| Keywords: | Rounding / decimal place / significant figure / estimate / |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Definition / Description: | Rounding: the process of adjusting a number to make it more convenient but still keeping its value as close to what it was. | Decimal Place: The position of a digit after a decimal point | Significant figure: refers to the size of the number within the place value chart and not the physical size of the individual number |  |  | ve an <br> f an actual |
| Knowledge points: | Rounding rules <br> The digit to the right of the digit you are rounding is the deciding digit. If the deciding digit is 5 or above the digit you round up. If the deciding digit is 4 or below the digit you are rounding remains the same | Rounding to the nearest <br> units / ten / hundred etc <br> This refers to the column that is to be rounded within the place value chart. Rounding rules are applied to the deciding digit | Rounding to a given number of decimal places <br> A decimal place refers to the number of digits to the right of the decimal point | Rounding to a given number of significant figures <br> The first significant figure of a number is the first digit which is not a zero. <br> The second / third and fourth significant figures are the digits immediately following the first significant figure / including zeros. |  |  |
| Knowledge point examples: | 1) Round 48 to the nearest 10 <br> 4 is in the tens $\xrightarrow{48} \begin{aligned} & 8 \text { is the } \\ & \text { DECIDING DIGIT }\end{aligned}$ <br> (If the deciding digit is greater than or equal to 5 , we round up) So 48 is rounded to 50. <br> 4.6 is closer to 5 so if we rounded 4.6 to the nearest whole number, the answer would be 5 <br> 14.67 is closer to 15 so if we rounded 14.67 to the nearest whole number, the answer would be 15 | Identify the column where you are being asked to round We are being asked to round to the nearest hundred look at the digit and column to the right of 4 - the tens column The tens digit is $\geq 5$, so we must round up 467 to the nearest ten is 500 <br> 467 is closer to 500 so if we rounded 467 to the nearest hundred, the answer would be 500 | Round 8.24 to the one decimal place We can use a number line to help us decide <br> 8.24 is closer to 8.2 so if we rounded 8.24 to one decimal place, the answer would be 8.2 | For <br> This is <br> This is <br> For <br> This is <br> This is <br> Rounding <br> $547 / \mathbf{7}$ <br> 5 or b <br> 547 | mple, <br> firs <br> first <br> mple <br> e for <br> third <br> ole nu <br> ? <br> o |  |

Linked Knowledge Maps

