MATTER AND ENERGY

Name

Date

Period

Measurement with St Units

Aim

· to become familiar with SI units and prefixes

Notës

Important metric prefixes (see Table C—Selected Prefixes)

- 10^{3} \star Kilo(k) = 1.000= 🖈 Deci (d) 10^{-1} = 0.1 = 10^{-2} \star Centi (c) = 0.01 = 10^{-3} \star Milli (m) = 0.001 = 10^{-6} \star micro (µ) = 0.000001 = \star nano (n) = 0.00000001 = 10^{-9}
- \star pico (p) = 0.00000000001 = 10⁻¹²
- Metric units (see Table D—Selected Units)
- \star Length meter (m)
- ★ Mass [quantity of matter in a body] gram (g)
- \star Time second (s)
- ★ Volume [amount of space a body occupies]
 - \Rightarrow derived from units of length (V=L×W×H): cubic measure
 - ☆ Liter (L) liquid measure
 - \star 1 L = 1,000 cm³
 - \star 1 mL = 1 cm³



Answer the questions below by circling the number of the correct response

1.	Which is the equivalent of 750. calories?	
	(1) 0.750 kcal	(3) 75.0 kcal
	(2) 7.50 kcal	(4) 750. kcal

- 5. Which is the equivalent of 0.500 ks? (1) 500. s (2) 50.0 s (4) 5.00 s
- 2. Which of the following could represent an object's mass?
 (1) 2.54 cm
 (2) 9.50 L
 (3) 8.46 kg
 (4) 0.95 ps
- 3. Which is the equivalent of 1250. microliters? (1) 1.250 L (3) 1.250 cL (2) 4.250 kL (3) 1.250 cL
 - (2) 1.250 kL (4) 1.250 mL
- 4. Which of the following could represent the space an object

occupies?	
(1) 3.4 cm	(3) 4.6 kg
(2) 4.2 L	(4) 6.3 ps