Name Key Date _____

1. Find the equivalent measures.

a. 1 kilometer = 1000 meters. How does this answer help you find how many meters are in 7 kilometers?

b. To find the number of meters in 7km, take 7 x 1,000 = 7,000 m.

c. 13 kilometers = 13,000 meters

d. 17 kilometers = 17,000 meters

---

2. Find the equivalent measures.

a. 7 km 123 m = 7,123 meters

(7 km = 7,000 m) + 123 m = 7,123 meters

b. 22 km 22 m = 22,022 meters

(22 km = 22,000 m) + 22 m = 22,022 meters

c. 875 km 4 m = 875,004 meters

(875 km = 875,000 meters) + 4 m = 874,004 meters

3. Solve.

a. 2 km 303 m – 556 m =

2,303 m

29 13
2,3Ø3
- 556
1747 = 1 km 747 m

b. 2 m – 54 cm =

1m 100 cm

1m 100cm
- 54cm
1m 46cm

4. Write vertically and solve.

a. 38 km 53 m + 62 km 71 m =

38 km 53m
+ 62 km 71 m
100 km 124 m

b. 800 m 65 cm – 154 m 49 cm =

5 15
800 m 65cm
- 154m 49cm
646m 16cm

c. 701 km – 523 km 445 m =

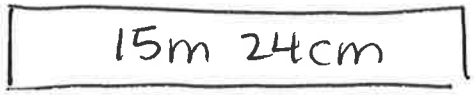
701 km
- 523 km 445m
0 9 9 10
701,000 m
- 523,445 m
177,555 m
177 km 555m

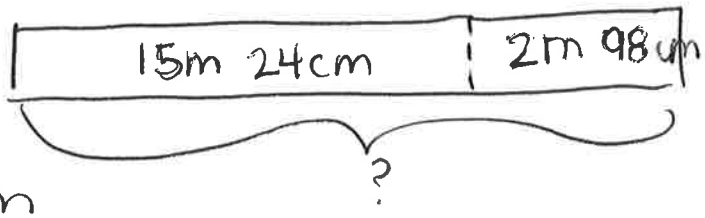
d. 31 km 811 m + 45 km 829 m =

31 km 811 m
+ 45 km 829 m
76 km 1640 m
77km 640m

Use a tape diagram to model each problem.

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?

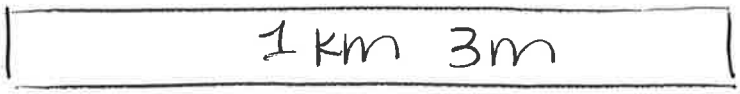
Celia's Garden 

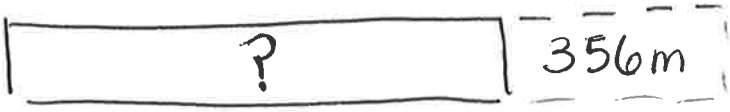
Friend's Garden 

15 m 24 cm
+ 2m 98 cm
17m 122 cm
18m 22cm

Her friend's garden is 18m 22cm long.

5. 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?

Tyler 

Jenny 

1 km 3m = 1,300 m
29 10
1,300 m
− 356m = − 356 m
944m

Jenny sprinted 944 m.

Name Key Date _____

1. Complete the table.

Mass	
kg	g
1	1,000
6	6,000
	8,000
15	15,000
24	24,000
550	550,000

2. Find the equivalent measures.

a. 2 kg 700 g = 2,700 g

b. 5 kg 945 g = 5,945 g

c. 9 kg 58 g = 9,058 g

d. 1 kg 3 g = 1,003 g

Solve.
Rename units if possible.

a. 370 g + 80 g =

$$\begin{array}{r} 370\text{g} \\ +\ 80\text{g} \\ \hline 450\text{g} \end{array}$$

b. 5 kg – 730 g =

4kg 1000g

$$\begin{array}{r} 4\text{kg}\ 1000\text{g} \\ -\ 730\text{g} \\ \hline 4\text{kg}\ 270\text{g} \end{array}$$

c. 27 kg 547g + 694 g =

$$\begin{array}{r} 27\text{ kg}\ 547\text{g} \\ +\ \ \ \ \ 694\text{g} \\ \hline 27\text{kg}\ 1241\text{g} \end{array}$$

28 kg 241 g

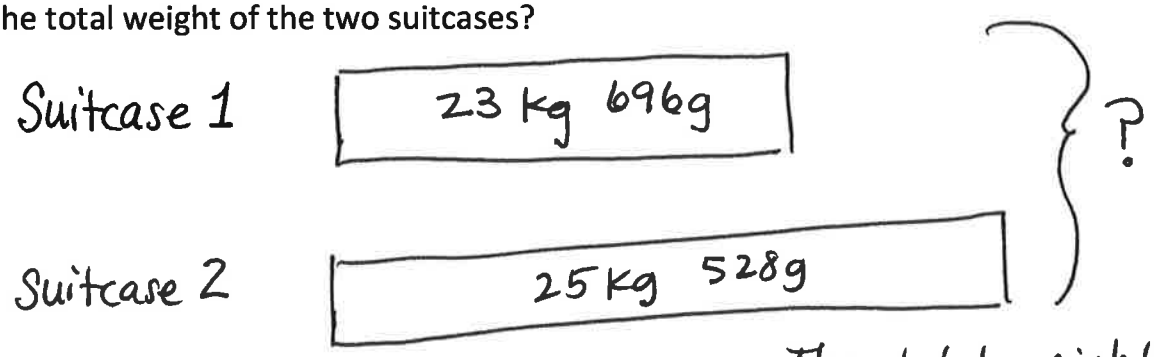
d. 16 kg + 2,800 g =

2kg 800g

18 kg 800 g

Directions: Use a tape diagram to model each problem.

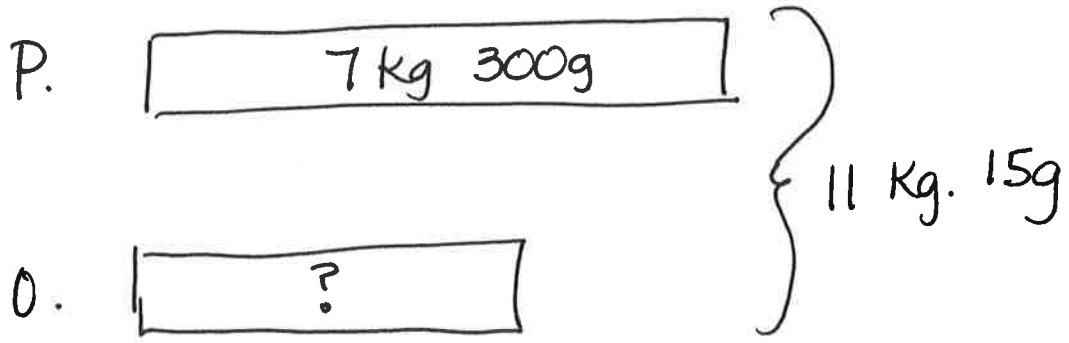
4. One suitcase weighs 23 kg 696 g. Another suitcase weighs 25 kg 528 g. What is the total weight of the two suitcases?



The total weight is 49 kg 224g.

$$\begin{array}{r} 23\text{ kg }696\text{ g} \\ +\ 25\text{ kg }528\text{ g} \\ \hline 48\text{ kg }1224\text{ g} \end{array} = 49\text{ kg }224\text{ g}$$

5. A bag of potatoes and a bag of onions together weigh 11 kg 15 g. If the bag of potatoes weighs 7 kg 300 g, how much does the bag of onions weigh?



$$\begin{array}{r} 11\text{ kg }15\text{ g} \\ -\ 7\text{ kg }300\text{g} \\ \hline \end{array} = \begin{array}{r} 10\text{ kg }1015\text{ g} \\ -\ 7\text{kg }\ 300\text{ g} \\ \hline 3\text{ kg }\ 715\text{ g} \end{array}$$

The bag of onions weighs 3kg 715g.

Name Key Date _____

1. Find the missing numbers.

a. 5 L 850 mL = 5,850 mL

b. 9 L 303 mL = 9,303 mL

c. 7 L 37 mL = 7,037 mL

d. 17 L 2 mL = 17,002 mL

e. 13,674 mL = 13 L 674 mL

f. 5,505 mL = 5 L 505 mL

2. Solve.

a. 545 mL + 48 mL =

$$\begin{array}{r} 545\text{ mL} \\ +\ 48\text{ mL} \\ \hline 593\text{ mL} \end{array}$$

b. 8 L – 5,740 mL =

$$\begin{array}{r} 8{,}000\text{ mL} \\ -\ 5{,}740\text{ mL} \\ \hline 2{,}260\text{ mL} \end{array} = 2\text{ L }260\text{ mL}$$

c. 27 L 576 mL + 784 mL =

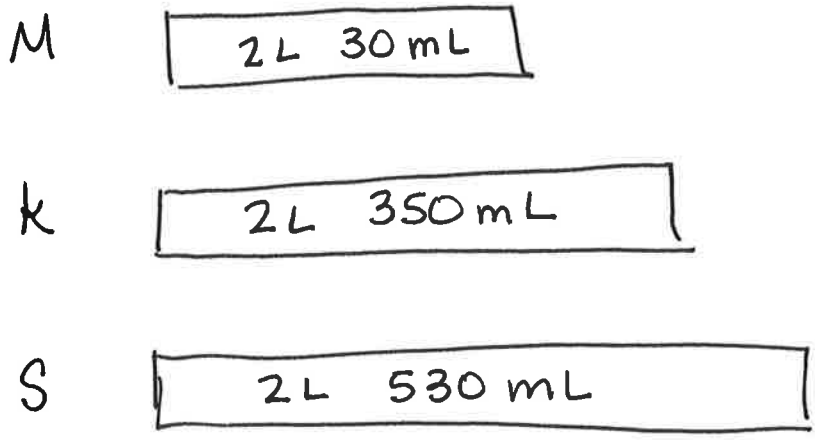
$$\begin{array}{r} 25\text{ L }576\text{ mL} \\ +\ \ \ \ 784\text{ mL} \\ \hline 25\text{ L }1360\text{ mL} \end{array} = 26\text{ L }360\text{ mL}$$

d. 27 L + 3,100 mL = 30 L 100 mL

3 L 100 mL

2L 530 mL

3. Sammy's bucket was filled with 2,530 milliliters of water, Marie's bucket was filled with 2 liters 30 milliliters of water, and Katie's bucket was filled with 2 liters 350 milliliters of water. Whose bucket had the least amount of water? Use a tape diagram to compare the three amounts.



Marie's bucket had the least amount of water.

3. 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? Solve any way.

18L 530mL − 795mL

$$\begin{array}{r} 17\text{L } 1\overset{4}{5}\overset{12}{\cancel{0}}\text{ mL} \\ -\ 795\text{ mL} \\ \hline 17\text{L } 735\text{ mL} \end{array}$$

The team drank 17L 735mL of water.

Name Key Date

1. Complete the following table.

Smaller Unit	Larger Unit	How Many Times as Large
centimeter	meter	100
one	hundred	100
meter	kilometer	1000
gram	kilogram	1,000
one	thousand	1,000
milliliter	liter	1,000
one	hundred thousand	100,000

2. Fill in the missing unit in word form.

a. 135 is 1 hundred and 35 ones

b. 135 centimeters is 1 meter and 35 centimeters

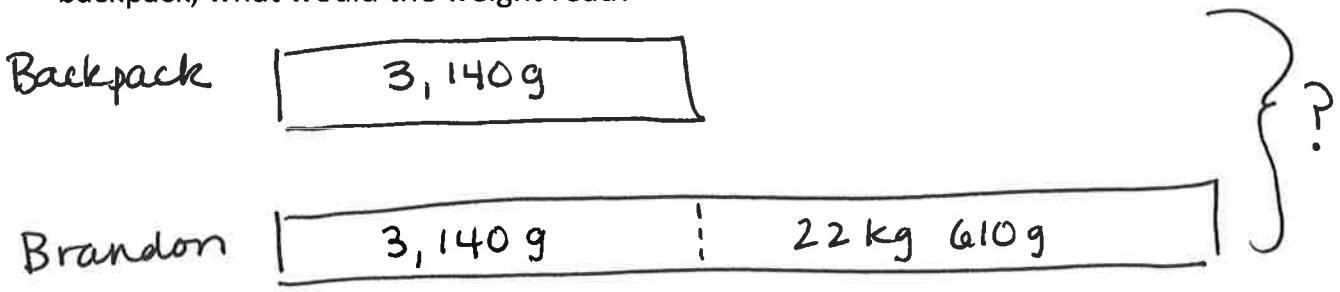
c. 1,215 is 1 thousand and 215 ones

d. 1,215 meters is 1 kilometer and 215 meters

e. 12,350 is 12 thousands and 350 ones

f. 12,350 grams is 12 kilograms and 350 grams

3. Brandon's backpack weighs 3,140 grams. Brandon weighs 22 kilograms 610 grams **more than** his backpack. If Brandon were to stand on a scale wearing his backpack, what would the weight read?



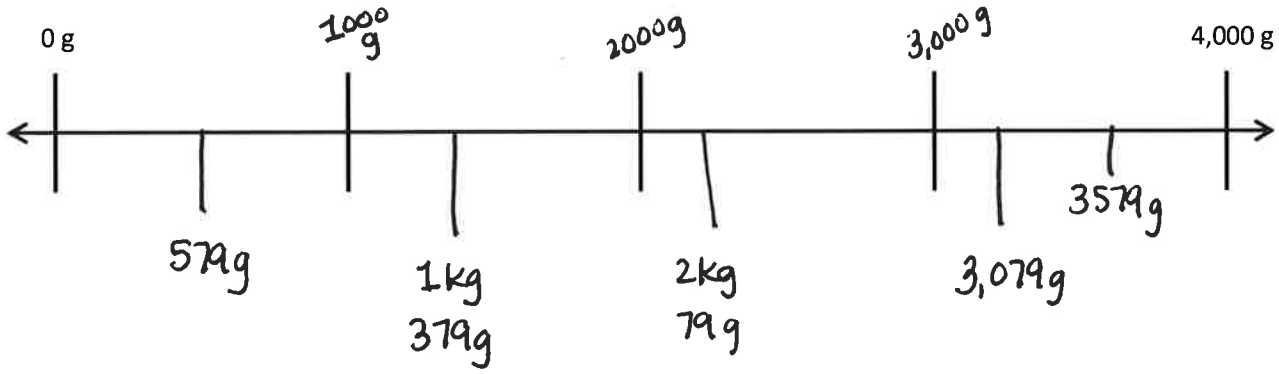
3 kg 140 g
22 kg 610 g
25 kg 750 g
Brandon's weight

25 kg 750 g
+ 3 kg 140 g
28 kg 890 g

The scale would show 28 kg 890 g.

4. Place the following measurements on the number line:

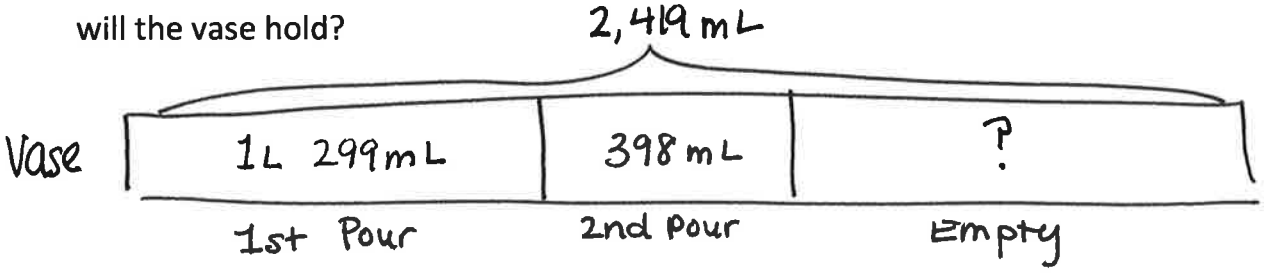
1,379 g
1 kg 379 g ✓
3,079 g ✓
2,079 g
2 kg 79 g ✓
3,579 g ✓
579 g ✓



Name Key Date

Directions: Solve. Model the problems using a tape diagram

1. Jose's vase can hold up to 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?



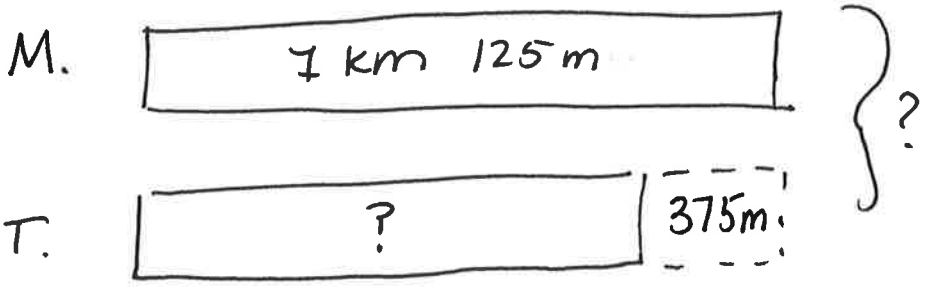
$$\begin{array}{r} 1\text{ L }299\text{ mL} \\ +\quad 398\text{ mL} \\ \hline 1\text{ L }697\text{ mL} \end{array}$$

total water

$$\begin{array}{r} 2\text{ L }419\text{ mL} \\ -\ 1\text{ L }697\text{ mL} \\ \hline \end{array} \rightarrow \begin{array}{r} {}^{3} \\ 1\text{ L }1,4{}^{1}19\text{ mL} \\ -\ 1\text{ L }\quad 697\text{ mL} \\ \hline 722\text{ mL} \end{array}$$

The vase can hold 722 mL water.

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



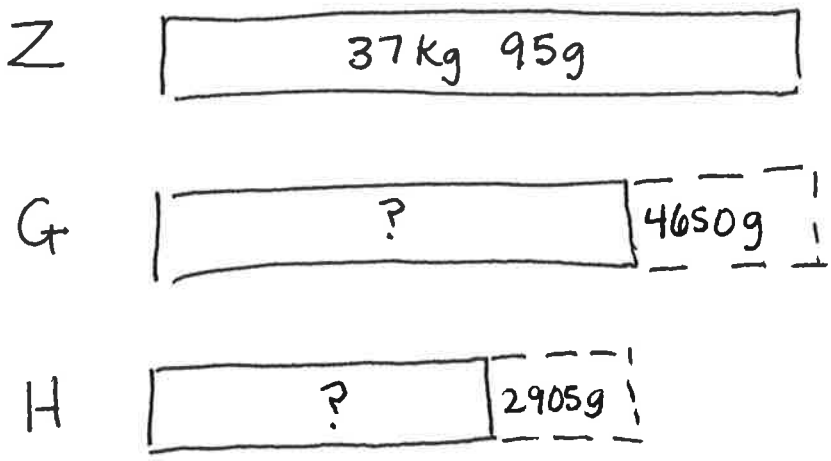
$$\begin{array}{r} 1\text{ km }1{}^{0}\!\!\not{2}5\text{ m} \\ -\quad 375\text{ m} \\ \hline 750\text{ m} \end{array}$$

Tues.

$$\begin{array}{r} 1\text{ km }125\text{ m} \\ +\quad 750\text{ m} \\ \hline 1\text{ km }875\text{ m} \end{array}$$

On both days, he biked a total of 1 km 875 m.

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

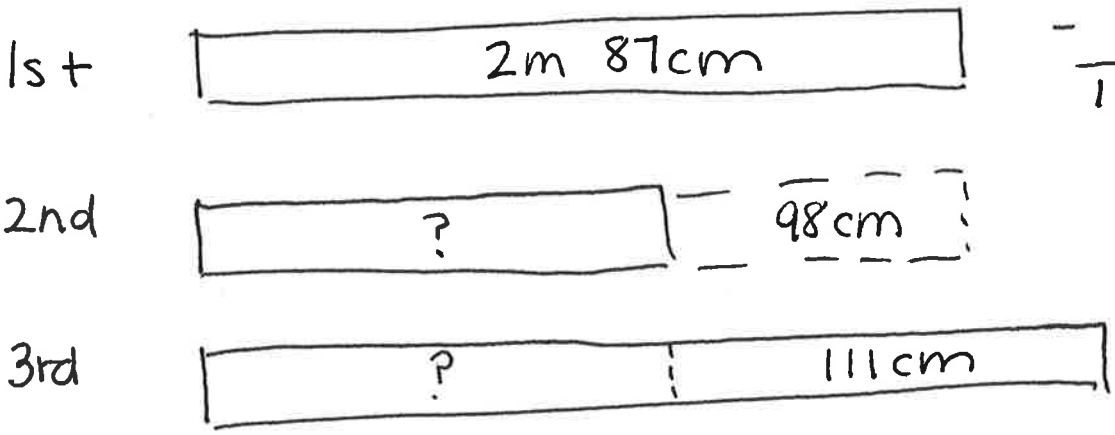


Z = 37,095
− 4,650
32,445g = G

G = 32,445g
− 2,905g
29,540g = 29kg 540g
Harry

Harry weighs 29kg 540g.

4. Marsha has three rugs. The first rug is 2 m 87 cm long. The second rug has a length 98 cm less than the first. The third rug is 111 cm longer than the second rug. How long is the third rug?



287cm
− 98cm
189cm = 2nd

189cm
+ 111cm
300cm

The 3rd rug is 3m long.