

**Welcome! Please get your ISN
(composition book) from your shelf
and have a seat!**

**Then complete this warm-up in
your Google classroom!! IT IS
FOR A GRADE
TODAY!!!**



Aug 15-9:15 AM

WWK:

1. base unit- a system of measurement based on an object or event.

- * mass - grams
- * length - meters

2. derived unit- a measurement that is based on one or more base units.

- * Volume - $L \times W \times H$
- * density - $\frac{\text{mass}}{\text{volume}}$

Aug 12-12:23 PM

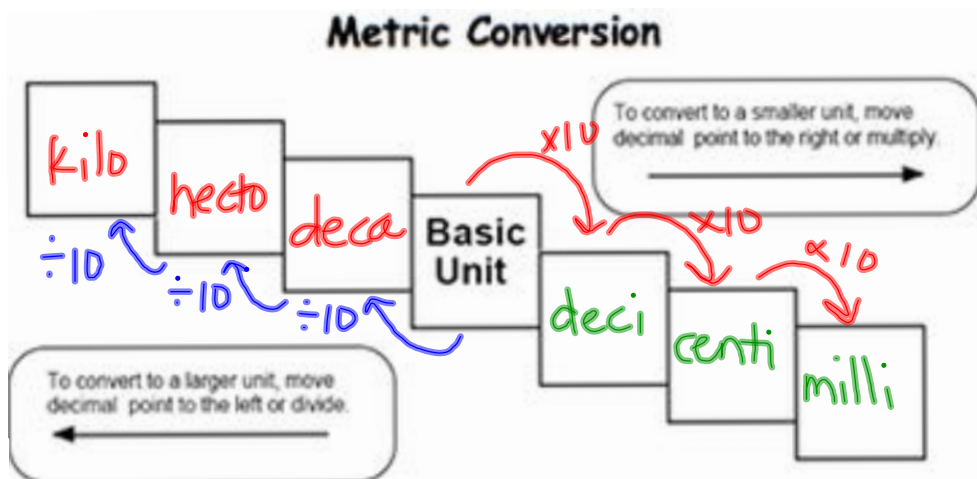
TOC 15-16 Metric System

SI Base Units

Quantity	Unit
time	second
length	meter
mass	kilogram (kg)
temperature	Kelvin
amount	mole (mol)

Aug 12-12:22 PM


TOC 15-16 Metric System



Aug 12-11:41 AM

TOC 15-16 Metric System

Metric System Notes



Prefixes Matter!

Kilo = 1000

Hecto = 100

Deca = 10

Deci = 0.1

Centi = 0.01

Milli = 0.001

King → kilo → 1000 → 10^3

Henry → hecto → 100 → 10^2

Died → deca → 10 → 10^1

By → Base Unit → 1 → 10^0

Drinking → deci → 0.1 → 10^{-1}

Chemical → centi → 0.01 → 10^{-2}

Mixtures → milli → 0.001 → 10^{-3}

Aug 12-12:24 PM

TOC 15-16 Metric System

Example: CONVERT

6m = 60 dm

~~6~~ × 10 dm

*Bigger unit gets the 1!

17mg = 0.000017 kg

~~17mg~~ × 1g / 1000mg = 17000g / 1000

~~0.017g~~ × 1kg / 1000g = 0.017kg / 1000

Aug 12-12:26 PM

examples pg 15

Conversion Challenge

Write the correct abbreviation for each metric unit.

- | | | |
|-------------------|---------------------|---------------------|
| 1) Kilogram _____ | 4) Milliliter _____ | 7) Kilometer _____ |
| 2) Meter _____ | 5) Millimeter _____ | 8) Centimeter _____ |
| 3) Gram _____ | 6) Liter _____ | 9) Milligram _____ |

Try these conversions, using the ladder method.

- | | | |
|----------------------|----------------------|-----------------------|
| 1) 2000 mg = _____ g | 6) 5 L = _____ mL | 11) 16 cm = _____ mm |
| 2) 104 km = _____ m | 7) 198 g = _____ kg | 12) 2500 m = _____ km |
| 3) 480 cm = _____ m | 8) 75 mL = _____ L | 13) 65 g = _____ mg |
| 4) 5.6 kg = _____ g | 9) 50 cm = _____ m | 14) 6.3 cm = _____ mm |
| 5) 8 mm = _____ cm | 10) 5.6 m = _____ cm | 15) 120 mg = _____ g |

Compare using <, >, or =.

- | | | |
|----------------------|------------------|----------------------|
| 16) 63 cm ○ 6 m | 17) 5 g ○ 508 mg | 18) 1,500 mL ○ 1.5 L |
| 19) 536 cm ○ 53.6 dm | 20) 43 mg ○ 5 g | 21) 3.6 m ○ 36 cm |

Aug 12-12:27 PM