

Zero Rules for Significant Figures

Well, first off let me say that when counting sig figs the most commonly encountered problem is whether or not to count the zeros????

Why focus only on the zeros you ask? Well, all non-zero numbers ALWAYS count but not all zeros always count.

So what are the rules?

Rule 1: Leading zeros NEVER count

Leading zeros are zeros preceding a number. Like 0.001 has three leading zeros

Rule 2: Middle zeros ALWAYS count

Middle zeros are sandwiched between two non-zero numbers. Like 5005 has two middle zeros

Rule 3: Trailing zeros IT DEPENDS on whether there is a decimal present or not

Decimal present = yes then trailing zeros count. Like 543.00 has two trailing zeros that count

Decimal present = no then trailing zeros DO NOT count. Like 54300 has two trailing zeros that don't count