

# Feb 5, 2019

## 1) Significant Digits

Reminder Classroom Agreement sheets are due Friday!!

## Warm-Up

Using your textbook determine each of the following about Significant Digits:

1. The page it begins on.
2. The chapter it is found within.
3. The definition for significant digits.

# Significant Digits

Determines the amount of rounding off that needs to be done to a number. Why?

**A measuring instrument can only measure to a certain number of significant digits. So you don't want to over represent the amount of precision you had.**

i.e. 0.00700km compared to 0.007km

on this odometer you can only be significant to the tenths column. You cannot use a digit to the right of the tenths column with any certainty (or significance).



## Rules for Identifying/Counting Significant Digits

1. ALL non-zero numbers (1,2,3,4,5,6,7,8,9) are ALWAYS significant/counted

i.e. 475 ( 3 significant digits)

34.5 ( 3 significant digits)

2. Any Zeros between two other significant digits are significant/counted.

i.e. 7005 ( 4 significant digits)

307 ( 3 significant digits)

3. Zeros at the beginning are not significant/counted

i.e. 0.0045 ( 2 significant digits)

0.03 m ( 1 significant digits)

4. Zeros at the end are only significant (counted) if there is a decimal place in the number

i.e. 4560 (3 significant digits)

4560.00 ( 6 significant digits)

# Lets Try a Few

2.09	
100.00	
0538	
500	
0.30	
9000.	
1090	
0.4040	

Copy this chart into your notebook and record the number of significant digits beside the number.

# Significant Digits Worksheet #1-12