

- The SI prefixes giga and micro represent, respectively:  
A)  $10^{-9}$  and  $10^{-6}$     B)  $10^6$  and  $10^{-3}$     C)  $10^3$  and  $10^{-3}$     D)  $10^9$  and  $10^{-6}$     E)  $10^{-9}$  and  $10^{-3}$
- The SI prefixes milli and mega represent, respectively:  
A)  $10^6$  and  $10^{-6}$     B)  $10^{-3}$  and  $10^6$     C)  $10^3$  and  $10^{-6}$     D)  $10^{-3}$  and  $10^9$     E)  $10^{-6}$  and  $10^{-3}$
- The diameter of an atom is approximately  $1 \times 10^{-8}$  cm. How many nanometers is this?  
A)  $1 \times 10^{-19}$  nm    B)  $1 \times 10^{-15}$  nm    C)  $1 \times 10^1$  nm    D)  $1 \times 10^{-10}$  nm    E)  $1 \times 10^{-1}$  nm
- 6.0 km is how many micrometers?  
A)  $6.0 \times 10^6$   $\mu$  m    B)  $1.7 \times 10^{-7}$   $\mu$  m    C)  $6.0 \times 10^9$   $\mu$  m    D)  $1.7 \times 10^{-4}$   $\mu$  m    E)  $6.0 \times 10^3$   $\mu$  m
- 2.4 km is how many mm?  
A) 2400 mm    B)  $2.4 \times 10^4$  mm    C)  $2.4 \times 10^5$  mm    D)  $2.4 \times 10^6$  mm    E)  $2.4 \times 10^{-5}$  mm
- How many mL is 0.005 L?  
A) 0.5 mL    B) 5 mL    C) 0.50 mL    D) 0.000005 mL    E) 200 mL
- Express 201 g in mg.  
A) 0.201 mg    B) 2.01 mg    C)  $2.01 \times 10^3$  mg    D)  $2.01 \times 10^5$  mg    E)  $2.10 \times 10^8$  mg
- Express 7500 nm as pm.  
A) 7.50 pm    B) 75.0 pm    C) 750 pm    D)  $7.5 \times 10^6$  pm    E)  $7.5 \times 10^{12}$  pm
- Express 450 kg in Mg.  
A)  $4.50 \times 10^{-2}$  Mg    B) 0.450 Mg    C) 4.50 Mg    D)  $4.50 \times 10^5$  Mg    E)  $4.50 \times 10^8$  Mg
- Which of the following is the greatest mass?  
A)  $2.0 \times 10^2$  mg    B) 0.0010 kg    C)  $1.0 \times 10^5$   $\mu$  g    D)  $2.0 \times 10^2$  cg    E) 10.0 dg
- Lead melts at  $601.0^\circ\text{C}$ . What temperature is this in  $^\circ\text{F}$ ?  
A)  $302^\circ\text{F}$     B)  $365^\circ\text{F}$     C)  $1050^\circ\text{F}$     D)  $1082^\circ\text{F}$     E)  $1114^\circ\text{F}$
- Ammonia boils at  $-33.4^\circ\text{C}$ . What temperature is this in  $^\circ\text{F}$ ?  
A)  $-60.1^\circ\text{F}$     B)  $-92.1^\circ\text{F}$     C)  $-28.1^\circ\text{F}$     D)  $-18.5^\circ\text{F}$     E)  $+13.5^\circ\text{F}$
- Many home freezers maintain a temperature of  $0^\circ\text{F}$ . Express this in  $^\circ\text{C}$ .  
A)  $-32^\circ\text{C}$     B)  $-18^\circ\text{C}$     C)  $0^\circ\text{C}$     D)  $18^\circ\text{C}$     E)  $57.6^\circ\text{C}$
- The highest temperature ever recorded in Phoenix, Arizona was  $122^\circ\text{F}$ . Express this in  $^\circ\text{C}$ .  
A)  $50.0^\circ\text{C}$     B)  $64.4^\circ\text{C}$     C)  $67.8^\circ\text{C}$     D)  $162^\circ\text{C}$     E)  $219.6^\circ\text{C}$
- The melting point of bromine is  $-7^\circ\text{C}$ . What is this in  $^\circ\text{F}$ ?  
A)  $-12.6^\circ\text{F}$     B)  $-28.1^\circ\text{F}$     C)  $19.4^\circ\text{F}$     D)  $39.0^\circ\text{F}$     E) None are within  $2^\circ\text{F}$  of the right answer.

Ans. 1. D, 2. B, 3. E, 4. C, 5. D, 6. B, 7. D, 8. D, 9. B, 10. D, 11. E, 12. C, 13. B, 14. A, 15. C