

Additional Practice *(continued)*

Investigation 1

Comparing and Scaling

4. a. Of the students in Ms. Yadav's fourth-period math class, 16 are wearing athletic shoes, 10 are wearing boots, and 4 are wearing other kinds of shoes. What fraction of Ms. Yadav's students are wearing boots? Explain.
- b. Suppose 1,006 students attend the middle school where Ms. Yadav teaches. Use your answer from part (a) to estimate the number of students who are wearing boots. Explain.
5. a. Use the table below. About what fraction of the total number of endangered species are found only in foreign countries?

Numbers of Endangered Species

	United States Only	United States and Foreign	Foreign Only
Animals	262	51	493
Plants	378	10	1
Total	640	61	494

- b. How many times more endangered plant species are there in the United States than in foreign countries? Explain your reasoning.
- c. About what percent of the total number of endangered animals lives only in the United States?
- d. What is the ratio of Endangered Plants to Endangered Animals in the United States only? In foreign countries only?
- e. What is the difference between the number of endangered animals in the United States and foreign countries and the number of endangered plants in the United States and foreign countries?

Additional Practice**Investigation 2****Comparing and Scaling**

1.
 - a. Bill has a paper route. It takes him 50 minutes to deliver newspapers to his 40 customers. How long will it take Bill to complete his route if he adds 20 more customers in his neighborhood? Explain.
 - b. Only 30 of Bill's 40 customers take the Sunday paper. About how long does it take Bill to deliver his papers on Sundays?
2. A micron is a metric unit of length. There are 1 million (1,000,000) microns in 1 meter.
 - a. How many microns equal 1 centimeter? Explain.
 - b. An object has a length of 2,911 microns. What is the length of the object in centimeters?
 - c. An object has a width of 0.000351 meters. What is the width of the object in microns?
 - d. Which metric unit—meters, centimeters, or microns—do you think is best to use to express the length of your pencil? Explain.
3. Betty and Derek are making punch for a class party. The directions on the liquid punch mix say to use 3 cups of mix for every 7 cups of water. Betty and Derek want to make enough punch so that each of the 25 people at the party can have 2 cups.
 - a. How many cups of punch mix will Betty and Derek need to use? Explain.
 - b. How many cups of water will Betty and Derek need to use?
 - c. Betty and Derek want to put the punch in bowls that hold 20 cups each. How many bowls will they need?