

Express the following numbers in Scientific Notation:

- 1) 2510 2.510×10^3
- 2) 0.0065 6.5×10^{-3}
- 3) 46 4.6×10^1
- 4) 77000000 7.7×10^7
- 5) 0.0102 1.02×10^{-2}
- 6) 3400600 3.400600×10^6
- 7) 0.0230 2.30×10^{-2}

Express the following in decimal form:

- 8) 4.77×10^4 47700
- 9) 8.41×10^{-6} 0.00000841
- 10) 5.8×10^1 58
- 11) 9.1×10^0 9.1
- 12) 1.415×10^{-2} 0.01415
- 13) 8.904×10^8 890400000

Match the exponential number with the metric prefix.

- A. 10^{-6} B. 10^{-1} C. 10^3 D. 10^9 E. 10^6 F. 10^{12} G. 10^{-2}
- 14) C kilo
 - 15) B deci
 - 16) D giga
 - 17) F tera
 - 18) E mega
 - 19) G centi
 - 20) A micro

Name the metric prefix indicated by the following exponents.

- 21) 10^{12} Tera
- 22) 10^{-9} nano
- 23) 10^2 hecto
- 24) 10^6 Mega
- 25) 10^{-3} milli
- 26) 10^{-1} deci
- 27) 10^2 hecto

List the exponent indicated by the following metric prefixes.

- 28) hecto 10^2
- 29) centi 10^{-2}
- 30) pico 10^{-12}
- 31) nano 10^{-9}
- 32) deca 10^1

Answer the following questions with the correct S.I. Standard unit.

- 33) What is the unit for measuring length in the S.I system? meter
- 34) What is the unit for measuring time in the S.I system? second
- 35) What is the unit for measuring mass in the S.I system? kilogram
- 36) What is the unit for measuring temperature in the S.I system? Kelvin
- 37) What is the unit for measuring volume in the S.I system? Liter

Quiz: Scientific Notation, Significant Figures, Conversions

Convert the following:

38) 42g to mg

$$\frac{42000 \text{ mg}}{42 \text{ g} \mid \frac{1 \text{ mg}}{1 \times 10^{-3} \text{ g}}} =$$

39) 0.741cm to m

$$\frac{0.00741 \text{ m}}{0.741 \text{ cm} \mid \frac{1 \times 10^{-2} \text{ m}}{1 \text{ cm}}} =$$

40) 8.4 mL to L

$$\frac{0.0084 \text{ L}}{8.4 \text{ mL} \mid \frac{1 \times 10^{-3} \text{ L}}{1 \text{ mL}}} =$$

41) 776 kg to g

$$\frac{776000 \text{ g}}{776 \text{ kg} \mid \frac{1 \times 10^3 \text{ g}}{1 \text{ kg}}} =$$

42) 1005 μL to mL

$$\frac{1.005 \text{ mL}}{1005 \mu\text{L} \mid \frac{1 \times 10^{-6} \text{ L}}{1 \mu\text{L}}} = 0.001005$$

43) 25 kg to mg

$$\frac{25000000 \text{ mg}}{0.001005 \text{ L} \mid \frac{1 \text{ mL}}{1 \times 10^{-3} \text{ L}}} =$$

44) 45000 cm to Gm

$$\frac{0.000000450 \text{ Gm}}{25 \text{ kg} \mid \frac{1 \times 10^3 \text{ g}}{1 \text{ kg}}} = 25000 \text{ g}$$

45) 0.003 TL to nL

$$\frac{3 \times 10^{18} \text{ nL}}{25000 \text{ g} \mid \frac{1 \text{ mg}}{1 \times 10^{-3} \text{ g}}} =$$

46) 45 in to ft

$$\frac{3.75 \text{ ft}}{45 \text{ in} \mid \frac{1 \text{ ft}}{12 \text{ in}}} =$$

47) 256 yds to ft

$$\frac{768 \text{ ft}}{256 \text{ yds} \mid \frac{3 \text{ ft}}{1 \text{ yd}}} =$$

48) 389 kg to lbs

$$\frac{855.8 \text{ lbs}}{389 \text{ kg} \mid \frac{2.2 \text{ lbs}}{1 \text{ kg}}} =$$

49) 94 in to cm

$$\frac{238.76 \text{ cm}}{94 \text{ in} \mid \frac{2.54 \text{ cm}}{1 \text{ in}}} =$$

50) 35 sec. to min.

$$\frac{0.583 \text{ min}}{35 \text{ sec} \mid \frac{1 \text{ min}}{60 \text{ sec}}} =$$

12 in = 1 ft 3 ft = 1 yd

2.2 lbs = 1 kg

2.54 cm = 1 in