

SI and METRICS PRACTICE

Identify the following as length, time, temperature, mass, or amount of substance (some may not be SI):

- | | |
|--------------|-----------------|
| 1) 30 cm | 6) 36 hrs. |
| 2) 17.50 g | 7) 0.1 mol |
| 3) 220 s | 8) 273 K |
| 4) 25.0 °C | 9) 0.98 m |
| 5) 0.1234 dg | 10) 365.25 days |

Identify the following as area, volume, speed, velocity, acceleration, or density:

- | | |
|----------------------------|---------------------------|
| 11) 4 m ² | 15) 1.0 g/mL |
| 12) 66 kg/m ³ | 16) 250 mL |
| 13) 27.08 cm ³ | 17) 19.56 mm ² |
| 14) 18.1 mm/s ² | 18) 5.9 m/s SE |

“King	Henry	Doesn’t	Usually	Drink	Chocolate	Milk”
kilo	hecto	deka	(base or plain unit)*	deci	centi	milli
k	h	da	(base or plain unit)*	d	c	m

**although kilogram is the SI base unit for mass, we use gram here for the plain mass unit.*

Convert the following measurements:

- Example #1 678.9 m = _____ km
 [from base unit (meter) to kilo(meter); move decimal three places to the LEFT]..... 0.6789 km
- Example #2 11 g = _____ cg
 [from centi(gram) to plain unit (g); move decimal two places to the RIGHT]..... 1100 cg

Convert the following measurements:

- | | |
|-------------------------------|--------------------------------|
| 19) 42.5 g = _____ kg | 30) 9123.4 m = _____ hm |
| 20) 50505 ms = _____ s | 31) 56 daL = _____ hL |
| 21) 9500 cL = _____ daL | 32) 459.11 kg = _____ mg |
| 22) 84.8 mm = _____ cm | 33) 4 das = _____ ds |
| 23) 0.033 kmol = _____ dmol | 34) 0.789 dmol = _____ mmol |
| 24) 111.41 cm = _____ m | 35) 88 g = _____ dag |
| 25) 52 s = _____ cs | 36) 12.211 s = _____ ks |
| 26) 0.05 L = _____ mL | 37) 4.5697 dL = _____ kL |
| 27) 130 mg = _____ g | 38) 5 m = _____ mm |
| 28) 62.77 mmol = _____ mol | 39) 10500 g = _____ hg |
| 29) 7.11 mol = _____ cmol | 40) 16.96 hmol = _____ mol |