

Name: _____

Date: _____

Rules for Significant Digits

We have 10 digits: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

Digits make-up numbers. Number 2016 is made of 4 digits.

Significant digits are the known digits. For example, if I measure 7 cm, it could be 7.1 cm or 6.9 cm. However, if I measure 7.0 cm, it is exactly 7.0 cm.

1. All non-zero digits are always significant:

235 has **three** significant digits

19 456 has **five** significant digits

3.5 has **two** significant digits

2. Zeros between non-zero digits are significant:

2016 has **four** significant digits

301 has **three** significant digits

20 000 001 has **eight** significant digits

3. Zeros at the end are only significant if the number contains a decimal point, otherwise zeroes are insignificant:

150 has **two** significant digits

150.0 has **four** significant digits

150 000 has **two** significant digits

4. Zeros before other digits are are never significant:

0.015 has **two** significant digits

0.00015 has **two** significant digits

0.000000015 has **two** significant digits