

LESSON
11.1**Estimating Weights in Grams and Kilograms**

A nickel weighs about 5 grams (5 g).

A liter of water weighs about 1 kilogram (1 kg).



In Problems 1–7, circle a possible weight for each object.

1. A dog might weigh about

20 kg 200 kg 2,000 kg

2. A can of soup might weigh about

4 g 40 g 400 g

3. A newborn baby might weigh about

3 kg 30 kg 300 kg

4. An adult ostrich might weigh about

1.5 kg 15 kg 150 kg

5. A basketball might weigh about

0.6 kg 6 kg 60 kg

6. The weight limit in an elevator might be about

100 kg 1,000 kg 10,000 kg

7. A pencil might weigh about

4.5 g 45 g 450 g

8. Choose one of the problems above. Explain why you chose your answer.

LESSON

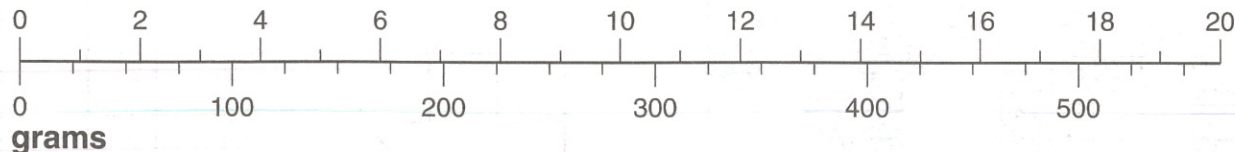
11.1

Metric and Customary Weight

The number line below has ounces on the top and grams on the bottom. It shows, for example, that 7 ounces are about equal to 200 grams.



ounces



Use the number line to give the approximate weight of each object.

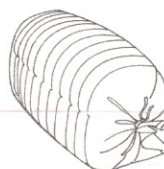
1.



15 ounces

About _____ grams

2.



16 ounces

About _____ grams

3.



100 grams

About _____ ounces

4.

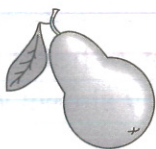


500 grams

About _____ ounces

Use the number line to help you determine which object weighs more. Circle the heavier object.

5.

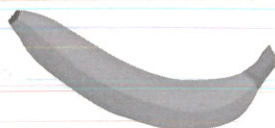


225 grams



2.3 ounces

6.



5 ounces



454 grams

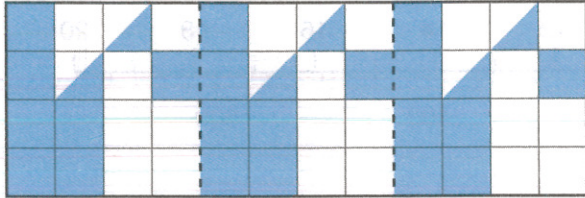
LESSON

11.1

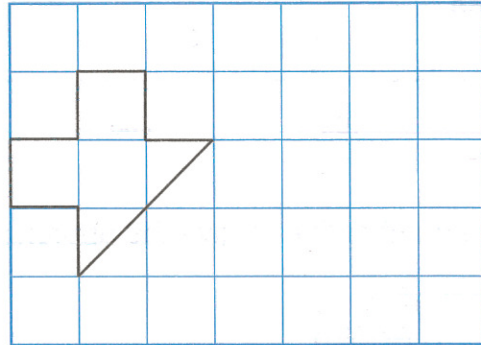
Math Boxes



1. a. Explain how you know that the pattern below is an example of a translation.



- b. Draw the figure after it is translated to the right.



2. Find the solution of each open sentence.

a. $\frac{6}{7} - y = \frac{4}{7}$ $y =$ _____

b. $\frac{3}{10} + a = \frac{9}{10}$ $a =$ _____

c. $\frac{3}{5} - r = \frac{1}{10}$ $r =$ _____

d. $\frac{3}{4} + m = \frac{7}{8}$ $m =$ _____



3. Circle the numbers that are multiples of 6.
Put an X through the numbers that are multiples of 5.

38

84

150

198

540

3,500



4. Insert parentheses to make each number sentence true.

a. $14 * 18 - 15 = 42$

b. $13 - 6 * 5 = 56 - 21$

c. $48 / 6 + 2 = 10 - 4$

d. $150 / 10 + 5 < 4 * 4$



5. If you use an average of 7 sheets of paper per day, about how many sheets would you use in

a. 1 week? _____ sheets

b. 4 weeks? _____ sheets

c. 52 weeks? _____ sheets

d. 2 years? _____ sheets



The World's Largest Foods



| Food | Weight | Date | Location |
|------------------|--------------------|----------------|--------------------------|
| Apple | 3 pounds 11 ounces | October 1997 | Linton, England |
| Bagel | 714 pounds | July 1998 | Mattoon, Illinois |
| Bowl of pasta | 7,355 pounds | February 2004 | Hartford, New York |
| Chocolate bar | 5,026 pounds | March 2000 | Turin, Italy |
| Garlic | 2 pounds 10 ounces | 1985 | Eureka, California |
| Gingerbread man | 372.13 pounds | November 2003 | Vancouver, Canada |
| Hamburger | 6,040 pounds | September 1999 | Sac, Montana |
| Ice cream sundae | 22.59 tons | July 1988 | Alberta, Canada |
| Pumpkin | 1,337 pounds | October 2002 | Topsfield, Massachusetts |
| Taco | 1,654 pounds | March 2003 | Mexicali, Mexico |

Source: www.guinnessworldrecords.com

Use the information in the table to solve the following problems.

- The largest apple weighed _____ ounces.
- A typical hamburger weighs about 4 ounces. The largest hamburger weighed _____ ounces.
- Which 2 foods together weigh about a ton? _____ and _____
- A kilogram is a little more than 2 pounds. Which 4 foods each weigh more than 1,000 kilograms?

- On the back of this page, use data from the table to write and solve your own problem.

Practice

6. $-\$75 + \$25 =$ _____

7. _____ $= -\$45 + (-\$30)$

8. _____ $= -\$60 + \60

9. $\$55 + (-\$25) =$ _____