me:		Date:		Measurement and t	conversion I	ab ru
	Measure	ement and Convers	sion Lab	Item	POINTS	
jectives:				Procedure & Data	101110	
	nake measure	ments using the metric syste	m and convert between	1	1 each	3
units		4	41 4	2	4	4
	e measuremen ne graduated o	ts will encompass mastering	the metric ruler, scale,	3	1 each	2
	_	ate your ability to convert the	e original measurements to	4	1 each	5
		alues by using dimensional a		5	1 each	3
			•	Correct sigfig Post Lab	1 each	3
terials:		T		1	2	2
	ıb paper	graduated cylinders	Scale	2	2	2
	etric stick	<ul><li>coins</li><li>Book</li></ul>	Pen/pencil	3 with calculations	_	26
• pe	nny	• Book	Plastic spoon     Small and	TOTAL	•	50
cedures a	nd Data:		Small cup			
a.	Length	or SI unit used for measuring	5			
b.	. Mass					
c.	Volume					
POW	ERS of 10.	metric prefix SYMBOLS fr				, mor
3. Using digit t	ERS of 10. g a meter stick	<b>k</b> or ruler record the followingsee. All measurements taken	ng measurements in <u>centim</u> with a ruler or meter stick	eters. Remember to e	estimate one	
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3. Using digit t  a. b. c. d.  4. Using	g a meter stick than you can so Diameter of Height of the Height of the Height of control of an electronic	k or ruler record the following see. All measurements taken of Penny  Lab counter	ng measurements in centiments with a ruler or meter stick	eters. Remember to established should have two dec	estimate one	
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3. Using digit t  a. b. c. d.  4. Using  a. b. c. d.  5. Using to fill	g a meter stick than you can so theight of I width of the Height of Can electronic Mass of Period Mass of Period Mass of En Mass of graduate and item to	k or ruler record the following see. All measurements taken of Penny  Lab counter  The text book  The person in group  The scale record the mass of the senny  The country of the mass of the senny  The person of Pen  MPTY graduated cylinder  The aduated cylinder with 10 mL	of water	should have two dec	estimate one imal places.	ll nee
3. Using digit t  a. b. c. d.  4. Using  a. b. c. d.  5. Using to fill	g a meter stick than you can so Diameter of Height of It. Width of the Height of Gran electronic Mass of Permans of En Mass of En Mass of gran electronic Mass of En Mass of En Mass of was the graduate each item to be urements take	k or ruler record the following see. All measurements taken of Penny  Lab counter  The text book  One person in group  Exactle record the mass of the sensy   Exactle	of water	should have two dec	estimate one imal places.	ll nee
POW.  3. Using digit t  a. b. c. d.  4. Using a. b. c. d.  5. Using to fill measures.	g a meter stick than you can so Diameter of Height of It Width of the Height of Gran electronic Mass of Per Mass of En Mass of gran Mass of was the graduate each item to be a treat tube.	k or ruler record the following see. All measurements taken of Penny  Lab counter  The text book  One person in group  The scale record the mass of the sensor of Pen  MPTY graduated cylinder  aduated cylinder with 10 mL  after (subtract c & d from about the edge and carefully pour the see. All measurements the vote the edge and carefully pour the see.	of water	should have two dec	estimate one imal places.	ll nee

## Post Lab

- 1. What sources of error would account for differences in measurement for the same item?
- 2. Using the mass and volume of water calculate the density of water (SHOW CALCULATION with UNITS)

3. Complete the following conversions using the measurements from above.

Show your conversion with units on using DIMISINAL ANALYSIS on BACK to receive full credit.

Ĺ	ength	<b>1:</b>	(measured value include unit)	(conversion)	
	a)	Diameter of Penny			Km
	b)	Height of Lab Counter			Tm
	c)	Width of text book			um
	d)	Height of one person			Gm

Mass:		(measured value include unit)	(conversion)
e)	Mass of Penny		ng
f)	Mass of pencil or pen		Нд
g)	Mass of EMPTY graduated cylinder		dg
h)	Mass of 10 mL water		Mg

Volume	e:	(measured value include unit)	(conversion)
i)	Test Tube		L
j)	Plastic Spoon		daL
k)	Small Plastic Cup		pL

## **Non-Metric Conversion**

, .				
	1)	Time	275,000 seconds	years
	m)	Time	14.25 months	seconds

a)	
1	
b)	
c)	
d)	
e)	
f)	
g)	
h)	
i)	
j)	
1)	
k)	
1)	
m)	