## Discussion Problems

## Step 4: Percentage of an Amount 1

## National Curriculum Objectives:

Mathematics Year 6: (6R2) Solve problems involving the calculation of percentages [for example, of measures, and such as $15 \%$ of 360 ] and the use of percentages for comparison
Mathematics Year 6: (6F11) Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

## About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

## More Year 6 Percentages resources.

Did you like this resource? Don't forget to review it on our website.

## Percentage of an Amount 1

1. Look at the grid below.

Choose 5 numbers and use a different method each time to find $1 \%$ of each of them.
For example: $1 \%$ of $900=900 \div 100=9$.

| 15 | 2,500 | 273 |
| :---: | :---: | :---: |
| 600 | 675 | 7,500 |
| 930 | 1,040 | 48 |

2. Harry is thinking about percentages.


Investigate examples to show Harry's statement can be true, and to show it can be false.

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Choose 5 numbers and use a different method each time to find $1 \%$ of each of them.

For example: $1 \%$ of $900=900 \div 100=9$

|  |  |  |
| :---: | :---: | :---: |
| 15 | 2,500 | 273 |
| 0.15 | 25 | 2.73 |
| 600 | 675 | 7,500 |
| 6 | 6.75 | 75 |
| 930 | 1,040 | 48 |
| 9.3 | 10.4 | 0.48 |

Various methods can be used, for example: divide by 100; divide by 10 and 10 again; divide by 10 , then 5 and then 2 ; divide by 2 , then 5 and then 10 ; divide by 20 and then by 5.
2. Harry is thinking about percentages.


Investigate examples to show Harry's statement can be true, and to show it can be false.
Various answers, for example:
To show it can be true:
$50 \%$ of $680=340$, and $25 \%$ of $480=120$
To show it can be false:
$50 \%$ of $28=14$, and $25 \%$ of $80=20$

