partner?

Every number is between two 10000 's. We round to the nearest 10000.
By convention the half way point goes up, so 6500 rounds to 7000.

## Rounding to 100000

Write two 6-digit numbers.
Add the numbers together and round the answer to the nearest 100000. Now round the original numbers and add them together.

Do you get the same answer?
Try it again with different numbers.
What do you find?

Roughly half the answers will be the same; the rest will differ by 100000 . This is where both numbers are rounded up or both down by more than 50000.
e.g. $225000+325000=550000$ rounds to $\mathbf{6 0 0} 000$ $200000+300000=500000$

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