0.5 Scientific Notation Notes

Scientific notation looks like this:



 Rule: Must be between \_\_\_\_\_ and \_\_\_\_\_

Examples of Scientific Notation:

Non-examples of Scientific Notation:

**Converting between Notations**

Note: we are not changing the *value* of a number, only it’s *appearance*.

Positive powers mean \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Negative powers mean \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**How to Convert Scientific Notation to Standard Notation**

Always, always, always think first: “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?”

Examples: 2.5 x 105 =

 2.345 x 10-7=

**How to Convert Standard Notation to Scientific Notation**

Ask yourself “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?”

After you finish the problem, look back and ask “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?”

Examples: 0.0001234 =

 78,300 =**Calculators**

Calculators are pretty nifty at sci notation, but you have to be *careful!*

Your calculator might look like this------------------------------->

Take a moment to write down what your calculator looks like when you *get* scientific notation from it:

If you answer “5.2”, not only are you wrong, but you have NO IDEA HOW BIG OR SMALL YOUR ANSWER SHOULD BE!!

 (Angry Mr. Newman)

Advanced tip: there’s (usually) a fast way to type scientific notation in on the calculator.

Draw the button here for what your calculator’s “times 10 to the” button looks like:

(But on the *sci notation* quiz, I expect you to be able to convert & compute without a calculator!)