Eureka Math™

Grade 3, Module 2

Student File_B

Contains Sprint and Fluency, Exit Ticket,
and Assessment Materials

Sprint and Fluency Packet

A

Number Correct: _____

Find the Halfway Point

1.	0	_____	10	23.	280	_____	290
2.	10	_____	20	24.	580	_____	590
3.	20	_____	30	25.	590	_____	580
4.	70	_____	80	26.	30	_____	40
5.	80	_____	70	27.	930	_____	940
6.	40	_____	50	28.	70	_____	60
7.	50	_____	40	29.	470	_____	460
8.	30	_____	40	30.	90	_____	100
9.	40	_____	30	31.	890	_____	900
10.	70	_____	60	32.	990	_____	1,000
11.	60	_____	70	33.	1,000	_____	1,010
12.	80	_____	90	34.	70	_____	80
13.	90	_____	100	35.	1,070	_____	1,080
14.	100	_____	90	36.	1,570	_____	1,580
15.	90	_____	80	37.	480	_____	490
16.	50	_____	60	38.	1,480	_____	1,490
17.	150	_____	160	39.	1,080	_____	1,090
18.	250	_____	260	40.	360	_____	350
19.	750	_____	760	41.	1,790	_____	1,780
20.	760	_____	750	42.	400	_____	390
21.	80	_____	90	43.	1,840	_____	1,830
22.	180	_____	190	44.	1,110	_____	1,100

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Lesson 14: Round to the nearest hundred on the vertical number line.

1

B

Number Correct: _____

Improvement: _____

Find the Halfway Point

1.	10	_____	20	23.	270	_____	280
2.	20	_____	30	24.	670	_____	680
3.	30	_____	40	25.	680	_____	670
4.	60	_____	70	26.	20	_____	30
5.	70	_____	60	27.	920	_____	930
6.	50	_____	60	28.	60	_____	50
7.	60	_____	50	29.	460	_____	450
8.	40	_____	50	30.	90	_____	100
9.	50	_____	40	31.	890	_____	900
10.	80	_____	70	32.	990	_____	1,000
11.	70	_____	80	33.	1,000	_____	1,010
12.	80	_____	90	34.	20	_____	30
13.	90	_____	100	35.	1,020	_____	1,030
14.	100	_____	90	36.	1,520	_____	1,530
15.	90	_____	80	37.	380	_____	390
16.	60	_____	70	38.	1,380	_____	1,390
17.	160	_____	170	39.	1,080	_____	1,090
18.	260	_____	270	40.	760	_____	750
19.	560	_____	570	41.	1,690	_____	1,680
20.	570	_____	560	42.	300	_____	290
21.	70	_____	80	43.	1,850	_____	1,840
22.	170	_____	180	44.	1,220	_____	1,210

A

Number Correct: _____

Round to the Nearest Ten

1.	21 ≈		23.	79 ≈	
2.	31 ≈		24.	89 ≈	
3.	41 ≈		25.	99 ≈	
4.	81 ≈		26.	109 ≈	
5.	59 ≈		27.	119 ≈	
6.	49 ≈		28.	149 ≈	
7.	39 ≈		29.	311 ≈	
8.	19 ≈		30.	411 ≈	
9.	36 ≈		31.	519 ≈	
10.	34 ≈		32.	619 ≈	
11.	56 ≈		33.	629 ≈	
12.	54 ≈		34.	639 ≈	
13.	77 ≈		35.	669 ≈	
14.	73 ≈		36.	969 ≈	
15.	68 ≈		37.	979 ≈	
16.	62 ≈		38.	989 ≈	
17.	25 ≈		39.	999 ≈	
18.	35 ≈		40.	1,109 ≈	
19.	45 ≈		41.	1,119 ≈	
20.	75 ≈		42.	3,227 ≈	
21.	85 ≈		43.	5,487 ≈	
22.	15 ≈		44.	7,885 ≈	

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Lesson 17: Estimate sums by rounding and apply to solve measurement word problems.

3

B

Round to the Nearest Ten

1.	11 ≈		23.	79 ≈	
2.	21 ≈		24.	89 ≈	
3.	31 ≈		25.	99 ≈	
4.	71 ≈		26.	109 ≈	
5.	69 ≈		27.	119 ≈	
6.	59 ≈		28.	159 ≈	
7.	49 ≈		29.	211 ≈	
8.	19 ≈		30.	311 ≈	
9.	26 ≈		31.	418 ≈	
10.	24 ≈		32.	518 ≈	
11.	46 ≈		33.	528 ≈	
12.	44 ≈		34.	538 ≈	
13.	87 ≈		35.	568 ≈	
14.	83 ≈		36.	968 ≈	
15.	78 ≈		37.	978 ≈	
16.	72 ≈		38.	988 ≈	
17.	15 ≈		39.	998 ≈	
18.	25 ≈		40.	1,108 ≈	
19.	35 ≈		41.	1,118 ≈	
20.	75 ≈		42.	2,337 ≈	
21.	85 ≈		43.	4,578 ≈	
22.	45 ≈		44.	8,785 ≈	

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Lesson 17:   Estimate sums by rounding and apply to solve measurement word problems.

4

A

Number Correct: _____

Round to the Nearest Hundred

1.	201 ≈		23.	350 ≈	
2.	301 ≈		24.	1,350 ≈	
3.	401 ≈		25.	450 ≈	
4.	801 ≈		26.	5,450 ≈	
5.	1,801 ≈		27.	850 ≈	
6.	2,801 ≈		28.	6,850 ≈	
7.	3,801 ≈		29.	649 ≈	
8.	7,801 ≈		30.	651 ≈	
9.	290 ≈		31.	691 ≈	
10.	390 ≈		32.	791 ≈	
11.	490 ≈		33.	891 ≈	
12.	890 ≈		34.	991 ≈	
13.	1,890 ≈		35.	995 ≈	
14.	2,890 ≈		36.	998 ≈	
15.	3,890 ≈		37.	9,998 ≈	
16.	7,890 ≈		38.	7,049 ≈	
17.	512 ≈		39.	4,051 ≈	
18.	2,512 ≈		40.	8,350 ≈	
19.	423 ≈		41.	3,572 ≈	
20.	3,423 ≈		42.	9,754 ≈	
21.	677 ≈		43.	2,915 ≈	
22.	4,677 ≈		44.	9,996 ≈	

Lesson 20:   Estimate differences by rounding and apply to solve measurement word problems.

5

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B

Round to the Nearest Hundred

1.	101 ≈		23.	250 ≈	
2.	201 ≈		24.	1,250 ≈	
3.	301 ≈		25.	350 ≈	
4.	701 ≈		26.	5,350 ≈	
5.	1,701 ≈		27.	750 ≈	
6.	2,701 ≈		28.	6,750 ≈	
7.	3,701 ≈		29.	649 ≈	
8.	8,701 ≈		30.	652 ≈	
9.	190 ≈		31.	692 ≈	
10.	290 ≈		32.	792 ≈	
11.	390 ≈		33.	892 ≈	
12.	790 ≈		34.	992 ≈	
13.	1,790 ≈		35.	996 ≈	
14.	2,790 ≈		36.	999 ≈	
15.	3,790 ≈		37.	9,999 ≈	
16.	8,790 ≈		38.	4,049 ≈	
17.	412 ≈		39.	2,051 ≈	
18.	2,412 ≈		40.	7,350 ≈	
19.	523 ≈		41.	4,572 ≈	
20.	3,523 ≈		42.	8,754 ≈	
21.	877 ≈		43.	3,915 ≈	
22.	4,877 ≈		44.	9,997 ≈	

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Lesson 20: Estimate differences by rounding and apply to solve measurement word problems.

6

Exit Ticket Packet

Name _____ Date _____

The table to the right shows how much time it takes each of the 5 students to do 15 jumping jacks.

Maya	**16 seconds**
Riley	**15 seconds**
Jake	**14 seconds**
Nicholas	**15 seconds**
Adeline	**17 seconds**

a. Who finished 15 jumping jacks the fastest?

b. Who finished their jumping jacks in the exact same amount of time?

c. How many seconds faster did Jake finish than Adeline?

Name _____   Date _____

The number line below shows a math class that begins at 10:00 a.m. and ends at 11:00 a.m. Use the number line to answer the following questions.
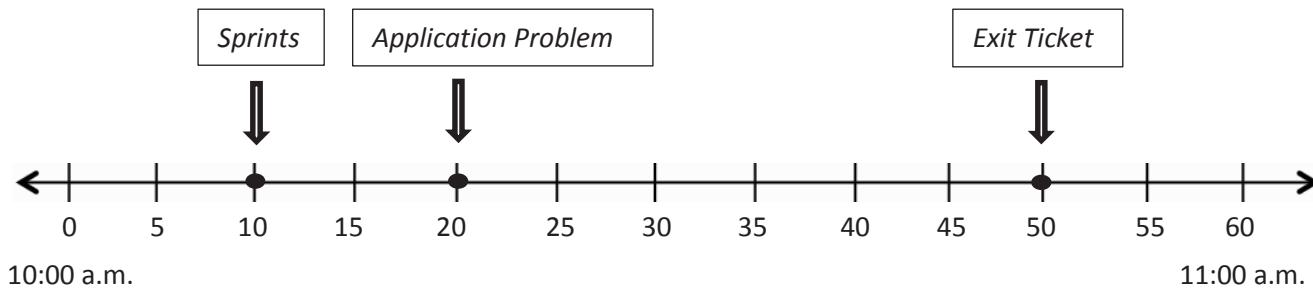
a. What time do Sprints begin?

b. What time do students begin the Application Problem?

c. What time do students work on the Exit Ticket?

d. How long is math class?

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Lesson 2:   Relate skip-counting by fives on the clock and telling time to a continuous measurement model, the number line.

2

Name _____   Date _____

The clock shows what time Jason gets to school in the morning.

Arrival at School

a. What time does Jason get to school?

b. The first bell rings at 8:23 a.m. Draw hands on the clock to show when the first bell rings.

First Bell Rings
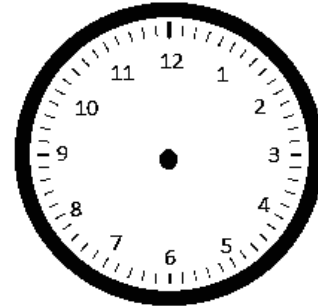
c. Label the first and last tick marks 8:00 a.m. and 9:00 a.m. Plot a point to show when Jason arrives at school. Label it *A*. Plot a point on the line when the first bell rings and label it *B*.

```
  |    |    |    |    |    |    |    |    |    |    |    |
  0    10        20        30        40        50        60
```

Lesson 3:   Count by fives and ones on the number line as a strategy to tell time to the nearest minute on the clock.

3
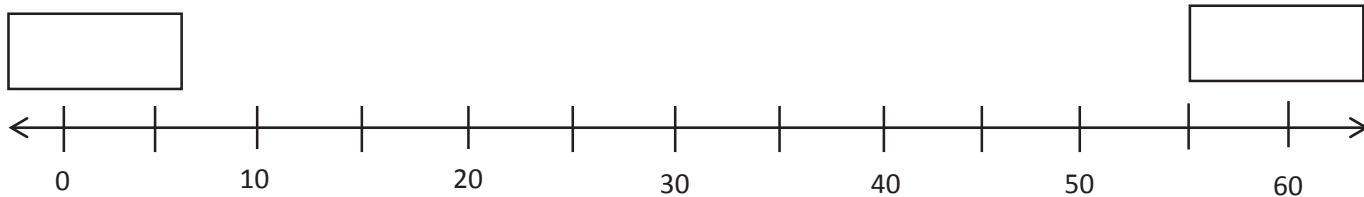
Name _____   Date _____

Independent reading time starts at 1:34 p.m. It ends at 1:56 p.m.

1. Draw the start time on the clock below.   2. Draw the end time on the clock below.
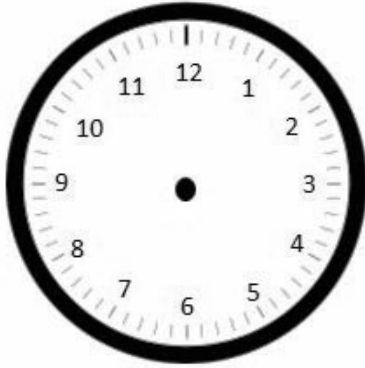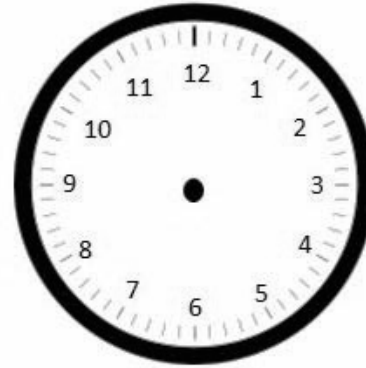
3. How many minutes does independent reading time last?

Lesson 4:   Solve word problems involving time intervals within 1 hour by counting
backward and forward using the number line and clock.

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4

Name _____ Date _____

Michael spends 19 minutes on his math homework and 17 minutes on his science homework.

How many minutes does Michael spend doing his homework?

Model the problem on the number line, and write an equation to solve.
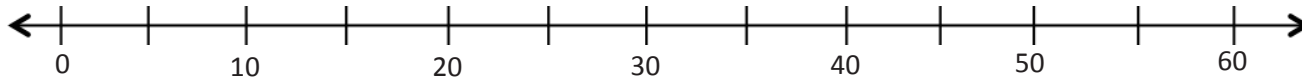
Michael spends _____ minutes on his homework.

Lesson 5: Solve word problems involving time intervals within 1 hour by adding and subtracting on the number line.

5

Name _____   Date _____

Ten bags of sugar weigh 1 kilogram. How many grams does each bag of sugar weigh?

Lesson 6:   Build and decompose a kilogram to reason about the size and weight
of 1 kilogram, 100 grams, 10 grams, and 1 gram.

6

Name _____   Date _____

1. Read and write the weights below. Write the word *kilogram* or *gram* with the measurement.

POTATOES

140

150

0
500g

250

0
30 kg

15

_____   _____
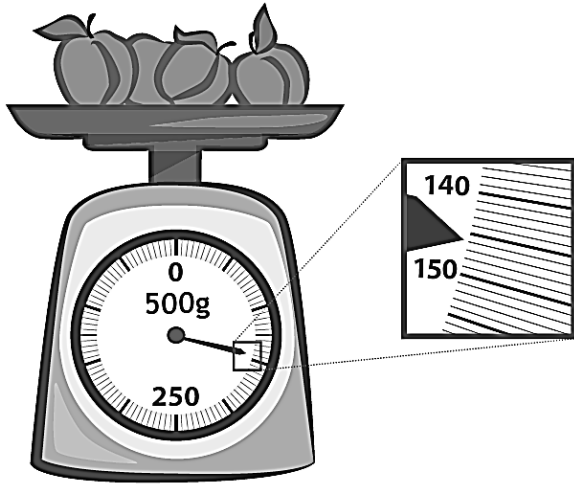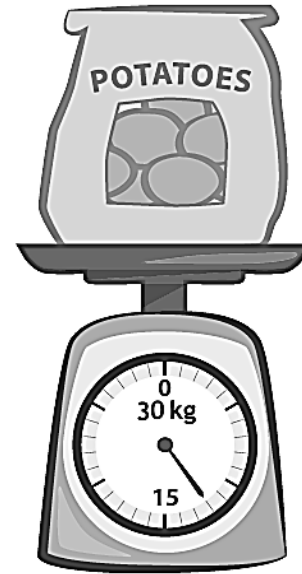
2. Circle the correct unit of weight for each estimation.

    a. An orange weighs about 200 (grams / kilograms).

    b. A basketball weighs about 624 (grams / kilograms).

    c. A brick weighs about 2 (grams / kilograms).

    d. A small packet of sugar weighs about 4 (grams / kilograms).

    e. A tiger weighs about 190 (grams / kilograms).

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Lesson 7:   Develop estimation strategies by reasoning about the weight in kilograms of a series of familiar objects to establish mental benchmark measures.

7

Name _____   Date _____

The weights of a backpack and suitcase are shown below.

7 kg

21 kg

a. How much heavier is the suitcase than the backpack?

b. What is the total weight of 4 identical backpacks?

c. How many backpacks weigh the same as one suitcase?

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Lesson 8: Solve one-step word problems involving metric weights within 100 and estimate to reason about solutions.

8

Name _____   Date _____

1. Morgan fills a 1-liter jar with water from the pond. She uses a 100-milliliter cup to scoop water out of the pond and pour it into the jar. How many times will Morgan scoop water from the pond to fill the jar?

2. How many groups of 10 milliliters are in 1 liter? Explain.

There are _____ groups of 10 milliliters in 1 liter.

Lesson 9:   Decompose a liter to reason about the size of 1 liter, 100 milliliters, 10 milliliters, and 1 milliliter.

9

Name _____   Date _____

1. Use the number line to record the capacity of the containers.

Container	Capacity in Liters
A	
B	
C	
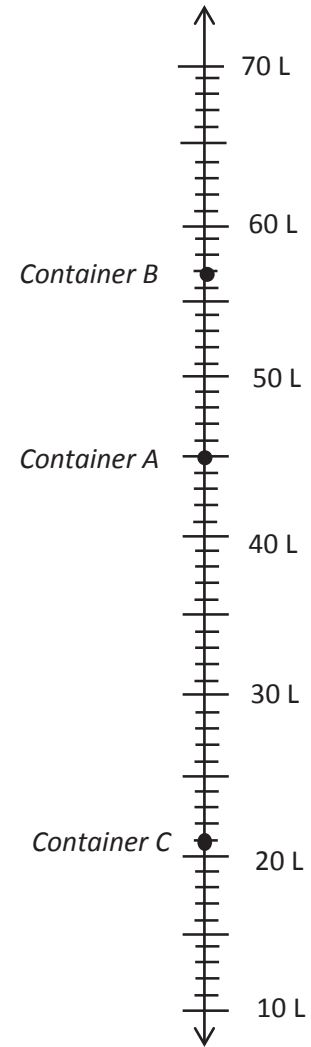
2. What is the difference between the capacity of Container A and Container C?

Container B — 70 L, 60 L, 50 L, 40 L, 30 L, 20 L, 10 L

Container A

Container C

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Lesson 10:   Estimate and measure liquid volume in liters and milliliters using the vertical number line.

10

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Name _____   Date _____

The capacities of three cups are shown below.

Cup A
160 mL

Cup B
280 mL

Cup C
237 mL

a. Find the total capacity of the three cups.

b. Bill drinks exactly half of Cup B. How many milliliters are left in Cup B?

c. Anna drinks 3 cups of tea from Cup A. How much tea does she drink in total?

Lesson 11:   Solve mixed word problems involving all four operations with grams, kilograms, liters, and milliliters given in the same units.

11

Name _____   Date _____

The weight of a golf ball is shown below.
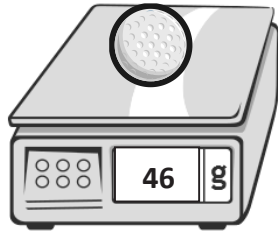
a. The golf ball weighs _____.

b. Round the weight of the golf ball to the nearest ten grams. Model your thinking on the number line.

c. The golf ball weighs about _____.

d. Explain how you used the halfway point on the number line to round to the nearest ten grams.

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Lesson 12:   Round two-digit measurements to the nearest ten on the vertical number line.

12

Name _____   Date _____

1. Round to the nearest ten. Use the number line to model your thinking.

   a. 26 ≈ _____

   b. 276 ≈ _____

2. Bobby rounds 603 to the nearest ten. He says it is 610. Is he correct? Why or why not? Use a number line and words to explain your answer.

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Lesson 13:   Round two- and three-digit numbers to the nearest ten on the vertical number line.

13

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Name _____   Date _____

1. Round to the nearest hundred. Use the number line to model your thinking.

a. 137 ≈ _____	b. 1,761 ≈ _____

2. There are 685 people at the basketball game. Draw a vertical number line to round the number of people to the nearest hundred people.

Name _____   Date _____

1. Find the sums below. Choose mental math or the algorithm.

   a. 24 cm + 36 cm   b. 562 m + 180 m   c. 345 km + 239 km

2. Brianna jogs 15 minutes more on Sunday than Saturday. She jogged 26 minutes on Saturday.

   a. How many minutes does she jog on Sunday?

   b. How many minutes does she jog in total?

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Lesson 15:   Add measurements using the standard algorithm to compose larger
units once.

15

Name _____   Date _____

1. Find the sums.

   a. 78 g + 29 g   b. 328 kg + 289 kg   c. 509 L + 293 L

2. The third-grade class sells lemonade to raise funds. After selling 58 liters of lemonade in 1 week, they still have 46 liters of lemonade left. How many liters of lemonade did they have at the beginning?

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Lesson 16:   Add measurements using the standard algorithm to compose larger units twice.

16

Name _____   Date _____

Jesse practices the trumpet for a total of 165 minutes during the first week of school. He practices for 245 minutes during the second week.

    a.   Estimate the total amount of time Jesse practices by rounding to the nearest 10 minutes.

    b.   Estimate the total amount of time Jesse practices by rounding to the nearest 100 minutes.

    c.   Explain why the estimates are so close to each other.

Name _____   Date _____

1. Solve the subtraction problems below.

     a. 381 mL – 146 mL   b. 730 m – 426 m   c. 509 kg – 384 kg

2. The total length of a banner is 408 centimeters. Carly paints it in 3 sections. The first 2 sections she paints are 187 centimeters long altogether. How long is the third section?

Lesson 18:   Decompose once to subtract measurements including three-digit minuends with zeros in the tens or ones place.

18
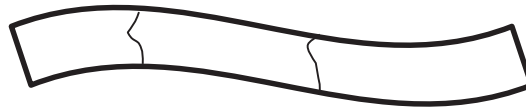
Name _____   Date _____

1. Solve the subtraction problems below.

   a. 346 m – 187 m

   b. 700 kg – 592 kg

2. The farmer's sheep weighs 647 kilograms less than the farmer's cow. The cow weighs 725 kilograms. How much does the sheep weigh?

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Lesson 19:   Decompose twice to subtract measurements including three-digit minuends with zeros in the tens and ones places.

19

Name _____   Date _____

Kathy buys a total of 416 grams of frozen yogurt for herself and a friend. She buys 1 large cup and 1 small cup.
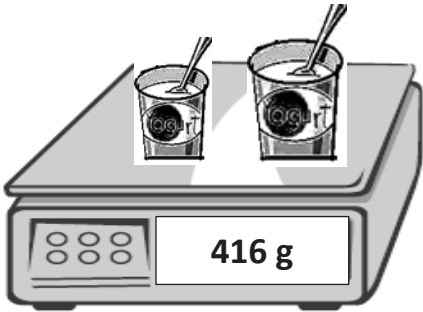
Large Cup	363 grams
Small Cup	? grams

a. Estimate how many grams are in the small cup of yogurt by rounding.

b. Estimate how many grams are in the small cup of yogurt by rounding in a different way.

c. How many grams are actually in the small cup of yogurt?

d. Is your answer reasonable? Which estimate was closer to the exact weight? Explain why.

Lesson 20: Estimate differences by rounding and apply to solve measurement word problems.

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20

Name _____   Date _____

Rogelio drinks water at every meal. At breakfast, he drinks 237 milliliters. At lunch, he drinks 300 milliliters. At dinner, he drinks 177 milliliters.

a. Estimate the total amount of water Rogelio drinks. Then, find the actual amount of water he drinks at all three meals.

b. Estimate how much more water Rogelio drinks at lunch than at dinner. Then, find how much more water Rogelio actually drinks at lunch than at dinner.

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Lesson 21:   Estimate sums and differences of measurements by rounding, and then solve mixed word problems.

21

Assessment Packet

Name _____   Date _____

1. Fatima runs errands.

    Fatima leaves home.

    a. The clock to the right shows what time she leaves
        home. What time does she leave?

    b. It takes Fatima 17 minutes to go from her home to the
        market. Use the number line below to show what time
        she gets to the market.

2:00 p.m.   3:00 p.m.

    0   10   20   30   40   50   60

    Fatima leaves the market.
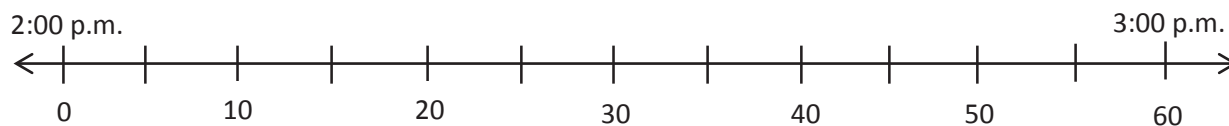
    c. The clock to the right shows what time Fatima leaves
        the market. What time does she leave the market?

    d. How long does Fatima spend at the market?

2. At the market, Fatima uses a scale to weigh a bag of almonds and a bag of raisins, shown below. What is the total weight of the almonds and raisins?
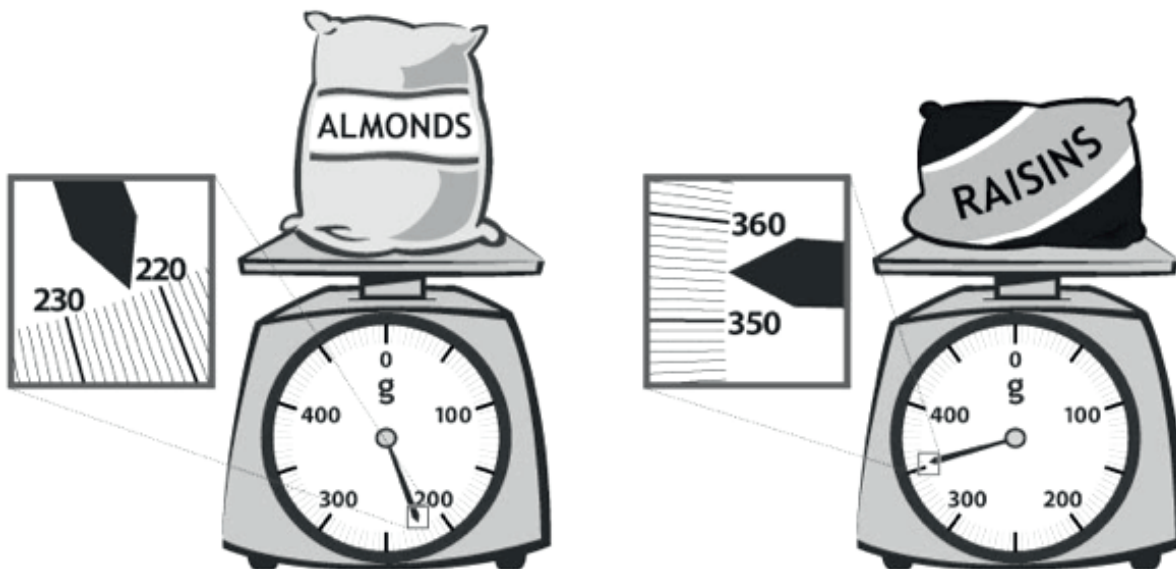
3. The amount of juice in 1 bottle is shown to the right. Fatima needs 18 liters for a party. Draw and label a tape diagram to find how many bottles of juice she should buy.

2L

1L
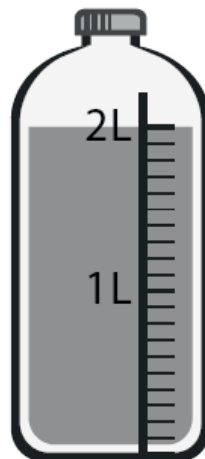
4. Altogether, Fatima's lettuce, broccoli, and peas weigh 968 grams. The total weight of her lettuce and broccoli is shown to the right. Write and solve a number sentence to find how much the peas weigh.

LETTUCE

BROCCOLI

744 g
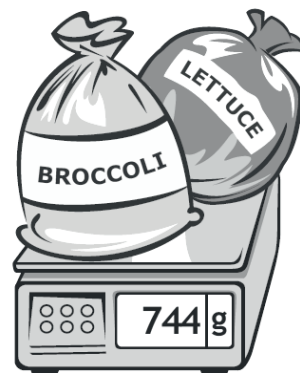
5. Fatima weighs a watermelon, shown to the right.

   a. How much does the watermelon weigh?
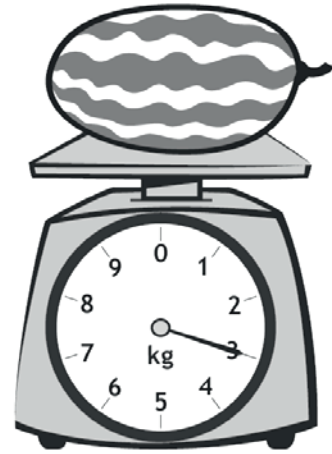
   b. Leaving the store Fatima thinks, "Each bag of groceries seems as heavy as a watermelon!" Use Fatima's idea about the weight of the watermelon to estimate the total weight of 7 bags.

   c. The grocer helps carry about 9 kilograms. Fatima carries the rest. Estimate how many kilograms of groceries Fatima carries.

   d. It takes Fatima 12 minutes to drive to the bank after she leaves the store and then 34 more minutes to drive home. How many minutes does Fatima drive after she leaves the store?

Name _____   Date _____

1. Paul is moving to Australia. The total weight of his 4 suitcases is shown on the scale to the right. On a number line, round the total weight to the nearest 100 kilograms.
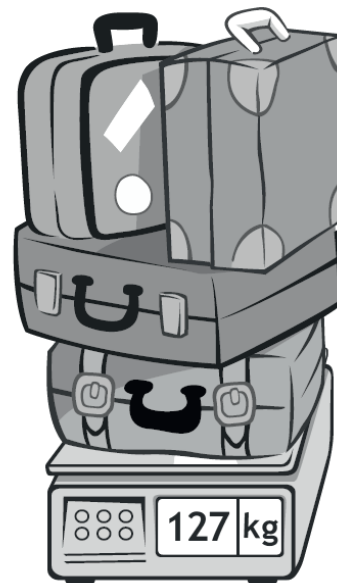
2. Paul buys snacks for his flight. He compares cashews to yogurt raisins. The cashews weigh 205 grams, and the yogurt raisins weigh 186 grams. What is the difference between the weight of the cashews and yogurt raisins?

3. The clock to the right shows what time it is now.

   a. Estimate the time to the nearest 10 minutes.

   Time Right Now

   b. The clock to the right show Paul's departure time. Estimate the time to the nearest 10 minutes.

   Departure Time

   c. Use your answers from Parts (a) and (b) to estimate how long Paul has before his flight leaves.

4. A large airplane uses about 256 liters of fuel every minute.

    a. Round to the nearest ten liters to estimate how many liters of fuel get used every minute.

    b. Use your estimate to find about how many liters of fuel are used every 2 minutes.

    c. Calculate precisely how many liters of fuel are used every 2 minutes.

    d. Draw a tape diagram to find the difference between your estimate and the precise calculation.

5. Baggage handlers lift heavy luggage into the plane. The weight of one
    bag is shown on the scale to the right.
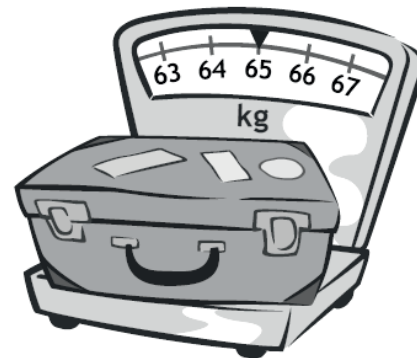
    a. One baggage handler lifts 3 bags of the same weight. Round to
        estimate the total weight he lifts. Then, calculate exactly.

    b. Another baggage handler lifts luggage that weighs a total of 200 kilograms. Write and solve an
        equation to show how much more weight he lifts than the first handler in Part (a).

    c. The baggage handlers load luggage for 18 minutes. If they start at 10:25 p.m., what time do they
        finish?

    d. One baggage handler drinks the amount of water shown below every day at work. How many liters
        of water does he drink during all 7 days of the week?
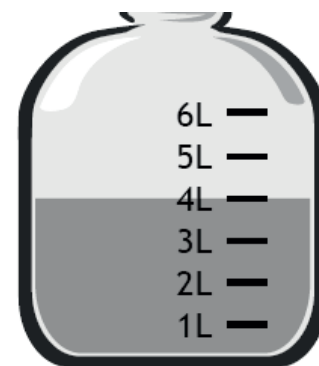
6. Complete as many problems as you can in 100 seconds. The teacher will time you and tell you when to stop.

3 x 1 = _____	2 ÷ 1 = _____	_____ = 20 ÷ 10	2 x 2 = _____	5 x _____ = 10
_____ x 2 = 4	10 ÷ 5 = _____	10 x _____ = 30	_____ = 2 x 3	_____ = 12 ÷ 4
4 x 3 = _____	15 ÷ 5 = _____	_____ x 4 = 16	_____ = 40 ÷ 10	2 x 4 = _____
3 x 4 = _____	4 x _____ = 12	20 ÷ 4 = _____	_____ = 10 x 5	_____ x 5 = 25
4 x _____ = 20	_____ = 10 ÷ 2	_____ x 3 = 18	10 x 6 = _____	30 ÷ 5 = _____
3 x 6 = _____	_____ = 24 ÷ 4	5 x _____ = 35	_____ = 10 x 7	14 ÷ 2 = _____
2 x 7 = _____	_____ x 4 = 28	_____ = 40 ÷ 5	10 x _____ = 80	_____ = 3 x 8
24 ÷ 3 = _____	80 ÷ 10 = _____	36 ÷ 4 = _____	5 x 9 = _____	2 x _____ = 18