

LO: To round decimal numbers accurately (bronze)

Practise

Round these numbers to the nearest tenth (1 decimal place)

- 1) 2.73
- 2) 3.87
- 3) 95.434
- 4) 38.94
- 5) 1.239

Round these to the nearest whole number.

- 6) 56.78
- 7) 12.34
- 8) 27.583
- 9) 0.31
- 10) 0.501

Fluency

11) Work out the missing number.

362.19 rounded to the nearest _____ is 362

12) Work out the missing number.

23.47 rounded to the nearest _____ is 23.5

13) A number rounded to the nearest tenth is 6.4. What is the smallest possible number it could have been? What is the largest possible number it could have been?

Reasoning

14) Zara says "If I round 26.63 to the nearest 10, I do not need to look at the tenths or hundredths." Do you agree? Explain your reasoning.

15) Here are the weights in kilograms of some parcels.



a) Round the weight of each parcel to 1 decimal place.

kg kg kg kg

b) The weight of each parcel has been rounded to the nearest 100g.

Is this true or false? _____

LO: To round decimal numbers accurately (silver)

Practise

Round these numbers to the nearest tenth.

- 1) 95.434
- 2) 38.94
- 3) 12.98
- 4) 28.72

Round these to the nearest whole number.

- 5) 27.583
- 6) 34.5
- 7) 0.31
- 8) 67.4

Fluency

9) Work out the missing number.

23.47 rounded to the nearest _____ is 23.5

10) A number rounded to the nearest tenth is 6.4. What is the smallest possible number it could have been? What is the largest possible number it could have been?

Reasoning

11) Zara says "If I round 26.63 to the nearest 10, I do not need to look at the tenths or hundredths." Do you agree? Explain your reasoning.

12) Give an example of a number that rounds to the same number when rounded to the nearest tenth, nearest hundredth and the nearest whole number. Explain why this has happened.

Problem solving

13) Nathan thinks of a number. Rounded to the nearest whole number it equals 7. Rounded to the nearest tenth it equals 7.20. Rounded to the nearest hundredth it equals 7.240. What is Nathan's number? Is this the only possibility?

14) Amir is thinking of a number.

Rounded to the nearest whole his number is 5

Rounded to the nearest tenth his number is 4.8

Write at least four different numbers that Amir could be thinking of.

LO: To round decimal numbers accurately (gold)

Practise

Round these numbers to the nearest tenth.

1) 12.98

2) 1.239

Round these to the nearest whole number.

3) 34.5

4) 0.31

Fluency

5) A number rounded to the nearest tenth is 13.2. What is the smallest possible number it could have been? What is the largest possible number it could have been?

Reasoning

6) Zara says "If I round 26.63 to the nearest 10, I do not need to look at the tenths or hundredths." Do you agree? Explain your reasoning.

7) Alex says "If I round 13.74 to the nearest tenth, I do not need to look at the tens or ones." Do you agree? Explain your reasoning.

8) Give an example of a number that rounds to the same number when rounded to the nearest tenth, nearest hundredth and the nearest whole number. Explain why this has happened.

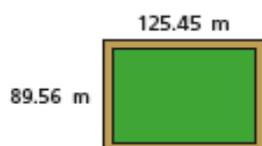
Problem solving

9) Nathan thinks of a number. Rounded to the nearest whole number it equals 7. Rounded to the nearest tenth it equals 7.20. Rounded to the nearest hundredth it equals 7.240. What is Nathan's number? Is this the only possibility?

10) Two numbers each with two decimal places round to 41.3 to one decimal place. The total of the numbers is 82.6. What could the numbers be? How many different ways can you find?

11) Look at question 11. Using this question, pick a number that goes to three decimal places and create your own question in this style.

12) A farmer is building a new fence for her sheep field.
Here are the measurements.



She wants to build a fence around the whole field.
Estimate how much fencing you think she will need.

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

Practise

Round these numbers to the nearest tenth (1 dp)

- 1) 2.7
- 2) 3.9
- 3) 95.4
- 4) 38.9
- 5) 1.2

Round these to the nearest whole number.

- 6) 57
- 7) 12
- 8) 28
- 9) 0
- 10) 1

Fluency

- 11) 362.19 rounded to the nearest whole number is 362
- 12) 23.47 rounded to the nearest tenth is 23.5
- 13) 6.35 - 6.44

Reasoning

16) Yes, if you are rounding to the nearest 10 you need to look at the ones

17)

Here are the weights in kilograms of some parcels.



3.48 kg



1.42 kg



10.65 kg



1.03 kg

a) Round the weight of each parcel to 1 decimal place.

kg kg kg kg

b) The weight of each parcel has been rounded to the nearest 100g.

Is this true or false?

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

Practise

Round these numbers to the nearest tenth.

- 1) 95.4
- 2) 38.9
- 3) 13.0
- 4) 28.7

Round these to the nearest whole number.

- 5) 28
- 6) 35
- 7) 0
- 8) 67

Fluency

9) 23.47 rounded to the nearest tenth is 23.5

10) 6.35 - 6.44

Reasoning

15) Yes, if you are rounding to the nearest 10 you need to look at the ones

16) Answers will vary

Problem solving

17) 7.235 - 7.244

18) Amir is thinking of a number.

Rounded to the nearest whole his number is 5

Rounded to the nearest tenth his number is 4.8

Write at least four different numbers that Amir could be thinking of.

Answers will vary e.g. 4.78, 4.82

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

Practise

Round these numbers to the nearest tenth.

1) 13.0

2) 1.2

Round these to the nearest whole number.

3) 35

4) 0

Fluency

5) 13.150 - 13.249

Reasoning

6) Yes, if you are rounding to the nearest 10 you need to look at the ones

7) No, if the tenths is 9 and you need to round up and the ones (and possibly the tens) need to change

8) Answers will vary

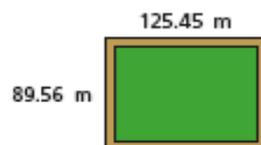
Problem solving

9) 7.235 - 7.244

10) 41.34 + 41.26, 41.33 + 41.27 etc

11) Answers will vary

12) A farmer is building a new fence for her sheep field.
Here are the measurements.



She wants to build a fence around the whole field.
Estimate how much fencing you think she will need.

Estimate answer not calculate

e.g. $90 + 125 + 90 + 125 =$