

Metric Conversion, Scientific Notation, and Graphing Practice Sheet
Earth Science/Geology Mr. Traeger

Name: _____ Period: _____ Date: _____

Part 1: Metric Unit Conversions

Convert the following by jumping decimals or cross-cancellation.

1. 78 cm = _____ m	2. 548 m = _____ cm	3. $3.0 \times 10^8 \mu\text{m} =$ _____ m
4. $4.6 \times 10^{-4} \text{ m} =$ _____ μm	5. 1000 km = _____ m	6. 10 dm = _____ μm

Part 2 : Scientific Notation

Write the standard notation if scientific notation is given. Write the scientific notation if standard notation is given.

1. $4.0 \times 10^3 =$ _____	2. 60000 = _____	3. 1,000,000 = _____
4. $6.7 \times 10^{-6} =$ _____	5. 77 = _____	6. 0.000000000056 = _____
7. $3.57 \times 10^2 =$ _____	8. $3.57 \times 10^{-2} =$ _____	9. 343,000 = _____

Part 3: Multiplication/Division in Scientific Notation

Multiply or divide to find the correct answer

1. $4 \times 10^6 \times 8 \times 10^4 =$ _____	2. $1.2 \times 10^{16} / 1 \times 10^{14} =$ _____	3. $6 \times 10^{-2} \times 1 \times 10^2 =$ _____
4. $3 \times 10^4 \times 4 \times 10^4 =$ _____	5. $8 \times 10^{11} / 4 \times 10^4 =$ _____	6. $4.4 \times 10^3 / 2.2 \times 10^{12} =$ _____

Part 4 : Graphing

Graph and interpret the following data sets on a separate piece of graph paper.

1. Rainfall in Downtown Los Angeles (inches) Data from
http://www.nwsla.noaa.gov/climate/data/cqt_monthprecip_cy.txt

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1998	4.12	13.68	4.06	0.97	3.10	0.05	0.00	0.00	0.01	0.00	1.32	0.54
2001	5.59	8.87	1.17	1.11	0.00	0.00	0.00	0.00	0.00	0.06	1.42	1.38

2. Tide heights relative to sea level at Los Angeles Harbor (feet)

Time	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Height	2.0	1.8	1.3	0.8	0.4	-0.5	-1.1	-1.5	0.0	0.3	0.6	1.1	1.5	1.2	0.9	0.7	0.0	-0.2	0.0	0.2	0.5	1.1	1.4