

CHEMISTRY

SIGNIFICANT FIGURES

- All the digits that can be precisely in a measurement, plus a last estimated digit.
- ★ WHEN TO USE IT?
 - To calculate data
- ★ Using significant figures:
 - 1) Start counting from the first nonzero digit.
 - 2) All digits from 1-9 count as significant digits.
 - 3) Zeros between nonzero (1-9) digits are considered significant.
 - 4) Count how many digits are significant.

WHICH SIDE DO WE START? HOW DO WE KNOW WHERE TO START?

- If the decimal is Present, we start counting from the Pacific side (LEFT)
- If decimal is Absent, we start counting from the Atlantic side (RIGHT)

EX: 2000 only has one significant figure

2000 - the decimal is absent so we start counting from the right side. And because zero is not a digit in this case, 2000 only has 1 significant figure which is the 2 in 2000.

EX2: 2000. has 4 significant figures.

2000. - has a decimal so we start from the left side starting from the 2. After 2 are 4 zeros which are counted as digit numbers because it is present before the decimal point.

EX3: 0.0203 has 3 significant figures. The 0.0 in 0.0203 don't count as significant figures because no digit was before the zero.