

Numeracy Quote Issue 4

“We will always have STEM with us. Some things will drop out of the public eye and go away, but there will always be science, engineering, and technology. And there will always, always be mathematics”. — **Katherine Johnson, African American mathematician**

WELCOME

The Bulwell Academy is committed to raising the standards of numeracy of all students, so that they develop the ability to use numeracy skills effectively in all areas of the curriculum and the skills necessary to cope confidently with the demands of further education, employment, and adult life.

COMMON APPROACH

We would like all curriculum areas across the academy to use the methods below when teaching percentage of amount without a calculator

Words that often suggest that you need to find percentage: Probability

Issue 4: Takeaway puzzle

Email your answer to:

Nileshwar.Prasad@bulwellacademy.org.uk



Notice: If you would like to share any amazing numeracy news/ideas which you have used in your curriculum area please email Nileshwar.Prasad@bulwellacademy.org.uk or perhaps you would like to know more about NUMERACY in your subject area please let me know.

EXAMPLES

Method 1: Building up an answer from simple percentages

Using simple percentages, you can build up to the answer to the question.

This question could be broken down into the following steps.

10% of 140 = 14 (To find 10% we divide by 10)
So
60% of 140 = 84 (60% is six lots of 10%)
84

Method 2: The decimal multiplier method

Write the percentage as a decimal and then multiply the amount by this decimal.

60 % = 0.60

140 × 0.60 = **84**

To find 10% you need to divide by 10.
To find 50% you need to divide by 2.
To find 1% you need to divide by 100.

Method 1: Building up an answer from simple percentages

Using simple percentages, you can build up to the answer to the question.

This question could be broken down into the following steps.

10 % of 80 = 8 (To find 10% we divide by 10)
So...
30% of 80 = 24 (30% is three lots of 10%)
1% of 80 = 0.80 (To find 1% we divide by 100)
So...
2% of 80 = 1.60 (2% is two lots of 1%)

30% + 2% = 32%

24 + 1.60 = **25.6**

Method 2: The decimal multiplier method

Write the percentage as a decimal and then multiply the amount by this decimal.

32% = 0.32

80 × 0.32 = **25.6**

The 4 numbers around the circle are operated on to get the center number. Find the unknown number:



Answer to puzzle
Issue 3 was: 50.