## LO: To round numbers accurately (bronze)

### Practise

Round these numbers to the nearest 10

1) 954
2) 1,235
3) 128,928

Round these to the nearest 100

4) 1,239
5) 283,782
6) 3,456,286

Round these to the nearest 1,000

7) 283,782
8) 3,456,286
9) 2,747,923

Round these to the nearest 10,000

10) 3,456,286
11) 2,747,923
12) 345,349

### Fluency

13) In July 2015, the population of the U.K was estimated to be 64,881,609. What is this rounded to the nearest 10,000? To the nearest 100,000? To the nearest million?

14) Circle all the numbers that round to 38,000 to the nearest 1,000

| | | | |
|---|---|---|---|
| 38,350 | 38,499 | 37,500 | 38,500 |
| 37,690 | 37,099 | 37,999 | 38,098 |

15) Write the missing digits so that each number rounds to three hundred and twenty thousand when rounded to the nearest ten thousand.

32__,657          3__5,001          31__,999

### Reasoning

16) A number rounded to the nearest 1000 is 54000. What is the largest possible number this could be?

## LO: To round numbers accurately (silver)

### Practise

Round these to the nearest 100

1) 1,239
2) 3,456,286

Round these to the nearest 1,000

3) 3,456,286
4) 345,349

Round these to the nearest 10,000

5) 2,747,923
6) 345,349

### Fluency

7) Write the missing digits so that each number rounds to three hundred and twenty thousand when rounded to the nearest ten thousand.

32__,657        3_5,001        31__,999

8) In 2013, there were 778,803 births in the UK. What is this to the nearest 100? Nearest 1000? Nearest 10000? Nearest 100000?

9) In July 2015, the population of the U.K was estimated to be 64,881,609. What is this rounded to the nearest 10,000? To the nearest 100,000? To the nearest million?

### Reasoning

10) A number rounded to the nearest 1000 is 54000. What is the largest possible number this could be?

11) Three children have rounded 471,958 to the nearest 100,000

Eva — 500,000

Jack — 400,000

Rosie — 472,000

Who is correct?

_____ is correct.

Explain the mistake the other children have made.

### Problem solving

12) Nathan thinks of a number. Rounded to the nearest 10 it equals 1150. Rounded to the nearest 100 it equals 1200. Rounded to the nearest 1000 it equals 1000. What could Nathan's number be?

# LO: To round numbers accurately (gold)

## Practise

Round these to the nearest 100

1) 283,782
2) 3,456,286

Round these to the nearest 1,000

3) 3,456,286
4) 2,747,923

Round these to the nearest 10,000

5) 3,456,286
6) 2,747,923

## Fluency

7) In July 2015, the population of the U.K was estimated to be 64,881,609. What is this rounded to the nearest 10,000? To the nearest 100,000? To the nearest million?

## Reasoning

8) Round the number 259996 to the nearest 1000. Round it to the nearest 10000. What do you notice about your answers? Can you think of three more numbers where the same thing would happen?

9) True or false? All numbers with a five in the tens column will round up when rounded to the nearest 100 and 1000.

## Problem solving

10) Two numbers when added together make 100 but when rounded one number rounds to 0 and the other rounds to 100. How many different combinations of numbers can you find?

11) Nathan thinks of a number. Rounded to the nearest 10 it equals 1150. Rounded to the nearest 100 it equals 1200. Rounded to the nearest 1000 it equals 1000. What could Nathan's number be?

12)

A and B are integers.

A = 300,000 to the nearest 100,000

B = 300,000 to the nearest 10,000

a) What is the greatest possible value of A + B?

b) What is the smallest possible value of A + B?

c) What is the greatest possible value of A – B?

# LO: To round numbers accurately (bronze) - answers

## Practise

Round these numbers to the nearest 10

1) 950
2) 1,240
3) 128,930

Round these to the nearest 100

4) 1,200
5) 283,800
6) 3,456,300

Round these to the nearest 1,000

7) 284,000
8) 3,456,000
9) 2,748,000

Round these to the nearest 10,000

10) 3,460,000
11) 2,750,000
12) 350,000

## Fluency

13) 64,880,000 - 64,900,000 - 65,000,000

14) Circle all the numbers that round to 38,000 to the nearest 1,000

38,350   38,499   37,500   38,500

37,690   37,099   37,999   38,098

15) Write the missing digits so that each number rounds to three hundred and twenty thousand when rounded to the nearest ten thousand.

32__,657        3__5,001        31__,999

0-4             1             5-9

## Reasoning

16) 54,499

# LO: To round numbers accurately (silver) - answers

## Practise

Round these to the nearest 100

1) 1,200
2) 3,456,300

Round these to the nearest 1,000

3) 3,456,000
4) 345,000

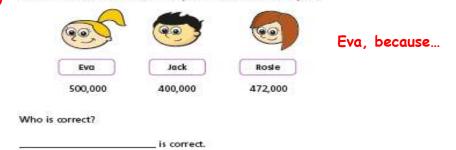Round these to the nearest 10,000

5) 2,750,000
6) 350,000

## Fluency

7) Write the missing digits so that each number rounds to three hundred and twenty thousand when rounded to the nearest ten thousand.

| 32__,657 | 3_5,001 | 31__,999 |
|----------|---------|----------|
| 1-4 | 1 | 5-9 |

8) 778,800 - 779,000 - 780,000 - 800,000

9) 64,880,000 - 64,900,000 - 65,000,000

## Reasoning

10) 54,449

11) Three children have rounded 471,958 to the nearest 100,000

Eva, because…

Eva    Jack    Rosie

500,000    400,000    472,000

Who is correct?

_____ is correct.

Explain the mistake the other children have made.

## Problem solving

12) Answers will vary e.g. 1151

# LO: To round numbers accurately (gold) - answers

## Practise

Round these to the nearest 100

1) 283,800
2) 3,456,300

Round these to the nearest 1,000

3) 3,456,000
4) 2,748,000

Round these to the nearest 10,000

5) 3,460,000
6) 2,750,000

## Fluency

7) 64,880,000  -  64,900,000  - 65,000,000

## Reasoning

8) 260,000  -  260,000  both the same.
   Answers will vary
9) False, it will round up to the nearest 100 but not always to the nearest 1000 (that depends on the hundred column)

## Problem solving

10) Answers will vary e.g. 49 + 51, 48 + 52…

11) Answers will vary e.g. 1151

12)
A and B are integers.

A = 300,000 to the nearest 100,000
B = 300,000 to the nearest 10,000

a) What is the greatest possible value of A + B?      349,999+304,999=654,998

b) What is the smallest possible value of A + B?      250,000+295,000=545,000

c) What is the greatest possible value of A – B?      349,999-295,000=254,000