

Round a number to 1 significant figure

- 1** Some numbers are written in a table.
Underline the first significant figure in each of the numbers.
Then complete the other columns.
The first one has been done for you.

Number	Place value of 1st significant figure	Number rounded to 1 significant figure
<u>7</u> 3	Tens	70
730	Hundreds	700
758	Hundreds	800
7,300	Thousands	7,000
7,780	Thousands	8,000
704,000	Hundred Thousands	700,000
7.9	Ones	8
0.71	Tenths	0.7

- 2** Round the numbers to 1 significant figure.

- | | | | |
|----------|------------------|----------|----------------|
| a) 328 | <div>300</div> | e) 89.6 | <div>90</div> |
| b) 1,719 | <div>2,000</div> | f) 83.67 | <div>80</div> |
| c) 1,219 | <div>1,000</div> | g) 9.84 | <div>10</div> |
| d) 83 | <div>80</div> | h) 96.9 | <div>100</div> |

- 3** Alex rounds 459 to 1 significant figure.

Alex

This is 500 to 1 significant figure.

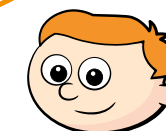
- a) Is Alex correct? Yes

Explain why.

The first significant figure is in the hundreds position and 459 to the nearest 100 is 500

- b)

Rounding to 1 significant figure is always the same as rounding to the nearest 100



Ron

- Is Ron correct? No

Talk about it with a partner.

- 4** Which of these numbers could have been rounded to 1 significant figure?

Tick your answers.

- | | | | |
|-------|-------------------------------------|--------|-------------------------------------|
| 80.08 | ☐ | 800 | ☒ |
| 8 | ☒ | 0.8 | ☒ |
| 80 | ☒ | 8.08 | ☐ |
| 808 | ☐ | 0.08 | ☒ |
| 0.80 | ☒ | 0.0008 | ☒ |

What do you notice about your answers?

- 5 Dora is rounding numbers to 1 significant figure.



0.086 rounds to 0.1 as 8 is greater than 5, so the 0 goes up to a 1

Explain the mistake that Dora has made and write the correct answer.

Dora should have looked at the thousandths column to round. The correct answer is 0.09

- 6 Round the numbers to 1 significant figure.

a) 0.0451

0.05

b) 0.0000662

0.00007

0.451

0.5

0.0002662

0.0003

0.000451

0.0005

2.000662

2

- 7 Tommy rounds 0.003872 to 1 significant figure.

0.004000

How could Tommy improve his answer?

0.004

- 8 Mo is rounding answers on his calculator to 1 significant figure.

a) Mo says the answer is 99

Explain the mistake that Mo has made and write the correct answer.



99 is two significant figures. The correct answer is 100

- b) Work out $\frac{6.7 + 2.3}{9.6}$ on your calculator.

0.9375

Round the answer to 1 significant figure.

0.9

- 9 The attendance at a football match is 28,765

a) Round this number to 1 significant figure.

30,000

The number of people who attend a different football match is 60,000 rounded to 1 significant figure.

b) What is the greatest possible number of people who attended the football match?

64,999

c) What is the least possible number of people who attended the football match?

55,000

- 10 When does rounding to 1 significant figure give the same answer as rounding to the nearest 10?

Talk about it with a partner and come up with a generalisation.

