Name:			Date:								
	Notes: Scientific Notation										
Why do we use scientific notation?											
What tv	wo things are alwa	ys true of a number wr	itten in scientific nota	tion?							
1.											
2.											
•											
	ne numbers that ar rs that are not.	re correctly written in s	cientific notation and	place an X over the							
	$12.8 \times 10^6$	$2.56 \times 10^{-16}$	$5.2 \times 10^{1.6}$	$4.35 \times 10^{6}$							
	$1.28 \times 10^{6}$	$8.93 \times 10^{1.6}$	$3.47 \times 10^{6}$	$20.1 \times 10^5$							
What d	oes a positive expo	onent mean?									
What d	oes a negative exp	onent mean?									

Match each number below to the same number written in scientific notation. Circle your choice.

Number:	: Scientific Notation:					Number: Scientif			fic Notation:	
1 280 000.0	=	1.28 × 10 <sup>6</sup>	or	1.28 × 10 <sup>-6</sup>		0.000 044	=	4.4 × 10 <sup>5</sup>	or	4.4 × 10 <sup>-5</sup>
620 000 000	=	6.2 × 10 <sup>8</sup>	or	6.2 × 10 <sup>-8</sup>		-0.000 005 6	=	-5.6 × 10 <sup>6</sup>	or	-5.6 × 10 <sup>-6</sup>
0.000 000 15	=	1.5 × 10 <sup>7</sup>	or	1.5 × 10 <sup>-7</sup>		780 000.0	=	$7.8 \times 10^{5}$	or	7.8 × 10 <sup>-5</sup>
-3 200.00	=	$-3.2 \times 10^3$	or	-3.2 × 10 <sup>-3</sup>		0.000 034	=	$3.4 \times 10^{5}$	or	$3.4 \times 10^{-5}$
0.000 025 1	=	2.51 × 10 <sup>5</sup>	or	2.51 × 10 <sup>-5</sup>		725 000 000	=	7.25 × 10 <sup>8</sup>	or	7.25 × 10 <sup>-8</sup>
1 370 000 000	=	1.37 × 10 <sup>9</sup>	or	1.37 × 10 <sup>-9</sup>	(	0.000 000 35	=	$3.5 \times 10^{7}$	or	$3.5 \times 10^{-7}$
561 000 000	=	5.61 × 10 <sup>8</sup>	or	5.61 × 10 <sup>-8</sup>		0.000 012	=	1.2 × 10 <sup>5</sup>	or	1.2 × 10 <sup>-5</sup>

Write the following numbers in scientific notation.

## Number:

### **Scientific Notation:**

### **Number:** Scientific Notation:

0.000 000 054 = \_\_\_\_\_

740 000 000 =

230 000 000 =

66 500.0

0.000 89

452 000 000 000 =

470 000.00

0.000 000 075 = 63 500 000 =

0.000 000 20 =

Putting a number in scientific notation into the calculator:

Step #1: \_\_\_\_\_

Step #3: \_\_\_\_\_

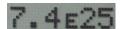
Step #4: \_\_\_\_\_

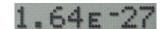


Write the numbers below in correct scientific notation:

# 3.01E24







Multiply the following numbers. Be sure to place the numbers into the calculator correctly.

$$(2)(2.5 \times 10^2) =$$

$$(1.4)(4.6 \times 10^{24}) =$$

$$(6)(4.5 \times 10^4) =$$

$$(6)(4.5 \times 10^4) = \underline{\hspace{1cm}} (2.6)(5.6 \times 10^{27}) = \underline{\hspace{1cm}}$$

$$(7)(1.8 \times 10^{-5}) =$$
  $(10)(2.6 \times 10^{-24}) =$ 

$$(10)(2.6 \times 10^{-24}) =$$

Divide the following numbers. Be sure to place the numbers into the calculator correctly.

 $7.82 \times 10^3 \div 2.35 \times 10^3 =$ 

 $5.0 \times 10^{30} \div 9.0 \times 10^{29} =$ 

 $3.01 \times 10^{24} \div 6.02 \times 10^{23} =$ 

 $7.2 \times 10^5 \div 5.7 \times 10^4 =$ 

 $1.5 \times 10^8 \div 6.0 \times 10^6 =$