Name _____ date _____ period _____

Converting Metric (SI) Units

Fundamental Quantities	Unit of Measurement
Length	meter (m)
Volume	liter (L)
Mass	gram (g)

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Metric Prefix Table

Prefix	Symbol	Value	Exponential or Scientific Notation
yotta	Y	1,000,000,000,000,000,000,000,000.	10^{24}
zetta	Z	1,000,000,000,000,000,000,000.	10^{21}
exa	E	1,000,000,000,000,000,000.	10^{18}
peta	P	1,000,000,000,000,000.	10^{15}
tera	T	1,000,000,000,000.	10^{12}
giga	G	1,000,000,000.	10^{9}
mega	M	1,000,000.	10^{6}
kilo	k	1,000.	10^{3}
hecto	h	100.	10^{2}
deca	da	10.	10^{1}
		1.	10^{0}
deci	d	0.1	10^{-1}
centi	c	0.01	10^{-2}
milli	m	0.001	10^{-3}
micro	µ	0.000001	10^{-6}
nano	n	0.000000001	10^{-9}
pico	p	0.000000000001	10^{-12}
femto	f	0.000000000000001	10^{-15}
atto	a	0.000000000000000001	10^{-18}
zepto	z	0.000000000000000000001	10^{-21}
yocto	y	0.000000000000000000000001	10^{-24}

Name _____ date _____ period _____

Converting Metric (SI) Units

1. What SI units are used to describe volume?
2. What SI units are used to describe mass?
3. What SI units are used to describe density?

Appropriate Scale: Which SI unit would be most appropriate to measure

4. the amount of water you drink in a day?
5. the distance between New York and Salt Lake?
6. the mass of an apple?
7. the mass of a person?

8. How many centigrams in one gram?
9. How many liters in a kiloliter?
10. How many meters in a kilometer?
11. How many nanoseconds in one second?
12. How many nanoliters in a liter?

Convert the following and write what each symbol stands for

13. 1L = _____ mL _____ _____
14. 1 mL = _____ µL _____ _____
15. 1 L = _____ µL _____ _____
16. 1 µL = _____ nL _____ _____
17. 1 kg = _____ g _____ _____
18. 1 g = _____ mg _____ _____
19. 1 mg = _____ µg _____ _____
20. 1 g = _____ µg _____ _____
21. 1 m = _____ cm _____ _____
22. 1 cm = _____ mm _____ _____
23. 1 m = _____ mm _____ _____
24. 1 mm = _____ µm _____ _____
25. 1 m = _____ µm _____ _____
26.

List which is larger?

27. 1321 psec or 1.2 nsec?
28. 232.1 kg or 125,487 g?
29. 23.0 mm or 2.0 cm?
30. 1 mL or 500 µL?

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