

Measuring Assignment – Teacher Edition

A. Identification

Complete the table below. by writing either the unit of measurement for each physical quantity or its correct symbol.

Physical Quantity	SI Units	Symbol	U.S. Customary Units	Symbol
length	centimeter			in
		km	foot	
mass		mg		oz
	gram		pound	
temperature		C		F
time	second			s
volume	milliliter		quart	
		liter		gal

B. Comparing Metric Measurements

Compare the values of measurement in metric units. Inside the box, write $<$, $>$, or $=$.

- | | |
|--|---------------------------------------|
| 1. 35 cL <input type="text"/> 350 mL | 6. 56 m <input type="text"/> 560 km |
| 2. 0.75 g <input type="text"/> 7500 mg | 7. 360 s <input type="text"/> 360 min |
| 3. 100 cm <input type="text"/> 1 km | 8. 56°C <input type="text"/> 75°C |
| 4. 23.8 kg <input type="text"/> 2380 g | 9. 150 mL <input type="text"/> 150 cL |
| 5. 450 cm <input type="text"/> 1.5 km | 10. 0.15 kg <input type="text"/> 1 mg |

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C. Conversion of Units of Measurement (Metric to Metric)

Convert into given units of measurement.

1. 45 km = _____ m

5. 5.6 kL = _____ L

2. _____ g = 2500 mg

6. 6.3 cm = _____ mm

3. 7 cm = _____ mm

7. _____ g = 45000 cg

4. 900 L = _____ kL

8. _____ mL = 3500 L

D. Conversion of Units of Measurement (Metric to English)

Use the conversion table below to convert each measurement from metric unit to English unit.

Conversion Table:

1 kg = 2.2 lbs	1 in = 2.54 cm	1 m = 3.28 ft
1 L = 0.26 gal	1 km = 0.62 mi	1 oz = 28.3 g

1. 45 kg = _____ lbs

4. 180 m = _____ ft

2. 250 L = _____ gal

5. _____ mi = 32 km

3. 7 in = _____ cm

6. _____ g = 235 oz

E. Conversion of Temperature Scales

Convert the following temperature scales.

1. 45 °C = _____ °F

4. _____ °C = 65 °F

2. _____ °C = 95 °F

5. 23 °C = _____ °F

3. 37 °C = _____ °F

6. _____ °C = 180 °F

Measuring Assignment – Teacher Edition

A. Identification

Complete the table below. by writing either the unit of measurement for each physical quantity or its correct symbol.

Physical Quantity	SI Units	Symbol	U.S. Customary Units	Symbol
length	centimeter	cm	inch	in
	kilometer	km	foot	ft
mass	milligram	mg	ounce	oz
	gram	g	pound	lb
temperature	Celsius / Centigrade	C	Fahrenheit	F
time	second	s	second	s
volume	milliliter	mL	quart	qt
	liter	liter	gallon	gal

B. Comparing Metric Measurements

Compare the values of measurement in metric units. Inside the box, write $<$, $>$, or $=$.

1. 35 cL 350 mL

6. 56 m 560 km

2. 0.75 g 7500 mg

7. 360 s 360 min

3. 100 cm 1 km

8. 56°C 75°C

4. 23.8 kg 2380 g

9. 150 mL 150 cL

5. 450 cm 1.5 km

10. 0.15 kg 1 mg

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C. Conversion of Units of Measurement (Metric to Metric)

Convert into given units of measurement.

1. $45 \text{ km} = 45000 \text{ m}$

2. $2.5 \text{ g} = 2500 \text{ mg}$

3. $7 \text{ cm} = 700 \text{ mm}$

4. $900 \text{ L} = 0.9 \text{ kL}$

5. $5.6 \text{ kL} = 5600 \text{ L}$

6. $6.3 \text{ cm} = 630 \text{ mm}$

7. $450 \text{ g} = 45000 \text{ cg}$

8. $3.5 \text{ mL} = 3500 \text{ L}$

D. Conversion of Units of Measurement (Metric to English)

Use the conversion table below to convert each measurement from metric unit to English unit.

Conversion Table:

$1 \text{ kg} = 2.2 \text{ lbs}$	$1 \text{ in} = 2.54 \text{ cm}$	$1 \text{ m} = 3.28 \text{ ft}$
$1 \text{ L} = 0.26 \text{ gal}$	$1 \text{ km} = 0.62 \text{ mi}$	$1 \text{ oz} = 28.3 \text{ g}$

1. $45 \text{ kg} = 99 \text{ lbs}$

2. $250 \text{ L} = 65 \text{ gal}$

3. $7 \text{ in} = 17.78 \text{ cm}$

4. $180 \text{ m} = 590.4 \text{ ft}$

5. $19.84 \text{ mi} = 32 \text{ km}$

6. $6650.5 \text{ g} = 235 \text{ oz}$

E. Conversion of Temperature Scales

Convert the following temperature scales.

1. $45 \text{ }^{\circ}\text{C} = 113 \text{ }^{\circ}\text{F}$

2. $35 \text{ }^{\circ}\text{C} = 95 \text{ }^{\circ}\text{F}$

3. $37 \text{ }^{\circ}\text{C} = 98.6 \text{ }^{\circ}\text{F}$

4. $18.33 \text{ }^{\circ}\text{C} = 65 \text{ }^{\circ}\text{F}$

5. $23 \text{ }^{\circ}\text{C} = 73.4 \text{ }^{\circ}\text{F}$

6. $82.22 \text{ }^{\circ}\text{C} = 180 \text{ }^{\circ}\text{F}$