

Master Rounding Decimal Numbers to Given Degrees of Accuracy

Rationale

In this step, pupils build on rounding decimals with 2 decimal places to 1 decimal place by rounding decimal numbers to given degrees of accuracy. They will use their prior knowledge of number lines and consider multiples of 1 and 0.1 before and after a given number. They will understand the significance of the relevant digit when rounding to the nearest whole number and to 1 decimal place to decide whether to round up to the next multiple or down to the previous multiple.

Pupils will develop their learning by identifying a range of numbers which round to a specific multiple of 1 or 0.1



Key Stem Sentences

- The multiples before and after ___ are ___ and ___
- ___ rounded to _____ is ___
- When rounding to _____, look at the _____ digit.
- ___ is nearer to the _____ multiple of ___



Key Vocabulary

- whole number / decimal place
- rounded to
- next / previous / multiple
- one / tenth / hundredth



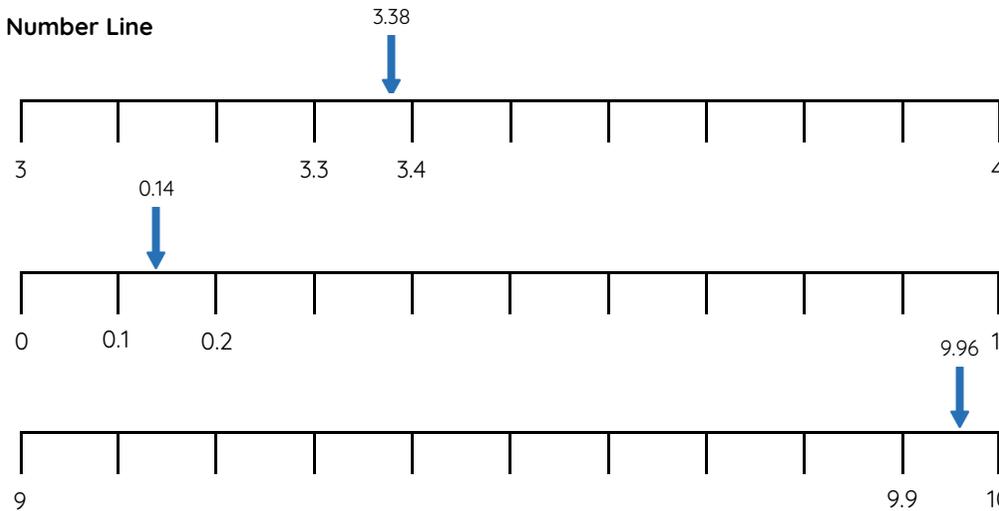
Common Errors or Misconceptions

- Pupils may round to the wrong decimal place.
- Pupils may add place holders or leave digits which are unnecessary following rounding.



Key Representations

Number Line



3.38 to the nearest whole number is 3
3.38 to 1 decimal place is 3.4

0.14 to the nearest whole number is 0
0.14 to 1 decimal place is 0.1

9.96 rounded to the nearest whole number and to 1 decimal place is 10



Pupils will FLOURISH if they can...

- identify the multiples of 1 or 0.1 before and after a given decimal number.
- accurately round a given decimal number to the nearest whole number and 1 decimal place.
- identify the range of numbers which round to a specific multiple of 1 or 0.1
- begin to explain their understanding using their own words and representations.

