## **Mathematics**

#### Number and Algebra



Mathematics | Year 5 | Number and Algebra | Number and Place Value | Rounding Numbers | Lesson 3 of 5: Rounding Measures

# **Rounding Measures**



#### Aim

• I can round decimal numbers to different values.

#### Success Criteria

- I can identify the values above and below a number.
- I can identify which digit to focus on when rounding to different values.
- I can identify which digits to round up and which digits to round down.

![](_page_2_Picture_6.jpeg)

#### Peg Rounding

![](_page_3_Picture_1.jpeg)

Your group has a set of **Peg Rounding Cards**. On each card you will find a rounding question and 3 possible answers.

You need to work as a group to identify the correct answer for each card. There are enough cards for each person in your group to have several cards.

Clip a peg onto the correct answer on each card.

Will your group get all the pegs in the right place?

![](_page_3_Figure_6.jpeg)

![](_page_3_Picture_7.jpeg)

## Peg Rounding

![](_page_4_Picture_1.jpeg)

![](_page_4_Figure_2.jpeg)

![](_page_4_Picture_3.jpeg)

#### **Rounding Decimals**

![](_page_5_Picture_1.jpeg)

We have learnt how to round whole numbers to different values in order to simplify and work with the numbers more easily.

Using the same methods, we can also round decimal numbers to different values.

Let's have a look at some examples.

![](_page_5_Picture_5.jpeg)

![](_page_5_Picture_6.jpeg)

![](_page_6_Picture_1.jpeg)

Round 23.4 to the nearest one, or the nearest whole number.

![](_page_6_Figure_3.jpeg)

23.4 rounded to the nearest one is 23.

![](_page_6_Picture_5.jpeg)

![](_page_7_Picture_1.jpeg)

Rounding to the nearest tenth is just the same!

![](_page_7_Figure_3.jpeg)

It is nearer to 3.3 on the number line, and the hundredths digit is 7. 5, 6, 7, 8 and 9 tell us to round up.

![](_page_7_Picture_5.jpeg)

![](_page_8_Picture_1.jpeg)

Choose 2 of these rounding challenges. You can use the number line below to help you.

5.4 to the nearest whole number.	2.19 to the nearest tenth.
8.82 to the nearest tenth.	19.7 to the nearest whole number.
75.45 to the nearest tenth.	456.72 to the nearest whole number.
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![](_page_9_Picture_1.jpeg)

#### **Championship Scores**

![](_page_10_Picture_1.jpeg)

These children have been participating in their class's mini championship games.

![](_page_10_Picture_3.jpeg)

One of the games is a tiddlywinks round.

Children have to flip a tiddlywink counter and measure how far it travels.

Each group records their scores.

![](_page_10_Picture_7.jpeg)

#### **Championship Scores**

![](_page_11_Picture_1.jpeg)

Here are the scores for one of the groups:

Child	Distance
Linden	5.7cm
Saif	13.4cm
Ava	7.3cm
Tonisha	12.6cm
Harry	6.1cm
Рорру	11.9cm

Choose one child's score and round it to the nearest whole number.

![](_page_11_Picture_5.jpeg)

#### **Championship Scores**

![](_page_12_Picture_1.jpeg)

Did you round it correctly?

Child	Distance	Rounded to the nearest whole number
Linden	5.7cm	6cm
Saif	13.4cm	13cm
Ava	7.3cm	7cm
Tonisha	12.6cm	13cm
Harry	6.1cm	6cm
Рорру	11.9cm	12cm

![](_page_12_Picture_4.jpeg)

### **Rounding Championships**

![](_page_13_Picture_1.jpeg)

You are going to compete in your own rounding class championships!

Each group will compete in 3 events: beanbag shot put, tiddlywinks and standing long jump.

You will follow the instructions on the Activity Guide for each event and record the score of each person in your group on the Scoring Card Activity Sheet.

Once your group has competed in an event, you should round the scores to the values given on the **Scoring Card Activity Sheet**.

![](_page_13_Picture_6.jpeg)

![](_page_13_Picture_7.jpeg)

### **Rounding Reasoning**

![](_page_14_Picture_1.jpeg)

Some people in our class have been thinking about whether the highest raw scores in each event are always the highest rounded scores.

#### Can anyone share their thoughts on this?

![](_page_14_Picture_4.jpeg)

![](_page_14_Picture_5.jpeg)

#### **Rounding Reasoning**

![](_page_15_Picture_1.jpeg)

The highest raw scores will not always be the highest rounded scores. Let's look at the example we used earlier in the lesson:

Child	Distance	Rounded to the nearest whole number
Linden	5.7cm	6cm
Saif	13.4cm	13cm
Ανα	7.3cm	7cm
Tonisha	12.6cm	13cm
Harry	6.1cm	6cm
Рорру	11.9cm	12cm

Because Saif scored 13.4cm, we round this down to 13cm.

Tonisha only scored 12.6cm, but because the tenths number is a 6, we still round up to 13cm.

Their rounded scores are the same.

![](_page_15_Picture_7.jpeg)

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![](_page_16_Picture_6.jpeg)

![](_page_17_Picture_0.jpeg)