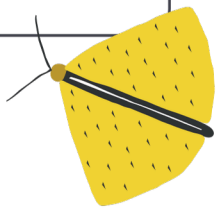
Name _____ Date _____

Multiplying and Dividing Numbers in Scientific Notation

You can multiply and divide numbers in scientific notation. Look at the examples below!

Multiply: $(2.5 \times 10^4)(6 \times 10^3)$	
$(2.5 \times 6)(10^4 \times 10^3)$	Group the first factors and the powers of 10.
$15 \times (10^4 \times 10^3)$	Multiply the first factors.
15×10^7	Multiply the powers of 10 by adding the exponents.
1.5×10^8	If needed, rewrite your answer in scientific notation.

Divide: $\frac{4.2 \times 10^6}{8 \times 10^2}$	
$\frac{4.2}{8} \times \frac{10^6}{10^2}$	Group the first factors and the powers of 10.
$0.525 \times \frac{10^6}{10^2}$	Divide the first factors.
0.525×10^4	Divide the powers of 10 by subtracting the exponents.
5.25×10^3	If needed, rewrite your answer in scientific notation.



Multiply or divide. Write each answer in scientific notation.

$(1.2 \times 10^5)(4.3 \times 10^2) =$ _____

$\frac{9.3 \times 10^5}{2 \times 10^3}$ _____

$(3.4 \times 10^5)(2.8 \times 10^3) =$ _____

$(7 \times 10^4)(3.25 \times 10^4) =$ _____

$\frac{6.8 \times 10^8}{1.6 \times 10^3}$ _____

$\frac{9 \times 10^{-3}}{1.5 \times 10^6}$ _____

$(3.6 \times 10^{-2})(8 \times 10^{-3}) =$ _____

$\frac{2.2 \times 10^8}{8 \times 10^{-2}}$ _____