

Thursday 30th April 2020

Good morning Y4s

Today I would like you to finish the Mastery activities from yesterday and then have a go at the Reasoning and Problem Solving Activities below. I have also added some of the Greater Depth tasks on the last page.

Round Decimals

Reasoning and Problem Solving

Two numbers with 1 decimal place round to 23 to the nearest whole number. The numbers add together to make 46.

What could the two numbers be?

A number with one decimal place rounded to the nearest whole number is 45.

What could the number be?

Round the Dice Decimals 1

Age 7 to 11 ★



There are two dice, each of them with faces labelled from 1 to 6. When the dice are rolled they can be combined in two different ways to make a number less than 10 with one decimal place.

For example, if I roll a 2 and a 3 I can combine them to make 2.3 or 3.2.

Now round each of these numbers to the nearest whole number: 2.3 rounds to 2 and 3.2 rounds to 3. Repeat for other rolls of the dice.

Do both of the numbers you make ever round to the same whole number?

Record your results in a table like this

Numbers rolled	1st decimal number	Rounds to	2nd decimal number	Rounds to
2 and 3	2.3	2	3.2	3
2 and 6	2.6	3	6.2	6

Activities for pupils working at greater depth:

I am a number with one decimal place.
When rounded to the nearest whole number I am 25.
My decimal digit is 7. What is my number?

I am a number between 20 and 30 with one decimal place.
When the digits of my rounded number are added together it makes 9.
My decimal digit is 5. What is my number?

Create a few more of these problems for your friends to solve.

We are two numbers with each having 2 decimal places.
We are both between 20 and 29.
When adding all our 4 digits together both of us add up 12.
We have the same ones value.
What could our two number be?
There may be more than one answer.
Create your own problem along these lines for your friends to solve.

Make up a set of 5 numbers with the same whole number and one decimal place.
Now make up another set of 5 numbers with the same whole number as before but this time with two decimal places.
Using the set of 10, get your partner to put them in order and then then you put your partners in order.

Make a board with the whole numbers 24 to 29 on. Get pupils to place numbers with one or two decimal places on them in the correct place once they have been rounded.

Create a board game that involves rounding to the nearest whole number and also decimal numbers up to two decimal places.
You may think of ideas such as snakes and ladders or even draughts.
If you use a dice it can be numbered as you wish and does not have to 1 to 6.
Create the game with your partner and see if it can be played by others following your rules.
Don't forget it has to feature decimals.

Answers

Round Decimals

Reasoning and Problem Solving

Two numbers with 1 decimal place round to 23 to the nearest whole number. The numbers add together to make 46.

What could the two numbers be?

The numbers could be:

22.6 and 23.4
22.7 and 23.3
22.8 and 23.2
22.9 and 23.1

A number with one decimal place rounded to the nearest whole number is 45.

What could the number be?

The number could be:

44.5, 44.6, 44.7,
44.8, 44.9, 45.1,
45.2, 45.3 or 45.4