Name _____ Date _____

Extension
Lesson 1

Estimation Strategies

These division problems have remainders. Estimate their quotients.

1. 23 ÷ 3 = ■

   Estimate: _____

2. 23 ÷ 4 = ■

   Estimate: _____

3. 23 ÷ 5 = ■

   Estimate: _____

4. $5\overline{)24}$ ■

   Estimate: _____

5. $3\overline{)25}$ ■

   Estimate: _____

6. $3\overline{)40}$ ■

   Estimate: _____

7. 38 ÷ 7 = ■

   Estimate: _____

8. 25 ÷ 7 = ■

   Estimate: _____

9. 41 ÷ 7 = ■

   Estimate: _____

10. $7\overline{)62}$ ■

    Estimate: _____

11. $9\overline{)62}$ ■

    Estimate: _____

12. $9\overline{)87}$ ■

    Estimate: _____

Name _____ Date _____

Extension
Lesson 2

Estimating and Checking Length and Perimeter

If all you have available are: a 1-foot length of string, an 8-inch stick, and a 15-inch strip of paper, how can you cut the following lengths of ribbon?

1. 20 inches of ribbon

2. 4 inches of ribbon

3. 7 inches of ribbon

4. 3 inches of ribbon

5. 19 inches of ribbon

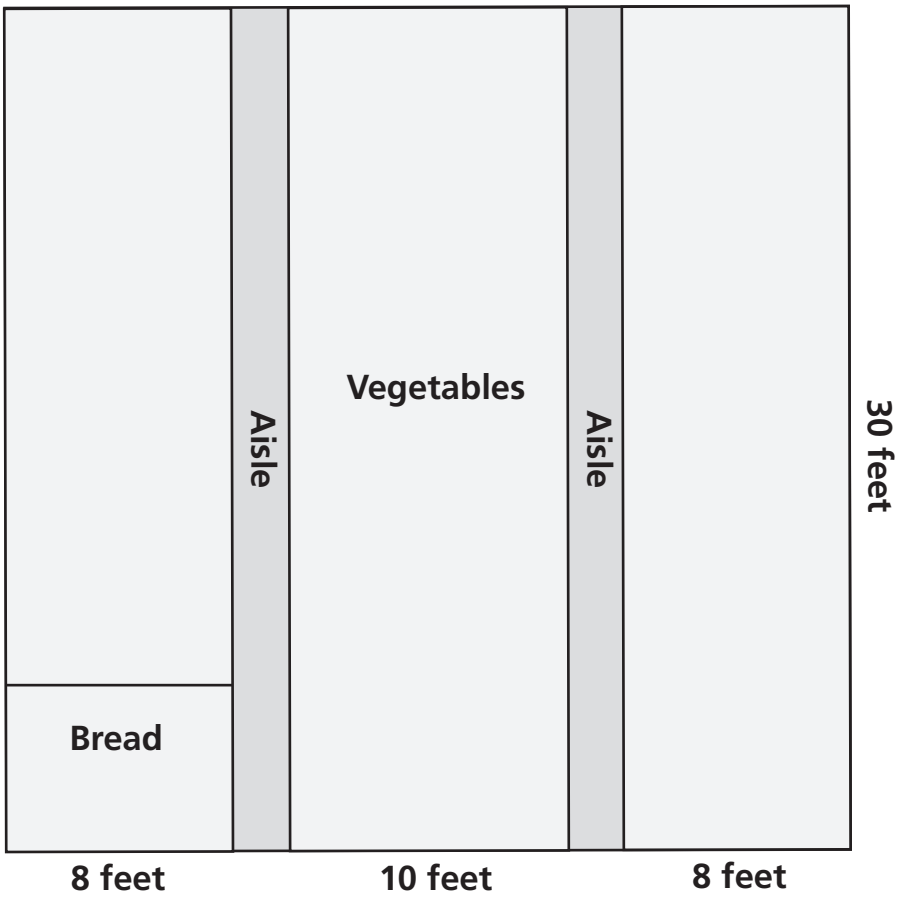
Name _____ Date _____

Extension
Lesson 3

Designing a School

Use a ruler to fill in the floor plan according to these requirements:

- There are sections for meat, vegetables, fruit, cereal, bread, and drinks.
- The perimeter of the fruit section is about 46 feet.
- The section for vegetables has more area than the section for cereal.
- The bread section has the smallest area and perimeter.
- The area of the meat section is almost 120 square feet.
- The perimeter of the drinks section is less than the perimeter of the meat section.



Name _____ Date _____

Extension
Lesson 4

Estimating and Checking Capacity

Jefferson County had to drain its 100,000-gallon lake to get rid of some of the algae growing in it. They want to transport the water to a treatment facility. They are deciding how many trucks will be needed for the transport.

1. If each truck can hold 500 gallons of water, how many trucks will they need?

_____ trucks

2. The treatment facility is very close to the lake. If each truck makes 2 trips from the lake to the facility, how many trucks will be needed?

_____ trucks

3. The cost of renting a truck is $1,000 for the first hour and $500 for each additional hour. It takes 1 hour for a truck to fill up with water, drive to the facility, empty the water, and drive back to the lake. To spend the least amount of money, should Jefferson County have the same trucks do more than 1 trip? Explain.

Name _____ Date _____

Extension
Lesson 5

Comparing Units of Capacity

The corner store sells water in various sizes.
Use the chart to answer the questions.

12 ounces	$0.59	20 ounces	$0.99
1 liter	$1.18	2 liters	$1.85
1 gallon	$2.99	5 gallons	$8.00

1. Jason needs about $1\frac{1}{2}$ gallons of water. What sizes should he buy so that he spends the least amount of money? How much will his purchase cost?

2. Shadae needed less than 5 gallons of water. She bought 5 gallons because it was less expensive. About how much water might she have needed? Explain your answer.

3. Austin spent about $6 at the store. What might he have purchased?

Name _____ Date _____

Extension
Lesson 6

Estimating and Checking Weight

Answer these questions. Remember that an object's weight on the Moon is about $\frac{1}{6}$ of its weight on Earth, and that an object's weight on Jupiter is about 300 times its weight on Earth.

1. If a bowling ball weighs 12 pounds on Earth, how much will it weigh . . .
   on the Moon? _____ pounds
   on Jupiter? _____ pounds

2. If Tom weighs 30 pounds on the Moon, how much would he weigh . . .
   on Earth? _____ pounds
   on Jupiter? _____ pounds

3. If a car weighs 900,000 pounds on Jupiter, how much would it weigh . . .
   on Earth? _____ pounds
   on the Moon? _____ pounds

Name _____ Date _____

Extension
Lesson 7

Comparing Units of Weight

Write the name of an object that weighs close to the given weight.

1. 100 grams _____
2. 12 ounces _____
3. 1 pound _____
4. 10 pounds _____
5. 100 pounds _____
6. 10 kilograms backpack stuffed with books
7. 70 kilograms _____
8. 100 kilograms _____
9. 1 ton _____
10. 5 tons _____

Name _____ Date _____

Extension
Lesson 8

Using Equations to Estimate

Solve.

1. If 8 bags weigh 10 kg and 7 boxes weigh 11 kg, which is heavier, a bag or a box?

_____

2. If 12 bags weigh 20 kg and 15 boxes weigh 30 kg, which is heavier, a bag or a box?

_____

3. If 21 bags weigh 15 lb and 19 boxes weigh 16 lb, which is heavier, a bag or a box?

_____

4. If 5 bags weigh 6 lb and 6 boxes weigh 5 lb, which is heavier, a bag or a box?

_____

5. If 16 bags weigh 4 lb and 24 boxes weigh 8 lb, which is heavier, a bag or a box?

_____

6. If 10 bags weigh 9 lb and 11 boxes weigh 10 lb, which is heavier, a bag or a box?

_____