



May 2000

Activity 3: A Trip to Japan

Answers

Questions:

1. Since the rates change daily, how could you find the exchange rate for the Japanese Yen to U.S.Dollars?

There are a number of resources you can use to find the exchange rate. Several examples are the business section of a newspaper, you can call your local bank and request the information, or you can search the Internet.

2. How many Japanese Yen equal an U.S. Dollar?

This answer will vary because the exchange rate is different every day.

3. How will you convert the Japanese Yen to U.S.Dollars?

To convert Japanese Yen to U.S.Dollars, you need to find the exchange rate.

If 1 Japanese Yen is equivalent to 0.01 U.S. Dollars, then you multiply the number of Japanese Yen by 0.01 to get the value in U.S. Dollars.

For example, 250 Japanese Yen = $250 \times 0.01 = \$2.50$ U.S. Dollars

Student Worksheet 1: Investigating the Japanese Yen

1. At this point in time the exchange rate for Japanese Yen is 105 Japanese Yen to one American Dollar. Check the latest exchange rates for accuracy.

2. At this point in time the exchange rate for CNY is 8.278 CNY to one American Dollar. Check the latest exchange rates for accuracy.

3. and 4. Answers will vary. Allow students to share their strategies. Many strategies will rely on mental computation. If 105 Japanese Yen equal \$1.00, then one Japanese Yen is about a penny. If 8 CNY equal \$1.00, then 1 Chinese CNY is about \$.12.

5. These answers will vary as exchange rates change daily.

Hotels – Western Style Accommodation 7 nights Double room, Y20,000 = approximately \$200 a night. So $7 \times \$200 = \$1,400.00$

Food each day (three meals), Y10,000 = approximately \$100 a day or \$700 for food.

Transportation, Y5,000 = approximately \$50 a day.

Sightseeing fees, Y2,100 = approximately \$20 a day (depending on how many days you pay a fee for sightseeing)

Gifts, Y15,000 = approximately \$150 for gifts.

$\$1,400.00 + 700.00 + 300.00 + 150.00 = \$2,550.00$ or approximately \$2600

a. \$2550.00 about \$2600

b. If there are 8.2 Chinese CNY to \$1.00, then you multiply the amount of U.S. Dollars by 8,

$$\$2600 \times 8 = 20,800 \text{ Chinese CNY}$$

Student Worksheet 2: Facts about Japan

1. a. $5^4 \times 24 = 625 \times 24 = 150,000$ square miles. Actual size is 145,711 square miles.

b. 150,000 square miles.

2. a. $\frac{1}{3} \times 90,000 = 30,000$ square miles

b. $3 \times 30,000 = 90,000$ square miles

c. 211144_{five} is 211144 in base 5. This is equal to
 $(2 \times 5^5) + (1 \times 5^4) + (1 \times 5^3) + (1 \times 5^2) + (4 \times 5^1) + (4 \times 5^0) =$
 $(2 \times 3125) + (1 \times 625) + (1 \times 125) + (1 \times 25) + (4 \times 5) + (4 \times 1)$
 $6250 + 625 + 125 + 25 + 20 + 4 = 7,049$ square miles

d. $\frac{1}{2} \times 30,000 = 15,000$ square miles

3. a. $\frac{1}{4} \times 48,000 = 12,000$ feet

b. $\frac{1}{4} \times 13,000 = 3,250$ meters

4. $1.23 \times 10^8 = 123,000,000$ people