

Guided Notes

3.3 Multiply Decimal by Whole Number (6.NS.3)

• Multiplying Decimals:

- Multiply normally, ignore the decimals.
- Then, put the decimal point in the answer - it will have as many decimal places as the two factors combined.

- **Annex Zero** - If there are not enough decimal places in the answer, you need to annex zeros to the left. To annex a zero means to place a zero at the beginning or end of a decimal.

Guided Practice: Multiply

1.) $2.7 \cdot 6$

$$\begin{array}{r} 2.7 \text{ (1)} \\ \times 6 \\ \hline 16.2 \end{array}$$

2.) $0.52 \cdot 3$

$$\begin{array}{r} 0.52 \text{ (2)} \\ \times 3 \\ \hline 1.56 \end{array}$$

3.) $5 \cdot 0.09$

$$\begin{array}{r} 0.09 \text{ (2)} \\ \times 5 \\ \hline 0.45 \end{array}$$

4.) $0.065 \cdot 18$

$$\begin{array}{r} 0.065 \text{ (3)} \\ \times 18 \\ \hline 0520 \\ + 00650 \\ \hline 01.170 \end{array}$$

- 5.) A bee hummingbird has a mass of 1.8 grams. How many grams are 6 hummingbirds and a 4-gram nest?
(HINT: 2-step problem)

#1

$$\begin{array}{r} 1.8 \\ \times 6 \\ \hline 10.8 \end{array}$$

#2

$$\begin{array}{r} 10.8 \text{ (birds)} \\ + 4.0 \text{ (nest)} \\ \hline 14.8 \end{array}$$

The birds and nest weigh 14.8 grams.

- 6.) Justin buys 12 pencils for \$0.56 each. He pays with a \$10 bill. How much change will he receive?
(HINT: 2-step problem)

#1

$$\begin{array}{r} 0.56 \\ \times 12 \\ \hline 112 \\ + 0560 \\ \hline 06.72 \end{array}$$

#2

$$\begin{array}{r} 10.00 \\ - 06.72 \\ \hline 3.28 \end{array}$$

Justin will receive \$3.28.

Building on Essential Question - How can estimating products help you to place the decimal correctly?

The estimate can help you determine the greatest place value, you can check for reasonableness by using estimation.

Rate Yourself

Are you ready to move? Shade the section that applies.

