Name				Date		
1.	1. Find the equivalent measures.					
	a.	5 km =	m	e.	7 m =	cm
	b.	13 km =	_m	f.	19 m =	_ cm
	c.	km = 17	7,000 m	g.	m = 2	,400 cm
	d.	60 km =	_m	h.	90 m =	_ cm
2.	Fin	d the equivalent measures.				
	a.	7 km 123 m =	m	d.	7 m 45 cm =	cm
	b.	22 km 22 m =	m	e.	67 m 7 cm =	cm
	C.	875 km 4 m =	m	f.	204 m 89 cm =	cm
3.	Sol	Solve.				
	a.	2 km 303 m – 556 m		b.	2 m – 54 cm	

- c. Express your answer in the smaller unit: 338 km 853 m + 62 km 71 m
- d. Express your answer in the smaller unit: 800 m 35 cm - 154 m 49 cm

e. 701 km – 523 km 445 m

f. 231 km 811 m + 485 km 829 m



Lesson 1:

Express metric length measurements in terms of a smaller unit; model and solve addition and subtraction word problems involving metric length. Modified from original



Use a tape diagram to model each problem. Solve using a simplifying strategy or an algorithm, and write your answer as a statement.

4. The length of Celia's garden is 15 m 24 cm. The length of her friend's garden is 2 m 98 cm more than Celia's. What is the length of her friend's garden?

5. Sylvia ran 3 km 290 m in the morning. Then, she ran some more in the evening. If she ran a total of 10 km, how far did Sylvia run in the evening?

6. Jenny's sprinting distance was 356 meters shorter than Tyler's. Tyler sprinted a distance of 1 km 3 m. How many meters did Jenny sprint?

7. The electrician had 7 m 23 cm of electrical wire. He used 551 cm for one wiring project. How many centimeters of wire does he have left?



Lesson 1:

Express metric length measurements in terms of a smaller unit; model and solve addition and subtraction word problems involving metric length. Modified from original



23

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Name	2		Date		
1.	Complete the conversion table.		2. Convert the measurements.		
	Mass		a. 2 kg 700 g =g		
	kg	g	-		
	1	1,000	b. 5 kg 945 g = g		
	6		c. 29 kg 58 g =g		
		8,000	d. 31 kg 3 g =g		
	15				
		24,000	e. 00,557 g kg		
	550		f. 270 kg 41 g = g		
3.	Solve. a. 370 g + 80 g		b. 5 kg – 730 g		
	 c. Express the answer in the smaller unit: 27 kg 547 g + 694 g 		 d. Express the answer in the smaller unit: 16 kg + 2,800 g 		

- e. Express the answer in mixed units: 4 kg 229 g - 355 g
- f. Express the answer in mixed units: 70 kg 101 g - 17 kg 862 g



Lesson 2:

Express metric mass measurements in terms of a smaller unit; model and solve addition and subtraction word problems involving metric mass. Modified from original



g

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Use a tape diagram to model each problem. Solve using a simplifying strategy or an algorithm, and write your answer as a statement.

4. One suitcase weighs 23 kilograms 696 grams. Another suitcase weighs 25 kilograms 528 grams. What is the total weight of the two suitcases?

5. A bag of potatoes and a bag of onions combined weigh 11 kilograms 15 grams. If the bag of potatoes weighs 7 kilograms 300 grams, how much does the bag of onions weigh?

6. The table to the right shows the weight of three dogs. What is the difference in weight between the heaviest and lightest dog?

Dog	Weight
Lassie	21 kg 249 g
Riley	23 kg 128 g
Fido	21,268 g



Lesson 2:

Express metric mass measurements in terms of a smaller unit; model and solve addition and subtraction word problems involving metric mass. Modified from original



Date _____

1. Complete the conversion table.

Liquid Capacity			
L	mL		
1	1,000		
8			
27			
	39,000		
68			
	102,000		

2. Convert the measurements.
a. 5 L 850 mL = _____ mL
b. 29 L 303 mL = _____ mL
c. 37 L 37 mL = _____ mL
d. 17 L 2 mL = _____ mL
e. 13,674 mL = _____ L ____ mL
f. 275,005 mL = _____ L ____ mL

- 3. Solve.
 - a. 545 mL + 48 mL

b. 8 L – 5,740 mL

- c. Express the answer in the smaller unit:
 27 L 576 mL + 784 mL
- e. Express the answer in mixed units: 9 L 213 mL - 638 mL

- Express the answer in the smaller unit:
 27 L + 3,100 mL
- f. Express the answer in mixed units: 41 L 724 mL - 28 L 945 mL



Lesson 3:

Express metric capacity measurements in terms of a smaller unit; model and solve addition and subtraction word problems involving metric capacity. Modified from original



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Use a tape diagram to model each problem. Solve using a simplifying strategy or an algorithm, and write your answer as a statement.

4. Sammy's bucket holds 2,530 milliliters of water. Marie's bucket holds 2 liters 30 milliliters of water. Katie's bucket holds 2 liters 350 milliliters of water. Whose bucket holds the least amount of water?

5. At football practice, the water jug was filled with 18 liters 530 milliliters of water. At the end of practice, there were 795 milliliters left. How much water did the team drink?

6. 27,545 milliliters of gas were added to a car's empty gas tank. If the gas tank's capacity is 56 liters 202 milliliters, how much gas is needed to fill the tank?



Lesson 3:

Express metric capacity measurements in terms of a smaller unit; model and solve addition and subtraction word problems involving metric capacity. Modified from original



Name			
INGINC			

Date _____

1. Complete the table.

Smaller Unit	Larger Unit	How Many Times as Large as?
centimeter	meter	100
	hundred	100
meter	kilometer	
gram		1,000
one		1,000
milliliter		1,000
one	hundred thousand	

2. Fill in the unknown unit in word form.



4. Fill in each with >, <, or =.



5. Brandon's backpack weighs 3,140 grams. Brandon weighs 22 kilograms 610 grams more than his backpack. If Brandon stands on a scale wearing his backpack, what will the weight read?

6. Place the following measurements on the number line:



7. Place the following measurements on the number line:





Lesson 4:

Know and relate metric units to place value units in order to express measurements in different units. Modified from original





Name ____

Date _____

Model each problem with a tape diagram. Solve and answer with a statement.

1. The capacity of Jose's vase is 2,419 milliliters of water. He poured 1 liter 299 milliliters of water into the empty vase. Then, he added 398 milliliters. How much more water will the vase hold?

2. Eric biked 1 kilometer 125 meters on Monday. On Tuesday, he biked 375 meters less than on Monday. How far did he bike both days?

3. Zachary weighs 37 kilograms 95 grams. Gabe weighs 4,650 grams less than Zachary. Harry weighs 2,905 grams less than Gabe. How much does Harry weigh?



Lesson 5:

Use addition and subtraction to solve multi-step word problems involving length, mass, and capacity.

Modified from original



4. A Springer Spaniel weighs 20 kilograms 490 grams. A Cocker Spaniel weighs 7,590 grams less than a Springer Spaniel. A Newfoundland weighs 52 kilograms 656 grams more than a Cocker Spaniel. What is the difference, in grams, between the weights of the Newfoundland and the Springer Spaniel?

5. Marsha has three rugs. The first rug is 2 meters 87 centimeters long. The second rug has a length 98 centimeters less than the first. The third rug is 111 centimeters longer than the second rug. What is the difference in centimeters between the length of the first rug and the third rug?

6. One barrel held 60 liters 868 milliliters of sap. A second barrel held 20,089 milliliters more sap than the first. A third barrel held 40 liters 82 milliliters less sap than the second. If the sap from the three barrels was poured into a larger container, how much sap would there be in all?



Lesson 5:

Use addition and subtraction to solve multi-step word problems involving length, mass, and capacity.

Modified from original

