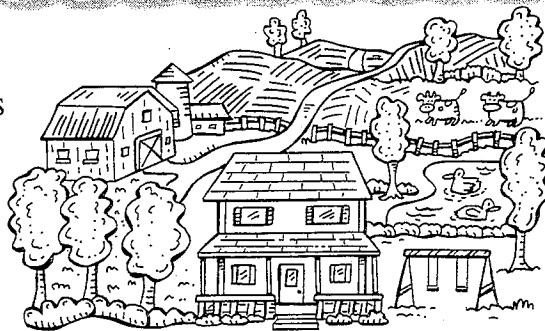


Down on the Farm

Working with
Customary Units
of Measurement

Kirsten enjoys helping her father and mother on their farm. One of the many things she has learned is the importance of measurement. Solve the following problems. If necessary, refer to your math book for the values of the units of customary measures.



1 Shadow, Kirsten's new puppy, gained 4 pounds 7 ounces last month. The veterinarian says that Shadow will probably gain about this much weight for each of the next four months. If Shadow weighs $15\frac{1}{2}$ pounds now, about how much will he weigh in four months?

2 Kirsten's mother asked her to pick 3 pounds of apples for apple pie. If each apple weighed 4 ounces, how many apples should Kirsten pick?

3 Kirsten helped her father build an addition to the deck at the back of their house. The addition was 7 feet 11 inches on one side and $8\frac{1}{2}$ feet on the other. They want to put a safety rail on these two sides. What is the total length of rail they should buy?

4 To keep livestock on their property, Kirsten's father will fence in a section of land. He figures he will need about $\frac{1}{4}$ mile of fencing. If he buys the fence in sections of 8 feet, how many sections of fence will he need to buy?

5 On a very hot day last week, Kirsten's father and three helpers were working to repair the barn roof. Kirsten made a gallon of lemonade and served the men in plastic cups that each held 1 pint. How many 1-pint servings are in a gallon?

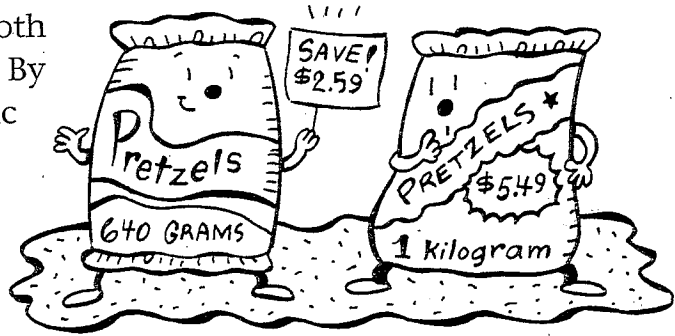
Frank drank $2\frac{1}{2}$ pints, Dave drank $1\frac{1}{2}$ pints, Pete drank 2 pints, and Kirsten's father drank $1\frac{1}{2}$ pints. How much lemonade was left?

6 Kirsten's father measured a section of lawn that needed to be reseeded. The section was 6 yards wide by 12 yards long. He asked Kirsten to calculate this area in square feet. Kirsten multiplied 6 yards times 12 yards and got 72 square yards. She then multiplied this by 3 because 3 feet equal 1 yard. She told her father they needed to buy enough grass seed to cover 216 square feet. Explain what is wrong with this answer.

Think Metric

Working with
Metric Units
of Measure

Many products in the U.S. are labeled with both metric and customary units of measurement. By thinking metric, it is easier to learn the metric system. Solve the following problems. If necessary, refer to your math book for the values of metric units.



- 1** Mike was helping his father put edging around the flower bed in the front of their home. The edging was packed in sections of 350 centimeters. How many meters is this?

If they needed 9.35 meters of edging, how many sections would they have to buy?

How much edging would be left over? _____

- 2** For lunch, Mike enjoys peanut butter sandwiches. In two weeks he used 680 grams of peanut butter out of a 1-kilogram jar. How much was left in the jar?

What part of a kilogram was left in the jar? _____

- 3** On a recent trip, Mike noticed that the speedometer in his mother's car was labeled both in miles per hour and kilometers per hour. They drove to his grandmother's house. The total distance was 294 kilometers. The drive took 3

hours and 30 minutes. What was their average speed in kilometers per hour?

- 4** Some of Alicia's friends were coming to visit her. Mike went with her to the store to buy refreshments. A 640-gram bag of pretzels was on sale for \$2.59. A 1-kilogram box of pretzels was priced at \$5.49. Which was the better buy?

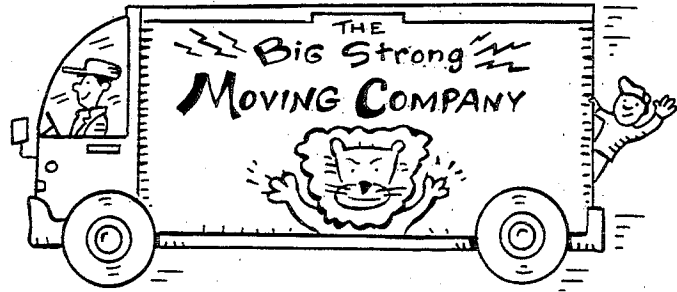
Alicia also wanted to buy spring water for her friends. She considered buying a six-pack of 355-milliliter bottles or one 2-liter bottle of spring water. Which contained more water, the six-pack or the 2-liter bottle? How much more?

- 5** Many people consider the metric system to be easier to use than other measurement systems. Why? Explain.

Moving In

Measurement
Review

Latrice and her family recently moved into a new home. As they did, Latrice learned how important understanding measurement can be. Solve the problems below. If necessary, refer to your math book for the values of the units of measures.



1 Latrice's new home is 15 kilometers from her old home. She and her family averaged 60 kilometers per hour driving from their old home to their new one. How long did the drive take?

How much fabric will she need to buy?

2 The family started moving in at 9:35 A.M. and finished at 3:15 P.M. They stopped from 12:15 to 1:00 for lunch. How long did they work to move in?

How many feet is this? _____

3 Latrice and her sister each had her own room. Latrice, being older, got the bigger room. Although both rooms were 3.4 meters wide, Latrice's room was 4.2 meters long. Her sister's room was 3.85 meters long. How many meters longer was Latrice's room?

5 Latrice and her family decided to invite friends and relatives to visit their new home. Latrice's mother asked Latrice to make enough punch for 30 1-cup servings. Latrice made 2 gallons of punch. Assuming the guests would drink 30 cups of punch, did Latrice make enough?

If yes, how much extra did she make?

How many centimeters is this?

If not, how many cups short would she be? _____

4 Latrice's mother planned to make curtains for eight of the windows in their new home. She will need $1\frac{1}{3}$ yards of material for each window. (The fabric she will buy is wide enough for each window.)

6 Latrice placed a flower stand in front of the window in her room. The flower stand holds five plants with a total weight of 7.5 kilograms. The plants Latrice wishes to place on the stand weigh the following: 1.5 kilograms, 2.25 kilograms, 1.3 kilograms, 2.36 kilograms, and 670 grams. Will the flower stand be able to support the combined weight of these five plants? Explain your answer on the back of this page.