

Customary units of weight include ounces, pounds, and tons.

In the metric system, weight is measured in grams and kilograms.

Which system do you use most often?

### Units of Weight

#### Customary Unit

#### Conversion

ounce (oz)

pound (lb)

ton

1 lb = 16 oz

1 ton = 2,000 lb

A large chicken egg weighs about 2 ounces.

#### Metric Unit

#### Conversion

gram (g)

kilogram (kg)

1 kg = 1,000 g

A nickel weighs exactly 5 grams.

Weights are often listed as mixed measures. For example, 5 pounds 7 ounces equals 87 ounces. Since 5 pounds equals  $5 \times 16 = 80$  ounces, 5 pounds 7 ounces equals  $80 + 7 = 87$  ounces.

### PRACTICE

Use the information above to help you solve each problem below.

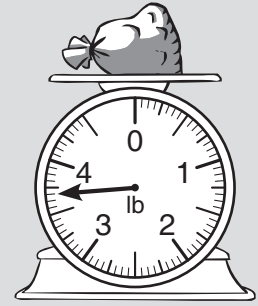
34. How many grams are there in four kilograms? 34. \_\_\_\_\_
35. When Alex was born, he weighed 3 pounds 9 ounces. What was Alex's birth weight in ounces? 35. \_\_\_\_\_
36. At the Academy Steak House, you can order a 50-ounce steak. It comes with a 14-ounce baked potato. How many **pounds** does the whole meal weigh? 36. \_\_\_\_\_
37. Lizzie has five textbooks. Each book weighs 1 lb 5 oz. What is the total weight of Lizzie's books in pounds and ounces? 37. \_\_\_\_\_ lb \_\_\_\_\_ oz  
 ★ *When a weight is given in pounds and ounces, the number of ounces must always be less than 16.*

A scale is used to measure weight.



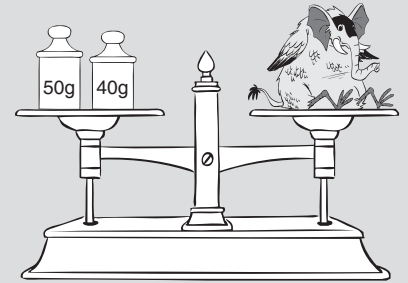
A **spring scale** uses a spring that is stretched or compressed. On the spring scale to the right, the weight is displayed in pounds and ounces. The numbered tick marks on the scale indicate pounds. The tick marks between the numbered tick marks indicate ounces.

The arrow on this spring scale points at the 11<sup>th</sup> tick mark past 3, so the sack on this spring scale weighs 3 lb 11 oz.



A **balance scale** compares weights. The object you are weighing is placed on one side of the scale. Objects of known weight are placed on the other side until the two sides are level.

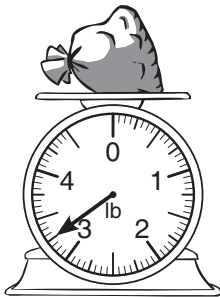
When the two sides are level, we say that the scale is balanced, meaning the weight on each side is the same. The elefinch on this balance scale weighs  $50 + 40 = 90$  grams.



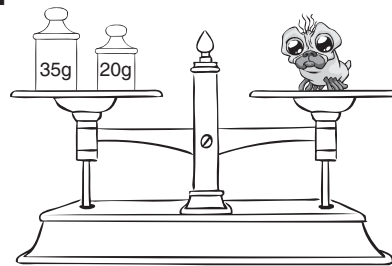
**PRACTICE**

Write the weight displayed on each scale below in the units listed.

38.



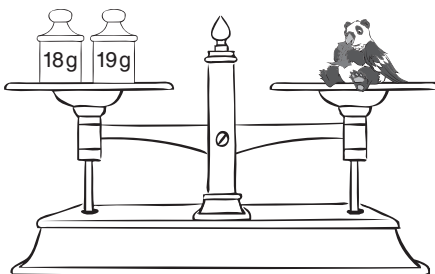
39.



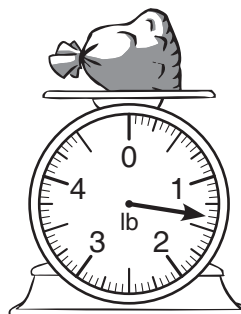
38. \_\_\_\_\_ lb \_\_\_\_\_ oz

39. \_\_\_\_\_ g

40.



41.



40. \_\_\_\_\_ g

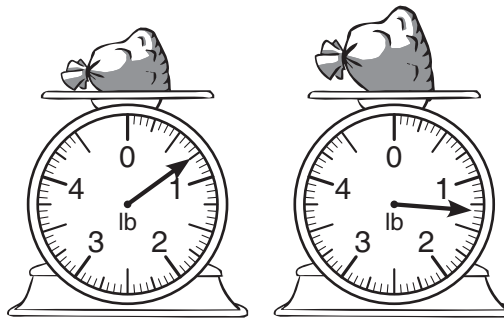
41. \_\_\_\_\_ lb \_\_\_\_\_ oz

# MEASUREMENT

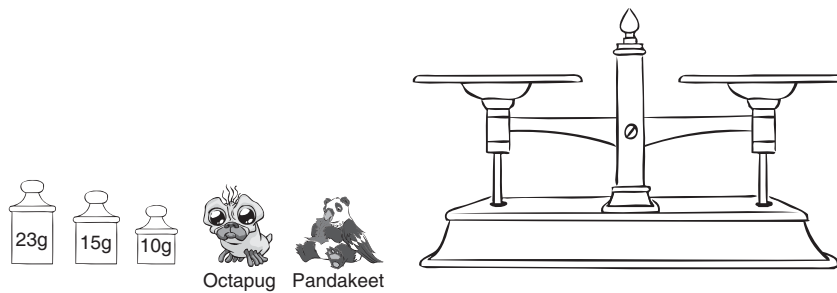
*Measuring Weight*

## PRACTICE

42. What is the combined weight in pounds and ounces of the two bags of coins on the scales below? 42. \_\_\_\_\_ lb \_\_\_\_\_ oz



43. ★ Use your answers from the previous page for the weight of the octapug and the pandakeet. How can all five items below be placed on the scale so that the scale is balanced?



44. ★ What is the weight of one scale? 44. \_\_\_\_\_ lb \_\_\_\_\_ oz

