## Mathematics <br> Number and Algebra

## 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.


## Peg Rounding

## 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?


## Peg Rounding



## Rounding Decimals

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.


## Find the Nearest

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

23.4 rounded to the nearest one is 23 .

## Find the Nearest

## Rounding to the nearest tenth is just the same!



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.

## Find the Nearest

## Choose 2 of these rounding challenges.

You can use the number line below to help you.
5.4 to the nearest whole number.
8.82 to the nearest tenth.
2.19 to the nearest tenth.
75.45 to the nearest tenth.
19.7 to the nearest whole number.
456.72 to the nearest whole number.

$\square$

## Find the Nearest

How did you do?

| 5.4 to the nearest whole number. | 5 | 2.19 to the nearest tenth. | 2.2 |
| :---: | :---: | :---: | :---: |
| 8.82 to the nearest tenth. | 8.8 | 19.7 to the nearest whole number. | 20 |
| 75.45 to the nearest tenth. | 75.5 | 456.72 to the nearest whole number. | 457 |
|  |  | 1 1 1 |  |

## Championship Scores

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


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.

## Championship Scores

Here are the scores for one of the groups:

| Child | Distance |
| :---: | :---: |
| Linden | 5.7 cm |
| Saif | 13.4 cm |
| Ava | 7.3 cm |
| Tonisha | 12.6 cm |
| Harry | 6.1 cm |
| Poppy | 11.9 cm |

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

## Championship Scores

Did you round it correctly?

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

## Rounding Championships

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.


## Rounding Reasoning

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?


## Rounding Reasoning

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 <br> whole number |
| :---: | :---: | :---: |
| Linden | 5.7 cm | 6 cm |
| Saif | 13.4 cm | 13 cm |
| Ava | 7.3 cm | 7 cm |
| Tonisha | 12.6 cm | 13 cm |
| Harry | 6.1 cm | 6 cm |
| Poppy | 11.9 cm | 12 cm |

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

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

Their rounded scores are the same.

## 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.


