Contents

TEACHER GUIDE

STUDENT HANDOUTS

Measurement – Task Sheets

Contents

NAME: _____ 1+2 Task Sheet

Task Sheet 3

Cooking Up Something Imperial

3) Diego and his father were making chocolate chip cookies for a class party. They followed the recipe Diego found in a cook book and were mixing ingredients in a bowl. But, they had one problem. The recipe Diego used was meant to bake 24 cookies. He needed to make 48. Rewrite the portion of the recipe shown below to reflect how much of each ingredient Diego will need to make 48 cookies.

Original Recipe	Doubled Recipe
1 cup of softened butter	_____ cups of softened butter
1 cup brown sugar	_____ cups brown sugar
1 cup white sugar	_____ cups white sugar
1 teaspoon baking soda	_____ teaspoons baking soda
2 teaspoons vanilla extract	_____ teaspoons vanilla extract
½ teaspoon salt	_____ teaspoon(s) salt
2 cups of chocolate chips	_____ cups of chocolate chips
3 cups flour	_____ cups flour

Reflection

Suppose you were Diego. Find your favorite recipe in a book or on the computer. Imagine you had to make enough to serve 48 people. Write a list of the ingredients you would need to make your recipe.

A recipe for: _____

Ingredients: _____

NAME: _____ 1+2 Task Sheet

Task Sheet 7

Shadow Casters

7) Li and her class had been studying shadows as part of a science unit in class. The students measured the length of shadows of objects at 8 AM and noon as part of their project. The results are listed below. The last part of the experiment is to convert the measurement from centimeters to meters. Help Li's class by converting the measurement from centimeters to meters in the spot below.

Object	Shadow length at 8 AM in centimeters (inches)	Shadow length at 8 AM in meters (feet)	Shadow length at noon in centimeters (inches)	Shadow length at noon in meters (feet)
a) Shrub	1140 (449)		104 (41)	
b) Flagpole	3520 (1386)		350 (138)	
c) Sunflower	570 (224)		57 (22)	
d) Soccer ball	30 (12)		3 (1)	
e) Birch tree	2280 (898)		225 (89)	
f) Slide	805 (317)		79 (31)	
g) Li	1610 (634)		160 (63)	

Reflection

Try measuring shadows of three objects outside at 8 AM and noon. List your results in the chart below.

Object 1 _____ 8 AM _____ noon _____

Object 2 _____ 8 AM _____ noon _____

Object 3 _____ 8 AM _____ noon _____

NAME: _____ Timed Drill Sheet # 2

Minutes

3a) Match the item on the left with the item on the right.

Ex:	cup
1	liter
2	milliliter
3	gallon
4	pint
5	kiloliter
6	quart

equals 1000 L	A
four of these are in a gallon	B
there are two of these in a quart	C
one pint has two of these	Ex:
is the same as 1000 mL	D
a kiloliter has 100,000 of these	E
there are four quarts in this	F

b) Convert the measurements below.

i) 4 cups = _____ pints

ii) 2 L = _____ mL

iii) 20 kL = _____ L

iv) 8 pints = _____ quarts

v) 2 gallons = _____ cups

vi) 5,000 mL = _____ L

vii) 8 kL = _____ L

viii) 4 quarts = _____ pints

ix) 2 cups = _____ gallons

x) 3000 mL = _____ quarts

xi) 4 gallons = _____ cups

xii) 5 kL = _____ mL

xiii) 9 L = _____ cups

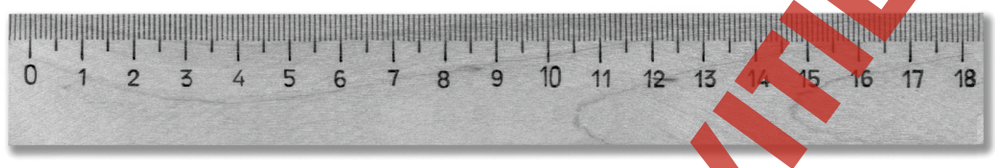
xiv) 2 pints = _____ quarts

Explore with Technology

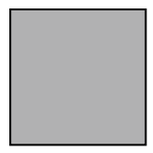
Using the internet, research the difference between gallons and liters.
How are they different? How are they similar?
When would it be best to use gallons and when would it be best to use liters when measuring?

NAME: _____ Warm-Up Drill Sheet # 3

7a) Look at the following shapes below. Using a ruler, measure the perimeter of each shape in inches and centimeters.

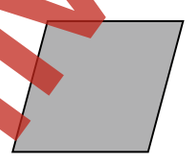


i)



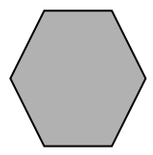
Perimeter = _____ in
Perimeter = _____ cm

ii)



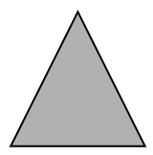
Perimeter = _____ in
Perimeter = _____ cm

iii)



Perimeter = _____ in
Perimeter = _____ cm

iv)



Perimeter = _____ in
Perimeter = _____ cm

b) Draw four of your own shapes and measure the perimeter in inches and cm.

i) _____ in _____ cm

ii) _____ in _____ cm

iii) _____ in _____ cm

iv) _____ in _____ cm

Drill Sheet

NAME: _____

Drill Sheet 1

Conversions

a)

5 ft = _____	in	2 gallons = _____	quarts	2 lbs = _____	oz
9000 mg _____	g	30 m = _____	cm	5 kL = _____	L
6 pints = _____	cups	48 oz= _____	lbs	720 in = _____	ft
5 m = _____	cm	8000 mL = _____	L	5000 g = _____	kg

Choose the correct answer

b) Which weighs more? 1 lb *or* 10 oz

c) Which term is a unit of distance? mile *or* pound

d) Which temperature is closer to the freezing point? -3°C (27°F) *or* 2°C (36°F)

e) Which unit would be used to measure an adult whale? ounce *or* ton

Time and Money

f) List three ways you can make $1.75 using at least three different types of coins or bills.

_____

g) Suppose you purchased lunch at school for $3.75. If you gave the cashier $5.00, how much money would you receive back?

_____

h) A plane takes off at 10:45 PM and lands five hours and twelve minutes later. What time did the plane land?

_____

i) Susan began soccer camp on July 14. She stayed at camp for two weeks and three days. What day did she leave camp?

_____

NAME: _____

Review Sheet

Review B

Measurement Conversions

a)

2 ft = _____	in	60 in = _____	ft	15 ft = _____	yds
600 mm = _____	cm	100 mm = _____	cm	1 m = _____	mm
36 ft = _____	yds	5 yds = _____	ft	4 ft = _____	in

Weight

b)

1 ton = _____	lbs	3 lbs = _____	oz	64 oz = _____	lbs
2 g = _____	mg	50,000 mg = _____	g	3000 g = _____	kg

Liquid Measurement

c)

3 quart = _____	pints	16 cups = _____	pints	20 quarts= _____	gallons
5 pints = _____	cups	12 pints = _____	quarts	6 gallons = _____	quarts

Time

d) One quarter until noon. _____

e) Fifteen minutes past six thirty at night. _____

f) One and one half hour past midnight. _____

g) Twenty five minutes until eight o'clock in the morning. _____

Temperature

h) Which temperature would you find on a summer day? 20°F (-7°C) *or* 80°F (27°C)

i) What temperature would water be as it turns to ice? 0°C (32°F) *or* 100°C (212°F)

j) Which temperature would a person have who has a fever? 98°F (37°C) *or* 101°F (38°C)

k) What temperature would you find on a cool fall day? 50°F (10°C) *or* 10°F (-12°C)

Review Sheet

NAME: _____

Review A

a) Convert the following measurements.

i) 12 in = _____ ft	ii) 8 cm = _____ mm
iii) 5 lbs = _____ oz	iv) 6 L = _____ mL
v) 3,000 mg = _____ g	vi) 3 gallons = _____ quarts
vii) 9 ft = _____ yards	viii) 4 cups = _____ pints

b) Draw the hands on the clocks below to show the given times.

i) 12:15

ii) 9:45

c) What coins can be used to make each amount below?

i) 28 cents: _____

ii) 32 cents: _____

d) Color the following temperatures on the thermometers below.

i) 45°F

ii) 18°C

Time

What time does each clock show below?

i) _____ ii) _____ iii) _____

iv) _____ v) _____ vi) _____

vii) _____ viii) _____ ix) _____

x) _____ xi) _____ xii) _____

xiii) _____ xiv) _____ xv) _____

NAME: _____

Timed Drill Sheet # 11

Minutes

17a) Rewrite the following times in number form.

Ex: one o'clock in the afternoon: 1:00 PM

i) two thirty in the morning: _____

ii) noon: _____

iii) half past six in the evening: _____

iv) ten minutes to eight at night: _____

v) quarter to three in the morning: _____

vi) twenty minutes to ten at night: _____

vii) quarter past four in the afternoon: _____

viii) ten after ten in the morning: _____

ix) five minutes to seven in the evening: _____

x) midnight: _____

xi) quarter to nine at night: _____

xii) eight forty in the morning: _____

xiii) six ten in the morning: _____

xiv) quarter past noon: _____

xv) half past seven in the morning: _____

Reflection

Look at the times listed above. Create a timeline and place the times in the correct order that they would occur in a 24 hour period.

17.

a)

i) 2:30 AM

ii) 12:00 PM

iii) 6:30 PM

iv) 7:50 PM

v) 2:45 AM

vi) 9:40 PM

vii) 4:15 PM

viii) 10:10 AM

ix) 6:55 PM

x) 12:00 AM

xi) 8:45 PM

xii) 8:40 AM

xiii) 6:10 AM

xiv) 12:15 PM

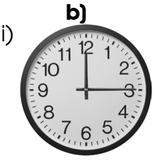
xv) 7:30 AM

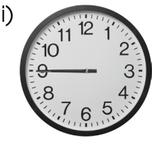
Review A

a)

i) 12 in = 1 ft
ii) 8 cm = 80 mm
iii) 5 lbs = 80 oz
iv) 6 L = 6,000 mL
v) 3,000 mg = 3 g
vi) 3 gallons = 12 quarts
vii) 9 ft = 3 yards
viii) 4 cups = 2 pints

b)

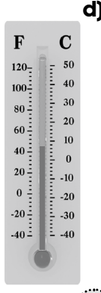
i) 

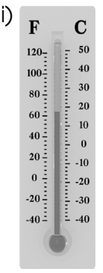
ii) 

c)

Coin combinations may vary. Possible combinations include:
i) 3 pennies, 1 quarter
ii) 2 pennies, 2 nickels, 2 dimes

d)

i) 

ii) 

Review B

a)

i) 4 ft = 48 in
ii) 22 g = 22,000 mg
iii) 7 lbs = 112 oz
iv) 6 pints = 12 cups
v) 50 L = 50,000 mL
vi) 12 yards = 36 feet
vii) 250 cm = 2.5 m
viii) 3 gallons = 24 pints

b)

i) 3:30
ii) 7:45
Make sure the student drew the correct time on the clocks.

c)

i) Area = 1 sq in (6.25 sq cm)
Perimeter = 4 in (10 cm)
ii) Area = 0.48 sq in (3 sq cm)
Perimeter = 3.6 in (9 cm)

d)

Coin combinations will vary. Possible combinations include: 5 pennies, 3 nickels, 3 dimes, 1 quarter.

Review C

a)

i) 2.5 ft = 30 in
ii) 227 L = 227,000 mL
iii) 180 g = 0.18 kg
iv) 12 pints = 1.5 gallons
v) 2.5 tons = 5,000 lbs
vi) 3.7 m = 370 cm
vii) 5 quarts = 20 cups
viii) 8 kL = 8 million mL

b)

i) length = 2 inches (5 cm); height = 0.5 inches (1.3 cm); Area = 1 sq in (6.5 sq cm); Perimeter = 5 inches (12.6 cm)
ii) length = 1.5 inches (3.8 cm); height = 0.5 inches (1.3 cm); Area = 0.375 sq in (2.47 sq cm); Perimeter = 4.5 inches (11.4 cm)
iii) length = 1 inch (2.5 cm); height = 2 inches (5 cm); Area = 2 sq in (12.5 sq cm); Perimeter = 6 inches (15 cm)
iv) length = 2 inches (5 cm); height = 2 inches (5 cm); Area = 4 sq in (25 sq cm); Perimeter = 8 inches (20 cm)