G5-M1-Lesson 2

1. Solve.

a. $4{,}258 \times 10 =$ 42,580

I visualized a place value chart. 8 ones times 10 is 8 tens. When multiplying by 10, each digit shifts 1 place to the *left*.

b. $4{,}258 \div 10 =$ 425.8

When dividing by 10, each digit shifts 1 place to the *right*.

c. $3.9 \times 100 =$ 390

The factor 100, has 2 zeros, so I can visualize each digit shifting 2 places to the *left*.

d. $3.9 \div 100 =$ 0.039

The divisor, 100, has 2 zeros, so each digit shifts 2 places to the *right*.

2. Solve.

7×1 hundred $= 7$ hundreds $= 700$

a. $9{,}647 \times 100 =$ 964,700

$7 \div 1$ thousand $= 7$ thousandths $= 0.007$

b. $9{,}647 \div 1{,}000 =$ 9.647

c. Explain how you decided on the number of zeros in the product for part (a).

I visualized a place value chart. Multiplying by 100 shifts each digit in the factor 9,647 two places to the left, so there were 2 additional zeros in the product.

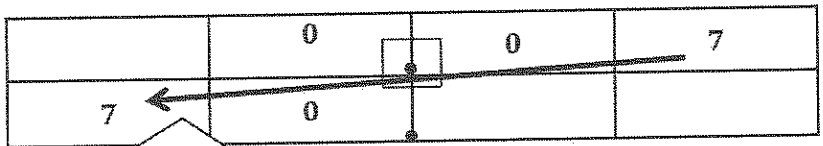
d. Explain how you decided where to place the decimal in the quotient for part (b).

The divisor, 1,000, has 3 zeros, so each digit in 9,647 shifts 3 places to the right. When the digit 9 shifts 3 places to the right, it moves to the ones places, so I knew the decimal point needed to go between the ones place and the tenths place. I put the decimal between the 9 and the 6.

3. Jasmine says that 7 hundredths multiplied by 1,000 equals 7 thousands. Is she correct? Use a place value chart to explain your answer.

Jasmine is not correct. 7 ones $\times$ 1,000 would be 7 thousands.

But $0.07 \times 1,000 = 70$. Look at my place value chart.

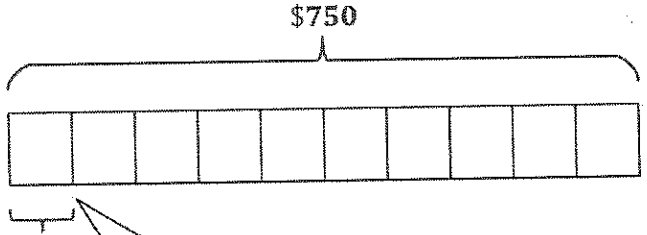


The factor 1,000 has 3 zeros, so the digit 7 shifts 3 places to the left on the place value chart.

4. Nino's class earned \$750 selling candy bars for a fundraiser. $\frac{1}{10}$ of all the money collected was from sales made by Nino. How much money did Nino raise?

The whole tape represents all of the money earned by Nino's class.

Nino collected $\frac{1}{10}$ of all the money, so I partition the tape diagram into 10 equal



The value of this 1 unit will tell me how much money Nino earned for his class.

10 units = \$750

1 unit = \$750 ÷ 10

1 unit = \$75

Nino raised \$75.