Name _____

Use Models and Strategies to Multiply Decimals

Topic 4 Standards

5.NBT.A.2, 5.NBT.B.7

See the front of the Student's Edition for complete standards.

Dear Family,

   Your student is learning to multiply whole numbers and decimals to hundredths. He or she will learn to represent the mathematical reasoning involved in multiplication situations using objects and models. Your student will also learn how to use patterns to place the decimal point when a decimal is multiplied by a power of 10. He or she will apply his or her understanding of place value to estimate decimal products.

   This topic also uses money as a real-world context to connect mathematics to problems arising in everyday life.

   Here is an activity you can complete with your student to help him or her learn about estimating products.

About How Much?

Materials: grocery items with prices marked

Step 1 Display several different grocery items with prices marked.

Step 2 Have your student choose one of the items and the number of that item that he or she wishes to buy.

Step 3 Have your student estimate about how much his or her purchase will cost. He or she may round to whole numbers or use compatible numbers to help estimate. For example, 4×2.89 is close to 4×3, and $4 \times 3 = 12$. The total cost will be about \$12. Similarly, to estimate $16 \times \$3.18$ you can use 15×3, and $15 \times 3 = 45$. The total cost will be about \$45.

Observe Your Child

Focus on Mathematical Practice 7
Look for and use structure.

Help your child become proficient with Mathematical Practice 7. Have your student explain how knowing a basic multiplication fact like $3 \times 4 = 12$ can help them to multiply 0.3×0.4.